# 4608 Official Transcript of Proceedings NUCLEAR REGULATORY COMMISSION

Title:

Tennesse Valley Authority

Watts Bar Nuclear Plant, Unit 1

Sequoyah Nuclear Plant, Units 1 and 2 Browns Ferry Nuclear Plant, Units 1,2,3

**Docket Number:** 

50-390-CivP; ASLBP No.: 01-791-01-CivP

Location:

Chattanooga, Tennessee

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Thursday, June 20, 2002

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Pages 4439-4739

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# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

# ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:	)	
TENNESSEE VALLEY AUTHORITY	)	Docket Nos. 50-390-CivP 50-327-CivP; 50-328-CivP 50-259-CivP; 50-260-CivP
(Watts Bar Nuclear Plant, Unit 1;	)	50-296-CivP
Sequoyah Nuclear Plant, Units 1&2;	)	
Browns Ferry Nuclear Plant, Units	)	ASLBP No. 01-791-01-CivP
1, 2 & 3)	)	EA 99-234

Chickamauga Room Read House Hotel 827 Broad Street Chattanooga, Tennessee

Thursday, June 20, 2002

The above entitled matter came on for hearing pursuant to Notice at  $9:00~\mathrm{a.m.}$ 

### **BEFORE:**

CHARLES BECHHOEFER, Chairman
ANN MARSHALL YOUNG, Administrative Judge
RICHARD F. COLE, Administrative Judge
Assisted by Raju Goyal, Law Clerk

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## PROCEEDINGS

 CHAIRMAN BECHHOEFER: Good morning, ladies and gentlemen. We welcome you to what may be our last day of hearing for the next few weeks, but maybe not, depending on

necessity.

Before we begin today, Judge Young has a further statement she wanted to make, I believe concerning the issues she wanted to have briefed.

JUDGE YOUNG: Okay. I just wanted to say that last night I went back and reread the parties' pretrial briefs since I had not, as I said yesterday, read them in some time. And at the same time, serendipitously, I had found an old file of mine over the weekend relating to employment discrimination cases and so I looked in that file last night and I found, first, that the issue that I had been asking you to brief I don't think has been briefed; and second, I found a case that I would like to suggest that you look at, and I want to read from it. And obviously -- this is a 1987 case, so there may be other cases that have overruled this in the time since, although Judge Posner was on it -- so, anyway --

I'm reading from <u>Benzies</u>, B-e-n-z-i-e-s, <u>v.</u>

<u>Illinois Department of Mental Health</u>. I think this was sex discrimination, but it's basically talking about the <u>McDonnell-Douglas</u> burden. It is at 810 F.2d 146 (7th

1 Circuit), it's from 1987.

MR. MARQUAND: What was the page number?

3 JUDGE YOUNG: 810 F.2d 146.

Okay, I just want to read to you from what the Court says there, because it really -- I must have had this in the far back recesses of my mind when I was talking earlier.

"The plaintiff must show that intentional discrimination caused the employer to take some unfavorable action."

I'm going to skip the cites.

"To have any hope of showing this, the plaintiff must puncture a neutral explanation the employer offers for its conduct. Benzies argues that if the plaintiff does so, shows that the explanation is a pretext, then the District Court must infer that the employee acted with discriminatory intent. Not so. A demonstration that the employer has offered a spurious explanation is strong evidence of discriminatory intent, but it does not compel such an inference as a matter of law."

Just as an aside, I noticed that a lot of the case law that was cited talked about permissible inferences, and I think you were saying much the same thing that I just

read, last night.

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Continuing, "The Judge may conclude, after hearing all the evidence, that neither discriminatory intent nor the employer's explanation accounts for the decision. A public employer may feel bound to offer explanations that are acceptable under a civil service system, such as that one employee is more skilled than another or that we were just following the rules. trier of fact may find, however, that some less seemly reason -- personal or political favoritism, a grudge, random conduct, an error in the administration of neutral rules -- actually accounts for the decision. Title 7 does not compel every employer to have a good reason for its deeds, it is not a civil service statute. Unless the employer acted for a reason prohibited by the statute, the plaintiff loses. The failure of an explanation to persuade the Judge supports an inference that a bad reason accounts for the decision, but it is not invariable conclusive. The presence of a sufficient explanation, however, is dispositive against the plaintiff, " et cetera.

"Benzies wants us to treat any failure of the employer's chosen explanation as leaving the prima

facie showing of discrimination unrebutted, 1 2 compelling judgment in the employee's favor." Or, by analogy, in the staff's favor in this case. 3 "Akins, which is <u>U.S. Postal Service Board of</u> 4 Governors v. Akins, 460 U.S. 711 (1983) 5 6 establishes that after the case has been tried, 7 the apparatus of prima facie case in response is no longer determinative." 8 9 And it goes to the issue of the plaintiff in any 10 case retaining the ultimate burden of persuasion. 11 So I thought that might be helpful in terms of the briefing issues that we discussed yesterday, and for that 12 13 reason, I thought I'd go ahead and share it with you now. 14 MR. MARQUAND: You said you read the staff's brief 15 last night? Did you read ours too? I thought we had --16 JUDGE YOUNG: Yes, I said both. 17 MR. MARQUAND: I thought we had specifically addressed that. We will do so again, whether we have or 18 19 not. 20 We will definitely deal with that. MR. DAMBLY: JUDGE YOUNG: I did read through both of the 21 22 cases, I don't know that you addressed the precise issue that I'm raising. If you did --23 24 MR. MARQUAND: I think Judge Posner was very 25 prescient. I think that's the precise issue when you

distill down <u>St. Mary's Honor Center</u> and <u>Reeves</u>, I think that's exactly what they say, which Judge Posner was ahead of his time, but that's exactly what those cases say.

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JUDGE YOUNG: In any event -- well, he was on the case, he didn't write the decision.

In any event, to the degree that's helpful, I wanted to share that with you because it seemed so on point on the specific issue that I was asking you to brief; namely, that if neither one of your versions is correct, I want you to address the possibility that may not necessarily be our ultimate finding, but if it is, I think a little briefing along this somewhat unusual line would be helpful.

Thank you, Judge Bechhoefer.

CHAIRMAN BECHHOEFER: Okay, now I have a further introduction.

I am not intimately familiar with the case Judge Young read, so I express no opinion, but I certainly don't preclude parties from briefing the question.

But with respect to today's witnesses, my inquiry is are these witnesses solely those for TVA or were they also included on the witness list that the staff -- any or all of them -- because the ones that are not included on both parties' witness list, I believe the scope of cross examination should be limited to the scope of the direct testimony.

1	MR. DAMBLY: As far as I know, whoever they're
2	calling today is not on our list.
3	CHAIRMAN BECHHOEFER: I see. So I would expect
4	that then the scope of cross examination would be limited to
5	whatever they say or refer to or put in the record. And I
6	suppose if they were needed for other reasons, they would
7	have to be called on rebuttal.
8	Well, if the parties should agree otherwise, then
9	
10	MR. MARQUAND: Possibly if counsel determines that
11	they are needed for rebuttal purposes, we should go off the
12	record and discuss whether we need to do it now as opposed
13	to having an even further session of hearings at which they
14	would have to attend and have their schedules factored into
15	everybody else's schedules as well.
16	CHAIRMAN BECHHOEFER: Correct. With that, I
17	understand Mr. Marquand, your witness
18	MR. MARQUAND: Mr. Slater.
19	CHAIRMAN BECHHOEFER: Oh, Mr. Slater, I'm sorry.
20	JUDGE YOUNG: Is it Alec or Alex?
21	MR. SLATER: Alex.
22	JUDGE YOUNG: A-l-e-x.
23	MR. SLATER: Yes, ma'am.
24	JUDGE YOUNG: And so in addition to him, we're
25	having

1	MR. MARQUAND: Here's the sequence Alex Sewell,
2	Cary Peters, Rob Ritchie and Mark Burzynski.
3	JUDGE YOUNG: So Mr. Goetcheus and Mr. Harding are
4	not
5	MR. MARQUAND: Mr. Goetcheus is unavailable and I
6	don't think that we could get to Mr. Harding today four
7	seems to be rather optimistic in light of our past history.
8	CHAIRMAN BECHHOEFER: Yeah, I think that's
9	JUDGE YOUNG: But these are not as central, right?
10	MR. MARQUAND: They're essential.
11	JUDGE YOUNG: As central.
12	MR. MARQUAND: They may not be as central, but
13	they are essential.
14	JUDGE YOUNG: Right. As central.
15	MR. MARQUAND: They're central to the issue
16	JUDGE YOUNG: So they may not be as long.
17	MR, MARQUAND: They're central to the issues on
18	which we're calling them. They're hopefully not as long.
19	JUDGE YOUNG: There's the salient point.
20	MR. MARQUAND: Sewell, Peters, Ritchie and
21	Burzynski.
22	CHAIRMAN BECHHOEFER: And the witness in the
23	witness stand now?
24	JUDGE YOUNG: That's Mr. Sewell.
25	Whereupon,

1		ALEX SEWELL
2	appeare	d as a witness herein and, having been first duly
3	sworn,	was examined and testified as follows:
4	Takan kanan ka	DIRECT EXAMINATION
5	BY MR.	SLATER:
6	Q	Good morning, Mr. Sewell.
7	A	Good morning.
8	Q	Could you state your full name for the record,
9	please?	
10	A	Alex L. Sewell.
11	Q	And could you spell your last name, please?
12	A	S-e-w-e-1-1.
13	Q	Mr. Sewell, where do you work?
14	A	TVA.
15	Q	And how long have you been employed with TVA?
16	А	Twenty nine years.
17	Q	And could you tell the Board what is your current
18	position	n?
19	А	Project manager.
20	Q	And how long have you been project manager?
21	А	About a month and a half.
22	Q	And could you tell us what your duties are with
23	respect	to your project manager position?
24	А	Well, basically it's overseeing the conversion
25	from	a new system from Optika to a system called Pentagon

-- it's taking all the personnel records and converting them 1 2 over to a new system. 3 And prior to becoming project manager, what was 4 your position? 5 Employee Service Center representative. Q 6 And as an --7 JUDGE YOUNG: I'm sorry, Employee Service --Employee Service Center 8 THE WITNESS: representative. 9 10 JUDGE YOUNG: Service Center? 11 THE WITNESS: Right. BY MR. SLATER: 12 As an Employee Service Center representative, what was your duties? 14 Answer questions about employee's benefits from 15 retirees, current employees and also to maintain the 16 17 personal history records. 18 And how long were you an Employee Service Center 19 representative? 20 Α Five years. And prior to being an Employee Service Center 21 22 representative, what was your position. Supervisor of personnel records system. 23 24 And could you describe for the Board what did you 25 do in that position?

1	A I oversaw the addition, deletion or updating of
2	personal records and maintaining personal records of all TVA
3	employees, former TVA employees and some contractors.
4	Q Now we've heard a good deal of testimony these
5	past number of days about PHRs or personal history record.
6	Could you tell us what a PHR is?
7	A A PHR is a personal history record of a TVA
8	employee, just maintained by TVA. It consists of any type
9	of job description, service reviews, memorandums, transfers,
10	demotions, disciplinary action letters, stuff like that, to
11 -	promote the efficiency of the agency.
12	JUDGE YOUNG: Would it be equivalent to what
13	people refer to sometimes as a personnel file?
14	THE WITNESS: Correct. Other organizations call
15	them OPFs, official personnel folders, other agencies, but
16	we call them personal history records.
17	BY MR. SLATER:
18	Q Would it be fair to say that the PHR is the
19	official personnel record for TVA, former and present TVA
20	employees?
21	A That's correct.
22	Q Now you mentioned what before we get into that,

A There's two ways it's maintained. If an individual was hired in at TVA after 1995, that person's PHR

tell us how the PHR is maintained.

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1 is on what we call the Optika system, it's on optical disks. 2 JUDGE YOUNG: O-p-t-i? 3 THE WITNESS: Optika, O-p-t-i-k-a. 4 JUDGE YOUNG: It's a computer thing? 5 THE WITNESS: Right, it's a program. 6 basically that's person's employment papers are scanned into 7 the system and put on the optical disk and the information 8 is retrieved from that computer system. 9 Now prior to that --10 JUDGE YOUNG: Before you go into prior to that, 11 what if there's a piece of paper -- would you scan it in? THE WITNESS: 12 Correct. JUDGE YOUNG: Okay. Prior to 1995, if an 13 individual is on TVA's payroll, their records were kept on 14 15 microfiche. So what we did was in 1995 convert all microfiche to the current system, which is called Optika, so 16 17 that if al person was hired in before 1995, that person resides in two different places, microfiche plus on the 18 19 Optika system. 20 BY MR. SLATER: 21 Now you just said, when you were talking about the documents being scanned in for employees after 1995, I 22 23 believe you said it was a database, or is it just scanning in of the image of those particular documents? 24 25 Α Correct.

So it's not a database, it's just scanning in of 1 2 those documents, is that correct? 3 Α Those documents are scanned in and they're imaged on an optical disk. 4 JUDGE YOUNG: Mr. Slater, could you pull your 5 6 microphone a little bit closer? Thank you. BY MR. SLATER: 8 Now if an employee was hired before January 1995, could you describe how his or her PHR would be maintained by 10 TVA? Okay, when the paperwork comes in, that paperwork 11 12 was microfilmed, a photograph was taken of it and put it on microfilm, microfilm processed and then that person's 13 information was put in a microfiche jacket, so it's 14 15 maintained in microfiche form. JUDGE YOUNG: Always prior to 1995? 16 THE WITNESS: Prior to 1995. 17 JUDGE YOUNG: I mean like back in 1970? 18 THE WITNESS: 1970s. There was two conversions, 19 if you want me to get into that. 20 21 JUDGE YOUNG: I was just curious, I didn't know they had microfiche back when TVA was created. But that may 22 be going to far afield. 23

At one point, were PHRs maintained in hard copy?

BY MR. SLATER:

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1	A	Correct.
2	Q	When did we go when did TVA go to the system of
3	microfich	ing documents?
4	A	They converted from paper to microfiche in 1980.
5	Q	And then that process lasted from 1980 until 1995?
6	A	Correct.
7	Q	And then in 1995, went to this scanning system?
8	A	Right.
9	Q	And is that system called PRIS.
10	A	It's called PRIS.
11		JUDGE YOUNG: What are the letters in that?
12		THE WITNESS: Personnel Records Imaging System.
13		JUDGE YOUNG: P-R-I-S.
14		THE WITNESS: Right.
15		JUDGE YOUNG: And that's on Optika.
16		THE WITNESS: Correct.
17		JUDGE YOUNG: PRIS on Optika.
18		THE WITNESS: Correct.
19		JUDGE YOUNG: Okay.
20	BY MR. SL	ATER:
21	Q	Now are you currently trying or attempting to
22	convert t	he information that was on microfiche into the PRIS
23	system as	well, or is it just maintained it's maintained
24	as a micro	ofiche up until 1995 and then from '95 forward it's

on the PRIS system

1 A Right.

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- Q Now you started to indicate what types of documents are maintained in the PHR. Could you just tell us a list of documents that are typically maintained in the PHR?
- A The person's application; resume if they send a resume in; if they're a veteran, DD-214; job description; service reviews; in some cases, disciplinary action; lateral transfers to another agency; transfer of job.
- Q Could you turn to TVA Exhibit 107? It's in Volume 11 in front of you.
- A Okay.
  - Q Have you seen that document before?
- 14 A Yes, I have.
- 15 Q And could you tell us what that is?
  - A It's basically information about what goes into a PHR and what a PHR is actually for at TVA.
  - Q And if you turn over to page 3 of that document, there's a list of documents included and a list of documents excluded; is that correct?
    - A That's correct.
  - Q And in the column for documents included, does it reflect that job descriptions are maintained in the PHR? The fourth entry down.
- 25 A Right.

And that's just among a long list of documents 1 that are included in the PHR. 2 Right, and this list is not inclusive because 3 Α there are actually documents generated from year to year. 4 5 And could you tell us on the first page of TVA Exhibit 107, who is Jim Raines? 6 He is the -- right now I think he's Senior 7 8 Manager, Human Resources. 9 JUDGE YOUNG: Back on page 3, could you just tell me what TVA 45s are? 10 THE WITNESS: Those basically are like little 11 memorandums or little notes, little notepads like from John 12 Smith to Paul Smith, Hi, John, how you doing. 13 JUDGE YOUNG: Is it a form for --14 MR. SLATER: It's a form. 15 THE WITNESS: Right, it's a form number, right. 16 MR. SLATER: It's a form for an informal 17 18 memorandum. 19 JUDGE YOUNG: Thank you. BY MR. SLATER: 20 21 And could you just turn back to Exhibit 106? Have 22 you seen that document before? Yes, I have. 23 Α And could you tell us what that is? 24 0

That's the Personal History Record Users Manual.

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Α

- 1 Q And what's the purpose for this document?
  - A It's basically to indicate to the users what the PHR is all about and how TVA maintains it.
  - Q If we can move back just a minute back to Mr. Raines, is Mr. Raines in corporate TVA?
    - A Correct, he is.
  - Q As opposed to TVAN or the nuclear organization, is that correct?
    - A That's correct.
- 10 Q Now as to Exhibit 106, does this document also 11 reflect what goes into a PHR?
- 12 A Correct.

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- Q And does this document also reflect how or under what circumstances documents can be removed from PHRs?
- 15 A Yes, it does.
  - Q Could you tell us under what circumstances a document can be removed from a current or former TVA employee's PHR?
    - A Okay, documents are only removed if there's an EEO grievance settlement or a grievance settlement. If a person had disciplinary action and that document is there for six months or seven months, they can request that it be removed after a six month period.
- Q Is there a process by which if a document is going to -- if a document is to be removed from a PHR, is there a

1 mechanism as to how that document would be removed?

- A Yes, there is.
- Q Tell us how that process works?

A That process is the Human Resource office would send us a memorandum requesting us to remove that particular document from that person's file due to a grievance or EEO settlement or disciplinary action or --

Q Now other than legal action -
JUDGE YOUNG: Were you going to add something
else?

THE WITNESS: Right.

#### BY MR. SLATER:

Q Once you receive that memorandum from the Human Resource folks, I want to take this both as to the microfiche portion of the PHR and also the PRIS portion of PHR. Let's assume for the moment that the document is a document that was placed in the PHR prior to January 1995. What would be the process once you receive that memorandum, to remove -- requesting to remove X document -- what would you do?

A The process would be to again verify that this is a legitimate document request, obtain that person's personal microfiche record, look at the document in the microfiche, remove it from the microfiche, go to the Optika system, again look at that person's document on the Optika system

1 and then delete that from the Optika system. Let's take one at a time. As to the microfiche --2 3 Α Right. -- you would go to it and snip it out, is that 5 what you're saying? Right, we have a small instrument, you can locate 6 7 the document, go in, remove it and then just put it in another jacket. 8 9 JUDGE YOUNG: I lost the last --10 CHAIRMAN BECHHOEFER: I didn't hear you. 11 THE WITNESS: It's a little instrument that we 12 have, locate the document in the microfiche, go in and 13 remove it. 14 JUDGE YOUNG: Just sort of cut around the page? 15 THE WITNESS: If it's not consistent on the same 16 film, most likely it's already separated, you just go in and remove it. 17 18 BY MR. SLATER: And then you said you would put it in a jacket. 19 0 20 Α Correct. 21 Okay, what's the purpose --JUDGE YOUNG: Wait a minute, I'm still not clear. 22 If there's -- on microfiche, there's a whole lot of pages on 23

each little piece of plastic. You wouldn't remove the whole

sheet of plastic, you'd go in and somehow cut out the --

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THE WITNESS: Correct. 1 2 JUDGE YOUNG: Okay, that's what I wasn't clear. 3 CHAIRMAN BECHHOEFER: Mr. Sewell, who or what level of person in HR would have to sign the memo directing 4 5 a document to be removed? THE WITNESS: It'd be the HR person -- it could be 6 a senior manager, it could be the manager. 7 8 CHAIRMAN BECHHOEFER: Any level required? THE WITNESS: Right, from HR, from the Human 9 Resource office. 10 11 JUDGE COLE: Mr. Sewell, what are some of the reasons that a document would be removed, some of the 12 13 legitimate reasons? THE WITNESS: Again, EEO complaint settlements, 14 grievance settlements or the person had disciplinary action 15 and the letter has been in the person's file for six months, 16 after six months it's supposed to be removed and they can 17 request after six months to remove it. 18 CHAIRMAN BECHHOEFER: But there would have to be a 19 20 formal request, the document would not be put in for six months and then deleted by your office without any formal 21 22 request? 23 THE WITNESS: No, we don't keep a tickler file saying in six months, go back and check this person's file -24

- we don't keep those kind of files. It's to vast to try to

1 keep that.

CHAIRMAN BECHHOEFER: Thank you.

3 BY MR. SLATER:

Q Now once a document is snipped out of the microfiche, do you create a new film for that page of the microfiche or how does that work?

A After we take the document out, we would close the gap in there, close it up with the other document that follows that. So if it's 1995, you would put 1996 behind that, keep it in order, always keep it in order.

Q Now you said that once you snip out the document that is a legitimate request and the document is one that can be removed, then you snip it out and you put it in a jacket.

- A Correct.
- Q What's the purpose of putting it in a jacket?

A That's basically how they would say it, to legitimize that request. This request came in January 16, 1997, it was removed January 19, 1997. That's for our recordkeeping to say why this document was removed from that person's file.

JUDGE YOUNG: So you're saying you keep the removed part in a separate jacket with a copy of the document indicating why it should be removed. Did I understand that right?

1 THE WITNESS: Correct. 2 JUDGE YOUNG: Okay. BY MR. SLATER: 3 So in the original microfiche then, would there be 4 5 any indication that a document -- let's say a document dated January 10, 1994 -- would there be any indication in the 6 7 microfiche -- I'm not talking about the jacket or anything -- the microfiche, that a document has been removed? 8 9 Α No. 10 0 Okay. Now --11 JUDGE YOUNG: Let me ask you a question -- and you 12 may not be able to answer this, maybe counsel -- but if 13 there was a discovery request for the personnel file and all 14 documents that had ever been removed, or were you already 15 going there? 16 MR. SLATER: Yes. 17 JUDGE YOUNG: Okay, thank you. BY MR. SLATER: 18 Now once the document has been removed from the 19 0 PHR and dropped into the jacket, I believe you just 20 21 testified that both the document as well as the memo 22 requesting its removal, both of those are placed in the 23 jacket.

A Correct.

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Q And to follow up on Judge Young's question, once

the person's PHR is requested, then both the PHR and the
jacket would come or --

A If specified, correct. Normally once it's removed, it's not a part of that person's official personal history record.

JUDGE YOUNG: So if a personnel record is requested, you would not include the removed part unless it was specifically requested as well.

THE WITNESS: Correct.

JUDGE YOUNG: Okay.

#### BY MR. SLATER:

Q Now could you describe for us the manner in which a document would be removed from the documents that are put into the system under the PRIS system?

A Depending on how the request came in, if the person just sent a memo saying please remove the document dated 1996 and we access the PRIS system and there was two documents in there with the same date, what we'd do is basically go back and get confirmation, is this the document that you want removed, there's two documents wit the same date on there. After we get confirmation about that, we go to the system and delete that from the system. Hit the button delete and it's gone.

- Q But would you also maintain a jacket for --
- A What we do, we would print out a copy of that memo

plus the request and put that also in the jacket too.

- Q And you would go through the same process if you're going to request a copy of the PHR and if you want to see any documents that have been actually removed, you would ask for PHR as well as the jackets.
  - A Correct.
- Q Both for the microfiche side as well as the PRIS side.
  - A Correct.

JUDGE YOUNG: When you say jacket, I thought -when you were talking about the microfiche, I assumed you
were talking about the little paper thing that the
microfiche films are kept in. Are you talking more like a
file folder?

THE WITNESS: Well, yeah, in our language at TVA, there's two jackets, a microfiche jacket plus the microfiche jacket folder, which is basically what you're saying; correct. Just like a little folder, we call those jackets too.

JUDGE YOUNG: And so when you delete it from the computer and you print it out, it wouldn't be a little microfiche, it would be a regular paper size, 8.5 by 11 --

THE WITNESS: Correct.

JUDGE YOUNG: Okay.

5 BY MR. SLATER:

Why don't you turn to -- in TVA Exhibit 106, at 1 0 the bottom there's a Bates stamp, it's FD00027. 2 3 Before we focus on that page, you said that a request to remove a document from the PHR would have to come 4 5 from HR? Α 6 Correct. Can someone outside of HR send in a request to --7 let me put it this way -- if someone outside of the HR chain 8 sends in a request to remove a document from someone's PHR, 9 10 what would you do with that request? Well, basically call the person up and let the 11 Α person know that we cannot process it unless it comes 12 13 through the HR office. It has to go through the HR office. JUDGE YOUNG: What's DPO? 14 15 THE WITNESS: It's been so long ago --16 MR. MARQUAND: It used to be division personnel 17 officer. That's just an old term that now means HR for that particular organization. 18 19 JUDGE YOUNG: Okay, thank you. BY MR. SLATER: 20 On page 27 of 106, under subpart D, do you see 21 22 that?

Is that the method or manner in which a document

is removed from a PHR? Not necessarily the method and

Uh-huh -- yes.

23

24

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Α

- 1 manner, but how a document is to be removed?
  - A That's correct.
  - Q And it says here that -- it gives the circumstances and it says TVA is directed to do so as a result of a grievance, legal action, EEO complaint, Merit Systems Protection Board ruling or similar appeal mechanisms; do you see that?
    - A Yes.
  - Q Are there any other ways in which your organization would honor a request to remove a document from a PHR?
  - A No.

- Q And if an individual contacts you by memorandum or telephone or otherwise that he or she would like to have X or Y document removed from his or her PHR, what would you do under those circumstances?
- A Direct that person that that request has to, again, come through the HR office.
- Q Are job descriptions a document that can be removed from the PHR?
  - A Again, if it falls under this category -- grievance, hearing or legal or EEO complaint.
- Q And as you just said, if there are any other reasons given to try to remove a document such as a PD, then the request is denied?

1	JUDGE YOUNG: Such as what?
2	CHAIRMAN BECHHOEFER: Such as didn't hear you.
3	BY MR. SLATER:
4	Q If a request came to you to remove a PD or other
5	- any document, including a PD position description.
6	JUDGE YOUNG: Okay.
7	Q that didn't fall under one of these categories
8	then what would you do with that request?
9	A Again, advise the individual it has to fall under
10	these categories and it has to go through the HR office to
11	be removed.
12	MR. SLATER: Your Honor, I move TVA Exhibit 106
13	and 107 into evidence.
14	CHAIRMAN BECHHOEFER: Any objection?
15	MR. DAMBLY: Well, on 107, I would note that it
16	says Personnel Micro Records Proposal, there's no indication
17	this was adopted, implemented or otherwise, so I don't know
18	why a proposal in 1990 necessarily would be relevant. And 1
19	may have missed it, but on 106, I don't know if we had
20	testimony or not that this is actually what's in effect
21	today or there's a different been a change to this I
22	don't know.
23	MR. SLATER: I will go through each one of them,
24	Your Honor.
25	BY MR. SLATER:

1	Q Could you take a 100k at
2	CHAIRMAN BECHHOEFER: I just couldn't hear you.
3	BY MR. SLATER:
4	Q Could you take a look at Exhibit 106, sir? And
5	again, could you tell us what that is?
6	A That's the Personal History Record Users Manual.
7	Q And is this document in effect today?
8	A Correct.
9	Q And is this the document that you would be guided
10	by when records are sent to your organization to be placed
11	in a person's official personnel record?
12	A Yes.
13	Q And is this document also in effect as to under
14	what circumstances documents are to be removed from a PHR?
15	A That's correct.
16	Q And if you take a look at page 1 or page 0002,
17	could you tell us when did this particular document go into
18	effect?
19	A It says 5/19/87.
20	Q And if you would take a look at Exhibit Number
21	107, and for the record, could you tell us what that is
22	again?
23	A Basically to give you a little history on this, we
24	were receiving documents from the retirement systems and it
25	was basically duplicate documents. We were getting

1	documents from the field, basically duplicate documents.
2	JUDGE YOUNG: I'm sorry, what kind?
3	THE WITNESS: Duplicate documents.
4	JUDGE YOUNG: Oh, okay.
5	THE WITNESS: So basically what they tried to do
6	was to narrow that down. If documents were kept in
7	retirement systems, not to put them in the personal history
8	records, just occupying space and duplicating that
9	information.
10	So our proposal was to eliminate some of these
11	documents out of the files that were kept in the field files
12	and kept in retirement.
13	BY MR. SLATER:
14	Q And is it a description of what we in fact keep in
15	the file?
16	A Correct.
17	MR. SLATER: Your Honor, I re-tender 106 and 107.
18	MR. DAMBLY: I guess I'll have no objection.
19	CHAIRMAN BECHHOEFER: I have one question. Were
20	these documents, each one of them, in effect during the
21	period from approximately 1992 through 1996?
22	THE WITNESS: They were.
23	CHAIRMAN BECHHOEFER: Both of them.
24	THE WITNESS: (Nods head.)

1	Exhibits	106 and 107.
2		(The documents, heretofore marked
3		as TVA Exhibits 106 and 107, were
4		received in evidence.)
5		MR. SLATER: Thank you, Your Honor.
6	BY MR. SL	ATER:
7	Q	Could you turn in the other book in front of you
8	to TVA Ex	hibit 39, it's in Volume 2.
9	A	Okay.
LO	Q	Could you tell us what TVA Exhibit 39 is?
L1	A	It looks like a declaration from Alice Green.
L2	Q	And who is Ms. Green?
L3	A	Ms. Green was the manager of the Employee Service
L <b>4</b>	Center at	this particular time.
L5	Q	She was your boss at that time?
16	А	That's correct.
L 7	Q	And attached to Ms. Green's declaration is a
18	document,	is that correct?
19	A	That's correct.
20	Q	And could you tell us what that is? Is that a PHR
21	of someon	e?
22	A	Which one are you referring to?
23	Q	Excuse me?
24	A	Which one are you referring to? I mean
25	Q	There is a series of documents attached, is that

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     correct?
 2
          Α
               That's correct.
 3
          0
               Now if you would turn over to AF000827.
               JUDGE YOUNG: The last one I have in 39 is
 4
     AF000740.
 5
               MR. MARQUAND: They're not in numerical sequence,
 6
 7
     Your Honor. It's probably a third of the way through the
     document.
 8
 9
               JUDGE YOUNG: 830 -- what was it again?
10
               MR. MARQUAND: 827, it looks like.
               MR. SLATER: Yes, 827 I believe, it's kind of
11
     faint.
12
               CHAIRMAN BECHHOEFER:
13
1.4
               MR. SLATER: Yes, it's about 20 pages in.
15
               JUDGE YOUNG: I see.
16
               (Brief pause.)
               JUDGE YOUNG: Caution, is that the one?
17
18
               MR. SLATER: Yes.
     BY MR. SLATER:
19
               Could you tell us what that is?
20
          Q
21
               It's a letter of certification, authenticity.
               Is it the cover page for the PHR?
22
23
          Α
               That's correct.
               And when you were talking about microfiche
24
          Q
25
     earlier, is this the part of -- whose PHR is it?
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- A This one is for Wilson C. McArthur.
- Q Okay. Now if you turn to the very next page after the certificate, what's that?
  - A Looks like microfilm.
    - Q And then it starts in on the PHR?
- A That's correct.

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- Q And again, you were talking about the microfiche portion of the PHR. Is this -- if you could just thumb through it -- or could you thumb through it and tell us where the microfiche portion ends?
  - A (The witness complies.)
- Q Why don't you just turn --
- 13 A It looks like -- I'm sorry.
- 14 Q Go ahead.
- 15 A -- AF000711.
  - Q Is that the first -- is 711 the first page of the printout from the PRIS system or the last page of the microfiche portion?
  - A It all depends on how this was printed out. I couldn't verify, the person might have printed miscellaneous first, might have printed job description first, it all depends on the individual who printed this.
- Q If you would, turn back to page AF846.
- JUDGE YOUNG: Mine may not -- it looks like mine goes from 840 to 641.

1	MR. SLATER: I think that might be 6 instead of 8.
2	JUDGE COLE: Yeah, I can't find any 8s.
3	JUDGE YOUNG: Is there something missing between -
4	-
5	MR. MARQUAND: I think we're misreading, instead
6	of 846 and 847, I think that was 626, 646.
7	JUDGE YOUNG: Right, but is there anything missing
8	after 840 or before 641?
9	MR. MARQUAND: I think it's 640, Your Honor.
10	JUDGE YOUNG: Because it looks like they are 8s,
11	but then it does change to a 6.
12	MR. SLATER: Those are 6s, 641, 642, 643.
13	JUDGE YOUNG: Right, but I'm talking about before
14	that.
15	MR. SLATER: There's 639 before, 640, 639, 638,
16	638.
17	JUDGE YOUNG: You're saying there's no 8s at all?
18	MR. SLATER: I was mistaken, I can hardly read my
19	copy. They're 6s instead of 8s.
20	CHAIRMAN BECHHOEFER: Well, for instance, either
21	627 or 827 it looks a lot like an 8 on mine.
22	JUDGE COLE: I think it's just faded out at that
23	point of the 6.
24	MR. SLATER: I think they're 6s, those are 6s.
25	MR. MARQUAND: I think there was a flaw on the 6th

1 digit when they stamped it. 2 JUDGE YOUNG: Right. BY MR. SLATER: 3 4 On page 646, could you tell us what that is? It's a position description. 5 Now if you would look through the microfiche 6 7 portion or the portion printed from the microfiche, would you look through this PHR and tell us whether or not another 8 9 job description was included in this PHR between the job 10 description set forth on 646, which was I think effective --11 effective date April 2, 1990 -- and just look through and 12 tell us whether or not there's another position description 13 in the microfiche portion. (The witness reviews a document.) 14 15 I don't find one. Α And before coming here today, did you check to see 16 0 whether or not there were any documents deleted from Mr. 17 18 McArthur's PHR that was set out or placed in a jacket for the microfiche portion of his PHR? 19 20 Α Yes, I did. 21 And were there any documents deleted from Mr. 0 22 McArthur's PHR?

Not to my knowledge.

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0 Now the document set forth on page 646 is Dr. McArthur's position description for manager, technical

- 1 programs; is that correct?
  - A That's correct.

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- Q And the effective date was April 2, 1990; is that correct?
  - A That's correct.
  - Q Now I believe, as you testified earlier, TVA went from the microfiche system to the PRIS system, beginning January of 1995, is that correct?
    - A That's correct.
  - Q Now if you would turn to the PRIS portion of Dr. McArthur's PHR, could you tell us where that begins?
    - A That would be AF000713.
  - Q And could you look through this portion of his PHR and tell us whether or not he received -- or a position description was sent to you to be included in his PHR?
  - (The witness reviews a document.)
- 17 A There are two.
- 18 Q And where is the first one?
- 19 A The first one is AF000713.
  - Q And could you tell us the date, the effective date of that position description?
- 22 A 6/17/1996.
- Q And what is the position title?
- 24 A Corporate radiological chemistry control manager.
- Q And that's the position description for Dr.

McArthur, is that correct? 1 Wilson C. McArthur, right. 2 Α And where is the second one? 3 0 AF000716. Α And that's also for Dr. McArthur? 5 Wilson C. McArthur, correct. 6 Α 7 And before you came here today, did you look -what's the date of the second one, sir? 8 Effective date is 6/30/1997. 9 And before you came here today, did you look in 10 Q the PRIS system or the jacket for the PRIS system -- or did 11 12 you check to see whether or not any documents had been deleted from Mr -- Dr. McArthur's PHR? 13 Yes, I did. 14 15 And were there any documents listed as being deleted from the PRIS portion of his PHR? 16 No, there were not. 17 Α 18 To your knowledge, did you or your organization receive any requests from Wilson McArthur to remove any 19 document from his PHR? 2.0 21 Α No. Did you receive any request from Thomas McGrath to 22 23 remove anything from this PHR?

Did you receive any request from James Boyles to

No.

Α

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remove any document from this PHR? 1 2 Α No. 3 Did you receive any request from Phil Reynolds to 4 remove any document from this PHR? 5 Α No. Did you receive any request from Ben Easley to б remove any document from this PHR? 7 Α Again, no. Sir, did you receive any request from anybody to remove any document from this PHR? 10 11 Α No, I did not. 12 MR. SLATER: Your Honor, I move that TVA Exhibit 13 39 be admitted. 14 CHAIRMAN BECHHOEFER: Any objection? 15 MR. DAMBLY: Well, I'm not sure how we get Ms. 16 Green's affidavit in at this point. I have no problem with 17 Dr. McArthur's -- he said this was what was in the system I guess for PHR, but I don't know --18 19 MR. SLATER: Then, Your Honor, we move that the 20 PHR of Dr. McArthur be admitted. 21 CHAIRMAN BECHHOEFER: I can't hear you. 22 MR. SLATER: TVA moves then that the PHR then 23 itself be admitted into evidence, starting with page AF000627 --24 25 JUDGE YOUNG: What about what's on page -- starts

on page 590, isn't that part of the PHR also? 1 2 THE WITNESS: I believe those were selected documents that were --3 JUDGE YOUNG: The other confusion I'm having is 4 5 that the declaration of Alice Green refers to PHRs not only 6 for McArthur but for Mr. Fiser, Mr. Harvey and Mr. Grover. 7 Were they just not included or --MR. MARQUAND: All of those were originally sent 8 9 to the staff when we were going back and forth prior to the 10 NOV. We simply put Alice Green's declaration here with Dr. 11 McArthur's PHR. That's what we thought was pertinent to this proceeding. 12 13 JUDGE YOUNG: Okay, so --14 MR. MARQUAND: It's not necessary to include the 15 others or even Alice Green's declaration, simply Dr. McArthur's PHR, which the witness has identified. 16 17 CHAIRMAN BECHHOEFER: Which particular pages are you moving in? 18 19 MR. SLATER: Okay, pages AF000827 -- sorry, 627 through 000710 and that is the microfiche portion of the 20 PHR. 21 22 JUDGE YOUNG: And pages 590 through 626, both

parties agree that those are not anything that needs to be

included? I'm just not clear what those are since her

declaration says -- even if you exclude the other three,

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1	what would remain would seem to be the PHR for Mr. McArthur.	
2	MR. SLATER: Yes.	
3	CHAIRMAN BECHHOEFER: Well what about 713 and 716?	
4	MR. SLATER: Yes, Your Honor, and the documents	
5	Bates stamped AF000711 through the end is the PRIS portion	
6	of the PHR.	
7	JUDGE YOUNG: So from 590	
8	MR. SLATER: We're not moving in from 590 to	
9	JUDGE YOUNG: You're saying that those are not	
10	part of the PHR?	
11	MR. SLATER: That's correct. I think if you	
12	looked through the PHR, you'll see that those documents are	
13	those are just mistakenly duplicated documents.	
14	JUDGE YOUNG: Oh, okay.	
15	MR. SLATER: But they're in the PHR.	
16	JUDGE YOUNG: Okay, so we don't have to worry	
17	about them.	
18	MR. SLATER: That's correct, Your Honor.	
19	JUDGE YOUNG: The only thing it starts on 627	
20	and goes through	
21	MR. SLATER: To the end.	
22	CHAIRMAN BECHHOEFER: 627 to the end?	
23	MR. SLATER: Yes, sir.	
24	JUDGE YOUNG: And that's through 740.	
25	MR. SLATER: Yes.	

CHAIRMAN BECHHOEFER: Before I rule on the 1 admissibility or admission I should say of this series of 2 3 documents, I would like to inquire if a different PD, position description were in effect, but had not been 4 transmitted to you by HR or personnel, say in the 1993, '4, 5 '5 period, that document would then not appear in this 6 7 particular record; is that correct? THE WITNESS: That's correct. 8 CHAIRMAN BECHHOEFER: So that if HR had made a 9 mistake, the official record would then continue to not 10 indicate perhaps what it should have, say a position 11 description that was not sent to you for inclusion. 12 THE WITNESS: That's correct. 13 CHAIRMAN BECHHOEFER: And -- well, you probably 14 weren't aware, as essentially a records custodian, of any 15 16 potential job descriptions that may have been in effect but were not formally transmitted to you by someone in HR; is 17 that correct? 18 THE WITNESS: That's correct. 19 (The Judges confer.) 20 CHAIRMAN BECHHOEFER: We will admit those two 21 22 documents. MR. SLATER: It's just one document. 23 CHAIRMAN BECHHOEFER: Oh, I'm sorry, one document, 24

the series of pages.

1 THE REPORTER: What's the number? JUDGE YOUNG: 2 TVA Exhibit 39, pages AF000627 3 through AF000740; correct? 4 MR. SLATER: Correct. 5 (The document, heretofore marked as 6 TVA Exhibit Number 39 pages 7 AF000627 through AF000740, was 8 received in evidence.) 9 BY MR. SLATER: 10 Q Mr. Sewell, as a follow up to Judge Bechhoefer's 11 question, if a position description had been issued but did 12 not come to your organization to be placed in the PHR, then that document would not be part of -- that would not be an 13 14 official document in the PHR; is that correct? 15 Α That's correct. 16 Could you -- let's talk a little about how 17 documents get from HR to your organization to be placed in the PHR. 18 19 JUDGE YOUNG: Before you go on to that, let me 20 just clarify something related to the last question you 21 The fact that something may have mistakenly been 22 omitted from a PHR, such as a job description, if someone 23 came to HR and said this document was mistakenly omitted, we'd like you to authorize the entry of the document into 24

the PHR and an HR person signed that in accordance with your

1	requirements, would that then be put in the PHR?
2	THE WITNESS: Correct.
3	JUDGE YOUNG: Okay.
4	BY MR. SLATER:
5	Q Tell us how documents are gotten from point X to
6	point Y and Y being your organization, to be placed in the
7	PHR.
8	A Normally, they're sent through the HR office
9	through interoffice mail to be put in the person's PHR.
10	JUDGE YOUNG: Could you put the microphone closer
11	to your mouth?
12	THE WITNESS: Okay.
13	CHAIRMAN BECHHOEFER: You're hard to hear.
14	JUDGE YOUNG: Pull it over a little bit that way
15	so when you're facing that way, we don't lose you. Thanks.
16	THE WITNESS: Normally the documents would come
17	from the HR office directly to us through the mail.
18	BY MR. SLATER:
19	Q And who is responsible for getting those documents
20	to you to be put in the PHR?
21	A The HR office.
22	Q What's the process?
23	A From my understanding, if the person, say for
24	instance a job description was cut, the original, it would
25	go to the person's supervisor, then that supervisor would

1 send it to the HR office, then they would send it to us to 2 be in the HR. And is it HR's responsibility to get that document 3 to you to be placed in the PHR? 4 5 Α Correct. 6 MR. SLATER: Thank you. No further questions. 7 MR. DAMBLY: Can we take five minutes? 8 CHAIRMAN BECHHOEFER: Yes, you can have ten, as a matter of fact. 9 10 MR. DAMBLY: Thank you very much. 11 (A short recess was taken.) 12 CHAIRMAN BECHHOEFER: Back on the record. Dambly or Ms. Euchner. 13 14 MR. DAMBLY: Thank you, Your Honor. 15 CROSS EXAMINATION 16 BY MR. DAMBLY: 17 Mr. Sewell, let's do -- do you know what the HRIS 18 is? 19 Yes, I do. Α 20 0 And what is that? 21 Α Human Resources Information System. 22 And that's where -- for TVA, that's where they 23 keep track officially of all of the actions that take place 24 with regard to an employee? 25 Α That's correct.

Q Now I put before you Staff Exhibit 99, which is a printout, as I understand it, from HRIS of the employee action reasons for Wilson C. McArthur. Attached to that underneath are various forms corresponding to all the entries that were made.

And if you want to take your time and look through it, I would represent to you that most of the entries on the first two pages there of Staff Exhibit 99 have no corresponding entry in the personnel history record, PHR. If you want to look at that, to do that.

Α I don't think I understand what you mean by no corresponding --

There is no document that I've been able to find in the PHR that you talked this morning with Mr. Slater for Wilson C. McArthur --

Α Right.

-- there's no document for most of the entries on here.

Α These actions.

To support the entries. For example, just we'll take one, the thing on 10/17/94, -- do you see on the first page a place where Dr. McArthur's salary went from \$98,000 to \$115,000, about five lines down.

Α Correct.

As far as I can tell, there's no document in the

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PHR that reflects that. Now did Dr. McArthur get paid the 1 \$115,000 or did he get paid \$98,000 because there was no 2 record in the PHR? 3 There should have been --JUDGE YOUNG: Could you pull the microphone closer 5 6 to you? 7 THE WITNESS: I'm sorry. There should be a document in his PHR that reflects that, what we call a 8 9 personal action. JUDGE YOUNG: There should be, you're saying. 10 11 THE WITNESS: Right. BY MR. DAMBLY: 12 So all of these documents that are underneath 13 pages 1 and 2 of Exhibit 99, or some document corresponding 14 to those, should be in the PHR. 15 Correct. Α 16 And if they're not, what does that mean, does that 17 18 mean that the HRIS doesn't control whether you get paid or promoted? 19 2.0 No, in the personal history record -- let me give Α you a little background about that -- we first started out, 2.1 22 if you look at the TVA exhibit, there's a form back in the back called a personal action form. 23

We receive those documents, paper documents, on

Right.

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1 those actions. We're supposed to receive those monthly on 2 individuals at TVA and the process we would be receiving 3 maybe 15,000 actions and the process back when we were microfilming, that was too much volume for us to handle, so 4 5 what we did was go back and do it quarterly. And again, that was too much information for us to process, so 6 7 basically what we did was go to a COLA system, copy over to 8 laser disk system on all personnel actions. Basically what we do is hit HRIS, there's a template of that information, 9 10 and copy it over to Optika, then they would print out a 11 personal action for that person's individual PHR and that 12 would be carried over to the Optika system and that person's 13 PHR. Now in 1999, we were going to a new system, so 14 15 from 1999, those actions were not ran, we would basically

rely on HRIS.

JUDGE YOUNG: I'm sorry, say that again.

THE WITNESS: We were relying on HRIS to get the information for that individual.

JUDGE YOUNG: So before 1999, you're saying that --THE WITNESS: Those were actually printed out in

that person's PHR.

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JUDGE YOUNG: The HRIS form that we're looking at?

The information from HRIS was copied 24 THE WITNESS:

25 over to that person's personal history record.

1	JUDGE YOUNG: When you say the information from
2	HRIS, are you talking about the pages in Exhibit 99 or are
3	you talking about those and additional information for each
4	action, or something else?
5	THE WITNESS: Exhibit 99 right here.
6	JUDGE YOUNG: I'm sorry, we have to keep doing
7	this for ourselves too, but maybe if you even pulled it
8	closer to you.
9	THE WITNESS: The exhibit I'm looking at right now
10	is what we're talking about.
11	JUDGE YOUNG: Exhibit 99?
12	THE WITNESS: Correct.
13	JUDGE YOUNG: You're saying that would be copied
14	into the PHR, right?
15	THE WITNESS: Right.
16	MR. MARQUAND: The pages or the information?
17	THE WITNESS: No, the information, not the pages,
18	the information.
19	JUDGE YOUNG: So the backup documentation for each
20	line, is that what you mean, each line on that form?
21	THE WITNESS: Depending on when it was ran.
22	Again, we ran quarterly, so any action that was done in that
22	Again, we ran quarterly, so any action that was done in that quarter would be on one document printout, on one

for each of these things be, just in files somewhere, boxes 1 2 or -- I mean the ones that were backlogged in effect because 3 you hadn't had time -- the people hadn't had time to --THE WITNESS: What they do, any actions say from 4 April to July, they run a computer program and get all those 5 6 actions and then copy that information over to the PRIS 7 system. JUDGE YOUNG: So now, looking at this and these 8 things that took place in 1990, since there are not 9 documents in the PHR reflecting each of these entries, is it 10 11 likely that they were just lost or -- because they could 12 have been entered at least by the end of the quarter in 13 which each of these action dates occurred -- action dates occurred, right, wouldn't they? 14 15 THE WITNESS: Correct. 16 JUDGE YOUNG: So if they're not, then they were 17 just lost or what? 18 THE WITNESS: I think if you look at TVA exhibits, let me qo back --19 20 BY MR. DAMBLY: 2.1 If you look at 669, is that what you're looking 22 for? Correct. For example AF000729 --23 JUDGE YOUNG: 24 729? THE WITNESS: Uh-huh. 25

1	JUDGE YOUNG: Okay.
2	MR. DAMBLY: Maybe this will make it easier, I
3	only have one question.
4	BY MR. DAMBLY:
5	Q If the HRIS system has an entry in which somebody
6	receives a pay increase or promotion or whatever, that
7	governs over in terms of they get paid or they get
8	promoted even if it doesn't make its way into the PHR?
9	A That's correct.
10	MR. DAMBLY: That's all the questions I have.
11	REDIRECT EXAMINATION
12	BY MR. SLATER:
13	Q Mr. Sewell, the document that you're looking at,
14	Staff Exhibit 99, the employee action reasons.
15	A Yes.
16	Q That is not the official that is not an
17	official document that would be in the PHR, is that correct?
18	A That's correct.
19	Q And that is not the official PHR of TVA employees,
20	is that correct?
21	A That's correct.
22	Q And in this particular case, Staff Exhibit 99 is
23	not the official PHR of Wilson C. McArthur, is that correct?
24	A That's correct.
25	MR. SLATER: Thank you.

1 MR. DAMBLY: Nothing further. MR. SLATER: I have one further question -- or 2 3 maybe a couple more. BY MR. SLATER: From Staff Exhibit 99, could you discern whether or not, from that document, if a position description had 6 been issued to Wilson McArthur? Α No. 8 And you referred to page 729 of Mr. McArthur's 9 PHR, do you recall that? 10 Α Correct. 11 12 And there was an action that took place on 13 11/14/97, is that correct? 14 Α That's correct. If you take a look at Staff Exhibit 99, and at the 15 very top, it says "Pay BCP base compensation plans" and then 16 it has some more dates. And it has an effective date of 17 11/14/97, do you see that? 18 Α Correct. 19 For the first entry, does 729 reflect the same 20 action on the first line of Staff Exhibit 99? 21 22 Α That's correct. And when you said that when you do a computer run 23 every quarter, that is the kind of information that would be 24 25 captured an placed in the HR?

1	A That's correct.			
2	MR. SLATER: Thank you.			
3	JUDGE YOUNG: What is the action on that one?			
4	Where does it tell that?			
5	MR. SLATER: It's on 729.			
6	JUDGE YOUNG: I know, but on page 729			
7	MR. MARQUAND: It changes the identification of			
8	the organization.			
9	JUDGE YOUNG: Is there any reference to the type			
10	of action on here?			
11	MR. DAMBLY: Your Honor, I was going to ask the			
12	same question.			
13	RECROSS EXAMINATION			
14	BY MR. DAMBLY:			
15	Q The action you're talking about, if you look at			
16	99, the action reason is BCP, base compensation plan, and			
17	the action reason here is DTA; is that the same action?			
18	JUDGE YOUNG: Where are you reading from oh, I			
19	see, never mind.			
20	BY MR. DAMBLY:			
21	Q That's not the same entry, is it?			
22	A That's basically an HR question, I'm not in HR, I			
23	couldn't answer that question.			
24	Q But they're not identical if you look at the two.			
25	A The coding or the wording, HR terminology is			

different and I can't address that.

JUDGE COLE: It looks like the only difference in that is under the DEP LID, the department ID, which is the only -- seems to be the only difference.

MR. DAMBLY: There's a difference if you look on 729, it says effective date 6/30/1997 and if you look at Staff Exhibit 99, you have an effective date of 9/29/97. So the effective dates are not the same; the action and reason code -- one is pay, BCP, and the other is DTA MMT, so I'm not sure that they do correspond. I mean they have a similar date for action date, but if you look down 99, you'll find a lot of entries with a similar date, with the same date, as a matter of fact, that had two or three different actions associated with it.

CHAIRMAN BECHHOEFER: Mr. Sewell -- are you through with that particular question?

I would like to inquire, when you look over Staff Exhibit 99 and you see the various entries for base compensation, which I assume means salary changes, how does that information get to you so that it gets put into the record, does HR officially review what each employee is entitled to be paid on a quarterly basis or whatever basis that you need and then advise your office?

THE WITNESS: Again, that database, as I said before, they would run a report of any personnel actions and

then that information would be sent to us via the COLA 1 2 operation. So that information from HRIS is transmitted 3 over to the PHR system. CHAIRMAN BECHHOEFER: Well, would they tell you 4 that compensation for Wilson McArthur as of a given date is 5 6 whatever it is? THE WITNESS: No, it's not on an individual basis, 7 it's just TVA-wide, that information. 8 9 JUDGE YOUNG: So let me --CHAIRMAN BECHHOEFER: So you would convert then 10 11 the grade to whatever the TVA-wide salary for that grade is? 12 THE WITNESS: Again, that information, we don't handle that information, all we do is take the information 13 14 that's given to us, that's copied over. CHAIRMAN BECHHOEFER: So they would not --15 JUDGE YOUNG: Let me see if I can --16 17 CHAIRMAN BECHHOEFER: -- HR would not send you the pay for individual employees? For instance --18 JUDGE YOUNG: Let me see if I can clarify. 19 CHAIRMAN BECHHOEFER: -- if they were entitled to 2.0 a step increase for instance, which is I understand fairly 2.1

THE WITNESS: That information -- a person's step increase, as I said before, that information is done through

automatic as of a given date. How would that get entered

into your HR system I guess?

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the HR office. Once it's done through the HR office, it's in the HRIS and when they go through that quarterly report, the information is copied over on a template and sent to the Optika system and put in the person's PHR. We don't see it, we don't have anything to do with it, all that information is just carried over and put in the person's PHR.

JUDGE YOUNG: Let me see if I can clarify my understanding. What you're saying is HR has various forms and various ways that they accomplish recording an action that's taken or whatever it is that they do. They create the document or form and they would be the ones who would know what all the entries mean in terms of pay or job description or whatever. And what happens in your office is that they send you the documents, you don't look at the documents to interpret them, you on a quarterly basis enter the documents into the official personal history record; is that right?

THE WITNESS: That's correct.

JUDGE YOUNG: Okay, thank you.

CHAIRMAN BECHHOEFER: But just to clarify again, to enter it into the personal history record, a pay increase, for instance -- in TVA, I guess every year you're told you'll get a percentage increase and then perhaps additional pay when recommended for services, that type of thing.

JUDGE YOUNG: HR does that. 1 CHAIRMAN BECHHOEFER: Well, I know. But what I'm 2 saying is how does HR get it --3 JUDGE YOUNG: HR sends a document to his office. 5 CHAIRMAN BECHHOEFER: Is it a general document covering TVA received a pay increase of X percent this year 6 and --MR. DAMBLY: Your Honor, I think if you were to 8 look for an example, on the devil page 666 there --JUDGE YOUNG: Page 666? 10 MR. DAMBLY: Yes. I think you will see a document 11 12 that corresponds on page 2 of Staff Exhibit 99. JUDGE YOUNG: Which line? 13 14 MR. DAMBLY: Come up from the bottom -- just look 15 in the right hand column coming up from the bottom --I'm sorry -- going up from the bottom in the right hand 16 column, you see a pay of 83 going to 95. 17 JUDGE YOUNG: Uh-huh. 18 19 MR. DAMBLY: And I think if you look on 666, 20 you'll see over -- it's hard to see in the middle of the top center of the page, about four lines down, pay rate, you see 21 22 83.4 to 95. 23 JUDGE YOUNG: Uh-huh. 24 MR. DAMBLY: So this would be a way they would 25 document a pay change.

1 THE WITNESS: Correct. 2 JUDGE YOUNG: You don't pay attention to the 3 contents, you just when you get the document, when you get 4 to the end of the quarter in which you receive it, you enter it into the PHR. 5 6 THE WITNESS: The individual's PHR, right, we 7 don't even look at it. JUDGE YOUNG: Right. 8 9 THE WITNESS: We just --MR. SLATER: Your Honor, I have just a couple more 10 questions just to clarify a couple of things. 11 12 CHAIRMAN BECHHOEFER: Proceed. 13 RE-REDIRECT EXAMINATION BY MR. SLATER: 14 15 Now Mr. Sewell, the devil page, as Mr. Dambly just referred to, I believe these are referred to as 9880s, is 16 17 that correct, as a Form 9880. 18 Α Correct. 19 TVA doesn't issue these any more. 0 No, we do not. 20 Α 21 Q When did they stop issuing these forms? 22 Α I want to say 1992. Okay, now just to clarify as to how a pay increase 23 24 would be reflected or should be reflected in a PHR. 25 understanding you correctly, when John Slater gets a pay

- increase from the Office of General Counsel, hopefully -
  the HR person or persons who are responsible for my

  organization would then go to the computer system and enter

  into the system that Slater has received a three percent pay

  increase, going from X to Y and that system is HRIS, is that

  right?
- 7 A That's correct.

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- Q And then the way that those entries are reflected in an individual's -- in this case my PHR -- would be on a quarterly basis, your organization runs a computer program to see what actions concerning pay and that kind of thing have been taken with regard to me; is that correct?
- A Not only you, TVA-wide.
- Q TVA-wide.
- 15 A Correct.
  - Q And if I received a pay increase during that particular quarter, then it should be reflected in my PHR, is that correct?
- 19 A That's correct.
  - Q So there is no paper transfer with respect to some personnel actions that are taken with respect to TVA employees.
  - A That's correct.
- Q It's just computer transfer.
- 25 A Correct.

Q Now but as to some items like job descriptions, those pieces of paper come to you if they are to be inserted in the PHR.

A That's correct.

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- Q And then if after 1995 in the PRIS system, you would just image that document and scan it into the system; is that correct?
  - A That's correct.
- Q And before 1995, that document would be microfiched.
  - A Correct.
- Q So that is how it works, some personnel actions are just -- you don't see any documentation whatsoever, it's just a quarterly computer dump and the computer will filter everything out as to what action has occurred as to me, as to you, as to Mr. Marquand, as to Ms. Green. Then they would be put into their respective PHRs, is that correct?
  - A That's correct.
- JUDGE YOUNG: And none of that is related to the actual accomplishing or implementing of the action.

  Presumably the HR person that approved Mr. Slater's raise would also send information to the payroll department who would then implement the raise.
- 24 THE WITNESS: I think that's correct.
- 25 BY MR. SLATER:

Q So just for further clarification, things like pay increases, changes of address, tenure, organization codes and grade levels, you won't see pieces of paper.

A That's correct.

Q And as to pay actions, that is -- it's from -- those actions are actually done by payroll and fed into the HRIS system and then you do your quarterly thing and then it's reflected in the PHR; is that the way it works?

A That's correct.

MR. SLATER: Okay, thank you.

CHAIRMAN BECHHOEFER: Well, just for further clarification, I was really referring to non-uniform throughout TVA pay increases, not as a result of a general pay raise or pay change throughout the organization, but say -- I don't know which persons are actually subject to step increases, but a step increase which would take place automatically after a given period of service in the grade or range, pay range, how would that come to your office, which varies per employee.

THE WITNESS: Again, that falls under the same category we talked about before. Any personal actions that are done, the same process. It's entered in HRIS and then the information is sent to us via computer.

CHAIRMAN BECHHOEFER: But something would have to be sent to you relating to the particular employee, for

instance?

THE WITNESS: Just on that report.

JUDGE YOUNG: Other parts of the organization are responsible for seeing that whatever information comes to you comes to you. You're not responsible for that, so for example on step increases, if it's the payroll department that's responsible for that, they would be the ones who would generate either computer entry or something else that would -- that if it happens correctly, would eventually get to you and then at the end of the quarter in which you receive it, that would be transferred into the PHR.

THE WITNESS: That's correct.

MR. MARQUAND: As I understood what he said, he's saying that on a quarterly basis, their computer talks to HRIS which is a computer and it looks to see has there been a change and it looks at every employee's salary and says has there been a change and it simply updates the salary in his system; is that right?

THE WITNESS: That's correct.

MR. MARQUAND: So they don't get a hard copy piece of paper from anybody with respect to that.

JUDGE YOUNG: Right.

MR. DAMBLY: But you do get a computer entry.

THE WITNESS: We get again that quarterly report that shows up in the PHR. Again, the information is on a

template, it's not a hard paper copy, just a template of information that's carried over from computer to our system, so you can view it in the template.

MR. DAMBLY: And if you don't get one, the HRIS system still controls in terms of what happens to the employee. If somehow it doesn't show up in your records, they still get the promotion.

THE WITNESS: If it's in HRIS, that's the official.

MR. SLATER: But just to further clarify, Mr. Sewell, as to position descriptions though, that is a hard piece of paper that physically comes to your organization to be placed in the PHR.

THE WITNESS: That's correct.

MR. SLATER: And so there is no magical computer program that will somehow get the position description to you to be placed in the PHR to be imaged, say after 1995, to be imaged in the PRIS system.

THE WITNESS: No.

MR. SLATER: Thank you.

MR. DAMBLY: I guess just one follow up on that.

If a PD is written and signed for an employee, reflecting a job change and somehow doesn't make it to you, does it mean it doesn't exist, if it doesn't make it into the PHR?

THE WITNESS: As far as our system is concerned,

1	it doesn't exist. I can't speak for anyone else.			
2	MR. DAMBLY: Okay.			
3	CHAIRMAN BECHHOEFER: Mr. Sewell, I guess we thank			
4	you for your presence and you're excused.			
5	THE WITNESS: Thank you very much.			
6	JUDGE YOUNG: Thank you.			
7	CHAIRMAN BECHHOEFER: Let's take about a 15 minute			
8	break and			
9	MR. DAMBLY: Thank you, Your Honor.			
10	MR. MARQUAND: Thank you, Your Honor.			
11	CHAIRMAN BECHHOEFER: you will I assume have a			
12	new witness.			
13	(A short recess was taken.)			
14	CHAIRMAN BECHHOEFER: Back on the record. Mr.			
15	Marquand?			
16	MR. MARQUAND: Thank you, Your Honor. TVA calls			
17	Cary L. Peters.			
18	Whereupon,			
19	CARY L. PETERS			
20	appeared as a witness herein, and having been first duly			
21	sworn, was examined and testified as follows:			
22	DIRECT EXAMINATION			
23	BY MR. MARQUAND:			
24	Q Mr. Peters, state your name for the record,			
25	please.			

1	A	Cary L. Peters.		
2	Q	How are you employed?		
3	A	TVA.		
4	Q	How long have you been employed by TVA?		
5	A	Just a little over five years.		
6	Q	What's your position with TVA?		
7	A	I'm a program manager for performance management.		
8	Q	What is performance management?		
9	A	Performance management includes our performance		
10	review sy	stems, our 360 degree feedback programs, and, in		
11 .	TVA's instance, I also do our preemployment assessment			
12	design work.			
13		JUDGE YOUNG: What was and TVA what?		
14		THE WITNESS: Our preemployment assessment		
15	processes	. I work on those as well. I guess I call it		
16	selection	•		
17		JUDGE YOUNG: I missed a couple of words.		
18		MR. MARQUAND: Can you scoot the microphone right		
19	up to the	edge of the table so it'll okay, there we go.		
20	If you're	going to lean back, just take the microphone with		
21	you.			
22		CHAIRMAN BECHHOEFER: Get a little closer to the		
23	microphone, I guess. You're hard to hear.			
24	BY MR. MA	RQUAND:		

Q All right. What organization are you in at TVA?

1 Α Comp and HR planning. 2 0 Is that part of the corporate human resource 3 organization? It is. 4 Α 5 It's not part of the TVA nuclear organization? Α No. 7 All right. JUDGE YOUNG: When you say it's part of the 8 9 corporate, does that mean it's part of the -- TVA-wide? THE WITNESS: Yes. 10 In human resources we have a 11 corporate HR function and then we have line HR function. 12 I'm at the corporate level. I would essentially do design 13 type of work that would apply to the entire company. 14 JUDGE YOUNG: Thank you. 15 BY MR. MARQUAND: 16 And, by contrast, the operating organization, the 17 chief operating officer has a line human resource organization in his organization? 18 19 Α Exact. 20 0 That handles day-to-day human resource issues? 21 Α Exactly. 22 And you're not part of that, you're in a distinct 23 human resource organization? 24 Α Exactly. Right.

All right. What's your educational background?

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A I well, I've gone to college a little bit. I
have an associate's degree from a junior college, Heston
Junior College; I have a bachelor's degree from Taylor
University; a master's degree from the University of
Nebraska; and a PhD from the University of Tennessee.

- Q And what is your -- what's your master -- what is your bachelor's in?
  - A Bachelor's was in social work.
  - Q All right. And what is your master's in?
- 10 A Master's in educational psychology, counseling -- 11 with a counseling emphasis.
  - Q And your doctorate, what is that in?
  - A Industrial and organizational psychology.
  - Q All right. When you -- you mentioned performance management. What is performance management?
    - A What is that?
- 17 Q Yes.

A Well, it entails a variety of things. In TVA it would include -- the lynchpin of that would be our performance review processes where managers evaluate the performance of their employees. So I work on that at the corporate level and apply our interests in those areas to both our management and our specialists, as well as our represented groups, so we have a variety of different performance review systems.

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I also directly manage our 360 degree feedback process, which is a system where employees give anonymous feedback to each other through surveys. It's fairly common in large Fortune 500 type companies. Those are the -probably the lynchpins of performance management.

- And was I correct in -- when I heard -- I think I heard you say you were involved in performance evaluation.
  - Yeah. Α
  - What is that?

The other part. When you say "performance management, " and that's my title for what I work on. also, incorporated into that is this other category called selection, preemployment assessment, testing, interview structure, those kinds of programs, as well. And I'm going to put those under performance management. If you talk to other people in other companies, they might have a separate division that does that kind of work. But in our case at TVA, I work on those, as well, and design those processes for our company.

What's involved in that?

Well, one of our big endeavors has been to design structured interview questions for line managers to use. And so we built -- for example, our most recent tool, if you want to call it a tool, was a resource, a binder of interview questions based on our winning behaviors. And...

JUDGE YOUNG: Based on what behaviors?

THE WITNESS: Our winning behaviors. Our company

has 20 winning behaviors. These are...

JUDGE YOUNG: Winning?

THE WITNESS: Winning. Yeah. These are the things people are supposed to have.

BY MR. MARQUAND:

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Q Those are desirable traits for employees?

A Desirable traits written in a -- in a language and a nomenclature kind of specific to TVA. Some -- if we threw some of those out, you may not really have meaning around them, but they're supposed to have meaning in TVA. So we're trying to perpetuate those throughout the company.

And so we wrote behavioral and situational questions for line managers to use when they conduct interviews with their employees. So we produced this document. I presented that to the various line HR groups for them to use as they consult with line managers whenever hiring decision occurs. So that's an example of -- of what we do. We also are in the process of doing a large-scale validation study, where our employees who work in craft positions, who work in jobs in our plants where they operate our plants, the plant operates, SGPOS, instrument mechanics take an assessment. And we are looking at other ways to enhance that assessment and include some of the -- I guess

you could call them the soft skills, the attitudinal pieces, so when these employees applied, for a period of about a year-and-a-half we assessed them on some additional measures. We didn't make decisions on those measures, but we assessed our candidates on those, and we have now determined about 302 of the 1,056 that we assessed were hired. And it's halftime now on that study, because it's longitudinal. And after a while we'll look at their job performance. Some of them...

JUDGE YOUNG: So, let me see if I understand. You do the assessments. You didn't make decisions based on them. But then you conduct -- you kept the statistics so that you could tell whether the behaviors that you predicted would -- would make a better employee actually did?

THE WITNESS: Exactly. But we haven't got to the point yet of confirming that those behaviors actually predicted behavior, because we haven't collected the other half.

## BY THE WITNESS:

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A So, on one side you have your predictors. We already are using some. Don't get me wrong. It's not like we randomly selected. We already had a very good assessment in place, and we're looking to enhance that and make it even better. And so we added to that some other stuff over here called predictors, and then over here we'll collect

criteria, if you want the fancy word. Otherwise we just call it job performance information.

But I'm right in the middle right now. It's halftime. Because we hired some of these people as recently as October of '91, and they go through fairly extensive training, and we didn't feel, when we looked at this about two or three months ago, that they really had had enough time on the job so that our supervisors could give us a pretty good evaluation of their job performance. So we said let's -- let's come back to it in six months, which will put us into the fall time frame.

When we get that information, then we'll run lots of different correlations and analyses between those two groups, and then we'll be able to say yes, these type -- these pieces of this information over here predicted job performance and this didn't predict job performance, and then that will help us in future decisions, as to how we can more effectively select our craft and other employees in the plants. So it's another example of selection work, couple of examples for you.

## Q So you're...

JUDGE YOUNG: Could I ask one more clarifying question on that. The -- when you look at the -- the data from which you -- well, you compare the data from performance reviews to the predictors, are there any -- is

there any other data, any other information besides performance reviews, that you look at?

THE WITNESS: Uh-huh. Yeah. That's kind of in my field, in IO psychology, is always a challenge to find good job performance or criteria. The criterion space, it's called. And the ubiquitous one is always supervisor ratings, because you can usually get those.

But the other one that we've looked at was safety records. So we would look at their accident history. And I see that as a much harder criterion. It's more objective. We can even -- our safety staff even has dollar amounts attached to that. So we can look at that. They also evaluate the severity of the accident. The challenge with a criterion like that is it has a -- fortunately, has a very low baseline rate. So, from a statistical standpoint, if you had these 302, and only five had an accident, well, we're pleased with that at TVA, or whatever that is. But from a statistical standpoint it's -- it's a little bit more challenging. So you -- there's a tradeoff there.

We also were going to look at some training records. But really, at that point, with our already good assessment process, it's pretty well expected that everybody proceeds through training and does well. So it's kind of a "pass, no-pass." And if you don't pass, then you try again. But we don't really want to have a large dropout rate on the

training. So I, after hearing a lot of people talk, decided that probably training records, which is often used, to answer your question, in our instance would have been a lot of -- we would have had a lot of difficulty tracking those down.

JUDGE YOUNG: Do you ever look at say a -- an organization -- organization-wide performance? Like, for example, INPO scores that chemistry organization at one of the plants might get, and use that with regard to all the employees who were in that organization?

THE WITNESS: We -- we could only use information that would be at the level of the individual. So if you had -- and I'm not that familiar with the INPO information, but if it's not driven down to the level of that applicant, then it doesn't really work for us. So I wouldn't be able to use that. So if it's some kind of aggregate, hey, everybody in this work group has done well or not done well, I suppose you could do something with that, but that'd be a very -- would be a big challenge. I don't see that too -- too likely. So, really, we're looking at the level of the individual.

And just as an FYI, when you say industrial and organizational psychology, the "I" stands for industrial.

And really, what we mean is individual level, research and applications in organizations. And that's exactly what this

is. The "O" is organizational level analyses and applications. And those are things like corporate culture, which is much more of an aggregate kind of an issue. So when we're talking about selection today, it's really the "I" side, and that goes back to your issue of we really need data from a research standpoint on the individual.

JUDGE YOUNG: Thank you.

THE WITNESS: Yeah.

CHAIRMAN BECHHOEFER: Does your organization in any way get involved in drafting operator license examinations or senior operator license examinations?

THE WITNESS: Not in the licensure examinations. My guess is those would come from some licensure board, and I am not involved in that. But we -- we could---although we're not at this point---you could certainly get involved in designing a preemployment assessment, if that's what you're looking at, to predict who would do well on the job and who would have more of a chance of passing some sort of licensure. But I don't directly work on developing licensure exams.

## BY MR. MARQUAND:

- Q What -- what I understand you to say is that you some of the major things you do is you design assessment
  tools to select people with?
  - A Design or recommend; yes.

1 Q All right. And you also evaluate assessment tools by which people are selected? 2 Α Sure. 3 All right. Would you look at Tab 101. That's TVA 4 5 Exhibit 101, which should be open right in front of you. What is that? 6 7 Α That's my vita. Q All right. And... JUDGE YOUNG: I'm sorry, I'm looking at Staff 101. 9 I need to get... 10 11 MR. MARQUAND: It's the black binder, Your Honor. It should be Binder #10 of 11. 12 And you said 101 is your vita? 13 14 Α Yes. 15 Q It shows your education? 16 Α Right. And then, beginning on Page 1, it shows your 17 Q professional experience in reverse chronological order? 18 Uh-huh. 19 Α And then, at Page 5, shows the courses, 20 activities, and affiliations? 21 22 Α Exactly. And beginning at Page 6, research and papers that 23 24 you've been involved in?

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Uh-huh.

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MR. MARQUAND: Your Honors, I'd tender Mr. Cary's
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    vita (sic), which is TVA Exhibit 101.
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               MR. DAMBLY: No objection.
               CHAIRMAN BECHHOEFER: Without objection, TVA
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    Exhibit 101 will be admitted.
5
                              (The documents, heretofore marked
6
7
                              as TVA Exhibit #101, were received
                              in evidence.)
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9
    BY MR. MARQUAND:
               Dr. Cary, did you perform an evaluation at my
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          Q
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    request?
               I did.
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               All right. And what did...
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               JUDGE YOUNG: Peters.
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               MR. MARQUAND: What did I say?
               JUDGE YOUNG: Dr. Cary. I was just looking at
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     the...
               MR. MARQUAND: I'm sorry.
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               JUDGE YOUNG: ...research. I thought...
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               MR. MARQUAND: Dr. Peters.
               THE WITNESS: I get that from time-to-time.
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    not sure what that means about my name, but...
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               MR. MARQUAND: Somebody over here is undermining
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    me. Back-dooring me.
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               CHAIRMAN BECHHOEFER: I might comment that this is
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- the type of background, position, statement which I had
  thought might well have been prepared for each witness, and
  then perhaps bound into the record at the place where the
  employee is questioned about it.

  MR. MARQUAND: Yes, Your Honor, I thought you
  might appreciate this.
  - CHAIRMAN BECHHOEFER: But as an exhibit it's just as good.
- 9 BY MR. MARQUAND:

- Q With respect to the evaluation that you performed at my request, Dr. Peters,...
  - A Thank you.
  - Q ...what information were you provided?
    - MR. DAMBLY: Well, first I'm going to object.

      Just moving in his curriculum vita does not establish him as an expert in statistics. And if that's what he's going to use him for, because that's the report, I don't think that's been established yet by any means.
    - CHAIRMAN BECHHOEFER: Well, you -- you have a right to voir dire him.
    - MR. DAMBLY: Well, I haven't even heard him tendered as an expert in any. We've got a -- a curriculum vita here that says he took two or three courses in college, which about everybody who went through college took. And there's nothing in -- on any -- anything on any of his

studies that are entitled statistical analysis of "X,"

there's no position he's ever held that says he was a

statistician or performed statistical anything. So, he's an

industrial psychologist. I don't know that qualifies you to

come in and give statistical testimony, and we've heard

nothing about it.

- MR. MARQUAND: Well, I think that objection's a little premature. I asked him what information I provided to him, and I don't think that objection's relevant to any question that's pending at this time.
- JUDGE YOUNG: We haven't gotten beyond your reference to Exhibit 101. You've not referred to any other exhibit yet, have you?
- MR. MARQUAND: No. And all I did is, I asked him, "Did you do an evaluation for me?" And then I said, "What information did provide you?" And that's the pending question that's on the floor. That objection is way premature.
- JUDGE YOUNG: I think we do need to hear what the subject matter is.
- JUDGE COLE: Might not even be statistical.
  - MR. DAMBLY: We had the report given as part of this -- this was one of the discussions we had about witnesses in one of the prehearing conference in Dr. Peters' report, which is a statistical analysis.

MR. MARQUAND: This is my -- my examination, and 1 2 I'm entitled to proceed in the order I wish to proceed. And 3 if I wish to qualify him as an expert prior -- immediately prior to asking him those questions, I'm entitled to do so. 5 I don't have to proceed in the sequence counsel wants to do so when he asks -- when he poses questions out of sequence. 6 JUDGE YOUNG: Let's wait till we get to it. BY MR. MAROUAND: What information I provide you (sic), Dr. Peters? 9 10 A You gave me a -- basically just a spreadsheet of 11 data with the ratings from the interviewers about the candidates. 12 And you understood that this was ratings that 13 14 occurred during a selection? During a -- yes, during an interview for a 15 16 selection. There were three raters, there were three 17 candidates, and nine questions. So he gave me 81 numbers, basically, and described the situation to me a little bit, 18 and asked me to go forth and take a look at that. 19 20 0 All right. CHAIRMAN BECHHOEFER: Well, is this for a 21 particular situation or for just generally what you do? 22 23 THE WITNESS: No, it was I think for the situation we're here today for. The -- the selection that we're 24

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talking about today.

1 Q If you would look at TVA Exhibit 102, the last 2 page, there's a number at the bottom of the page, FB16. JUDGE YOUNG: FB8? 3 MR. MARQUAND: No, it's FB16. 5 JUDGE YOUNG: The beginning page? 6 MR. MARQUAND: No, it's the last page of TVA Exhibit... 7 8 JUDGE YOUNG: The last page. MR. MARQUAND: ...102. And the page number is 9 10 FB16. 11 BY THE WITNESS: Yeah, that's exactly what you gave me. 12 Okay. 13 That's the information you were provided? And who do you understand to be the three evaluators or raters? 14 Corey, Kent, and Rogers. 15 Α All right. 16 Q MR. MARQUAND: And for the board's benefit, 17 Candidate B refers to Chandra; Candidate A is Mr. Harvey; 18 and Mr. Fiser's identified there. 19 Was there -- were you provided any other 20 information with respect to -- and let me ask -- let me back 21 22 up and rephrase that. What were you requested to evaluate this 23 information for? What were you looking for? 24 To look at it and -- and I might use the word 25 Α

"analyze," if that's okay.

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Q Okay. That's fine.

A That seems to be a number -- a word we use often when we're doing this kind of thing. We -- I analyzed -- was asked to analyze it to see if there was anything going on in the ratings that might indicate some sort of a bias against the candidate. And we had a conversation about the situation. We talked about -- although I don't know a lot about the situation, probably enough just to go forth and analyze the data. We talked about Corey, Kent, and Rogers, and the awareness of those three people about the status of Fiser, who was the person who was supposedly discriminated against. And I did not know the names of Candidate A and B, just...

Q All right. Were you informed that the allegation was that Mr. Fiser had been discriminated against for engaging in protected activity or, in the vernacular, for being a whistle blower?

A Right.

Q And what were you told with respect to the knowledge of Mr. Corey, Kent, and Rogers with respect to their awareness of his having engaged in protected activity or -- or the fact that he was a whistle blower?

A Corey and Kent knew, and Rogers didn't know of Fiser's involvement in a protected activity.

Q All right. And so you then used this information and you analyzed to see whether there was a bias with respect to...

A Exactly. To take -- my charter, being unfamiliar with really anything much else about this case, was to take the information that we've just summarized right here, the situation around Corey, Kent, and Rogers; and the fact that Rogers knew, and Corey and Kent didn't; and that Fiser was in the protected category and Candidate A and B weren't. And to take that information, along with those -- this little spreadsheet, and take a look at it, and see if there was anything going on, I guess you could say, in the ratings that occurred in the interview. Do the ratings indicate, are they consistent with this -- this hypothesis or this proposal that, in fact, Fiser was discriminated against. And so I took the information and the data in the spreadsheet and analyzed it.

Q What type of tool or tools did you use to analyze this data?

A When you say "tool," are you talking about the software package?

- Q Well, no, I mean just general.
- A My -- the analyses I performed?
- 24 Q Yes.

A An ANOVA is what it's called.

- And is ANOVA a statistical... 1
- It's a very common statistical procedure, well 2 Α 3 established. It's A-N-O-V-A, all capitals.
  - Is that an acronym?
  - As much as -- it stands for analysis of variance. So "analysis" is A-No.
  - 0 A-N.

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- I don't know if an acronym is limited to only the first letter of a word. But more or less, yes, it's an acronym or some cousin of an acronym.
- All right. Did you have experience in using 11 12 analysis of variance or ANOVA?
- 13 Yes.
- And have you had academic training in statistical analysis? 15
- Α I do. 16
  - Is that what you do on a day-to-day basis in your job is -- when you analyze selection tools?
    - I don't do it on a day-to-day basis. Α
  - But that's what you use in your analysis of selection tools?
  - When needed, I'll do a -- there's many statistical tests, and that's -- that was the main one I selected for this situation, as well as a two-way ANOVA, just to clarify that.

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JUDGE YOUNG: As well as a what?

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THE WITNESS: A two-way ANOVA, which is a more

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complex version of an ANOVA. We'll probably get to that.

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There's an interaction involved in that. And I also did a

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correlation.

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JUDGE YOUNG: So there's a regular ANOVA, a two-

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way ANOVA?

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THE WITNESS: Many, many ANOVAs. I've only --

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we've only scratched the surface. But I didn't need to do

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them all. But we did ANOVA, and a factorial or a two-way

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ANOVA, and a correlation.

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BY MR. MARQUAND:

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Tell us the type of training you've had in using statistical analysis.

courses --- one or two, I don't remember --- when I got my

master's degree. But it really kicked off, I guess, when

you get your PhD in IO psychology. It is loaded with stats.

And of all the many, many, many branches of psychology, we

are the -- I guess you could use the term gear head version

where there's probably the most statistical application and

Okay. My training, I had a couple of stats

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would have far, far less, because their work is very different. We're sort of a -- closer to an MBA on steroids,

training involved. A clinical psychologist, for example,

I guess, than we are to a clinical psychologist. So the

steroids part would be lots of statistical training. So we take courses in univariate and multivariate statistics, and we do those until we're tired of doing those, and then we do them some more when we're in graduate school. So I would guess---and this is just an estimate---about 40 percent of the PhD is statistical in nature for an IO psychologist.

Q And what does an IO psychologist use the statistical training for?

A Really, what we're talking about today, selection. The lynchpin of an IO psychologist, or the bread and butter is preemployment assessment and testing. That is a portion of my job, so that's why I don't do it every day, because I also do performance management work. But if you talk to people in our -- our industry, the bread and butter of an IO psychologist is in preemployment testing and assessment, and then relating that to job performance. That's what an IO psychologist works on, is employee performance and employee development in organizations. And in order to do that, they do a fair amount of quantitative type of work.

JUDGE YOUNG: Just out of curiosity, since Mr.

Marquand mentioned the issue of bias, I happen to be

familiar with some research done by a person at the

University of Chicago Business School on bias in performance

appraisal and -- oh, I forget the -- the term that's used.

Predicting behavior of groups and how they interact with

each other. Is that the kind of thing you also ...

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THE WITNESS: Somewhat. When you said predicting behavior, that sounds like IO psychology. When you said it's how groups -- when you said it's how groups interact with each other, that makes me think of a sociologist. I don't mean to split hairs or what. But we would certainly -- in our field, there would be thousands of studies on various forms of bias and the whole world of performance appraisals. Things like what about men evaluating women; what about women evaluating men; women evaluating women; men evaluating men. That's just one little -- you know, then we could throw in ethnic or racial issues. Then we could talk about people who -- in age. And so you can imagine. And -and in my field, it's about half practitioner, like me, and about half academic. And because you don't hear about IO psychology a lot at the undergraduate level, that tells you it's basically a master's or a PhD program. So those half of the field that are in the universities are all working for tenure, and so that produces thousands of papers on bias. Even that term "bias," we all probably have a little bit different thought in our head today exactly what "bias" means. And there have been some very sophisticated and complex definitions of "bias" in the area of preemployment And when I began learning about that, it all made sense. But I realized that what seemed to be a fairly

simple topic can get extremely complex when you talk about "bias." So maybe I gave you more information than you wanted, but...

JUDGE YOUNG: No, I find it interested. But on the predictors of behavior, let me just tell you one study that I -- I recall reading about. And I may not recall it in -- in great detail. But a study or a experiment (sic) in which a group of people, one after the other, would go, say, to a movie, or decide what to do about any given choice that they had to make. And the research was to watch each successive person to see the effect of what the previous person did to sort of predict sort of mass mentality or -- as opposed to independent judgement, I guess.

intriguing studies. There were studies shortly after World War II that in fact even movies have been made about. Some of Zimbardo's work and the influence that people can have on each other. An intriguing one is the Ash study where they put people in a room with a cohort. A cohort is someone who's working with the investigator, but the other people don't know it. It's really kind of humorous. They would do something as simple as shine up on an overhead projectorand this is, I think, in the '70s---lines, all of them clearly the same length except one. And then we'd go around the room and always put the -- the confederate toward the

front end and have that person tell the wrong line as being the shortest.

JUDGE YOUNG: And see which...

THE WITNESS: And see how many other people fell suit -- followed. And it was incredible. You'd get like -- and, again, I've not read this for many years, but something like -- when it's very clear that this one line is shorter, but this person would indicate a different line, something like a third of the people would still line up with this confederate. And then you can do other manipulations. Does that person look like they know what they're talking about or not; are they wearing a tie or not; is it a man or a woman. You could do many variations off of that. But those kind of social psychology experiments are always the most exciting or sexy ones to read about, and they probably make the papers, you know.

JUDGE YOUNG: Thank you.

MR. MARQUAND: Let's talk about the evaluation I asked you to do. And before I do that, I'm going to tender Mr. -- Dr. Peters as an expert in the area of this sort of evaluation for -- of a selection process.

MR. DAMBLY: And again I would object. He's had, from what I can see, two graduate -- three graduate courses which are pretty common. And he said his -- his expertise is in preadmission -- or preemployment field. And we're

dealing with a selection that's not preemployment. We're
not talking about new hires, we're talking about a specific
system in place at TVA for a promotion, which is not what he
said he does or what his expertise is in.

JUDGE YOUNG: When you say he's had three courses, are you looking at...

MR. MARQUAND: He said three at his master's level.

JUDGE YOUNG: ...FB05?

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MR. DAMBLY: If you look at -- yeah, I'm looking at 101, Page 005. He's got statistical methods for master's, which is a basic course with a computer lab; he's got, under PhD, lineal structural equations, under which he listed multivariate statistics, which I take is part of that course.

THE WITNESS: I think that's a typo, in the sense that that should be aligned on the left.

MR. DAMBLY: Separate.

THE WITNESS: That's a separate...

MR. DAMBLY: And univariate statistics, which are basic statistics courses. There's no graduate statistics work. It's not anything different than one would do if they were taking an undergraduate course that required -- or, I mean, undergraduate major that required some statistics. He's not worked as a statistician, and he's told us his

expertise is in the preemployment testing field, and this has nothing to do with preemployment.

JUDGE YOUNG: What does personnel...

MR. DAMBLY: So that's my -- my...

JUDGE YOUNG: ...what does your reference to "personnel selection" under the doctor of philosophy courses, what does that refer to? Is that a -- is that one course, or is that a category of courses?

THE WITNESS: It's one. And in IO psychology, when you say "selection" or "personnel selection," what you're talking about is the use of tests and the application of those tests in validation studies and stuff like that.

It's -- the name looks like selection; the content is about 50 percent statistics.

JUDGE YOUNG: Which -- which of these courses, if any, would relate to the tests that you did?

THE WITNESS: I'd be happy to outline which ones are statistical in nature, because the name doesn't always give it away fully. I'll also say when we -- in my field, when we say preemployment testing, we're talking about preemployment for that job. Not preentry into the company. We're talking about preemployment in that particular job, and this interview was a preemployment assessment, because these people were in a different job. So that's what we mean by that term.

## BY THE WITNESS:

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- A LISCREL is a high level stats course generally only offered at the doctoral level.
  - Q That's linear structural equations?
  - A Linear structural equations.
    - Q Okay.

Α Multivariate statistics was a graduate level course populated by PhD students in IO psychology and statistics majors. Personnel selection was for PhD students only in my program, typically about six or eight of us. About half the content of that is kind of statistical in nature. Psychometrics, by the name, is purely stats, and that was all doctoral students in that course. Research methods is the methodology of conducting research. all doctoral students, about six or eight of us in my program. Univariate statistics was at the graduate level. That was all people in my program and -- I'm trying to remember -- and other graduate students. There might have been one or two master's type students in there. I'll juxtapose the level of those courses to my master's degree course where I also took a graduate course called---I'll have to look here to see it---statistical methods. statistical methods with something like a T-test, if you're familiar with that. That's a -- just a simple test to compare the means of two groups. Are men taller than women,

- 1 on average. And we have 100 men and 100 women. That's a T-2 test. In ANOVA it's a little more complex, because it is when you have more than two groups, and that's where we began our doctoral level courses. So there's quite a difference between those and -- the name doesn't always 6 indicate --- although I think it does a pretty good job here--7 -of the content of the course. But the -- the difficulty 8 level is probably indicated by the people who get into that 9 course.
- JUDGE YOUNG: I would find Dr. Peters qualified as

  an expert, as offered.
- JUDGE COLE: I agree.
- 13 CHAIRMAN BECHHOEFER: Yeah.
- 14 BY MR. MARQUAND:

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- Q Let's talk about your analysis. You've mentioned the term ANOVA. Can you explain to us, so we could understand it, at least, what an ANOVA is looking for and what you're doing.
  - A Yeah. And to kind of briefly restate what I just said, we've all probably heard of a T-test. Or maybe you -- maybe I...
- JUDGE COLE: Student T-test?
- 23 A Yeah, students' T-test, that kind of thing, where
  24 you look at two groups. And it maybe is used in training.
  25 We test our 20 students in a training course at TVA on their

knowledge of some asbestos removal, and then we do the training course, and we retest them later. And we want to see did they learn anything. And so you'd want to know if there's a difference. So you'd look at that.

And, of course, anybody could just look at the pieces of paper where they took the test. But if you wanted a little more definitive answer, you would do a T-test. That'd be a paired T-test, because you have the same person taking the test in the front and the back. If we were going to my other example of men and women, that's not a paired T-test. Those are just two randomly selected groups. It's a slightly different way of computing the T-test, and you would look at the differences between men and women on their height, for example, and see if that's statistically significantly different.

An ANOVA is what you have to move to when you have more than two groups. So a T-test is limited to two groups. An ANOVA, in this instance -- the reason I selected an ANOVA, an analysis of variance, is because we had three groups. And we had three groups, two different ways. We had three groups, if you look at it by rater---I'll call them that---and that's Corey, Kent, and Rogers; or if you look at it by ratee, and that's A, B, and Fiser. So you could split this different ways.

And as we talk, you might want to think of a three

by three matrix, with three rows. Maybe we'll call those 1 2 the candidates, A, B, and Fiser; and three columns, which would be Corey, Kent, and Rogers. And so you can either 3 look at the rows or look at the columns. When we get to the 5 factorial ANOVA, we're looking at row bi-column. 6 little bit more sophisticated. But for an ANOVA, I'm simply 7 -- at the beginning of my writeup, was to look at the 8 differences between the three groupings. And we could do two different types of groupings of three. So I had to use 9 10 an ANOVA, since we had more than two groups.

Q What did you -- you performed this ANOVA. Did you do it between the raters?

A Did it between the raters, and I did it -- and that's exactly the way we would say it. We did ANOVA between raters, and we did an ANOVA between ratees.

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Q All right. Tell us what you found when you did your ANOVA between the raters, first.

JUDGE YOUNG: And you may cover this, but while

I'm thinking of it, let me just ask you this. I don't know
whether the information you received indicated whether,
during the evaluation process or scoring process the raters
had any knowledge or means of knowledge of the other raters'
scores or not, or whether that -- whether you look at that.

THE WITNESS: Oh, okay, does -- did Corey know what Rogers was rating, and did Rogers know what Kent was

1 rating.

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JUDGE YOUNG: Right.

THE WITNESS: I don't know the answer. I wasn't -

4 - no one shared that with me.

JUDGE COLE: So you assumed they didn't?

THE WITNESS: Yeah.

CHAIRMAN BECHHOEFER: Right. Were you given any information concerning the extent of prior knowledge of each of the raters to the particular candidates or ratees, and did that enter your analysis at all?

THE WITNESS: We had a discussion, and I'm a little bit foggy even, which rater knew more about which candidate. It didn't really matter because, I would -- I would go back to that little term, a gear head. That's what I had. I had 81 numbers and I had classifications for these people: were they involved in a protected category or not, or were they -- did they have knowledge of the candidates' involvement in that or not.

And then other pieces of information, like -- like the one that you're bringing up here, I -- you know, how much did they know. That's kind of a qualitative question. How much did Corey -- how well did Corey know Fiser or Candidate A or Candidate B. I know we had some degree of a discussion about that, but for my task in this it wasn't that interesting, from a -- I mean, it might be interesting

just to know, but it's useful for doing the analysis. And we did have some discussion. I really don't remember the details.

CHAIRMAN BECHHOEFER: Well, for instance, would the circumstance, perhaps, that Mr. Kent had previously considered the potential addition to his staff of one of the candidates. And, while he may not have been actively promoting that, he certainly indicated he was agreeable to that. Would that type of association have come into your calculation at all?

THE WITNESS: Not at all. It didn't get to the point where I -- I chose. I just didn't know enough about that. I'm not sure I know much about that right now. And I didn't see that as getting to the point where I needed to do anything with my analyses to take that into consideration. So it wasn't.

CHAIRMAN BECHHOEFER: I see. Thank you.

THE WITNESS: So, just to clarify, what I had is 81 numbers, and I had six people. And I classified those people as either involved in a protected activity or not involved in a protected activity. And, from a raters' standpoint, they either knew or they didn't know. And I -- that's not to say you couldn't consider that information. But in my few, brief discussions about this with -- with Brent, I -- I didn't see that as a need to be coded. And

when I say "coded," because my role in this is statistical analysis, you'd code something. And I didn't see the need to code anything about what you're talking about.

CHAIRMAN BECHHOEFER: Right.

JUDGE YOUNG: Another similar question. If -- if -- and if you're going to answer -- if you're going to ask about this in a minute, you can save it. But if -- if you knew that -- on this chart on Page 16.

THE WITNESS: Okay. Is that the -- is that the chart that I was given with the -- the data in it?

JUDGE YOUNG: With the data; right. And I don't know who Candidate A and who Candidate B were. But if you knew, for example, that John Corey had worked with Candidate B before and had more personal knowledge of Candidate B, and that Charles Kent had worked with Candidate A more and had more knowledge of Candidate A, would the differences between Corey's scoring of Candidate B as compared to the other two, and Kent's scoring of Candidate A in comparison with the other two be statistically significant in terms of the effect that each -- each of Corey and Kent's personal knowledge of Candidate B and Candidate A?

THE WITNESS: Tell me again which -- which raters knew Fiser the most. Summarize that for me one more time again.

JUDGE YOUNG: Okay, let's say...

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THE WITNESS: Or you're giving a hypothetical
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    here; is that right?
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               JUDGE YOUNG:
                             Well, actually, look at them,
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    because I'm choosing them because under -- under Corey,...
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               THE WITNESS:
                             Okay.
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               JUDGE YOUNG: ...Corey rated Candidate B the
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    highest.
                             Okay.
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               THE WITNESS:
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               JUDGE YOUNG: Kent rated Candidate A the highest.
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    Let's say -- this is the part I don't know, because I don't
    know who A and B are. But if Candidate B had worked for --
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    worked with Corey more frequently and Corey knew Candidate B
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    better, and if Kent had worked with Candidate A more and
    knew Candidate A better...
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               MR. DAMBLY: Your Honor, this goes...
               JUDGE YOUNG: ...could you plug those things in
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     and -- let me finish my question and then you can object
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     or...
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               MR. DAMBLY: I'm not going to object. He already
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     told you who A and B are.
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               JUDGE YOUNG: Okay.
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               MR. DAMBLY: He's already testified to that.
               MR. MARQUAND: He did not.
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               MR. DAMBLY: Or you did.
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               MR. MARQUAND: I mentioned that B is Chandra and A
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is Harvey.

JUDGE YOUNG: Okay, we can find that out. Now -now I'm going to have to go back and start my sentence over
and see if I can rephrase that. And if -- if I could get
through my sentence before interrupting, I'd appreciate it.

Now, as I was saying, if you want to tell me who they are, tell me.

MR. DAMBLY: B is Chandra and A is Harvey.

JUDGE YOUNG: Okay. If you'll refresh my recollection on who Chandra worked with.

MR. MARQUAND: Corey.

MR. DAMBLY: Corey.

JUDGE YOUNG: Okay.

MR. DAMBLY: The questioned hypothetical corresponds to the actual names.

JUDGE YOUNG: Okay. Okay. Let's say Mr. Corey worked with Candidate B, knew him better, and obviously gave Candidate B a higher overall score. Kent worked with Candidate A, knew him better, and gave him a higher score. If you included that variable, who they -- whom they knew and -- and had worked with, could you give us any analysis in terms of the effect of their knowledge and how statistically significant that was in comparison to Mr. Fiser not having anyone on the selection panel of three who had known him or had worked with him in the same way that

Corey had worked with B and Kent had worked with A. 1 that make sense? 2 3 THE WITNESS: Okay. Uh-huh. JUDGE YOUNG: Okay. THE WITNESS: It does. And good question. 6 think... 7 CHAIRMAN BECHHOEFER: And, by the way, the basis for my previous questions were Mr. Harvey having worked with 8 Mr. Kent. 9 10 THE WITNESS: And Harvey is A; right? 11 CHAIRMAN BECHHOEFER: Yes. 12 THE WITNESS: Yes. Okay. I suppose you could 13 take this situation, this knowledge factor and code that and 14 run another analysis. However, when we get through what I 15 did, you'll see that the most meaningful analysis was where 16 I actually combined A and B together. And that cancels out this -- I believe, this kind of familiarity situation, 17 18 because I juxtaposed A and B together, versus Fiser. 19 Because A and B are conceptually similar, not involved in a 20 protected activity, and Fiser is. So that's conceptually 21 meaningful. 22 JUDGE YOUNG: And if both of them also had the 23 advantage of -- of having someone who had personal knowledge 24 of them on the selection board, is that...

THE WITNESS: Your right, that personal knowledge

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could have, assuming -- you're right, assuming that personal knowledge results in a higher rating. There are probably some instances it results in a lower rating, you know. The more you know someone, the more you don't want to work around them. And that could be a situation as well. And I'm not familiar enough with all the peripheral -- or not the peripheral issues, but peripheral to my task at hand to know that situation. But that familiarity could have elevated those ratings to some extent. I would...

JUDGE YOUNG: And would your corrective -- I interrupted you. Would your corrective test at the end address that discrepancy?

THE WITNESS: You know, I think that when you look at the fact that -- if you give me just a minute to kind of look here.

JUDGE YOUNG: Well, and you don't have to answer it now. I wanted to ask -- ask it before, so that when you're talking about your -- your results, if -- if that played into them at any point, you would know the question in advance, rather than after.

THE WITNESS: Sure. And it could have played into them. Let me just add this, that you're absolutely right. You'll see that when you look at the charts. Rogers gives the lowest ratings across the board. But the crux of the issue is where do they get the very lowest. And are we

saying that Fiser -- or, excuse me, Rogers knew none of the candidates, then? He was just kind of a...

MR. MARQUAND: That's not true.

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THE WITNESS: I don't know all of that stuff.

MR. MAROUAND: Your Honors haven't heard the testimony, but the testimony would be that Rogers knew Fiser and thought highly of Fiser.

THE WITNESS: Okay. And -- and what I was going to say, and I -- I'm just a little bit unaware of all the familiarity connections between all the candidates and raters. But Rogers was, overall, the most -- the severest, is the term we might use in my field -- the severest rater, but he's the most severest with Fiser. Okay? And he didn't -- I quess he had some familiarity with some of them, but maybe not to the level, if I can assume what we're talking about here, that Corey did with B and Kent did with A. BY MR. MARQUAND:

- Dr. Peters, I believe I was asking you about what the -- your ANOVA showed with respect to the raters.
  - Α Okay, let's go back. If you all have the...
- And if -- I believe this is set out somewhat in Exhibit 102, TVA Exhibit 102.
- Yeah. And I think the best way to explain the findings of the ANOVAs is to flip to Pages 12 and 13 in the simple bar charts. And if you look at 12, what we did here,

this is, in a sense, you could say, a graphical picture of an ANOVA. And we looked at the three raters. Corey's average rating was an 8.5; Kent's average rating was an 8.2; and Rogers' was a 7.5. So what an ANOVA does is, it says which of those gaps between -- there's three of them. Corey and Kent, Kent and Rogers, and Corey and Rogers. It's like a triangle, if you can picture that in your mind. three lines to connect those three people. And the ANOVA looks at all three of those lines simultaneously. If we had two groups, you see it's much simpler. There's one line. You just draw one line. But, soon as you get three groups -- you can imagine an ANOVA with four groups. There would be quite a number of lines that an ANOVA is capable of looking at. And each line you can connect between these -- these people, an ANOVA will look at that simultaneously and tell you which ones are significantly different from the others.

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Let me backtrack just a minute. An ANOVA, at face value, only tells you if, on that whole picture, is there some significance occurring, some statistical differences. You must do a post hoc comparison to determine where the differences lie; okay? So an ANOVA is kind of a blunt instrument in a sense, is all it says is, wow, there's a difference between Corey, Kent, and Rogers. So we followed that up with post hoc tests. And I don't know how you want to remember this. It's pretty easy and the picture is

pretty consistent with what I'll tell you. The difference 1. 2 in post hoc testing between Corey and Kent was not 3 significant; the difference between Kent and Rogers was not significant; the difference between Corey and Rogers was 5 statistically significant. And that's what's driving the significant finding in the ANOVA overall. 6 7 Did you conduct further analyses, and you said post hoc, to determine where those differences happened? 8 9 that what you -- is that what you just... That's what I just said. 10 A All right. 11 0 12 Α That the significant... 13 CHAIRMAN BECHHOEFER: Well,... 14 Α Go ahead. CHAIRMAN BECHHOEFER: ...this -- your previous 1.5 analysis of differences being statistically significant or 16 not, just looking at the chart, the difference between Kent 17 18 and Rogers would seem to be significant, much more so than the difference between Corey and Kent. 19 20 THE WITNESS: You're right. JUDGE COLE: What level of significance were you 21 22 testing at, sir? 23 THE WITNESS: .05. JUDGE COLE: So one chance in 20. 24 And it

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didn't ...

THE WITNESS: Well, that's -- you're calling...

JUDGE COLE: ...it didn't make that -- didn't make

3 that test between Kent and Rogers, but with Corey it did.

MR. MARQUAND: Between Corey and Rogers.

JUDGE COLE: Between Corey and Rogers.

You know, it's -- yeah, you THE WITNESS: Yeah. have a specific threshold when you do significance testing. And, you're right, the industry standard would be .05, which is what I used. That means there's one chance in 20, a five percent chance that you would find statistical significance when it didn't occur. You're talking about a Type 1 error. A Type 2 error is when you don't find statistical significance, when, in fact, it is there. So we might have had a Type 2 error when we look at the difference between Kent and Rogers, which would address your question about, gosh, that's a pretty big stair step there. Why isn't that statistically significant. But it all has to do with, you know, the variance within each of those. So if you look at each of those three bar charts, there's an array of answers that contribute to that. And whether or not that array is tightly distributed or narrowly distributed is also a key The bar chart's kind of a coarse factor in this. representation.

## BY MR. MARQUAND:

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Q As a simple mathematical look at this, though --

and Judge Bechhoefer was saying this is a big stair step between Kent and Rogers. And when you -- on your left -- on the yy-axis, the vertical axis, you displayed these between 7.4 and 8.6. But if you had displayed them between zero and ten, would the stair steps have appeared to be as large?

- A Sure. Yeah.
- Q Would have been a much smaller stair step?
- A Much smaller.

Q And what you're saying is, when you look at these numbers, overall, statistically that's when it -- that's when it becomes...

MR. DAMBLY: I'm going to object to the testimony of counsel. We have an expert here. I don't know why he has to explain his charts to him.

JUDGE YOUNG: Well, to some degree I guess some leeway's in order, just in terms of understanding each other. But, obviously, if Mr. Marquand is -- is questioning him in such a way that -- that he would really be suggesting the answer, feel free to object. But...

MR. DAMBLY: Well, that's what I objected to.

JUDGE YOUNG: ...sounds as though -- sounds as though Dr. Peters is going to tell us what he thinks, no matter what he hears from anybody, anyway. Which is a compliment, by the way.

CHAIRMAN BECHHOEFER: Yes.

BY MR. MARQUAND:

- Q What was the next step you did in your analyses?
- A Well, we can talk about a parallel. If we flip the page to Page 13, you'll see now we've structured our groups in -- by the candidate. So we did an ANOVA and we found significant differences again overall. The overall ANOVA was significant.

And let me just add, getting a little -- you're asking questions, so I'm giving you statistical information; right? If you don't ask, I won't give you this much, but you seem interested. You can only do post hoc tests if you have an overall significant ANOVA. And I didn't mention that earlier. So if your overall ANOVA is not significant, you're done. You can't keep mining the data over and over to find stuff in there.

But this again was a significant ANOVA, and we see Candidate A and Candidate B got the same ratings; big drop-off when you go to Fiser. And the picture is very consistent. I bet you all can guess where the significance occurred in this one. It was significant when you compare A to Fiser; it was significant when you compare B to Fiser; and, of course, not significant when you compare A to B.

Let me add one more point to the stair step.

Again, each of these bars represents 27 numbers. Now, you can imagine if it only represented one number, you still

would have a mean. Or say two numbers. But the meaningfulness of that is much less, and so you can put a lot less stock in that. But once you get a little bit larger---this was a medium size data set---then you can put a little bit more stock into those differences.

So, I guess, back to the question on the first bar chart, the fact that there's a stair step there is only one piece of information. You'd have to kind of look at the entire range of potential ratings; you would want to know how many people are represented by each bar. Because, as I know, in statistics, the bigger your sample, the more power you have. So if we had a sample of a thousand, a tenth of a point might be statistically significant.

JUDGE COLE: Again, this is at the .05 level?

THE WITNESS: Yeah, everything in here is .05.

Q Now, in your -- in Paragraph 3 of your summary, you mention -- well, you've already referred us to Graphs 1 and 2. And then in your -- the summary of your analyses, you also mentioned that Plots 1 and 2 illustrate those findings. Can you explain those?

A Sure. And the plots are more illustrative than the bar chart, but I thought it'd be good to start with those bar charts.

Q Okay.

A Plot 1.

JUDGE YOUNG: I'm sorry. I go straight to Plot 3. 1 2 Am I missing one? MR. MARQUAND: Plot 1's on Page 10, Your Honor. 3 4 Back up. Back up. Before the bar charts. 5 JUDGE YOUNG: Okay. Thank you. Okay, the plots -- remember earlier I said you can 6 7 structure this in your mind in kind of a three by three 8 This is it right here. You have three rows -well, this is a little more complex than that. Let me back 9 10 off that because it's not presented quite that way. 11 three rows are essentially your candidates, I guess you 12 could kind of say that. And those are the colored lines 13 that zigzag all over the place. And then the three columns, 14 the vertical pieces in this, are Corey, Kent, and Rogers. So at any -- you have nine data points, and each of those 15 represents nine numbers that I was given. So let's start at 16 17 the upper left. I won't go through all of them. Corey's ratings of the blue line, which represents B, he averaged 18 9.39. Those nine numbers. 19 JUDGE YOUNG: The second from the -- well, the one 20 21 that starts 9.39 at the top? 22 THE WITNESS: Yes. I can't -- it looks to me like 23 JUDGE YOUNG:

there's two blue lines. Which...

THE WITNESS: Oh, I'm sorry.

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1 JUDGE YOUNG: ... I understand which is which, but 2 just for the record... 3 MR. MARQUAND: The top line on the left is blue. 4 THE WITNESS: It goes -- if you look at that very 5 left column where Corey is, it goes blue, red, green. colors are real clear on mine, but maybe in the 6 7 reproducing... 8 JUDGE YOUNG: And he's color blind, by the way. 9 CHAIRMAN BECHHOEFER: I can't see green at all. 10 THE WITNESS: I'm sorry. I'm sorry. I should have used dots and dashes and boxes and things like that. 11. 12 I'm sorry. 13 CHAIRMAN BECHHOEFER: Green looks gray or black to 14 me. MR. DAMBLY: Who drives the rental car? 15 16 JUDGE YOUNG: Judge Cole. 17 THE WITNESS: Okay. May want to do a little 18 squiggly line through one and "X's" on the other, or 19 something. But I'll review that again. The very top 20 number, where it says 9.39, if you follow that line through, 21 that's Candidate B. The next one over, where it's 8.69 is 22 A, Candidate A. And then at the bottom there it's green for those that have a clear color on that. That's Fiser. 23 24 that it's just plots, each of those ratings. And it's a nice visual... 25

1 (An outside noise interrupts the proceedings.)
2 THE WITNESS: Wait for the crash at the end of

It's a visual of what's going on with the data. I think it's probably the best picture. There's one other one that I think's pretty good, too. But this is the picture of what's going on. I don't know...

## BY MR. MARQUAND:

- Q That's by candidate; right?
- 10 A Uh-huh. Right.

something like that.

- Q All right, what does Plot 2 show?
  - A Plot 2 is similar.

JUDGE COLE: Well, wait a minute. What does this tell you, sir?

THE WITNESS: Well, it -- it begins to give me an indication of what I did later, when I said I aggregated A and B together in a conceptual sense, because they were not involved in a protected activity, and versus -- and it's just in a statistical sense, versus Fiser. It starts showing me that picture; okay. And what it tells me is that the bottom line there is Fiser. And Fiser is getting low ratings all over the place.

And they're especially low when it entails Rogers at the very bottom right, 5.67. We don't even have anybody rated in the sixes. The next lowest rating is slightly over

a seven, it's 7.1. And that's Fiser again. But the lowest ratings, over a point lower than any of the others, are right there at that bottom right corner, 5.67, when Rogers rates Fiser. So I start seeing a picture here of an interaction. And we haven't even gotten to that yet, and I'll talk about that.

I also see at the top that there's pretty good agreement between Candidate A and the raters opinions of Candidate A and Candidate B. If you kind of looked at the top fourth as a row of this graph, that would entail almost probably all the ratings of Candidate A and Candidate B by all of the raters, in one-fourth of this graph, which obviously doesn't go from one to -- to nine. I use a computer default on that, a lot like the stock market does when it only shows you a little bit of the entire 10,000 or 12, 11---we wish 12,000---10,000 point range. The similar concept is going on here.

CHAIRMAN BECHHOEFER: Now, are you -- are you saying or implying that engagement in protected activities is the motivating cause of the great differences?

MR. MARQUAND: We haven't got there yet, Your Honor.

CHAIRMAN BECHHOEFER: Okay. Well, I'm just wondering if -- that's how I might read those charts, given what I know now.

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MR. DAMBLY: I think it'd be fair to say we'd would have been calling him if that was going to be his conclusion.

MR. MARQUAND: His assumption, to remind Your Honors, was that Corey and Kent knew of protected activity, and Rogers did not.

THE WITNESS: And here's where our story's going to go. That steep angle of that green line, when it moves from Corey and Kent, who are almost the same on him or her--I don't even know if these are men and women, I just know the last name---they're both the low sevens. If you look at that green line, the bottom line, we have a 7.31 and a 7.11. Way down there for Fiser. But that line just tails off when we get to Rogers, who's the one person that didn't know Fiser was involved in a protected activity. So it actually goes lower when you're immune from that knowledge.

That, to me, is the -- is the story we're going to get to when I have another chart -- bar chart -- or, excuse me, a graph and a plot, I should say, that is a little bit later on. It's going to make this one, which is kind of busy, lots of numbers. But I wanted you to have the opportunity to see all the different numbers going on. But when we get a little bit later, I've consolidated this into something much more easy to chew on.

BY MR. MAROUAND:

Q And Plot 2, is that also correspond (sic) to Graph
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Yeah, and Plot 2 is exactly the same. thing that we did, if you look at the three lines in Plot 1, those now become the -- the three categories on the X-axis. So if you -- again, the -- the three lines represent the Candidates A, B, and Fiser. They are now transported to the X-axis, and the lines represent the raters, which were the X-axis on the first plot. It's the same stuff. It's kind of like taking it -- we have three dimensions. It's like a Rubik's cube. It has three dimensions involved, and this It has ratings, it has raters, and it has ratees. There are three categories, conceptually, of data or concepts to look at, and I exchanged two of them. I kept the left, as -- as any IO psychologist or statistician would do, kept the left as the rating, which is our dependent variable, and interchanged the independent variables, which is rater or ratee. And I did that in Plots 1 and 2, just to show the information in a different way. I think Plot 1 is a little clearer to look at, and we've spent more time talking about it. It would be a preference issue. else, that's astute at this stuff and likes to look at these kinds of charts, might prefer Plot 2. But it's really a preference issue. But they have exactly the same information. Just conveyed differently.

1	CHAIRMAN BECHHOEFER: All right, now, when you
2	were including Mr. Rogers, were you considering him not to
3	know the only about the 1996 protected activities, or
4	were you also including the 1992, '93 protected activities?
5	THE WITNESS: I think I'd have to say everything.
6	Because I just code him "didn't know" in the computer.
7	CHAIRMAN BECHHOEFER: I see. Because we haven't
8	heard from Mr. Rogers yet as a witness, at least, so
9	THE WITNESS: Yes. I
.0	MR. MARQUAND: Obviously the expert's conclusions
.1 .	are only as good as the data he's given to work with.
.2	CHAIRMAN BECHHOEFER: That's correct. That's
L3	correct.
L4	MR. MARQUAND: And our
L5	CHAIRMAN BECHHOEFER: No, I was just inquiring
L6	what the data was.
L 7	MR. MARQUAND: Yes. And we anticipate that the
L8	evidence that you will hear will support the assumptions he
L9	was asked to work with; i.e., that Mr. Rogers knew of no
20	protected activity, either the '93 complaint or the '96
21	complaint.
22	CHAIRMAN BECHHOEFER: I see. Okay. Okay, well, I
23	was just trying to find out his assumptions.
24	MR. MARQUAND: Right.
25	CHAIRMAN BECHHOEFER: Right.

BY MR. MARQUAND:

Q Okay, so you did ANOVAs, looking at both the rater and the ratee, the candidates. What was the next step, then?

A The next step, and included with those ANOVAs, and I think we've talked about that, was the post hoc test.

Both the ANOVAs were significant, and therefore I did the post hoc test, and that's when I gave the little story about the lines between the bars and the bar charts. So we did the post hoc test to find out more specifically where significant differences occurred.

Then I think that brings us to the fourth paragraph, which is where I kind of looked at this and said, well, really, what's going on here. It's an issue about whether or not you're involved in a protected activity from a candidate standpoint, and whether or not you knew about it, from a rater's standpoint. So I created those dichotomies.

I knew about -- or the rater knew about involvement in an IPA, is the little acronym I put in there; knew about involvement in a protected activity. And then was the candidate involved in a protected activity or not. So that took Plot 1, if we can go back to that again, and I'll tell you what I did. I collapsed the first two columns into one. So I took Corey and Kent, and merged them

1 together and averaged them.

So now what you would have is a three -- three lines, but only two columns now; right? And I relabeled Corey and Kent as "knew about IPA," and Rogers didn't know. I took the actual names and put them into what I thought was the meaningful purpose of my request to do these analysis, into knew versus not -- "know," k-n-o-w, versus "didn't know."

Then I did it one more time. And now we shrink this little accordion chart down, and I took A and B, those two lines, which is the -- the top two on this, the red and blue, and made one line out of them. And how did I do that? I simply averaged the numbers, is what I did. And now I have a two by two matrix. So we shrunk it vertically and we shrunk it horizontally, as you look at that chart, you can kind of think about that in your mind. And it gave me a two by two matrix, which addressed more directly the conceptual question which I've already mentioned.

JUDGE YOUNG: Let me see if I understand the averaging. You averaged -- looking at Plot 1, you averaged the top left four scores to arrive at 8.87 on Plot 3?

MR. MARQUAND: On the reds and the blue lines; yes.

JUDGE YOUNG: 9.39, 8.69, 8.94, and 8.44 would average out to 8.87; is that right?

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I have to make sure that all the
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               THE WITNESS:
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    charts are oriented the same way before I can answer that.
                                                I believe so.
     I averaged Corey and Kent across A and B.
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               JUDGE YOUNG: And then 8.44 would be the average
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    between 8.33 and 8.56?
               THE WITNESS:
                             Yes.
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               JUDGE YOUNG: And then...
               THE WITNESS: You're exactly...
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                             ...7.31 and 7.11 would average out
               JUDGE YOUNG:
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    to 7.21?
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               THE WITNESS:
                             You're right. Very astute.
               JUDGE YOUNG: And then the 5.67 stayed the same?
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                             Stayed the -- you're exactly right.
               THE WITNESS:
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               MR. MARQUAND: And, for the record, you're
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     comparing Plot 1 on Page 10 with Plot 3 on Page 14?
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               JUDGE YOUNG:
                             Right.
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               THE WITNESS: Yes. We're blessed that those are
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     oriented the same way. Sometimes, when you do these, for
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     example, Rogers could have been on the left on Plot 3, and
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     others on the right, and that would have been a little more
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     mental gymnastics to go through that. But I -- I believe
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     that what you've just actually summarized for us is exactly
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     what -- what's going on here.
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               JUDGE YOUNG: Okay. I'm just trying to follow so
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     I...
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1 THE WITNESS: Very good.

JUDGE YOUNG: ...know what you're saying.

## BY MR. MARQUAND:

- Q All right. What did you -- what else did you do?
- A So that's what we did. So now we have a new data set, in a sense. Not a new one; same data, but we have averaged into conceptual categories, as I've described, "knew" versus "not know," and "involved" versus "not involved." And I did an ANOVA on that.
  - Q So you did an ANOVA with respect to the data as displayed on Page 14?
  - A Yes. Now, you might say, well, you just got done telling us that you only need a T-test when you have two groups, because now we have two groups. And that's very true. But an ANOVA is the same as a -- as a T-test. However, it also allows you more freedom, in that you can throw in three or four or 100 groups, if you want. So it's the exact same test, but it has a lot more flexibility. That's one difference between an ANOVA and a T-test.

But the real reason why I ran an ANOVA, after giving you these discourse on T-test is a nice, simple test for two groups, is because I wanted to do an interaction.

And you cannot do interactions with T-tests. So I just started out with the ANOVA. When an ANOVA has a significant main effect, that means there's a difference, when you just

run it, between the groups. And in this instance, because there's only two groups, we know which groups the differences lies between. We don't have to draw three lines, like we did earlier. We just have one line between others and Rogers. And that line was significant in the ANOVA, and therefore I have the freedom, statistically, from a -- from a statistically pure sense, to go ahead and check an interaction, which I did.

Q What did you find?

A The interaction was significant. So an interaction means that the relationship between two variables is contingent on a third. Would an example help from everyday life before we get into this? I don't know. Let's think of one off the top of my head.

I have young children. We might say that boys are taller than girls. And I think we'd probably find that to be true. However, it might depend on what grade you're looking at. What about sixth grade or seventh? Girls generally hit a growth spurt there sooner than boys. So we have more specific information if -- and this is kind of conjecture, but I might -- sounds kind of reasonable that maybe -- certainly boys are taller than girls, I would think, in high school. I don't know about elementary. But perhaps for a couple year period, we all -- those of us who are men remember when all the girls were taller than us.

And maybe in sixth, seventh grade, that's exactly what
happens. So the fact that boys are taller than girls is
contingent on what grade you're looking at. Does that kind
of make sense?

JUDGE YOUNG: I want to -- yeah. And I want to ask a question. It may take me a couple of minutes here. Recently I took a course at the NRC called "The Joy of Statistics." Sort of statistics for -- for non-statisticians.

THE WITNESS: Kind of an oxymoron of a title, isn't it, for most people.

JUDGE YOUNG: I enjoyed it, actually.

THE WITNESS: Oh, good.

JUDGE YOUNG: And one of the things that the teacher, who's -- trying to remember his name -- Dan Lurey gave us an example of was something called Simpson's Paradox where -- and the example I recall is you're looking at whether there's discrimination in an organization based on sex. And if you looked at professional employees and administrative assistant clerical employees separately, there was a bias effect in each. But if you combined all those numbers together, there was not a bias effect, overall. And so what he was trying to illustrate, what I took from it, was that to show how statistics can be manipulated, and this paradox occurred by how you grouped

the -- the data.

THE WITNESS: Sure.

JUDGE YOUNG: And it sounds as though here there's not that many ways you could group the data to produce that. But my -- coming to my question is when you do a -- what was the word you used?

THE WITNESS: An interaction?

JUDGE YOUNG: An interaction. Is that to test against that kind of...

THE WITNESS: Yeah, it's exactly that kind of a thing. A statistician likes to find interactions because it's more meaningful. It's more meaningful to me to know -- everything from clothes manufacturers to doctors to anybody would like to know the height of kids at certain ages, and to know, perhaps, that -- maybe it's something -- shoe manufacturers don't produce heels for girls who are sixth, seventh grade, because they'd be even taller yet than the boys. So maybe that's meaningful to them.

Whereas that -- if they just looked at general in society and saw that men are generally taller than women, then there might be -- they might produce a real market for taller shoes. But there's no market in that junior high world because these girls don't want to be taller than -- assuming they don't want to be -- they might like being taller than the boys, but they may not want to be. So

Page 4561 that's meaningful. And that's where a statistician or 1 anybody has to use some good old common sense to decide what 2 test to use, and how to aggregate. And I think the decision 3 4 to aggregate in the two ways that I've described is very logical. Because if you think about what's the question 5 6 that we want answered here, it is: Did knowledge of 7 involvement in protected activity affect those ratings? 8 JUDGE YOUNG: When you say "aggregate," you're talking about... 9 10 THE WITNESS: Averaging. 11 JUDGE YOUNG: ...how you combined the data? 12 THE WITNESS: Right. 13 JUDGE YOUNG: And in the example I gave before, it

JUDGE YOUNG: And in the example I gave before, it would be if you aggregated the data according to whether the women versus men were professional or clerical...

THE WITNESS: Sure.

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JUDGE YOUNG: ...you'd get a different result than if you combine them all together, and there might be other variables, as well.

THE WITNESS: And that's where the good old common sense comes in, in your situation, where you'd have to say, "What is my real question here? Is it just overall? Is there a difference between men and women in their salaries and companies? Or should we look at that within a more refined classification of job category or tenure or whatever

it might be?" It really depends on your question. And that's a -- something that goes more philosophical in nature than just statistics. Because, really, the statistics piece is the manipulation of those numbers and the analysis of the numbers. So, you know, to this situation it seems very logical to aggregate, or probably a better word is to average---I should use that word---those ratings in the ways that I did, because I think it makes it more understandable and more meaningful to the question at hand. So it seemed like an appropriate situation.

# BY MR. MARQUAND:

- Q When you did your interaction, what did you find?
- A The interaction was significant, and that's the crux of the findings, if you ask me the main finding, it's that picture on page 14.
  - Q What does it mean, explain it to us.
- A It means that the low -- Fiser received significantly lower ratings than the other candidates.

JUDGE YOUNG: Whether or not the raters knew of the protected activity, you're saying.

THE WITNESS: But why did he or where, what was the cause for his -- is he a he -- for his ratings to be lower. Well, the interaction tells us it's because Rogers gave him the lowest ratings and remember earlier I talked about the slope on that green line, it's actually red on

page 14, it's the bottom line, that's pretty steep. And in statistics, when you see a slope like that when you've run an interaction, that means something is going on. The other line is relatively flat, there's a little slope to it but not a lot. So the others -- let's start with that top line, the others, which is A and B average -- pretty close, whether you're talking about people who knew of an involvement in a protected activity or people that didn't. It goes from an 8.44 from Rogers to an 8.87, less than half a point. So Rogers was a little bit more severe of a rater, but not really that much when you look at people who were not involved in a protected activity.

Now let's go to people -- Fiser I guess -- who was involved. He got lower ratings, but what drove that huge gap between him and the others? It was that 5.67 that came from the one person that didn't know he was involved. So that line is far steeper than the top line and in an interaction in a graphical sense, if we carry those lines out in space, they'll intersect and whenever that occurs, you have an interaction. It does not have to occur in the space that I've shown on this chart. This chart can be expanded, but clearly we'd all agree those lines are going to intersect if we maybe had one more sheet of paper there, that's where they're going to intersect, so there's a difference in the ratings that Fiser gets, and that

difference is due to the fact that some people knew he was in a protected activity and some didn't. That's what the interaction tells us.

JUDGE YOUNG: And then I would assume -- well, maybe not -- do you make a determination on whether an interaction is significant?

THE WITNESS: Yes, and it was significant.

JUDGE YOUNG: And then another question, supposing you were to find out that Mr. Rogers saw -- let me think of a nice example -- saw Mr. Fiser -- Mr. Rogers and Mr. Fiser had had a fist fight three years before. And you added in that variable, would that just -- would you just knock out the Rogers scores? I would assume you'd add in another variable and then add that all into the mix to see if that might change your determination on whether this particular interaction was significant; right?

THE WITNESS: Yeah, there'd be -- we could do a three-way interaction. We don't want to do that, but you could do that. Actually you don't have enough data here, you have to have very large samples for that.

Sure, there could be a lot of unmeasured variables that play into all of this. It could be everything from the clothes they wore to how they gave a handshake when they met them for the interview, to a fist fight a few years earlier, and none of that was considered in this analysis. And in

any analysis, there's always the issue of unmeasured 1 2 variables. There's thousands of them and you have to sort of drill down to what are the most meaningful ones and use 3 those. And these are the ones I was given, and so that's 4 what I used for my analysis. There very well could have been 5 a fist fight, there might not have been a fist fight, but 6 7 again, it could have been the handshake -- there's a multitude of --8 9 JUDGE YOUNG: Or the air conditioning started on 10 when Fiser was there but not when the others were. THE WITNESS: Exactly. All kinds of potentially 11

THE WITNESS: Exactly. All kinds of potentially unmeasured variables in here. Are they meaningful? You know, the quality of the handshake, probably a modest impact on that. A fist fight, very meaningful. I don't know about anything like that.

CHAIRMAN BECHHOEFER: Well, what about prior working relationships, the one I raised before.

THE WITNESS: Uh-huh.

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CHAIRMAN BECHHOEFER: Couldn't that be a fairly significant determinant?

THE WITNESS: I would think so. That's not included in these analyses here.

CHAIRMAN BECHHOEFER: I realize that.

THE WITNESS: And yet it's still -- I'd say yes, is a prior working relationship significant; yes. The

unanswered part of the is which way -- which way, is it a benefit or a detriment. In a lot of instances, it could be good that I worked with you in the past and we developed some affinity for each other and that might bias my ratings, although I've sat in on interviews where even though we're friends, it might bias them in a downward manner because I want to be above questioning on that.

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CHAIRMAN BECHHOEFER: Well what about I would like to have you on my staff, I don't have the funds for it, but -- or the slots, personnel slots for it, but I would like to have you working for me.

THE WITNESS: Yeah. And at that point, when we get into that issue of boy, I'd really like to have you working for me -- why would someone who has worked with someone or is aware of their work habits, want that? And in my field we would say well, we like people at work, particularly a supervisor and subordinate relationship. And why do we like some subordinates? Because they do better work. So even this issue of liking, this affective piece of it -- I like someone. Why is that? It's because they do good work.

JUDGE YOUNG: What if it had to do with the worker's familiarities with the plants at which they'd previously worked?

THE WITNESS: Yeah. I mean all of those can play

- into that, and I'd say familiarity with the plant would be a 1 2 job performance issue. BY MR. MAROUAND: 3 With respect to that though, Dr. Peters, in plot Q 3, when you looked at those, the two raters who knew one or 5 the other candidates better are your blue line, those are 6 7 the others, right? Α Uh-huh. 8 And Rogers, who shows that he rated Fiser significantly worse than he rated the other two candidates, right? 11 Α Right. 12 13
  - Q So what effect do you perceive from that with respect to the other two raters' knowledge of the candidates?
    - A Of the other candidates or of Fiser?
    - Q Others -- I mean they show that the other two candidates -- let's see -- others are 7.21 with respect to Fiser, right?
    - A Right.

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- Q And then Rogers is 5.67 with respect to Fiser. As you said, that's a steeper line.
  - A Uh-huh.
- 24 Q Right?
- A Much steeper, much steeper.

Q So does it appear that the fact that the others who rated the other two candidates in the flatter line, that the fact that they knew these individuals or worked with them, does that appear to be the driving force there?

- A You're talking about the 8.87?
- Q Right.
- A Well, did Rogers know the others?
- Q All three of them knew all the candidates. But the pairing was Corey with Chandra, Kent supposedly with Harvey and in the past Rogers had worked only with Fiser.

A Right, and their ratings are very similar. So if in fact familiarity was driving those ratings, that 8.87, a nearly equally high score occurred when there was no familiarity. That's that 8.44 on the blue line at the top --very close, that's a pretty flat line. So you know, others knew other people and rated them pretty high and Rogers didn't know other people and rated them pretty high. It's a flat line.

JUDGE YOUNG: The interaction significance, I would assume that that has to do with the -- if you ran those lines out to where they interacted, you'd measure the angle that's made there and that may be translatable into some statistical significant figure. Is that right? I mean

THE WITNESS: Yeah, I guess some people that would

get into the geometric aspect of it. We usually -- what I've done is painted a lot -- or produced a lot of pictures here, but we would have interaction terms and numbers that we would put on that, not necessarily the angle.

JUDGE YOUNG: But it would be something parallel to --

THE WITNESS: Sure. And what we're looking at is that .05 threshold, is it beyond a statistically significant amount. And let me add this, we've been asked a couple of times what's the significance level -- .05 is industry standard.

This is, I'd say a small sample at best, a low level medium sized sample. When I do research, I like to have 200 or more. And that means to find significance, you have to have a lot bigger angle to find it. If we had 1000 people or excuse me, 1000 ratings -- let's say we had the same three raters, three ratees, but they asked them 200 questions, kind of an unreasonable situation, but they had done that. I'd have a lot more data to work with. You might not even be able to tell that those lines are -- on a graph line this are not parallel, and yet it might be statistically significant. The question is is it practically significant and I'd say no in that situation.

So all that to say, here we have a relatively small sample and yet every analysis I ran, almost every -- I

can't hardly think of one that wasn't significant, with a small sample, which means you don't have a lot of power. So there have to be big gaps to find them, because of the rather small data set of 91.

And so there is a dramatic difference. In a graphical sense, I've seen a lot of journal articles where the picture isn't this dramatic, but it makes it into a refereed journal, and so that's -- if you're not familiar with looking at these things a lot, that's a fairly dramatic -- I've seen more dramatic ones, I've certainly seen less dramatic pictures, but the gap there, the slope of that bottom line is significant. In fact, there's over a point difference, there's no ratings in the 6s anywhere on any of these charts. It jumps from a mid-5 point something to a low 7 point something.

CHAIRMAN BECHHOEFER: One of the things that I would like to see, and you can't do this because it never happened, but if Mr. Cox had been on the selection board rather than Mr. Rogers -- Mr. Cox we were told had considerable knowledge of Mr. Fiser's work -- what would the results have looked like then, and I'm sure you can't tell because you don't know how Mr. Cox would have voted.

THE WITNESS: Right. Yeah, I don't know. That would be a very good question.

JUDGE YOUNG: You'd have to have had the

interviews taped so Cox could watch the interviews.

THE WITNESS: Yeah, that sounds like a college study now. A professor could get tenure on that, that would be a good study.

## BY MR. MARQUAND:

Q Dr. Peters, we've been talking about plot 3, is this a good point to also describe plot 4 and what it shows?

A Yes, and just likes plots 1 to 2, plots 3 and 4 are the exact same information, just switched out so again the Y axis is ratings, the lines on plot 3 now become the X axis and the X axis on 3 become the lines.

## Q I understand.

JUDGE YOUNG: And the significance again is in the -- well, to put it the way I said before, which could be translated into numbers, is how great an angle there is between the two lines?

THE WITNESS: Yeah, and you see they get much wider when you get to Fiser. Where did Fiser do his worst? At the bottom right is when, on the red line, is when Rogers is evaluating him. See how much bigger the gap is? Look at the Fiser column, see that big gap? On my sheet it looks like it might be an inch and a half or inch and three fourths maybe. I don't know about your sheets, if they're exactly the same. And then if you look to the left of the gap between the two lines, it's probably about half of an

inch. So that's an interaction, big, big difference.

So the meaning of Fiser's low ratings we would say is carried in the interaction. The interaction provides enriched information to why Fiser's ratings were so low.

Now he had low ratings across the board, we can see that in that first plot that we talked about. But what really brought him down enough, even with their low level, even to make them even lower, it takes that line from here to here, down here is Rogers, you see. And so he already had pretty low productivity in this interview to begin with, but it bottomed out when the person that didn't know he was involved rated him. And that's Rogers.

CHAIRMAN BECHHOEFER: But because of the person who did not significantly at least know him --

MR. MARQUAND: Your Honor, that's not what the evidence will show.

JUDGE YOUNG: We'll find out.

CHAIRMAN BECHHOEFER: Well, we will find out.

MR. MARQUAND: Right.

JUDGE YOUNG: My question was related I guess. It looks as though the factor that allows you to draw conclusions on the significance of knowledge of protected -- I'm sorry -- that the significance of the lower scores really hinges on Mr. Rogers.

THE WITNESS: That's the way you would interpret

1 that interaction.

JUDGE YOUNG: And so if something comes out in later testimony, for example, about Rogers that would provide another variable that would neutralize the conclusions that you reached -- well, that might take away from any significance to what you found.

THE WITNESS: It might. I think I'd have to hear what those are and make a determination, because in some instances it could mitigate and in some cases it could enhance the story that we see here.

JUDGE YOUNG: Right.

THE WITNESS: It depends on what -- I really don't know, I'm kind of --

JUDGE YOUNG: Exactly.

THE WITNESS: I'm the gearhead on this situation, that was my role, statistical analyses, and I'm not familiar with all those.

I guess I have a question, was Rogers familiar with any of the candidates. I don't know.

JUDGE YOUNG: Right. And if, for example, Rogers had reason to think negatively about Fiser in comparison to the other two, that would make your findings less significant, whereas if he had reason to think positively about Fiser as compared to the other two, it would enhance your --

THE WITNESS: I would want to know more than just Rogers -- the Rogers/Fiser relationship. I'd want to know the Rogers relationship with all of them, not just Rogers/Fiser.

JUDGE YOUNG: That's what I meant to say.

THE WITNESS: Okay, so I'd want to know Rogers' connection to Fiser, Rogers' connection to A and to B, hear all of that and then make some guesses -- you really don't know. Because someone knows someone -- there are a few instances in this world where the more familiar people are, the less they like each other. Okay? And so we just don't know about that for sure. So the connectivity between Rogers and Fiser alone, as a stand-alone piece of information wouldn't -- I'd have to hear it and then kind of give you some opinion about that, but I'd feel more comfortable doing that in context of what Rogers knew about everybody, not just Fiser.

JUDGE YOUNG: I don't know whether you're going to be available or be there or not, but when we hear from Mr. Rogers, but I'm just trying to get a sense of how particular factors might play in.

And so if we hear evidence that causes us to conclude that Rogers had had interactions with all three of them or only had interactions with Fiser and that significantly -- I don't wand to use that word because it

has -- that caused him to think more negatively about Fiser than the other two or more negatively about Fiser than he would about a random average person.

THE WITNESS: Uh-huh.

JUDGE YOUNG: Then that might wipe out the significance of your findings because there'd be another explanation for Rogers rating Fiser significantly lower.

THE WITNESS: Yes, if you know the qualitative nature of those relationships.

JUDGE YOUNG: Right, right.

THE WITNESS: Whether they were good or bad. If you can put some kind of label on those. And then I would say it would be another piece of information. I don't know if I'd say it wipes it out.

JUDGE YOUNG: Well, you're right, I shouldn't have sand that.

THE WITNESS: It might mitigate it or it might even enhance it, but it would affect this undoubtedly. Other pieces of information could affect it. It would only affect it to the sense that we want to make some kind of an assumption. We might make an assumption oh that line that you've got there, in my mind, I'm going to move it up half an inch or an inch, whatever.

JUDGE YOUNG: Right.

THE WITNESS: We'll never really know, will we,

because all we have is 81 numbers.

JUDGE YOUNG: Right.

THE WITNESS: You see, and then we use our intelligence and our common sense to come to some conclusion as to maybe how this other information might tilt a line or move it up or down or something like that.

JUDGE YOUNG: Or explain the difference in --

THE WITNESS: If we feel we have good information, yeah. So I don't mean to be too evasive, I don't think I'm being evasive, I'm just being cautious because we have empirical information here and we want to add some qualitative pieces of information. The relationships and the quality, character of those relationships, and we have to take that information and use our best judgment as to how that would affect the empirical data which is on the page here.

## BY MR. MARQUAND:

Q Dr. Peters, you looked for interaction and you've explained how you displayed that information in plots 3 and 4. What was the next step you did?

A Really to me that was pretty much the end of the needed analysis. There's a little follow up, it looks like it's the third paragraph from the bottom, where another ANOVA was done to be extra thorough.

Q And what did it show?

JUDGE YOUNG: On page 9?

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MR. MARQUAND: Page 9, Your Honor.

Yes, and a similar kind of story here. What I did Α is I just selected a subset of the entire data sample, which was Fiser only. That'd be one-third of our data. received -- 27 is a third of 91, if you want to get into the numbers piece of this, so there were 27 ratings on Fiser and I looked at Fiser only and then evaluated the differences between the raters. Then I did the same thing, I looked at Rogers only, another 27 pieces of information and looked again to see if there were differences among the raters and for the Rogers only data, significance occurred between candidate B and Rogers -- excuse me, between candidate B and Fiser and candidate A and Fiser, but not between A and B. When we look at Fiser only data, significance occurred between Kent and Fiser and Corey -- excuse me, between Kent and Rogers and Corey and Rogers but not between Corey and Kent. I think my stomach is distorting my accuracy a little bit here.

MR. MARQUAND: Let me ask one more question and maybe we ought to conclude his direct and take a break for lunch.

#### BY MR. MAROUAND:

Q Dr. Peters, what was the final conclusion you reached in your analyses with respect to whether or not

knowledge of protected activity played a bias with respect to Mr. Fiser's ratings, based on the assumptions that you were asked to operate under.

A Exactly. Based on the assumptions that I have, I think it's summarized in that last paragraph, can I just read that? Because I think that's -- those are my words.

Q Go ahead.

A In conclusion, the results of all analyses were very consistent with each other -- and they were.

Everything I did, there were no unique -- oh, this analysis said something and then a different one said something different, which you can find from time to time. The data were so powerfully consistent and the differences are so big, and you can see that when you look at some of these graphs that I've done, that there was no issue dealing with inconsistencies. That's what I'm saying in that sentence.

Q Right.

A Taken together, the results clearly and strongly indicate the ratings Fiser received were most likely not lower because Corey and Kent knew he was involved in a protected activity, based on the assumptions that I worked from on this.

Q And was that analysis -- that was your statistical analysis based on those assumptions.

A Yes.

- Q Was it statistically significant?
- A Yes.

Q You mentioned you looked at other analyses. Did you do that as well?

A I did a variety of other analyses. As an example, I looked at Fiser only and looked at the differences between the raters for Fiser only. I could also look for others only and the differences between the raters -- same story, more or less. You just -- I shouldn't say more or less -- consistently throughout you see the same theme. And I even did a quite a bit different analysis. There's just one sentence in there, it's the correlations. I don't think that they're useful for making conclusions on this, but to address question is the consistency of the ratings was high.. All the correlations among the raters with how they viewed candidates were at about a .69 or higher and, you know, correlation, that's -- in the '7 range.

JUDGE COLE: This is the next to the last paragraph?

THE WITNESS: That's the second to the last paragraph. I don't think that in and of itself answers our questions for this trial, but they just show that we didn't have a candidate or a rater who was just out in left field. When one rater rated someone higher, someone else rated them higher on a particular question. The gap between those

1	ratings was pretty good sized, but they paralleled each
2	other. If you draw a little chart of all the ratings Corey
3	gave and all the ratings Rogers gave for those questions,
4	they'd parallel each other, and that's what a correlation
5	looks at. So just consistency is what it was. And so all
6	the analyses, whether I talked about them here or a couple
7	of others that I did that were really just a cross
8	examination on my own of the data, said the same thing over
9	and over.
10	MR. MARQUAND: Your Honors, at this point, I'd
11	like to tender TVA Exhibit 102.
12	MR. DAMBLY: No objection.
13	MR. MARQUAND: And this might be a good place to
14	break for lunch and then everyone can think
15	CHAIRMAN BECHHOEFER: I have one further question
16	before we break for lunch, but I do I will
17	JUDGE YOUNG: I have a question, but go ahead.
18	CHAIRMAN BECHHOEFER: I want to accept the exhibit
19	first.
20	JUDGE YOUNG: Yes.
21	CHAIRMAN BECHHOEFER: TVA 102 is accepted without
22	objection.
23	(The document, heretofore marked as
24	TVA Exhibit Number 102, was
25	received in evidence.)

MR. DAMBLY: Can we take a one minute break?

CHAIRMAN BECHHOEFER: Yeah, I just have one question.

MR. DAMBLY: Sometimes that ends up a half hour.

MR. MARQUAND: Well, I'm just thinking that maybe since we're going to have a lot of clarification, a lot of cross examination, maybe this would be the right time to break.

CHAIRMAN BECHHOEFER: Well, I agree with you, but I want the witness to be thinking about something during lunch.

JUDGE YOUNG: And the same with me, it might be helpful, because otherwise we may not get t precise nuances in our questions after lunch as exist now.

CHAIRMAN BECHHOEFER: My question was would there be any utility or any likely difference if Mr. Cox was given a videotape of the interview, if such exists, and were asked to give his own answers to the various questions asked. And could there be a significant difference in the total result. Mr. Cox being one who was quite familiar with Mr. Fiser, they knew each other, and the claim was made that the substitution of Mr. Rogers for Mr. Cox was arranged so as to likely lead to a particular result. And so I don't know whether there's technically any way this could be done.

THE WITNESS: Is that my lunch time question?

CHAIRMAN BECHHOEFER: Pardon? 1 THE WITNESS: Is that my lunch time pondering? 2 CHAIRMAN BECHHOEFER: Yeah, you could think about 3 4 it. THE WITNESS: I think I already have an answer, 5 6 but I'll think about it at lunch and come back to you with 7 something. CHAIRMAN BECHHOEFER: Right. 8 JUDGE YOUNG: Here's my lunch time question, a two 9 part question. If -- the first one is more hypothetical, 10 the second one is -- well, I'll tell you about the second 11 12 one. If Corey, Kent, Rogers, candidate A and candidate 13 14 B were all the same race, whatever that might be, and Fiser were a different race, what would that -- how could that 15 16 affect your results. Second question is a little more subtle. 17 And I'm interested in both your impression of the question that I'm 18 putting to you and your answer to it. In organizations, 19 there are often sort of unspoken values that the phrase go 20 21 along to get along, where even though nothing is explicitly 22 spelled out, in an organization, the members of the 23 organization sort of, on some more or less conscious level, 24 adopt a certain value. And it actually might be applied to

race but it might be applied to other things as well.

If, for example, management created an atmosphere 1 in which management did not value or did not like a certain 2 3 candidate, much the same way that kids in junior high school -- popular kids might not like an unpopular kid -- and the rest of the crowd goes along. In talking about the research 5 6 that I asked you about early on, then you gave me some more 7 If it were shown that there was that kind of a 8 sort of thing going on that distinguished Fiser from the other two candidates, how would that type of thing operate 9 10 to affect your results. Does that make sense? 11 THE WITNESS: Uh-huh. 12 JUDGE YOUNG: Okay, thank you. 13 THE WITNESS: Sure. 14 MR. DAMBLY: When do we come back? 15 MR. MARQUAND: September? 16 CHAIRMAN BECHHOEFER: Try 2:15. 17 MR. MARQUAND: Thank you, Your Honor. 18 MR. DAMBLY: Thank you. 19 (Whereupon, a luncheon recess was taken at 20 1:15 p.m., the hearing to resume at 2:15 p.m., the 21 same day.) 22 23

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1	<u>AFTERNOON SESSION</u>
2	MR. DAMBLY: Are we reconvened?
3	CHAIRMAN BECHHOEFER: Yes.
4	Whereupon,
5	CARY PETERS
6	RESUMED his status as a witness herein, and was examined and
7	testified further as follows:
8	CROSS EXAMINATION
9	BY MR. DAMBLY:
10	Q Mr. Peters, it is true, isn't it, that
11	statistically you cannot draw conclusions of causation?
12	JUDGE YOUNG: What was your last word?
13	MR. DAMBLY: Causation.
14	JUDGE YOUNG: Of causation?
15	MR. DAMBLY: Causation.
16	A Oh, I think you can if the experiment is conducted
17	correctly.
18	BY MR. DAMBLY:
19	Q I thought as a matter of just black letter or
20	whatever you want to call it, you can demonstrate
21	correlations but you can never prove that A caused B.
22	A If you used a correlation in a field study, it'd
23	be challenging to show correlation is the same as causation
24	but if you have an experiment with randomly selected people
25	and you do an intervention and then something changes.

1 that's generally conveyed as a causal study.

- Q A causal study, but you don't see anybody say therefore it's definitively proved beyond a shadow of a doubt that --
- A You would say definitively -- in this study you have definitively supported the hypothesis. So there are quite a number of instances where causation can be inferred.
- Q Did you look at the data -- well, first of all, tell me what -- you've got the sheet that's the last page on 103 -- or 102 from Mr. Marquand, the scores?
  - A Yes.

- Q What else did you get? You were told Mr. Fiser engaged in protected activity, the other two weren't.
  - A Right.
- Q And you were told that Corey and Kent knew about the protected activity and Rogers didn't.
- A Right.
- Q What else were you told?
  - A We spent a little bit of time talking about the -- I think we've had two meetings of substance, one two years ago maybe, year and a half or something when they -- we kind of talked about this and looked at the data and then I went away and analyzed it and in that meeting, I'll have to be somewhat vague, that they told me what you have described, and I don't remember much of anything else that was

discussed at that meeting. I think I probably just had some questions to kind of clarify exactly what even involvement in protected activity is and I know that, but what is the story that describes the categories into which I can place these people for analysis. So there's a discussion around that and it ended up, just as you described, who's involved in a protected activity and who isn't, and who knew that and who didn't know that.

We had one other meeting, I suppose two months ago or something like that when this became scheduled I guess. I got a call. And we talked through the results that I produced for this and they supplied a little bit more information as to what's going on in the case and asked me questions, if I remember right, about oh, best practices and conducting interviews and those kinds of things and then we kind of ended doing that.

- Q Well, what did they tell you was going on the case?
- A They told me in this case, it's a situation of looking at whether or not the fact that the knowledge of being a whistleblower or involved in a protected category biased the interview ratings, and they wanted me to look at that.
- Q Now did you look at this -- did they tell you anything about -- or give you any indication about the

scoring that the individual board members did, that there was any criteria, that there was any -- did you have the impression there was some kind of objective questions and answers?

A I looked at my role as primarily an analyst of this information. What I've found typically at TVA, there's usually some kind of a standard or criteria and we may have had some discussion about that, although I don't recollect a lot of specifics.

- Q You're aware that in your dealings at TVA, there's normally some kind of criteria for scoring?
  - A There often are.
    - Q You don't work in nuclear, right?
- A No.

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- Q That would explain that. Did you ever look at the data in this case in an ordinal sense rather than raw scores? Do you remember the figure skating controversy in the Olympics?
- 19 A Uh-huh.
- Q Did you look at it from that perspective?
- 21 A No.
  - Q Did you do anything to see if Mr. Rogers was even a player in the decision?
- A What do you mean by that?
- Q Well, if you look at the numbers that you were

given, the last page, let's assume that Mr. Fiser sat up straight in his chair and Mr. Rogers gave him 10s on everything. Put the score 90 in by Mr. Rogers for Mr. Fiser and add it up and tell me where he comes out.

A Is your point that the same decision would have been reached?

Q The point is Mr. Rogers wasn't a player after the first two people who knew he engaged in protected activity had given their scores, nothing Mr. Rogers could do would have affected the outcome.

A That could be true. That might be true of all three of people. You might be able to pull out any particular person and have the other two entirely made the decision, it's such a small group.

Q But we're talking about Mr. Rogers, the only person who didn't know.

A That's fine. I'm just saying that principle may apply to all three raters, I don't know. I'd have to look at it.

Q If I told you the two people who knew gave scores such that no matter what Mr. Rogers knew or didn't know, he couldn't affect the outcome, can you draw some statistically significant conclusions about Mr. Rogers and the use of protected activity?

A I don't think I'm following your line of thought

other than what I've already stated. It very well could be true that any one of the three could be eliminated and the other two would have made the entire decision. Any one person represents 33 percent, but you have 67 percent of the decision already made by two other people.

- Q And when you have 67 percent of a decision made by two people who knew that Mr. Fiser had engaged in protected activity, because that's the variable you're looking at --we don't pull out Kent or Corey because they had the attributes we're looking at. If you add them up, even given perfect scores, Mr. Fiser would have gotten a 219.8 as opposed to 235.7 and 235.5. So Mr. Rogers was not a player in this decision, is that correct?
  - A I can't agree to that.
  - Q Why not?

- A Maybe they had a discussion and he had a role in the discussion that they had. If you look at the numbers only, I'll agree with that --
- Q You're looking at the numbers.
  - A -- if they had a discussion and he influenced their rating up or down or they influenced his up or down, then certainly he had a role in this.
  - Q So if you look at the numbers, which is all you were given, and if you had bothered to add the numbers up in the first place, you would have found out that the person --

eliminate Mr. Rogers because he didn't have an impact on Mr. 1 Fiser in the selection, then the only thing you're left is 2 the two people that knew about protected activity and the 3 4 person who came out low was the person who engaged in 5 protected activity. And statistically you would say then 6 protected activity was the reason he came out the lowest. 7 I haven't added the numbers, I would need a little 8 time to do that. If you're correct, then I would buy off on 9 that, assuming your assumption is correct. 10 MR. DAMBLY: Okay, thank you. We have nothing further. 11 12 MR. MARQUAND: Does the Board have any questions? 13 CHAIRMAN BECHHOEFER: Well, the Board did pose 14 some questions --15 JUDGE YOUNG: I do. 16 CHAIRMAN BECHHOEFER: -- before lunch. 17 MR. MARQUAND: Right. 18 CHAIRMAN BECHHOEFER: We'd like to get Dr. Peters' 19 response. JUDGE YOUNG: Before we do that, I'd like to 20 follow up on the very last question of Mr. Dambly. And Mr. 21 Dambly, correct me if I'm wrong, you said there's no way 22 23 that Rogers could have had an effect on the outcome. 24 MR. DAMBLY: Of Mr. Fiser -- for Mr. Fiser. 25 JUDGE YOUNG: Okay, here's what I just did --

MR. DAMBLY: I mean if you put zeroes in his 1 scores for Harvey and Chandra, yeah, he could have an impact 2 and anybody can, but I didn't do that. I gave perfect 3 scores to Mr. Fiser, a 10 on each of the nine questions. That gives him 90 points instead of the 51 points, which 5 then added to the 64 and the 65.8 from the other two guys 6 7 comes up with a grand total of 219.8 points. Mr. Harvey and Mr. Chandra had 135.7 and 235.5 points. So even with 8 perfect scores given by Mr. Rogers, Mr. Fiser comes out 18 9 points lower than the other two people and still wouldn't 1.0 have had a chance. 11 JUDGE YOUNG: I'm going to just check my addition 12 here because I want to ask. 13 Okay, if you changed Rogers scores to 65 for B, 65 14 15 for A and 100 for Fiser. MR. DAMBLY: He can't get to 100, he can only get 16 17 to 90, there's only nine questions. MR. MARQUAND: There's only nine questions. 18 19 JUDGE YOUNG: Oh, okay. MR. DAMBLY: You got bonus points because he sat 20 21 up straight. 22 (Laughter.) 23 JUDGE YOUNG: Okay. Then I have to start over, so 24 go ahead and answer another question.

The questions that we had asked before maybe.

25

THE WITNESS: My homework?

The first question was I guess my estimate as to what would have happened if Cox would have been the rater, is that a fair summary, rather than Rogers?

CHAIRMAN BECHHOFFER: Right, Cox.

THE WITNESS: Cox, C-o-x.

JUDGE COLE: I believe so.

CHAIRMAN BECHHOEFER: Cox was initially picked as a member of the selection review board and then because of scheduling conflicts, we're told at least, dropped out and Mr. Rogers was appointed in his stead.

THE WITNESS: Cox is a name to me, we could put Smith or Jones in there, I don't know all of those facts in any sense. And I guess I'd have to say whether it's Smith, Jones or Cox, I don't really know how they would have evaluated Fiser or any of the other people. I just don't know that for sure.

I know that -- I'm sorry, that's all that I feel like I can say. We could say what if anybody were in there and I just don't know.

CHAIRMAN BECHHOEFER: Okay, let me just follow a little bit, and again, it's along the lines of the question I asked earlier. If you correlate -- this appears on page 16 -- if you correlate the particular judges with -- or review board members with the candidates with whom they were

assertedly quite familiar, you see that Mr. Kent, who was
familiar with candidate A, statistically came out about four
and a half points greater for A than did B. And then if you
look at Mr. Corey, who was -- at least to our knowledge -was quite familiar with candidate B, Chandra, to my
understanding. He comes out just about six and a half points
higher for Chandra than for Mr. Harvey.

THE WITNESS: Are you talking about six and a half

THE WITNESS: Are you talking about six and a half tenths of a point?

CHAIRMAN BECHHOEFER: Well, 84.5 and 78.2, that's the comparison.

THE WITNESS: Okay, I'm sorry, I'm referring to my averages of their scores.

CHAIRMAN BECHHOEFER: I'm reading the bottom subtotals.

THE WITNESS: That's fine.

CHAIRMAN BECHHOEFER: And previously I was referring to Kent's rating of Sam Harvey at 80.5 and Chandra at 76.

And while the two of those may be in the same ballpark, it seems to me to produce a significant difference with respect to the candidates that the board members knew and were familiar with and did not know as familiarly. And we're excluding Mr. Rogers at this point because -- well, I do not know as of this time what Mr. Rogers' familiarity

with any of the candidates was.

THE WITNESS: Okay. You're right, there's a gap between Fiser and the other two candidates, when you look at Corey and Kent, that's pretty clear. When I was asking about the tenths earlier, I'm actually looking at my plot 1 and I just computed averages, so that we're looking at the same data, just kind of summarized in different ways.

So that's pretty clear that Fiser was rated lower than A or B by Corey and Kent.

CHAIRMAN BECHHOEFER: I realize that. But I was raising the question of whether past familiarity of a particular candidate with a particular board member may have had a significant difference or significant -- well, significant difference between the particular member who was known by the board member -- particular candidate, I'm sorry -- who was known by the board member and is not that enough of a significance to almost mandate that the other factor be brought in.

THE WITNESS: Yeah, and although that was not one of the assumptions I worked under, that was not a piece of information in the analysis, I would agree with what you're saying and that could be an explanation for the difference between Fiser and A and B, we can kind of consider them together because their scores are closer together, as a potential reason why, yes.