ORIGINAL

# UNITED STATES NUCLEAR REGULATORY COMMISSION

#### IN THE MATTER OF:

DOCKET NO: 50-445-012 50-446-012

TEXAS UTILITIES GENERATING COMPANY, et al.

(Comanche Peak Steam Electric Station, Unites 1 and 2)

### PREHEARING BRIEFING

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#### UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

3 : In the Matter of: : 4 TEXAS UTILITIES GENERATING : Docket Nos. 50-445-0L2 5 COMPANY, et al., 50-446-0L2 : . 6 (Comanche Peak Steam Electric Station, Units 1 and 2) 7 : -x 8 Room 422 Phillips Building 9 7920 Norfolk Avenue Bethesda, Maryland 10 Friday, November 9, 1984 11 The briefing in the above-entitled matter was convened 12 pursuant to notice at 9:00 a.m. 13 APPEARANCES: 14 On behalf of the Applicants: 15 MCNEILL WATKINS II, ESQ. ERIC L. HIRSCHHORN, ESQ. 16 SCOTT M. DUBOFF, ESQ. Bishop, Liberman, Cook, 17 Purcell & Reynolds 1200 Seventeenth Street, N.W. 18 Washington, D. C. 20036 19 On behalf of the Nuclear Regulatory Commission Staff: 20 STUART A. TREBY, ESQ. Office of the Executive 21 Legal Director U. S. Nuclear Regulatory commission 22 Washington, D. C. 23 24 -Federal Reporters, Inc. -- continued --25

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1	PROCEEDINGS
2	MR. TREBY: We are now going to begin the second
3	day of the briefing session. And, as we had indicated,
4	the schedule for today is that Dr. David Bowers is
5	available for the first two hours to be examined by the
6	attorneys for both the applicant and the intervenors, and
7	will also be available for the final two hours where the
8	rest of the panel is available.
9	If anybody concludes early and wants to get to the
10	other people, that's quite all right with the staff.
11	My further understanding is that today the order will
12	be that the applicant's attorneys will go first, and
13	Mr. Roisman will go second. • With that, I make Mr or
14	Dr. Bowers available to Mr. Hirschhorn and Mr. DuBoff.
15	EXAMINATION OF DR. DAVID BOWERS
16	BY MR. HIRSCHHORN:
17	Q Good morning. I wonder if we could start by
18	introducing your vitae for the record and marking it as an
19	exhibit. I think I have that one. I'll give it to you.
20	(Exhibit 10 identified.)
21	BY MR. HIRSCHHORN:
22	Q I wonder if you could just give us a brief
23	narrative description of your background, both teaching,
24	researching, and practical background specifically as it
25	relates to organizations like the one that was studied

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1 here?

A In terms of education I received my bachelor's degree in business administration and my master's of arts in psychology from Kent State University. Then I received my doctorate in organizational psychology from the University of Michigan in 1962.

7 Following that, I remained at the Institute for Social 8 Research at the University of Michigan until -- well, in 9 fact until August 31st, this year, when I took retirement 10 from the university.

Between that period and 1978, that is 1962 to 1978, I was a primary research staff person; that is the research faculty of the university. And in that capacity, conducted a number of studies of organizational behavior, organizational development, and other related such problems, all having to deal with organizations, their functioning, their outcomes, and so on.

18 The primary method, I suppose, that I used in those 19 studies, patly because the Institute for Social Research 20 is a large and fairly famous name in the survey area, was 21 the survey; by interviews, sometimes, but principally by 22 paper and pencil questionnaire.

I have done a number of such studies. I can't even count how many -- from 1962 on. In the course of that I suppose I developed a fair amount of expertise in the area

> 1 of organizational diagnosis, that is, diagnosing organizational strengths and weaknesses from the patterns 2 3 of survey responses particularly. 4 Beginning in 1978 until this last August I split my 5 time, 50/50, between the university where I directed the 6 Institute's organizational development research program, and Rensis Likert Associates, which is a consulting firm 7 outside the university. Rensis Likert was the founder and 8 9 first director of the institute, was its director for 25 10 years; and on his retirement in 1970 he did something that 11 he always wanted to do, which was to establish an 12 applications entity, essentially free from the constraints 13 of bureaucracy and so on in the university, to apply the 14 findings that he and others had generated over those man; 15 years. 16 In 1978 at his request I began to split my time 50/50, and became, in that year, vice chairman and president of 17 18 Rensis Likert Associates. 19 As I say, I took early retirement in August of this 20 year and am now essentially full-time at Rensis Likert 21 Associates; retired from the university. 22 During my university years I taught. I taught in a variety of kinds of areas. Several times I taught a basic 23 24 course in personnel psychology, which had to do with

> 25 issues like selection and so on, which is not particularly

> my area of preferred work, nor is it my area of greatest 1 2 expertise. I also taught for, oh, a number of years, my 3 graduate seminar in the theory of organizational development and change. I taught as well, basic courses 4 5 in the graduate school of business for several years, basic courses in what was called organizational behavior 6 7 and industrial relations, it was basically organizational 8 psychology but taught in the business school. 9 I have written a number of journal articles, research 10 reports, some books; have done a great deal of research 11 for the U.S. Navy, and I suppose the other salient fact is 12 I was a member of the three-person task force that Drew Lewis, Secretary of Transportation in 1981, appointed to 13 14 look into the Federal Aviation Administration in the wake 15 of the PATCO strike. And the other two members of that 16 task force authored a two volume report that appeared in

17 early '82.

18 I'm not sure what more to say.

19

BY MR. DU BOFF:

20 Q Could you describe the report you did for the 21 Department of Transportation?

A Basically the task force was charged by the Secretary with going into the agency and looking into management practices -- management and employment practices, I believe the title of it was, in the agency.

> It was a very broad mandate, but they were concerned that that incredible event had happened, and what kinds of conditions had caused essentially 12,000 people to break the law against overwhelming odds, walk out and not come back. And, as a task force, we decided to do essentially three things.

> 7 The three of us visited many facilities, talked to a 8 large number of people. So we had interviews, relatively 9 informal interviews; not structured ones.

> We also did a survey of practices and opinions and attitudes of people working in the facilities and people in the regional offices, the Washington headquarters, and also a parallel sample, which I organized, of the PATCO strikers in matched facilities.

15 Then we retained McKinsey and Company to do an analysis 16 of more formal systems, things like traffic variability 17 and peaks and valleys and so forth.

18 Volume 1 of the report contains the basic findings from 19 the task force's effort, both our conclusions and 20 recommendations as a task force, and a report of the 21 survey results. I directed the survey operation. And 22 also an account of the McKinsey findings.

23 Volume 2 contains other analyses and essentially backup 24 data that were not central to Volume 1, but we thought 25 should be presented.

1	BY MR. HIRSCHHORN:
2	Q What kinds of conclusions did you reach about
3	the problems or lack of problems in the FAA?
4	A Basically we concluded that the FAA's management
5	practices and style were atrocious; that the treatment
6	they accorded people was punitive, autocratic, arbitrary,
7	and that in at least one analysis that was reported in
8	Volume 2, that a basic cause of the strike was, indeed,
9	the treatment that those people had received. So we came
10	down very negatively against the agency.
11	Q In describing your work with the Institute, you
12	indicated that you used surveys as your primary research
13	tool?
14	A That's right.
15	Q And that they typically were written questions
16	and answers?
17	A Typically paper and pencil questionnaires; more
18	often closed end questions, where you check a response
19	category.
20	Q So that in your view, face to face interviewing
21	is not an essential component of finding out what's going
22	on in an organization?
23	A In an organization, no. The difference is that
24	well, there are two differences between the use of an
25	interview and the use of a paper and pencil questionnaire,

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in my judgment. If you are going to go to respondents who 1 have no particular stake in the outcome, for example you 2 want to do a national cross-sectional survey of attitudes 3 toward refrigerators, you could -- and, indeed, many 4 Congressmen do mail out 200,000 paper and pencil 5 questionnaires most of which go to a waste basket, send 6 out 200,000, get back 500 and conclude something -- well, 7 that doesn't do anything. 8 If you want a reliable sample of opinion from some, you 9 know, population that has no reason otherwise to provide 10 it to you, then you almost always have to go to an 11 interview. Because there's no other way that you can get 12 the attention of the respondent. 13 The other is if you don't totally know the content in 14 advance, you know the areas but you are not quite certain 15 what fleshes out the area, there you may need optional 16 probes and so on, which means that to get that kind of 17 elaboration you have to go to an interview. 18 Interviews are basically much more expensive per bit of 19 information than are questionnaires, but interviews 20 provide more flexibility and detail whereas questionnaires 21 permit you to collect standard data from a larger number 22 of people. 23 I'm curious about how you interacted with the 0 24 rest of the team that prepared this report. I gathered

> 1 from the discussion that we all had yesterday that the 2 team members, at least Dr. Margulies and Mr. Rice, read 3 raw data and then the team would meet and then they would 4 go back and read more data. We'll clarify later whether 5 that's correct, but that's the sense I got.

6 Did you participate in the same way or are you working 7 entirely separately and producing only a written document?

8 A I was working separately producing a written 9 document. I had, I think, a telephone conversation or two 10 of a sort of minor type with Mr. Kaplan, and similarly 11 couple of phone conversations with Mr. Stratton, and a couple of administrative kinds of calls around contract 12 13 issues and so on, with Mr. Obenchain and a Ms. Rydalch. 14 But other than that I had, let's call it an 15 encapsulated task, a very definite task, and I did that 16 and did not interact with the other team members.

17 Q You didn't compare notes as you went or anything 18 like that?

19 A No. No.

20 Q The final report notes on page 30, and I think 21 that probably was taken pretty directly from your report, 22 that the 1983 survey, "was constructed specifically for 23 you in the QA/QC organization and was also specifically 24 constructed around" -- specified categories. And then the 25 four categories mentioned are: Supervision, attitudes of

1	top management, relationship between QC and craft, and
2	attitudes of craft personnel.
3	In terms of the inquiry that you, and ultimately the
4	team were asked to make, would you consider these
5	appropriate target categories?
6	A Yes. I believe I would.
7	Q And in terms of adequacy of the sample, I take
8	it you would consider that I guess the word used here
9	was "valid responses" or "usable responses" of 139
10	questionnaires out of 150 that were sent out is a pretty
11	good and pretty high result?
12	A I would say that that's yes. That's a fairly
13	high and adequate sample.
14	BY MR. DU BOFF:
15	Q Dr. Bowers, I don't know a great deal about
16	statistics, and that's probably going to become evident in
17	a moment or two.
18	Could you turn to appendix C, please? On page C-7,
19	could you explain the acquiescence response tendency?
20	That term, a little bit more, for us?
21	A Okay. What that refers to in this report is the
22	tendency of a person, if they were to feel intimidated, to
23	give essentially a favorable to the organization, the
24	company or whatever response. Which, since, as I
25	pointed out in the report, some of the items were worded

1	in the negative, where mostly "no" would be favorable to
2	the company; and others were worded in the positive, where
3	mostly "yes" would be, then the issue is: Is there a
4	discernible and kind of persuasive tendency for people to
5	answer "mostly no" to the negatives more often than they
6	would answer "mostly yes" to the fairly low threat,
7	innocuous ones. That's the kind of issue that refers to.
8	Q Okay. This survey was submitted in an anonymous
9	form, was it not?
10	A It's my understanding that it was. At least I
11	know nothing of who these individuals were and it's my
12	understanding that there was no way that individuals were
13	identified.
14	Q And how does that affect your ability to draw
15	conclusions from the data?
16	A The anonymity?
17	Q Yes, the anonymity?
18	A It doesn't affect it.
19	Q How would it be different would your
20	conclusions be any different if the respondents were
21	identified, or could have been identified?
22	A If the respondents had been, for example,
23	required to put their names on their questionnaires, or
24	sign their questionnaires, that certainly would affect any
25	pattern of responses. Not only around the issue of

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intimidation, but around substantive issues. 1 2 0 Another term that I'm not entirely clear on is, 3 on the top of page C-8, "systematic referrent differences." 4 Would you explain that a bit for us? 5 The referrent, the term "referrent" means what A did the question refer to, topically. 6 7 For example, were all of the high threat items -- did 8 all of the high or most of the high threat items refer to 9 supervision and most of the low threat items refer to 10 craft? In other words, were there differences like that? 11 And were there systematic differences among the "threat" 12 categories, in terms of what the items referred to. 13 Could you give me -- I'm not sure I follow that. Q 14 Could you give me an example? I guess I understand what you mean by "referrent" but not how it relates to your use 15 16 of the "systematic"? 17 A Well, "systematic" means something other than a random pattern. In other words, were they systematically 18 19 different. 20 In other words -- whenever there was a high threat item, did it refer to something supervision did? But whether 21 22 they wanted to talk about low threat items, did they refer to craft, or management, or policies? 23 24 Q I see. Thank you. 25 BY MR. HIRSCHHORN:

> Obviously you had some more knowledge of the 1 0 2 situation you were looking at than was just contained in the four corners of the questionnaires. I wonder if you 3 could tell us the source of it and what it consisted of? 4 5 A It really consisted of a letter which I received 6 shortly after agreeing to undertake this analysis, that said basically -- well, basically outlined the issue; that 7 8 there were these questionnaires that had been collected from QA/QC personnel; that the issue was one of -- well, 9 10 the question of intimidation, and was there evidence in 11 the questionnaire responses of intimidation? That the 12 site was a nuclear plant under construction. I believe on 13 another letter, a more administrative one, it identified it as Comanche Peak; about which I, frankly, knew nothing. 14 15 I had heard the name probably referred to in a news article a couple of years before. I wasn't even certain 16 where it was. That's about what I knew. 17 18 I did not -- for example, the questionnaires were 19 clumped into clusters with names, with a name on it like "Smith" or "Jones." I assumed that these were some sort 20

21 of organizational clusters, but that's about all that I 22 knew.

23 Q I would like to show you a document and ask you 24 if this is the letter you are speaking of -- a copy of the 25 letter, since it seems to be an internal one?

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> 1 Yes. Yes. A 2 MR. HIRSCHHORN: Shall we mark that, please, as 3 number 11. 4 (Exhibit 11 identified.) 5 BY MR. HIRSCHHORN: 6 0 You said you had a couple of telephone 7 conferences, I guess, with Mr. Kaplan and Dr. Stratton. I assume you had some discussion with somebody before 8 you agreed to. I guess what I'm asking is, I would really 9 like you to go through step by step --10 11 A How it happened. 12 Q -- in addition to the letter, how it happened 13 and what information you got at what point, so we can have as full an idea as possible of what you were and were not 14 told in connection with your evaluation of these surveys. 15 16 A Okay. My typical pattern in the summer is to 17 spend about six weeks on a working vacation at my place in northern Michigan. This was where I was when a member of 18 19 my university -- then university office staff, called me and said that she had received an inquiry from Mr. Kaplan. 20 And the issue was a nuclear plant under construction. 21 22 There were some questionnaires. It was an issue of 23 intimidation. And would I be interested in, essentially, 24 analyzing those questionnaires around an issue of 25 intimidation.

> I told her I had many things to do up there, but, yes, I could probably undertake that if they wanted me to. I believe she called Mr. Kaplan back and passed that along to him.

5 As I recall, I don't believe at that point Mr. Kaplan 6 and I had talked on the phone, I believe, by the time this 7 transpired he was on vacation and I had had a couple of 8 telephone calls well, of an administrative type, with 9 Mr. Obenchain, and I believe a call or two with Mr. 10 Stratton. But that was basically how it happened. The 11 questionnaires, copies of the questionnaires plus the -- I want to say -- the nondisclosure statement. It may have 12 13 been some other document like that -- were sent to my office and then sent by my assistant up to me at the lake. 14 15 That was -- that, plus in one of those conversations a 16 discussion about the tight time constraints involved, was 17 essentially what went on before my undertaking it 18 literally.

19 Q I take it, then, that subsequent to receiving 20 this letter -- did the questionnaires come with this 21 letter which has been marked as Exhibit 11?

A No. I believe the questionnaires were sentseparately.

Q And subsequent to receiving this letter and
before beginning your review of the questionnaires, did

> 1 you have any further conversations with any of the team or anyone else from the prime contractor, about the study? 2 I remember a conversation. It was not with 3 A 4 Mr. Kapian. It may have been with Dr. Stratton. It may 5 have been with Mr. Cbenchain. I'm not just certain who it 6 was. 7 The question I was putting forward -- one that most 8 concerned me was intimidation. Was the issue: Did the 9 substance of the responses reflect intimidation? Or, did 10 the pattern of responding? Which was the focus, or both? 11 And, as I recall, whoever I talked to said: Weil, that's a good question. It could be either one or both, I 12 13 suppose. And I said: Well, that's what I think, too. 14 And that essentially directed my analysis to looking at both substance and the pattern of responding. 15 16 And the conclusion that you reached, then, Q 17 includes your conclusions as to both? 18 Yes. Yes. A 19 0 And during the course of examining these 20 questionnaires and before your final report was 21 transmitted -- which I guess was August 2nd -- did you 22 have any other conversations with members of the team? As far as I can recall, I did not. 23 A 24 0 So that you never spoke at all, then, with Dr. Margulies? 25

1	A Never.
2	Q Or with Mr. Rice?
3	A Never. In fact not during the preparation of
4	this at all.
5	Q And you were never advised of the state of the
6	team's or their individual reviews?
7	A No.
8	BY MR. DU BOFF:
9	Q Another term, if you will bear with me. On page .
10	C-8, if I can find it it's the third bullet paragraph
11	there: "5 percent confidence interval"?
12	A Right.
13	Q Can you define that for me?
14	A In a statistical test, the question is: What
15	are the odds of finding something, simply by chance? And
16	the way this is done is in terms of a probability
17	distribution. And a very common one used in the social
18	sciences is what's called the 5 percent level of
19	confidence. That means you would expect a difference that
20	large or larger to occur only 5 percent of the time by
21	sheer chance.
22	So it's a kind of convention, although there are other
23	levels that are sometimes used, a common convention is to
24	say we will accept something as real if it would occur by
25	chance only 5 percent of the time or less. And, so, in

1	the case of this particular thing, the question is: What
2	distance on either side of the percentage would occur
3	could occur by chance 5 percent of the time. So that's
4	what that refers to.
5	Q I wonder, does that in any way relate to "confidence
6	band" that you referred to on page C-9, I believe?
7	A Yes. That's essentially the band the band is
8	that area.
9	Q The same the range?
10	A Right. Right.
11	MR. DU BOFF: Thank you.
12	BY MR. HIRSCHHORN:
13	Q . Now, we know that you did not design this survey.
14	A That's correct.
15	Q But, given what it was and what it contained,
16	what was asked and what was answered, and given what you
17	were asked to examine it for, would you say that it was
18	useful?
19	A Yes. I would say that it was useful for
20	examining the question that I was asked to look at.
21	Q And that is the question as set forth in Exhibit
22	11, of July 27
23	A I'm sorry, I didn't understand.
24	Q And the question that you were asked to examine
25	was

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> 1 A Oh, yes. Yes. Right. 2 -- I guess it's the first paragraph of page 2; Q 3 is that correct? 4 That is the overall question, I gather, that is A 5 being addressed in all of this. My part of it, of course, 6 was to see whether that -- there was any evidence that 7 that was true in the survey in the questionnaires -- in 8 the questionnaire survey. 9 MR. KAPLAN: Could you say, just for the record, what was true? You were pointing to something there. I 10 11 didn't know what you were saying. 12 WITNESS BOWERS: Page 2 says, "The basic 13 question which you are to attempt to answer is: Did 14 management by its actions create an atmosphere of 15 intimidation for the QA/QC inspectors such that they performed their duties in a way that there is some 16 17 likelihood of impact on the safety and quality of the 18 plant." It was not that question in all its possible 19 ramifications, but that question as it applied to the 20 questionnaire survey results. That was my task. 21 MR. KAPLAN: Thank you. 22 BY MR. HIRSCHHORN: 23 0 Given the content of the survey, if the answer 24 to the basic question that you just read us were in fact 25 "yes," what is the likelihood that that would fail to show

> 1 up in a survey of this kind? Did I have too many double negatives in that question? 2 3 You had quite a few of them. Try it again. A 4 0 In view of what the questionnaire was, and what 5 kinds of questions it asked --6 A Right. 7 -- assume, if the answer to the question the 0 team was examining -- that is to say whether there was an 8 9 atmosphere of intimidation such that there is some 10 likelihood of impact on the safety or the quality of the 11 plant -- assuming the answer to that question were "yes," what would you consider the likelihood, stated either way, 12 13 that evidence of that would or would not show up in a 14 survey of this kind? 15 A I think evidence of it -- I think it's highly 16 likely that evidence of it would show up. And the reason 17 is because it is not necessary -- not just evidence in any 18 single respondent's questionnaire, but the pattern across 19 all respondents. 20 I'll give you an example of what I mean. With a 21 pattern, perhaps like the one that's here, where 22 prevailing opinion appears to be positive, or favorable 23 toward the company, but not universally so; where negative views are not concentrated among a tiny number of people 24 25 but are spread across a large number of people; where

> there is no necessary pattern of a person being negative on one and also negative on another; and to put it across 139 respondents and to produce a plausible pattern of nonintimidation of that kind, would require interpersonal collusion by 139 people. That is, the likelihood of that ever being pulled off is very, very low.

7 Q May I take it, then, that given the portion of 8 the team's work that you conducted, that you have a pretty 9 high level of confidence in the conclusions of the overall 10 report as well as your own conclusions?

A I have a high level of confidence in the overall conclusions and in my conclusions about the 1983 survey; yes.

14 Q And do you have -- well, let's see if I can 15 clarify that a little.

16 Do you have a fairly high level of confidence that 17 those conclusions reflect the facts, even though you were 18 not on-site, did not have interviews, et cetera?

19 A I have a high level of confidence they reflect 20 the facts as seen and interpreted and analyzed by other 21 team members. Facts other than the 1983 survey, of course, 22 are things that I did not analyze, have in hand, or 23 anything, when I did my specific piece of this. But the 24 fact that other things appear to be consistent with what I 25 saw in the limited piece I did gives me confidence that it

1	is essentially correct.
2	BY MR. DU BOFF:
3	Q You worked independently as you said before; is
4	that correct?
5	A That's correct.
6	Q And as you were doing your own analysis, you
7	were not influenced by the fact, I take it, that your
8	colleagues had reached very similar conclusions looking at
9	a different data base; is that true?
10	A That is absolutely the case. Because I had no
11	conversations with most of them, and, in fact was, I guess
12	at the time, unaware of the existence of two of them.
13	Q You could not have been influenced?
14	A That's right.
15	Q Okay. Thank you.
16	MR. KAPLAN: Could I just they hadn't been
17	hired. What's that?
18	MR. TREBY: I was going to suggest that you are
19	taking into their time
20	MR. DU BOFF: Oh, that's fine. It's fine if he
21	wants to ask questions.
22	MR. KAPLAN: Just a quick comment, just for
23	David, we really hadn't talked too much. They hadn't
24	actually been hired at the time we talked.
25	BY MR. DU BOFF:

1	Q On page 31 of the report, under the paragraph
2	that begins "level 1: Simple analysis responses," the
3	first sentence of that paragraph is reads as follows.
4	I'm quoting: "The questionnaire permits specific
5	identification of the attitudes and concerns of people in
6	the QC organization." Could you elaborate on that for us
7	just a bit?
8	A Well, the questions in the questionnaire dealt
9	with a variety of perceptions, attitudes, possible
10	concerns, substantively as distinct from the patterning of
11	responses. And that's what that that sentence
12	essentially says.
13	Q And did you feel that there was an opportunity
14	for a very broad expression of these attitudes? Is that
15	also part of what you are saying?
16	A Yes. I think so. Yes.
17	BY MR. HIRSCHHORN:
18	Q I take it, by the way, that your lack of
19	communication with the rest of the team continued after
20	you submitted your report; is that right?
21	A That is correct, until, I guess, last week, I
22	had a conference call. Other than periodic telephone
23	calls from, I guess it was Mr. Kaplan, asking when I could
24	come in and give a deposition, I had no such contact after
25	submitting the report.

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1	Q So you had no involvement in any of the drafts,
2	et cetera, a stack of which we were looking at earlier?
3	A No.
4	BY MR. DU BOFF:
5	Q Was a major aspect of your analysis to determine
6	whether the 1983 survey responses were distorted in a way
7	that could have masked feelings of intimidation? That
8	level I'm really thinking of your level 2 analysis.
.9.	A I hesitate about the term "masked."
10	Part of my charge, as I saw it, was to determine
11	whether feelings of intimidation were reflected in the
12	responses, in ways that produced what one would suspect
13	was a distorted response. In that sense, yes, masking.
14	would be an appropriate term.
15	Hypothetically, for example, people did feel
16	intimidated but were so intimidated that they wanted to
17	give a squeaky clean case that they weren't. In that
18	sense masking is appropriate.
19	Q So an important part of your analysis was to
20	examine whether that had taken place, and you concluded
21	that it had not?
22	A That's correct.
23	(Discussion off the record.)
24	BY MR. DU BOFF:
25	Q On page C-10 this is a real tough question

1	in the two footnotes
2	A Right.
3	Q should those be correct to read "category 3"
4	and "category 4," instead of 4 and 5?
5	A Let's see here. Yes, they should.
6	MR. DU BOFF: I think that's all we've got.
7	Thank you.
8	MR. TREBY: We don't we take a break.
9	(Discussion off the record.)
10	BY MR. ROISMAN:
11	Q Doctor, when you got the July 27th letter, what
12	was your understanding of what it was that you were to be
13	looking for? What did you understand you were to be
14	looking for?
15	A I understood I was looking for evidence of
16	intimidation in the questionnaire responses.
17	Q And what did you understand "intimidation" was?
18	A An excellent question. I went to the large
19	dictionary I kept up there at the lake, and looked up
20	"intimidation." And from that I concluded that the
21	intimidation would be defined as behavior, either
22	behavior either avoiding doing something or going ahead to
23	do something specific, as a result of acts which create an
24	emotion of fear or apprehension in the individual to whom
25	they are directed in other words, fear of punishment or

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> 1 adverse consequences. So there were three components in my mind: One was the overall phenomenon of the behavior; 2 3 the second was the act, verbal or behavioral that was directed toward the subject individual; and the third part 4 was the feeling or emotion of the individual itself. 5 6 Now, when you looked at the questionnaires, if 0 7 you did not find all those elements then, as to a 8 particular answer to a particular question, did you then 9 draw the conclusion that that did not represent 10 intimidation? 11 A No. I think as I stated in my report at some 12 point here -- excuse me just a moment until I find it -- I said in there that --13 14 Which page are you looking at, Doctor? Q 15 A This is on page C-4. That "the survey results in this report" -- analyzed in this report -- "can contain 16 17 no direct reading on possible acts of intimidation." That 18 is, you would not, as you would if it were some sort of 24-hour 19 a day video taping, you would not be able to literally see 20 the act of intimidation. Nor can you get a direct reading 21 on the feeling or the emotion that is inside the 22 individual's head. 23 What you can get from it is evidence that a behavior

24 occurred on the part of the respondent, behavior in
25 responding to the questionnaire, that produces a pattern

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1	suggesting that the emotion felt was that of intimidation.
2	That's what I was able to look at.
3	Q So, in other words, what you really were looking
4	at was whether or not the persons felt intimidated about
5	answering the questionnaire?
6	A That's correct intimidated in answering the
7	questionnaire, I suppose I would say.
8	Q For instance, if the whole 139 answers had been
9	written as though these people were working for the lord
10	himself, you would have been suspicious: and if all 139
11	answers had come back and had said no answer at all,
12	you would have been suspicious.
13	A Yes.
14	Q You were looking for that kind of a pattern in
15	the answers?
16	A Yes. Though not necessarily that extreme to
17	arrive at those conclusions.
18	Q I understand.
19	A Yes.
20	Q I take it if the questionnaire hadn't been
21	designed and hadn't asked anything particularly about the
22	workplace, but had simply been a questionnaire to ask the
23	people about if it had been to find out how they liked
24	lunch, you know
25	A Yes.

> 1 Q -- it could have served the same purpose that 2 you were interested in? You were trying to find out did 3 they feel comfortable about answering questions which 4 might have elicited from them some negative response, and, 5 if they did, then you would expect to see it in the 6 answers to the questionnaires?

7 A Yes. If the questionnaire had contained nothing 8 about, let's say, innocuous items having little to do with 9 any real -- say, work-related thing -- having to do with 10 issues of quality, issues of inspection, those kinds of 11 things; but, rather, dealt with the parking lot, lunch, 12 what do you think -- what is your -- what do your friends 13 and family think about the fact that you work here, stuff like that. Then I would have said, if I were to find some 14 15 pattern which suggested intimidation on that, I wouldn't 16 have known what to make of it. Maybe they were very 17 suspicious persons or something. But it was evidence of intimidation around those issues, on the questionnaire. 18

19 Q How would your conclusions differ if you
20 believed that the questioned people felt that their
21 identities would be known?

A If I believed that these people felt that their identities would be known? Let me think about that for a moment.

25

Considering the pattern of responses, I suppose what it

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1	would lead me to conclude is that there is even less
2	feeling of intimidation and there's practically none
3	here now because in the face of that, they still come
4	through with this sort of portion that's, I don't know, 20
5	to 25 percent of whatever is there, that is negative.
6	Q Negative about what kind of thing? What were
7	you finding that they were negative about, that wasn't
8	intimidation?
9	A Well, negative about whatever the issue was. I
10	don't have a copy of the questionnaire in front of me.
11	But negative about practices of management; negative about
12	policies of the company; negative about one's supervisor,
13	and so on:
14	So, if I believed that these people did not feel that
15	their identities were protected, I suppose I would feel
16	that there must be even must be remarkably little
17	intimidation because they certainly felt free to say what
18	they said.
19	Q But the issue was whether they were intimidated

19 Q But the issue was whether they were intimidated 20 about reporting nonconforming conditions at the plant. 21 And they didn't -- you found that they didn't say very 22 much about that; right? What they did was they talked 23 about practices of management that they didn't like. 24 Now, isn't it true that you could have a group of 25 people who were intimidated against reporting safety

> 1 problems, but not intimidated about grousing and bitching 2 about management?

> A I suppose it is possible. But I think it would be highly unlikely. I'm trying to consider your question carefully here.

6 As I understand it, the purpose of the questionnaire 7 was to elicit perceptions and views and opinions from the 8 QA/QC people, about matters having to do with their 9 ability to perform their reporting function. And the questions -- some of them, as I recall -- dealt rather 10 . 11 directly with the issue of your willingness or ability or whatever to report some particular problem. Others, 12 13 perhaps, had less directly to do with it. But all were 14 around the issue of how free do you feel to speak up in 15 some sense, or to do your job. I'm not sure where I'm 16 taking that at this moment. Would you ask me your 17 question again?

18 Q Let me try again in a different vein. Where did 19 you get your understanding of what the reason was for the 20 survey? How did you obtain that understanding?

A I obtained that from the -- well, from two places: From the July 27th letter, and from a telephone conversation which my assistant at the office had had initially with Mr. Kaplan. And, in that telephone conversation, I can recall talking to my staff member when 1 she called me, I asked, "intimidation about what?" And 2 she was not clear at that point. And the letter clarified 3 it.

Q No, that's a different question. My question is:
How did you know what this survey was designed to uncover?
Not how did you know what you were supposed to lock for in
the survey. How did you know what the author of the
survey intended to find out with the survey?

9 At the time I received -- at the time I agreed A 10 to do this, I had no idea what the author of the survey 11 intended to look at. As I looked at the content of the 12 questions after I received the questionnaires, it became 13 clear that the author of the survey wanted to ask these 14 QA/QC people about the climate that existed in a number of 15 areas, supervision, management practices, policies, whatever -- the climate that existed that could 16 17 conceivably affect their ability or their feeling of 18 freedom to do their job in the best possible way. It 19 became apparent when I saw the content of the questions. 20 That's what you perceived was the motivation of 0 the questionnaire. Not that you got any information 21 22 regarding what that person stated was the motivation or 23 intent?

A I distinguished between the person, author of the survey's motivation, and what he or she proposed to

1 measure by getting responses about it.

The distinction I'm making is that the individual who designed this survey may have had many, many motives in mind for designing the survey. You know, to collect the information, to get a promotion -- anything. I couldn't say anything about the person's motivation. But I could look at the content of the questions and determine what it was the individual was attempting to measure.

9 Q It may merely be semantic but it seems -- you 10 don't mean what he intended. You mean what you perceived 11 what, if you had written the survey, you would have 12 intended. You have no idea what he intended. No one 13 shared his testimony --

14 A You are quite correct. I have no reading on 15 that individual's intent. I am inferring the intent from 16 what I saw from the questionnaire.

17 Q Right. Now, were you aware that with regard to 18 the "Williams" group, the 12-people group, that sometime 19 prior to the time the survey was done, that most if not all of those people had been personally interviewed by the 20 man who was there, the ultimate boss under whom these 21 22 people who answered the questions worked, for the purpose 23 of finding out what complaints they had about Harry Williams? 24

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I was not aware of that at all at the time. Not

1 at all.

2	Q Assuming for a moment that that's correct, does
3	that alter in any way your judgment about the willingness
4	of them to express on the written questionnaire any
5	problems that they had with Harry Williams, if they had
6	already had a meeting at which they discussed those issues
7	with the man who initiated the survey?
8	A I don't think my reading on it would be much
9	affected by that, because one could imagine almost
10	offsetting consequences from that. In other words, people,
11	as a result of that, might feel that they had ventilated
12	whatever was in their minds and therefore they didn't have
13	to put it on paper. Some might feel that way. Others
14	might feel it was now legitimate to respond negatively
15	about Williams, or whatever, so there would be no, in my
16	mind, no clear impact that I would expect that to have.
17	Q Wouldn't it confuse the Williams results for the
18	purpose of your analysis of whether or not people were
19	freely being critical in the surveys, as indicative of
20	their lack of a feeling of intimidation? Would it make

21 the Williams data somewhat confusing?

22 P

A Not really.

23. Q So you'd feel just as solid about the Williams
24 data, even though the people who are talking about
25 Williams have previously expressed those concerns

1	personally to the supervisor, under questioning from the
2	supervisor?
3	A If what you describe were what I knew, the
4	answer to your question is: Yes, I would still feel about
5	that as I do.
6	MR. TREBY: Could you keep your voice up?
7	WITNESS BOWERS: Okay.
8	BY MR. ROISMAN:
9	Q Now, in doing the analysis that you did, how did
10	you factor in the substantive answer that indicated a
11	dissatisfaction with management practices? Did you count
12	that as a sign of a lack of a feeling of intimidation
13	because the people were willing to say that in the
14	questionnaire?
15	A To me, that was evidence that, indeed, there was
16	not some strong feeling of intimidation. They were
17	willing to, in those instances where they did, to say so.
18	Q I take it that if they believed that it was
19	anonymous, and that no one would know who said it, that
20	would give them a little more leeway to say it than it
21	would have if he knew that their names would be known;
22	isn't that true?
23	A Yes. I would agree with that.
24	Q How did you deal we talked about this a
25	little bit yesterday with what we called the Catch-22

> 1 phenomenon in this survey? If they don't say anything is 2 wrong it could either mean that nothing is wrong or they 3 are afraid to speak up. If they do indicate a problem, 4 then it either indicates that there's a problem or that there is not a problem because they are not afraid to 5 6 speak up. 7 How do you deal with that in the context of this survey 8 and giving an analysis of it? ) A If they say there is a problem -- I'm just 10 repeating back what you said. If they say there is a problem, it's either that there is a problem or there is 11 not a problem because they are --12 13 Q Willing to say there is a problem. 14 That was the statement you made. A 15 Q That's right. When the problem is intimidation, 16 that's what makes it the potential Catch-22 problem. 17 A I guess my answer to that is, if you were asking questions directly about intimidation, I mean referring 18 directly to intimidation, I would say that would be 19 20 perplexing. But if you are asking questions about other 21 things, things concervably related to intimidation, then 22 it seems to me it's less a problem because if -- and also 23 you have to take into account how many people, you know, what proportion of them rather than any single one. But 24 25 if, in large numbers they are willing to describe the

> existence of problems and are not universally positive, or 1 2 something, it suggests that there is that freedom to 3 express it. On the other hand, if the large majority of them are in 4 5 large part favorable and selectively negative, that 6 collective pattern to me indicates an absence of 7 intimidation. 8 I'm not sure whether I have answered your question or 9 not. 10 0 You have done -- I mean I think you've answered what I think is about all that one can say on that. 11 12 If you had been called in by Comanche Peak in 1983 and 13 asked to design a survey of the workforce to determine 14 whether or not they felt inhibition in reporting safety 15 problems, how would you have gone about doing that? What would your technique have been for developing a survey and 16 17 how close to what you would develop is this survey? 18 I suppose the first thing, if I had been called A in to do that, the first thing I would have done, because 19 it's the first thing I do in a generation of surveys that 20 are to be applied to a unique site, is to do some 21 22 relatively unstructured interviewing around the 23 organization, making it clear that I am an outsider; that whatever they say is confidential and will not be revealed 24 25 as their response to anyone; but, get from them issues,

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descriptions, or -- descriptions of situations or practices or whatever that they would consider to be intimidating.

I would not go around and say, or ask them if they had been intimidated, because I think then you are getting into the whole problem that we are talking about here. But I would ask them, probably, for the kinds of things which, if a person in Comanche Peak felt intimidated, the kinds of things that would produce that intimidation. And from that I would then generate survey questions.

And how -- these survey questions, would you say that this survey is the one you would have generated?

13 · I would say that the questions that were asked A in this questionnaire could well have emerged from that 14 process; yes. Since I did not do that process, I don't 15 know what whoever did it, assuming they did it, or 16 17 something analogous to it -- I don't know what 18 materialized from that. But these questions would be --19 are very plausibly things that would be in a questionnaire 20 that would result; yes.

21 Q In that kind of a questionnaire, would the style 22 of question, the "mostly yes" "mostly no" approach be the 23 kind that you'd probably use?

A Personally I probably would not opt for that.
25 It's adequate. But sort of at root is the trade-off

> between the fineness of discrimination that's required and 1 the amount of information that is lost. That is, a 2 5-point scale is parhaps optimal because if you go beyond 3 4 that in numbers of categories of response, you gain very little information while confusing the respondent. And as 5 6 you go down from 5 toward 2, you lose this fineness of 7 discrimination, in that sense some information. But if 8 all you are really after is an overall answer of "yes" or "no," this would probably be adequate. I probably would 9 have gone to some larger number of scale points, maybe 5. 10

> 11 Q How much is the answers to the questions 12 distorted by the "mostly" in there, which implies that it 13 must be at least 51 percent of the time the condition 14 described exists, and thus the person who says: Yes, it's 15 happened but doesn't happen all the time -- how would this 16 survey distort away that data point?

17 A Well, the "mostly yes"/"mostly no" two-response 18 category thing essentially forces the individual to throw 19 it one way or the other or else not respond.

If they are truly torn -- well, there are some things I've seen in things like that before too, it wasn't necessarily that. They responded -- they checked both boxes. Or they write something in the margin saying: Yes, sometimes, but not all the time. Or whatever. I didn't find that, really.

1	It forces them to judge one way or the other on the
2	basis of some combination of the frequency and the
3	significance of it. So it's not just how often it happens,
4	but how large it is in their minds, how important it is in
5	their minds, in combination with frequency, that causes
6	them to leap one way or the other.
7	If would having it that way cover up significant
8	acts of intimidation, significant incidents of
9 .	intimidation? I guess that's the thrust of your question.
10	Q Yes.
11	A It might. But I think my feeling would be it
12	probably wouldn't, or would do so rarely. Because if the
13	intimidation were truly significant to a significant
14	number of people, I would think it that feeling, and
15	not just the frequency of it would push them toward
16	whatever the other category is.
17	Let's say it was one of the positive worded items, it
18	would tend to push them towards "mostly yes" "mostly no."
19	Q What is your understanding of the nature of the
20	kind of work that these people were doing which they might
21	or might not have been intimidated from doing right?
22	A My understanding, I suppose, is that they are
23	responsible for checking, inspecting the quality of
24	various aspects of construction as it occurs, whether it
25	amounts to welding something or to putting pipes on

hangers, or whatever. Something like that. It could be
 concrete. It could be anything. Wiring.

3 Q Was it your understanding that most of their 4 work involved fairly objective -- this is either right or 5 it's not right? They had to say either it's okay or not 6 okay, on a very objective evaluation basis?

7 A I suppose it would be my expectation or 8 understanding, knowing the rather stringent requirements 9 that the NRC generally puts in these areas, that there are fairly definite, clear requirements, standards, whatever, 10 that the work must meet, however it is defined. And that 11 they, indeed, have those -- whatever -- if I want to say 12 checklist or whatever -- that they have those and those 13 are known to them. And they are looking to see whether, 14 15 indeed, they have been adhered to.

16 They are not called in to look at something and say: 17 Yes, I don't think that looks too bad. But rather it's 18 much more precise than that.

19 Q So that your expectation is that they, this
20 group of 139 people, would know whether they were doing
21 something wrong that they should be doing right, and would
22 then have a sense of: Well, am I doing it wrong because
23 I'm intimidated? Or because I'm told every time you do it
24 wrong we'll give you an extra \$50, whatever it was -- that
25 they would know whether they were doing it right or wrong?

> 1 I would assume that they would know whether they A 2 were doing it right or wrong; that it would not be a situation which you might run into in much less -- oh, I 3 call it critical areas -- where it isn't important whether 4 5 it's really right or wrong. You know? It's not a 6 situation like that. That they know it is held to be 7. important and they know what meets or exceeds the required standards. I would assume that. 8

> 9 Q How would you go about getting the answer to the. 10 question: Are you being inhibited from doing what you 11 should do, the right thing -- where the person who is 12 being inhibited doesn't realize that they are not doing 13 the right thing? That is, that they are subjectively 14 biasing their judgment on a series of judgmental decisions, 15 but they don't know that they are doing it?

16 A Because they don't know the standards? Because the standards are not so objective. 17 0 They are not as objective as the assumptions that we have 18 19 just been talking about, but they are more subjective. 20 How would you go about getting the answer to the 21 question: Is this person in fact being intimidated and acting in a way that they would not act if these events 22 23 didn't exist or the persons themselves don't realize it? 24 A Well, you know, there are two parts to the 25 problem you just posed. The issue of intimidation could

> still be looked at in this way, or something analogous to 1 it. The issue of their doing it wrong because they don't 2 3 know what's right ---4 No. No. 0 5 A No? 6 0 That isn't what I meant. Let me give you an 7 example. 8 At this plant there were two ways of reporting 9 nonconforming conditions. One was called an NCR, and one was called an IR. For reasons I will not bore you with, 10 11 management just loved the IR and they didn't very much like the NCR. But the criteria of when you would use the 12 13 IR and when you would use the NCR were not so objective that it was clear in every situation, that it was clear 14 this was an IR or there was an NCR situation. Many of the 15 people who worked for Harry Williams had had a great deal 16 of dispute among them for quite some time over whether 17 they should use the IR, or whether they should use the NCR. 18 19 Harry Williams had already given them a now infamous 20 speech on that situation, and so had another man named Ron 21 Tolson, whose name you may also have come across. So it 22 would be an issue on which there would be a lot of 23 management pressure.

And it would be an issue in which I think it's fair to assume that management did not want to see NCRs, except

1 when it was absolutely necessary and there was no option. But it wasn't always clear to the person in the field when 2 there was clearly to be an NCR. And it was always a gray 3 area there. You might decide to make it an IR. 4 5 Now, these people are now being asked the question: Are you being discouraged from doing what you think is 6 right? Well, they know what they are supposed to do, but 7 8 they get faced with a number of situations in the field in 9 which it is not crystal clear. And they tend to bias 10 their decision towards the one which gets them less 11 negative response from management.

How can you find out in a questionnaire that those people are being discouraged from doing what their natural judgment tells them they should do, by the knowledge that there will be a negative response if they go toward the NCR rather than toward the IR? How do you design the questionnaire to get at that question?

18 A I suppose -- well, there are several approaches 19 one might consider. One could design questions that 20 directly dealt with that. You know, how often do you 21 submit something as an IR that really should be an NCR? 22 Questions like that. You directly ask it.

Another would be to frame questions that dealt with hypothetical problems that should be one or the other; that you truly knew would be one or the other, and ask

1	them	in	the	quest	tion	wha	at	they	would	do	with	it?	That
2	would	be	and	other	way	to	do	it.					

3 Q Yes.

A Beyond that, I am not sure what I would do. I'd have to think about that for some time. Those are at least two possibilities.

7 How, at all, does this survey, the 1983 survey. 0 8 give you an answer to that kind of issue? The issue of the person who is not consciously aware that they are not 9 doing something that they should do, or that they are 10 being -- that their subjective is directing them away from 11 courses of action where there is a judgment to be made, if 12 one course of action looks like it is going to give them a 13 14 negative response?

A In this survey, it would not be that specific
issue that would be addressed. It would be that issue as
part of an overall feeling or climate of intimidation.
In other words, the situation you described is a very
specific, concrete situation. Specific, concrete
situations are not really assessed in a questionnaire like
this that deals with the more general issue.

22 Q That's right. I didn't mean my question to be 23 related to the particular NCR/IR, but to the generic issue: 24 How well does this survey help you learn whether there is 25 a subconscious biasing that's taking place as a result of

1 negative responses? How does this discover whether those
2 biases really exist and whether these people find those
3 negative responses?

A It seems to me that's a part of the question that's addressed by the pattern of responding as opposed to the substance of the response; that if there are subconscious or unconscious feelings like that that are steering people away from doing anything controversial, that it should show up in this overall pattern of intimidation anyway.

II Q Is that how you looked at this? Is that the issue was whether these people were being discouraged from doing anything controversial? Your premise was to examine and see whether there was a pervasive discouragement of doing the controversial?

A No. I wouldn't say that that was what guided me in this. I used that term, I guess, as an outgrowth of your illustration of IRs and NCRs, which did sound controversial somebow.

But the issue that I was addressing here was whether the pattern reflected an underlying feeling of intimidation, which may have come from acts that one is -that they were directly aware of, or of things that they were not directly conscious of but which nevertheless influenced their behavior in the response to the

1 questionnaire.

2 Q Would the questionnaire find indications of -3 let me take that back.

Give me a couple of examples of what, in your mind, would be the kind of intimidating actions that you think would have been present at Comanche Peak, if there were intimidating actions present. In other words, some idea, what did you think there was if you had gone down and you had been able to do your full, in-depth survey, what did you think was meant in specific about intimidation?

11 A Well, it seems to me intimidation can cover a 12 fairly wide range of acts and their effects, their 13 emotional effects.

For example, maybe at one extreme would be a statement from the company tacked up on the bulletin board saying that anyone who reports anything will be fired. All right? That would be pretty intimidating.

18 Q Reports anything? What do you mean?

A Anything unfavorable, any problems. Sort of "don't
 nobody bring no bad news" kind of injunction.

21 Q Let me just stop you there because I really want 22 to get at what -- because you were not part of the team's 23 evolutionary process. You didn't read the thousands and 24 thousands of pages of deposition which may explain why you 25 were willing to work for a substantially lower daily rate

1	than anybody else. You sat at your cabin in Michigan
2	they had the other things.
3	But in the context of this it sounds to me like you
4	were looking for just what you just described; that is,
5	you were looking for a company that basically was trying
6	to get the word out to everybody that bad news is
7	unacceptable?
8	A No, I was anchoring one end of a distribution at
9	that point. Not stating that as the
10	Q Give me the other end of your distribution.
11	A Okay. The other end would be intimidation that
12	is induced because of, let's say, expressions or maybe not
13	even verbal implications of disapproval.
14	Q Disapproval of what?
15	A Of the individual. In other words
16	Q No; of the individual for doing what?
17	A For doing anything. I mean, if it's doing
18	let's say doing their job exactly someone might frown,
19	scowl or even verbally say something about "you are too
20	fussy" or whatever. That would be mildly intimidating, to
21	me. Certainly nowhere near as great as a direct threat to
22	you that: "If you do that or don't do that, you will be
23	fired."
24	Q All right. You look like you are old enough to
25	remember Jerry Lee Lewis. Do you remember Jerry Lee Lewis?

1

A Yes.

2 Q Remember his song about blue suede shoes?
3 A Yes.

4 Q Remember what he says in the song: You can do 5 anything you want to do but don't step on my blue suede 6 shoes."

How effectively does this survey deal with the "don't step on my blue suede shoes," if the blue suede shoes are: "Don't do anything that will slow down the production of this plant but grouse on anything else you want"? Just how good a survey is it for that?

12 A It deals with that issue, among others. Does it 13 deal with that issue alone, in a way or to a degree that 14 would permit you to know, in great detail, whether that 15 was a problem? The answer would be "probably not." You 16 wouldn't know in great detail, though you would know, I 17 think, that that was a problem as part of a broader 18 picture of intimidation.

19 Q When you did your analysis of the survey from 20 the perspective of whether the way in which answers were 21 presented, did they reflect existence of an intimidating 22 atmosphere, did you draw a distinction between people who 23 were willing to grouse about everything but blue suede 24 shoes, and those who just were willing to complain about 25 the blue suede shoes? Those who were just willing to

1 focus their complaints on the issue of whether production
2 was taking precedence over other considerations like
3 safety?

4 Well, I did look, particularly in the responses A to that last writing question, 20, look at that kind of 5 distinction. In fact I think that's indeed kind of 6 implied by the four categories that I clustered things 7 into; that is, complaints about wages, hours, so forth, on 8 up to suggestions of intimidation. Or more serious 9 complaints about procedures, safety, and the like. There 10 is that kind of distinction in that. 11

12 But what way does that cut in terms of the issue: 0 Did the survey answers reveal a willingness on the part of 13 people to complain about matters of intimidation that 14 interfered with them doing their job. What do the number 15 16 of negative answers tell you about that? Does it tell you 17 that they were free to express that complaint, that they 18 were not free to express it, or you can't draw any conclusions about it? 19

A I'm not certain one can draw a conclusion about that distinction. What one can say is that they did not -they felt free to complain about a wide array of things, so that it was clear, you know, that they did not feel that they were in a situation in which one never complained about anything -- you know, you couldn't

1	criticize or complain about anything.
2	Q Yes.
3	A It's clear that a few people, five of them, felt
4	free to complain about things related to safety or
5	procedures or even just to say "somebody was intimidating
6	me."
7	Q Could five it may not be five, right? It
8	could only be as many as three?
9	A I was lumping those two categories together.
10	Q But I was saying it could be the two that are in
11	category 3 are part of the three that are in category 4.
12	This chart didn't suggest that you had parsed it carefully
13	enough to know whether there's double counting?
14	A As I recall, there is not double counting. I
15	believe I think it is five.
16	Q All right. Five out of the 139 is not, in and
17	of itself, is not evidence just because five complained,
18	that therefore they didn't feel an inhibition to complain
19	about items 3 and 4; is it? It doesn't give you any clue
20	on that, does it?
21	A I think the answer is "Yes." But let me the
22	questionnaire results do not tell you about something that
23	might exist but that one would expect to have not exist if
24	it did.
25	Q One of the conclusions that you reached was

there were enough people complaining about conditions at the plant that you could not conclude that there was an atmosphere in which complaining about conditions at the plant was being discouraged.

5 A That's correct.

6 Q Now my question to you is: Were there enough 7 people complaining about serious safety procedural 8 problems or actual acts of intimidation, that you could 9 say that there was not an atmosphere at the plant that 10 discouraged them from complaining about those two things?

11 A That's where I got into that tongue-twister. I
12 cannot conclude that what I do not see exists.

13 Q But I'm asking you to conclude the opposite.
14 I'm asking you your conclusions, your positive conclusions.
15 Can you make the positive conclusion that there was not an
16 atmosphere that discouraged people from reporting the
17 kinds of things that are in your categories 3 and 4 on
18 page C-10?

A Okay. Now I think I am on to the question.
Q Okay. I'm sorry if I got you confused.
A No, it's all right. I cannot conclude anything
about what went on in that plant. All I can conclude is
what is reflected in the survey responses.

24 Q Okay. Even looking at the survey responses, do 25 the survey responses give you a basis to say that the

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people who believed that there were serious problems with 1 2 procedure and safety, and the people who believed that they were being intimidated from reporting those problems, 3 4 were free to speak up? 5 A Does it permit me to conclude that? It does not 6 permit me to conclude that -- I want to put an adverb on 7 it -- I don't want to be redundant. I was going to say 8 "conclusively." I cannot say that beyond any shadow of a doubt. Right? 9 That I can't say. 10 11 I'm not asking you to do that. Whatever was the Q 12 level of confidence with which you said this survey shows 13 that people were not discouraged or didn't feel discouraged from complaining; to that level of confidence, 14 can you say that they were not discouraged about 15 complaining about serious procedures and safety problems? 16 17 A I can conclude that there is, in my judgment, a 18 high likelihood that people who are intimidated by an organization, for example, on something of great 19 consequence, will not say, therefore: But I'm free to 20 21 complain about other things. 22 I mean, it seems to me that most human beings, if 23 someone hits them with that kind of intimidation, will say:

25 it. I'm not going to complain about anything. Not draw

Well, the heck with it. I'm just going to stay clear of

one from column A but don't you dare draw any from column
 B and be sure you take one from column A. I just don't
 think that's very likely.

4 Q Why is that? If you touch a stove when it's on 5 and you burn your finger, it doesn't mean that you will 6 not, therefore, touch a door?

7 A No, but --

8 You learn there are certain things that you Q 9 can't touch because they are going to burn you, stoves and things that look like stoves. If you were always getting 10 negative responses when you raise safety problems but you 11 12 didn't get any negative responses when you bitched about 13 the fact that you were only making \$11 an hour, or when you complained about the fact that the parking lot was not 14 15 situated conveniently for your job site or whatever, why would you come away with a conclusion that you should only --16 17 that you shouldn't grouse about anything? Wouldn't you be getting a mixed set of responses and you would learn which 18 19 way to go? Don't bitch about safety but keep complaining 20 about salary?

A Let me go back to your stove. If, having never encountered a stove you make a mistake of laying your hand on a hot burner and so forth, I think what you don't learn is: "Never lay your hand on a hot burner." You learn never to lay your hand on the burner at all, because you

1 can't be sure. And it seems to me in situations in
2 organizations, where the organization is seen as likely to
3 clobber someone who complains about something in a
4 particularly important area, I would guess that the effect
5 becomes generalized, at least for that period of time,
6 whatever it is. Just, you know: "Stay out of the way.
7 Don't complain about anything. Be safe." You know?

But your premise is "clobber." What if it's 8 0 9 just that when you report a safety problem you find yourself in three different meetings at which people are 10 expecting you to justify why it was that you reported that 11 safety problem, and it's made you feel uncomfortable. You 12 13 just felt like -- that wasn't worth it. It wasn't worth it for me to go to those three meetings and have three of 14 my supervisors question me about "How come you wrote the 15 NCR, why wasn't it an IR?" Not in a nasty way, but people 16 17 don't like having to justify themselves to other people. "I'm told you don't like it here. I wouldn't if I were.on 18 19 the other side."

It's not a clobbering. It isn't that management docked you five days pay. It's that they dealt with you at that other end of your spectrum.

Now, why would that make you reluctant, particularly when asked the question: Do you think you are making enough money? To say: No, I don't think I'm making

1 enough money.

2 Why would the rational person assume that they would 3 also be subjected to some kind of an inquisition situation 4 over that issue?

5 No, I don't think that they would be subjected A to an inquisition situation over it. But then in this 6 7 instance, it is not someone going around asking them if they are paid enough. It's the issue of: In this climate, 8 whatever it is, can you safely complain about something? 9 10 In the example you gave it would be clear to an individual in that kind of a climate that it was -- it was 11 not to your advantage, best interests or whatever, to 12 complain about "this" category of things. Would you 13 14 therefore feel that if you complained about other 15 categories of things would it amount to anything? 16 My hunch is that complaining about the wages and hours, 17 or benefits, you know -- you may not run into a stone wall of intimidation but you probably will run into bureaucracy, 18 legal requirements, contract laws, prevailing wage rates, 19 we don't do it that way, we can't do it this way -- all 20 21 the things we run into in large organizations. And there 22 is a risk there, too, not necessarily of being clobbered here, either, but of being seen as a whiner, a chronic nag, 23 24 or whatever. And that would not be pleasant either. To the extent that it is simply unpleasant treatment, 25

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1 if one wants to call it that, that's at issue. I'm not 2 sure these others are devoid of that either. And if it is 3 something more serious that is sort of -- I won't say 4 "promised," but whatever it is sitting in the background --5 my hunch would be that it would generalize to any 6 complaints.

Are you suggesting that when a person raise a aint, if nothing is done that after a while they stop raising the complaint? That the failure to do anything about the complaint is itself an inhibitor in their raising the complaint subsequently?

12 A It can be an inhibitor. But you can't rely on its being an inhibitor. That is, if you raise a complaint 13 14 and someone -- whoever -- doesn't do anything about it; 15 they raise it again, they don't do anything about it; you 16 raise it; a third time they still don't do anything about it; some individuals will say, "Well, what the heck. I 17 18 might as well not raise it. I might as well save my 19 breath."

Other people, however, will be precisely the opposite. I'm referring to the FAA thing I did two years ago. In that instance the controllers had complained about conditions for years and gotten nowhere. It didn't stop them complaining about conditions. What it led to was rebellion.

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1	So sometimes the experience of either nonresponsiveness
2	or even unpleasant treatment as a response to complaining
3	leads people, not to simply give up to apathy, but to
4	outright rebellion.
5	Q But you certainly end up with less complaints
6	overall. You are saying some people will persevere
7	through it but some will certainly drop out of the
8	complaining class; right? Over time?
9	A Some will drop out. What the proportions will
10	be one way or the other I have no way of knowing. I'm
11	simply saying it could lead them to more serious what
12	would one call it? more serious behavior about the
13	issues, rather than to less.
14	(Discussion off the record.)
15	BY MR. ROISMAN:
16	Q The section of the report itself, not appendix
17	C, which deals with the 1983 survey did you write that
18	section?
19	A I did not.
20	Q Did you review that section before it was made
21	into a final report?
22	A I don't believe I did; no.
23	Q Were you asked about it? Did anybody talk to
24	you about it before it was made into a final report?
25	A I don't believe so; no.

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5.

> 1 Q So the only part of this document that's called 2 "EG&G report" that you personally reviewed before it was completed and/or that you wrote, is part C that has your 3 4 name on it; correct? 5 That's right. That is correct. A 6 Now, does your answers earlier to questions by 0 the other counsel regarding whether you were supportive of 7

> 8 the results of the entire report, that's not based upon 9 your doing the work yourself?

10 A That's correct.

11 Q You have read over the report, it sounds 12 reasonable to you if everything that they saw would have 13 caused them to reach those conclusions?

14 A That's correct.

15 Q At the beginning of your report on C-4, you say 16 "the survey results analyzed can contain no direct reading 17 about possible acts of intimidation. It also contained no 18 direct reading about the feeling or emotion of the 19 respondents. What they can contain is evidence that the 20 responses were distorted in ways congruent with 21 intimidation having been felt."

When you read that, what I understood you to be saying was, essentially, that I am disregarding these surveys for their substantive content and I'm looking at them as indicative of a process. If the employees felt

> 1 intimidated, I would expect to see it show up in the way 2 in which they answered the questions, rather than the 3 specific content of the answers. And that you were not 4 going to draw conclusions about whether they substantively 5 did or didn't give you examples of intimidation or not, 6 but that you were only going to look to see whether or not 7 that they answered certain questions or didn't, what 8 patterns you could say had emerged from that? Am I --9 A No. That's not what I tried to say in that 10 paragraph. 11 Q All right. Good. Maybe you could explain it 12 then, again. Because I was not sure about it at all.

13 A Other than the behavior, the timidity behavior 14 which I treated as sort of the overall, or first indicator 15 supported by two other things, namely an act that induced 16 it and an emotion that was a reaction to it -- okay? 17 Other than that behavior, the survey itself is not -- it's 18 not a snapshot of those acts that you might get if you --19 if you somehow got a reading upon the behavior of Joe 20 Dokes, September 5, 1981 -- whatever. Okay? It is not 21 that.

It can describe whole categories of, like supervisory style or something. But it is not a direct reading on that specific act, Okay?

25 Q Yes.

> A It also is not a direct reading on the emotion that is inside the individual, such as what you might get if you did an examination of hormonal level changes.

4 Q

Yes.

5 Rather, what it is is a reading upon what the A respondents said, and the pattern with which they -- the 6 pattern they used in saying it, that, as an act -- yes, as 7 8 a behavior, a set of behaviors in this case, can be 9 reasonably assumed to imply the other two legs of the 10 stool. In other words, to imply that there was a feeling in these people of apprehension and whatever, intimidation; 11 and that, therefore, there had to have been an act, an act 12 at least perceived by them, that would induce it. 13 14 ----Q Now, in your examination on the intimidation question, do you look only at whether there was indication, 15 16 as the letter to you on the 27th suggests -- of management

17 intimidating?

A I did not specifically orient myself exclusively to management intimidation, though L would assume that I was limiting myself to intimidation in the organizational setting and not, let's say, intimidation coming from being brought up to say "nobody likes a complainer." Not that kind of intimidation.

Q Well, in your instructions in the July 27th Ietter, you are told, for instance -- let's see -- "this

is distinct from intimidation that some inspectors may 1 2 have felt from actions on the part of crafts personnel." Now, the questionnaire that you looked at might have some 3 4 questions about crafts. 5 . A That's right. 6 0 Did you follow that instruction? Did you 7 disregard that, the statements regarding perception of intimidation or perception of pressure or conflicts with 8 9 the craft personnel? 10 I did not ignore those ideas. A 11 Q All right. What did you do with it? 12 I treated them as I did all of the other items. A 13 When you say you treat them as you did all the Q 14 ... other items, did they show up in your listing on page C-10, under categories 3 and 4? If a craft person -- if they 15 16 said, "Well, craft was trying to get me not to do it the right way," if that statement were made, would it show up 17 18 under statement 3? 19 It would show up in here. Where, specifically --A 20 I'm not quite certain where I would put it. But I did not 21 drop any of the written-in responses on the grounds that 22 they dealt with crafts and the letter said that was not 23 the issue.

24 Q No, but it is very important. I'm puzzled that 25 you wouldn't know which category you would put them into.

1	There were some statements that said that craft was
2	discouraging us from finding problems, or would argue with
3	us and so forth. Did you call that number 12? Or did you
4	call that number 3?
5	A I would call that number 3, if they said
6	something about, you know, somebody craft is always
7	getting its way, or that crafts people get all the goodies,
8	or something like that. Then I probably would put it in
9	number 2. But if it dealt with issues of safety and so
10	forth, then I definitely would put it under category 3.
11	MR. TREBY: Why don't we take a couple of
12	minutes. Realign ourselves.
13	(Discussion off the record.)
14	EXAMINATION OF PANEL RESUMED
15	MR. TREEY: We are up to, now, the last phase, I
16	guess the last two hours.
17	DR. MARGULIES: Let's try to stick to that
18	because I really want to try to catch my plane.
19	(Discussion off the record.)
20	BY MR. HIRSCHHORN:
21	Q Dr. Bowers, there was some colloquy between you
22	and Mr. Roisman about the section of the report itself
23	that reviews your findings, your conclusions, and you
24	indicated that you had neither written it nor been
25	consulted about it.

1	A	That's correct.
2	Q	Have you had an opportunity to read it?
3	A	Yes.
4	Q	And would you say that it accurately reflects
5	your own	findings and conclusions?

6 It accurately summarizes them; yes. A 7 0 Even if, hypothetically, Mr. Roisman's premises, 8 namely that the criteria for inspections or for the 9 inspector's work were subjective rather than objective, and that intimidation was strictly limited to the safety 10 11 area and accident was perhaps even encouraged, if not tolerated in other areas, even if those premises were, 12 13 wouldn't you have expected the 1983 survey to have

14 \_\_\_\_reflected what intimidation there was?

15 A I would have expected it to reflect whatever 16 intimidation there was, because I think it's very 17 difficult to set things up in an organization as 18 selectively intimidating.

19 Q I'm not sure who would be the best person,
20 perhaps Mr. Kaplan or Dr. Stratton, could summarize for us
21 the process by which the team reached its conclusions?
22 And by that I mean, I got a sense, although I don't think
23 it was crystal clear, from yesterday's discussions, that
24 at least Dr. Margulies and Mr. Rice went off and spent
25 some time on the data and then the team met, either

physically together or by conference call, and then they
 went off and met again. I wonder if you could describe
 that in as much detail as can you recall.

A (WITNESS KAPLAN) Correct. Okay. Basically the 5 study team people were hired on the understanding of what 6 the scope of the study was to be, they were to deal with 7 the climate of intimidation. They were told that a number 8 of depositions, reports would be sent to them. That they 9 were to read those. And we would get back together after 10 a few-week period and begin writing a report.

In terms of getting started, I believe Chuck Rice took 11 the initiative of saying: Well, let's get a little more 12 refinement on what our definition of "intimidation" is, so 13 - that we are all reading for the same kinds of things. And - 14 15 Chuck checked around, as I understand, because now we are in the time period when I was on vacation -- Chuck checked 16 17 around with Newt and Bill, and got a concurrence that that seemed to be an adequate working definition, a general 18 19 guideline to help get started.

20 Am I giving you too much detail?

21

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No. That's fine.

A Okay. So basically, then, people went off, did their reading independently. Then the next time they met was in Idaho Falls on Friday, the 5th or so. They met in Idaho Falls and we had an evening meeting. I guess it

1	wasn't Friday it was a Sunday night.
2	A (WITNESS RICE) Sunday night?
3	A (WITNESS KAPLAN) And at that time people were
4	asked for the first time what their conclusions were; or
5	what they were finding. Basically we were getting ready
6	to write a report.
7	Q That would be Sunday, August 5th?
8	A (WITNESS STRATTON) Right.
9	Q So that would be after Dr. Bower's report was
10	dated if not received?
11	A (WITNESS KAPLAN) Dr. Bower's report had been
12	seen by me. I don't know if Dr. Stratton had seen it.
13	Margulies had not and Rice had not. They received it for
14	the first time, actually, Monday.
15	And at that point I checked around the table to ask
16	primarily well, to ask Rice and Margulies, and Bill, I
17	believe, and I had had some discussion asked these
18	other guys what their findings were, what their
19	conclusions were, in a summary kind of way. And basically
20	their overall findings were the same; basically, that
21	there had not been a climate of intimidation.
22	Because we were so close in what the assessment of the
23	situation was, it was decided to write an integrated
24	report.
25	There might be more reasons for having decided to write

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1	an integrated report, but that was certainly a factor.
2	Then we proceeded the next day to say what would the
3	categories of the report be and divided up the work in
4	terms of people taking a shot at writing a first draft for
5	different sections of the report. That's how we got
6	started.
7	Q So that it is accurate to say that three
8	independent strike that.
9	It is accurate to say that three different individuals,
. 10	each selected for a particular field of expertise, and
11	each examining at least part if not most of the raw data,
12	reached the same basic conclusion?
13	A Correct.
14	BY MR. DU BOFF:
15	Q Dr. Bowers, have you read the definition of
16	intimidation in the report?
17	A (WITNESS BOWERS) Yes.
18	Q I believe it's at page 5.
19	A Yes.
20	Q You are familiar with it. Is that definition
21	consistent with appendix C and the conclusions that you
22	set forth in appendix C?
23	A I think it is. The difference, to the extent
24	there is a difference in the body of the report, treats
25	the behavior as a separate and sort of co-equal category.

1	I treated it as an overall category, with two
2	triggering subcomponents all three parts are in my
3	definition as it is in theirs.
4	Q All three parts are in the definition you use?
5	A Yes.
6	Q Can you turn to page 5 of the report? The five
7	bullet paragraphs there, those indicators are all
8	consistent with your definition as well?
9	A Let me examine them a moment.
10	They are all consistent with it. They state in much
11	greater detail what I stated and dealt with in more
12	general terms.
13	Q Turning to the 1983 survey responses, in your
14	. analysis of the responses did you did they suggest to
15	you any feeling on the part of the respondents that their
16	identity would be disclosed?
17	A Saw nothing that suggested that.
18	MR. DU BOFF: That's all I have. Thank you
19	oh, Mack, you have some questions.
20	BY MR. WATKINS:
21	Q Dr. Margulies, yesterday I believe you stated
22	that in assessing the data, all the data, you focused more
23	on inhibitors than on facilitators; is that correct?
24	A (WITNESS MARGULIES) Yes. I said I was more
25	interested in looking since the question was, "Is there

1	a climate of intimidation," I was more interested in
2	trying to discover what would be the producers, the
3	factors that would contribute to that. That's right.
4	MR. TREBY: Keep your voice up.
5	BY MR. WATKINS:
6	Q So you focused more on the negative than on the
7	positive?
8	MR. TREBY: Wait. Don't nod. Answer.
9	A (WITNESS MARGULIES) I'm sorry yes.
10	Q In assessing climate, isn't that like counting
11	rainy and snowy days and ignoring sunny days altogether?
12	A The question wasn't to produce a report that
13	described the climate profile at Comanche Peak. That
14	wasn't the charge.
15	Q Wouldn't positive management attributes,
16	positive management actions, tend to mitigate the negative
17	aspects?
18	A Well, if you look at some of the indicators, I
19	mean there are things that fall into that general category.
20	We were interested in seeing the degree to which
21	management took prompt and effective action; the degree to
22	which the management protected the job security of
23	individuals so, I mean it wasn't something that was
24	totally ignored.
25	But I'm saying as a focal point, as a target for

1	exploring the issue, we tended to look more at the
2	contributors to the climate. But we didn't ignore the
3	others. I mean those were part of the indicators.
4	Q In that sense, in any event, your approach was
5	more conservative than not, wasn't it, in assessing
6	climate of intimidation?
7	A I wouldn't use that word. I'd say it was more
8	focused. I'd say it was more focused.
9	Q Mr. Rice, do you agree?
10	A (WITNESS RICE) Yes.
11	Q Doctor, you mentioned yesterday that there's
12	very little in the literature regarding intimidation,
13	industrial organization intimidation. What is there
14	little about in the literature, exactly? What were you
15	looking for that you didn't find?
16	A (WITNESS MARGULIES) There are various ways of
1.7	defining "climate" in the literature. There are various
18	ways of dimensionalizing "climate." There's very little
19	instrumentation, for example, that specifically measures
20	climate of intimidation, or intimidation specifically as
21	an element of climate.
22	Secondly, I find very little specific research on the
23	impacts of an intimidating climate. And I think I did a
24	reasonably thorough literature search.
25	Q You mentioned that you did find literature on

1 power?

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3 Q Can you tell me what that is?

Oh, yes.

A Oh, there's lots of information on sources of
organizational power, how power is used in organizations,
particular modes of utilizing power in conflict resolution,
various dimensions of power; and, subsequently,

8 organizational politics, these days, is very popular.

9 Q Did you use any of those materials in conducting 10 your survey? Your study?

A I find that they were sort of general, and I am familiar with the literature, but not terribly pointed to help focus this study.

14 Q \_\_\_\_\_Did\_you plan to write anything for publication 15 regarding your participation in this enterprise?

16 A Well, to be perfectly honest, I was sitting over 17 there actually watching the behavior of the attorneys and 18 I -- no, I'm just kidding.

19 (Laughter.)

20 A (WITNESS MARGULIES) I'm just quipping.

21 Q You have my consent.

22 (Discussion off the record.)

A (WITNESS MARGULIES) The notion crossed my mind.
I think really -- by the way, I checked this out with some
of my colleagues at school and they are also rather

1	intrigued with this idea. So I think potentially it might
2	be something that's worth exploring in more detail.
3	BY MR. WATKINS:
4	Q Have you put anything down? Written anything in
5	an outline?
6	A No.
7	Q Dr. Stratton?
8	A (WITNESS STRATTON) NO.
9	Q Dr. Bowers?
10	A (WITNESS BOWERS) You mean for publications?
11	Q Yes.
12	A I have no intention of publishing anything from
13	this.
14.	Q
15	written product differ from conclusions that you reached
16	here? What would you analyze that you have not already
17	done?
18	A (WITNESS MARGULIES) Well, I think number one is,
19	I tried to point out, in at least the portions that I
20	wrote, the complexity of dealing with this issue: the
21	interpretation of all the elements in the definition, what
22	the acts are, what the probabilities of perception are,
23	what the probabilities of subsequent action are. So I
24	think there's I think some more interesting work could
25	be done in sharpening and conceptualizing this whole

1 notion. That's number one. 2 Secondly, personally I don't believe that -- this is 3 sort of a case study. So we don't really have available 4 more global information in other organizations of the same 5 type, or different organizations, different types of 6 organizations. I think that might be an interesting 7 avenue. 8 We all implied here, over the last day and a half or so, of the very important and critical stressful relationships 9 10 between production and quality control. That's worth some 11 additional exploration, I think. 12 Q Just so I understand, you and Mr. Rice, Dr. Margulies, did not divide up the depositions and 13 14 transcripts? You duplicated the effort? Each of you 15 reviewed everything that there is to review? 16 A Right. 17 You might not be up to speed on what's happened 0 18 since the report was published --19 A That's accurate. 20 0 Dr. Margulies, what kind -- can you give us an 21 example of things that you read that you decided simply weren't relevant to the question that you were studying? 22 23 Testimony, for example? 24 Again, there were two specific things that at A 25 least come quickly to mind. There was one deposition that

had to do specifically with a particular personnel procedure. And I felt there was a good deal of detail about the procedure, but very little indication of how that was applicable to the question that I was interested in.

Another, I thought the bulletin board incident was notterribly relevant.

8 Q What was the bulletin board incident?

9 A There were concerns about where the bulletin 10 boards were placed and where on the bulletin board the 11 telephone number or instruction -- it had to be in the 12 lower right-hand side -- that kind of thing. And it was a 13 lot of detail that I felt wasn't terribly relevant to what 14 I was doing.

15 Q Mr. Rice, to go back to something I asked
16 Dr. Margulies, did you feel that you focused more on the
17 negative aspects of the plant than the positive?

A (WITNESS RICE) No, I don't really think so. I think it was an attempt to view all of it as relevant data. Obviously, the filter through which you are processing all of this in your own mind, however, is related to the consideration as to whether a climate of intimidation existed. So perhaps from that standpoint. I wouldn't call it a focus on the negative, however.

25 Q Yesterday I think both of you, at least I know

1	you did, Dr. Margulies, indicated that you did not
2	consider credibility of individual allegers. You would
3	have ignored, therefore, facts such as that the alleger
4	was a two time felon or had misrepresented facts elsewhere.
5	You just ignored that; is that correct?
6	A Yes. I didn't make any judgment about the
7	quality or truthfulness of either the information that I
8	was looking at or the person who was providing it. I just
9	took it
10	Q You took it at face value?
11	A at face value.
12	Q Did you also ignore evidence tending to indicate
13	that the facts as related by the individual could not have
14	been true?
15	A I think in a general sense I have to say I
16	couldn't make that judgment.
17	Q So you didn't make that judgment; is that right?
18	A That's right.
19	Q In that sense, therefore, you gave the allegers
20	the benefit of the doubt?
21	A I didn't make the judgment.
22	Q Well, an alleger comes forth and says "I was
23	intimidated." You accepted that as face value, no matter
24	that it might not have been true or that this person might
25	be of doubtful credibility?

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1	A I couldn't make that judgment. If a manager
2	said, "the alleger says there was never a meeting and I
3	know darned well there was," I didn't make the judgment
4	that the manager was incorrect either. That was just a
5	misunderstanding or distortions of a piece of data. I
6	just treated it that way.
7	Q Prior to our session here yesterday, Mr. Kaplan,
8	I'll ask you first, did you have any contact with anyone
9	that you know represents the intervenors?
10	A (WITNESS KAPLAN) NO.
11	Q Did you have any contact with anyone from any of
12	the following organizations: Citizens Association for a
13	Sound Energy; Trial Lawyers for Public Justice; or the
14	Government Accountability Project?
15	A No.
16	Q Mr. Rice?
17	A (WITNESS RICE) NO.
18	Q Dr. Stratton?
19	A (WITNESS STRATTON) Prior to when?
20	Q Yesterday. Prior to yesterday's session here?
21	A I on a visit to Comanche Peak with Dr.
22	Margulies, we sat in on one deposition. Tony Roisman was
23	present in that session and we simply were introduced.
24	Q Dr. Margulies?
25	A (WITNESS MARGULIES) I agree.

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1	Q Dr. Bowers?
2	A (WITNESS BOWERS) I have had no contact with any
3	of those.
4	Q Mr. Rice, I was interested in your statement
5	yesterday that Mr. Tolson might not have had any more
6	influence over blind truth, let's call them, than
7	supervisors somewhere down the chain. Do you remember
8	that?
9	A (WITNESS RICE) Yes.
10	Q Dr. Margulies, do you agree with that, that a
11	supervisor, Mr. Tolson in particular, might have less
12	influence?
13	A (WITNESS MARGULIES) I'm saying it's either/or.
14	I'm saying sometimes people at the top are so divorced and
15	detached from the operations that they really have minimal
16	operational influence.
17	On the other hand, it's also true that people at the
18	top can have, and sometimes do, strong influence on the
19	kind of attitudes and culture of the organization, how the
20	organization proceeds. So it's a matter of either/or.
21	Q Have you seen enough about Mr. Tolson in this
22	record to reach any judgments, to make any judgments about
23	whether he falls into one category or the other?
24	A I don't think I could comfortably make the
25	judgment.

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> 1 Q What are the attributes, then, of the kind of 2 isolated manager that has little influence, or less 3 influence?

4 A Where the role has begun to evolve to a more 5 longer range, strategic management of the enterprise; 6 where the manager is concerned and needs to spend a 7 greater part of his or her time interfacing with other 8 units outside of the organization; where the role has 9 evolved, such where the manager's role has evolved more in the change and implementation of new technology. That 10 11 person would be involved, in terms of the way they would 12 spend their time, in issues that are more detached from 13 the day-to-day operation of the organization.

14 Q In this case, what about practical things, like: 15 "Does the person write a lot of memos for distribution? 16 Does the person leave his office to go out into the field?" 17 Are those relevant to that question?

A Well, sure. And what I said is a person who is more involved in the day-to-day operations would spend time in more of a directing, managing, monitoring role on the day-to-day operations. That person, depending on one's own leadership style and its effectiveness, could have a lot of influence.

Q Mr. Rice, can you add to that? Have you reached any conclusion about Mr. Tolson?

A (WITNESS RICE) I think I probably said yesterday,
 and I would repeat: I think there were intimidating
 aspects to Mr. Tolson's personality.

Q Right. I understand that and I'm going to
address that in a minute. The question is, was he highly
influential, in your view, or less influential, as
compared to supervisors in the field, for example?

8 If I recall correctly, Tolson was probably the A 9 third level up from QC inspector. At most construction sites, the actual interaction of each one of the 10 11 inspectors with somebody three levels up in the organization would be very few and far between. They 12 13 would almost, almost be limited to having, perhaps, sat in 14 on some meetings with them without any direct interaction between them. In addition, viewing memos that might be 15 posted on the bulletin board, or that sort of thing, might 16 17 also be there.

18 The primary influence that I would expect to see on the 19 part of — influence on QC inspectors would be the 20 immediate QC supervisor immediately above them. Just like 21 a foreman on top of a craft worker.

Q Okay. Now, as to Mr. Tolson, the intimidating aspects of Mr. Tolson's behavior, that relates to the way that he conducted himself, the way that he talked; is that right?

1	A That was my conclusion; yes.
2	Q There is a distinction between having such a
3	personality and intentionally trying to intimidate people,
4	isn't there?
5	A I would say "yes."
6	A (WITNESS MARGULIES) I would say that.
7	Q Dr. Margulies, do you make that distinction in
8	Mr. Tolson's case?
9	A (WITNESS MARGULIES) I really would like to
10	decline on that because I really did not, certainly at
11	this point, make judgments about either the personality or
12	the truthfulness of what was reported.
13	The answer to your question is, in my opinion, as I
14	said, there are two possibilities. There are very
15	explicit identifiable acts of intimidation. And as I said
16	yesterday about three or four times, when those acts are
17	coupled with threats or potential use of negative
18	sanctions, they are very explicit.
19	There are also behaviors that are implicitly
20	intimidating, that do not have those characteristics, but
21	can be, in the perception of the perceiver, intimidating.
22	So I agree with that part of it. I don't think I have
23	enough information, frankly, at this point anyway, to make
24	judgments about, A, whether those things really occurred
25	explicitly; or, B, whether the personality of the players

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1 was such that they are naturally intimidated -- that is 2 that people would perceive the behavior as such. That's 3 an honest response. 4 0 I'm sure they all are. 5 A Thank you. 6 With respect to Mr. Tolson's, what you Q characterized as his personality, would that personality 7 8 have the greatest effect on the meekest person? 9 A That is people who tend to have a style that is 10 more likely to be interpreted or perceived as intimidating? I don't know if it's meekest, but some --11 12 How would you characterize it, the person on Q 13 whom it would have the greatest effect? 14 A Generally people who tend to just be more sensitive to that kind of behavior. 15 16 Let me give you an example. On the one hand, it could 17 be meekest. On the other hand, sometimes the most 18 aggressive styles tend to be the most sensitive to other 19 aggressive styles. It's very hard, I think, to categorize. 20 The best thing I could say is that there probably is a 21 group of people who would be very sensitive to that and would interpret that behavior as intimidating. But I have 22 23 trouble differentiating, at least right now. 24 0 Mr. Rice, you, I think, answered affirmatively a 25 minute ago that there is -- to the question: Is there a

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distinction between having an intimidating personality and
 intentionally committing intimidating acts; is that right?
 A (WITNESS RICE) Yes.
 Q Have you formed a judgment about whether
 Mr. Tolson intentionally committed intimidating acts?

I guess my feeling is that the answer to that is 6 A "no." The answer is "yes, I have formed an opinion," and 7 8 the answer, further, is "no, I don't believe it was intentional." And when I say "an intimidating personality," .9 there are also areas in which it is obvious that he has a --10 at least the record would tend to indicate that he has a 11 12 caring personality with respect to a lot of the people. 13 So, like anybody, it isn't a black and white case. It's a case of having what appears to be intimidating 14 15 aspects to his personality.

16 Q Okay. Nonetheless, you discounted a lot of that 17 and focused instead on the state of mind of the individual, 18 the alleger, the person who claimed intimidation in his 19 contacts with Mr. Tolson; is that right?

20 A Yes.

21 A (WITNESS MARGULIES) Yes.

A (WITNESS RICE) Oh, I'm sorry, I thought you were
 asking me.

24 Q No, I was. I got your answer and I wanted -25 A (WITNESS MARGULIES) Sure.

1.	Q You have each, by now, for better or for worse,
2	gotten a feel for how the lawyers in this proceeding have
3	gone about trying to prove the cases. And the way it
4	worked at least initially was the intervenor would produce
5	a witness who said "I was intimidated," and then the
6	company would put on witnesses to say, "no, you weren't."
7	Is that a fair statement of how it started out anyway?
8	A (WITNESS MARGULIES) I think it's fair.
9	MR. ROISMAN: Just for the record, that's not
10	how it started out.
11	A (WITNESS RICE) The company witnesses were the
12	first ones that we saw.
13	BY MR. WATKINS:
14	Q Right. Due to a procedure that I have never
15	encountered before and hope never to again.
16	A (WITNESS RICE) It added burdens to the review of
17	the depositions.
18	Q Would you agree that what we are left with,
19	though, in looking at the totality of it, is we have a
20	bunch of allegers and we have a bunch of responsive
21	evidence, either that the allegation is true or not true;
22	is that fair?
23	A (WITNESS RICE) Yes.
24	Q Dr. Margulies?
25	A (WITNESS MARGULIES) Yes.

> 1 Q The intervenors certainly did not produce 2 witnesses who said "I wasn't intimidated" for obvious 3 reasons. In that respect, Dr. Margulies, would you say 4 that the record of the case developed this summer is 5 somewhat biased toward actual incidents of intimidation? 6 You haven't heard from all of the other inspectors out 7 there; is that correct?

A See, I'm having problems with the line of questioning so you'll have to help me. My problem is that I feel on a dilemma. And the dilemma is between trying to make judgments of individual instances of intimidation, and I'm not going to argue whether there were or there weren't. In fact, in my view -- wait, wait, let me finish. Hear me out.

15 In my view, in terms of the charge and focus of the 16 project, to try to make a judgment about climate of 17 intimidation, it wouldn't matter if there were 10 or 12 or --18 I don't know what the number is -- actual incidents of 19 intimidation. What I'm more interested in is the, as I 20 said yesterday, the overall pattern, the gestalt, what's 21 going on in this place. So I'm more comfortable trying to 22 deal with that rather than each item.

23 Now, given that --

Q I appreciate it. I agree with everything you
say. Given that, how representative is this hearing

1	record, the depositions and the transcripts?
2	A I was very comfortable with the survey data
3	because I think the survey data in both cases at least
4	covered more ground in terms of climate of intimidation.
5	It covered more ground. There was more breadth.
6	We can always argue about what the quality of those
7	responses are, whether the questions did what they were
8	supposed to do, whether they actually measured what they
9	were supposed to measure, et cetera, et cetera. But I
10	think there's some breadth there.
11	I think what we've got is a whole series of things that
12	make up this data pool.
13	I don't think the depositional material is unimportant.
14	Q I wasn't suggesting that it was.
15	A What I'm saying is it's a piece of a number of
16	things that come together to try to help give a picture of
17	what's going on here.
18	Ω My question again was: How representative is
19	the hearing material?
20	A Let me see if I understand what you are saying.
21	If one only gets depositions from people who are now
22	allegers, then it's sort of a self-selected process. So
23	in that respect, it has that characteristic. Is that
24	Q Presenting a witness to say "I have been
25	intimidated and here's what happened" is one thing. How

do you show -- on what do you rely, including the absence --1 it's hard to prove, isn't it? The absence of intimidation? 2 3 Well, I think the methodology for doing that, I A think David has discussed in a lot of detail this morning, 4 5 using more global data while looking at patterns of 6 responses and making inferences from those patterns. So I 7 think from a behavioral science point of view the methodology, while not flawless, is fairly straightforward. 8 9 Q Let's go back to your observation that we have 10 10 or 11 or 12, or however many actual incidents of 11 intimidation in the depositions, for example. Your indication was that some -- or your belief is that some 12 intimidation is inevitable, some conflicts of that sort 13 14 are inevitable? 15 A It doesn't surprise me. 16 0 It follows, to me anyway -- and correct me if I'm wrong -- that given those data, given the '79 survey, 17 given the whole data base that you evaluated, it was 18 19 important to put those individual incidents in context and 20 that's exactly what you've done, isn't it? 21 A That's exactly what I tried to do. 22 Q Mr. Rice, do you agree? 23 A (WITNESS RICE) Repeat the question. 24 0 Let me go back a couple of questions. How 25 representative of plant conditions do you think the

1 hearing record developed over the summer is?

A (WITNESS RICE) I was adding up some numbers,
writing down some numbers while you were talking with, or
asking Newt questions.

5 In the area of depositions from the alleged intimidated 6 people, you've got roughly 40 to 50 depositions. We've 7 got an equal number that come from the other side of the 8 fence, from the management side of the fence.

9 In addition to that you've got something like 145 10 people that were interviewed by the Office of Inspection 11 and their reports, another 38 that were in an additional interview process that -- plus something like 121 in one 12 of the surveys and 130 in another one of the surveys. So 13 14 you are looking at a data base in terms of people that 15 were talked to and had an opportunity of something close 16 to 500 people.

Obviously some of those are duplicates. But I think the data base that we were looking at is a large number of people and it's not limited to simply the people that were allegers.

21 Q So your answer is, you do feel it was fairly 22 representative, if you include all of the OI interviews 23 and all of the exhibits as well as the deposition 24 transcripts?

25 A I feel it was relatively representative; yes.

1	Q Dr. Margulies, I recall you saying please
2	correct me if I'm wrong that when you looked at the '79
3	survey data, you expected to find more in terms of
4	intimidation than you did. Did you make that observation
5	yesterday?
6	A (WITNESS MARGULIES) That sounds like something
7	that I might have said; yes.
8	Q Why did you expect to find more?
9	A Well, I think, given the natural tensions and
- 10	conflicts and interface difficulties between the craft and
11	QA/QC, I expected to see more indication of that tension
12	surface in that questionnaire. And it just wasn't there.
13	So my expectations were that the numbers on those
14	categories would be somewhat higher.
15	In fact, in '79, if I would just do a kind of rough in
16	my mind, the number of times those kinds of items were
17	identified was not unlike the '83 survey.
18	So, my expectation from the situation was that there
19	would be somewhat more indications there.
20	Q Did you look at the '83 surveys, materials?
21	A No.
22	Q Did you, Mr. Rice?
23	A (WITNESS RICE) No, sir.
24	Q Are you going to?
25	A (WITNESS MARGULIES) I didn't think it was

1 necessary.

2	A (WITNESS RICE) I have no intent to.
3	Q A few times yesterday, Dr. Margulies, you
4	referred to the question of anonymity I can't pronounce
5	that word in connection with the '79 surveys. Could
6	you describe your thoughts on that, what you meant?
7	A (WITNESS MARGULIES) Sure. I also said that
8	while I had a high level of confidence in the data, I
9	don't think you know, from an ideal perspective, the
10	way in which the '79 survey proceeded was that there were
11	recorders who went in, talked to people, and wrote down
12	the responses. And my recollection of that I'm not
13	totally accurate is that those people were Utilities
14	people. I think they were not on-site but off-site
15	someplace in Dallas or something like that, which is
16	admirable. But there is still that kind of internal
17	connection. And, so, when one is collecting data from an
18	individual, there may be some question about the
19	particularly if it's an internal about the level of
20	confidentiality and anonymity of that data.
21	So, while I feel very confident about the conclusions
22	in the report vis-a-vis intimidation, I'm not so sure that
23	people felt that they could be, you know, absolutely
24	totally open about their concerns.
25	I think the data would have just I think I might

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1 have said this yesterday -- a twinge more credibility if 2 the same data had been collected with a bit more anonymity. That is, where people could either fill it out or the data 3 4 could have been selected by external parties. 5 But you did see enough to indicate to you that Q the interviewees were candid? 6 7 A I would say so. 8 0 And you were satisfied on that? 9 A Yes. 10 0 Mr. Rice, did you share that concern? 11 (WITNESS RICE) I would say yes, probably for A different reasons that Newt did. The people as I recall 12 13 from Dallas were Texas Utilities people. The bulk of the inspectors on-site that were interviewed in the process of 14 15 that survey worked for Brown & Root, or Ebasco, or other 16 contractors as opposed to actually working for Texas 17 Utilities. 18 There is a -- consequently there is an opportunity 19 there for inspectors to make their concerns known, if they 20 have them, at a level in the organization they normally 21 wouldn't have access to, because they are now talking to 22 the Utility. This, generally, would tend to make for more openness than would otherwise be the case, in my 23 24 estimation.

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Mr. Kaplan, I believe you indicated you did not

1	actually evaluate any of the data base?
2	A Right.
3	Q You evaluated the evaluators, those were your
4	words yesterday?
5	A (WITNESS KAPLAN) Yes.
6	Q What was your criteria? What standards did you
7	use to evaluate their work?
8	A Well, it had to make sense to me. It had to
9	have some face validity. It had to be fairly
10	comprehensive. I'd say the main thing I was doing was
11	it had to fit my previous training and experience in the
12	area. I anticipated what questions others might ask of
13	the data; I thought what other points of view could
14	someone take on the subject other than the ones they were
15	taking; and just as I read the thing, as you saw, if I had
16	a doubt or question concerning it, I would write: this
17	doesn't feel well, this doesn't sit right with me the
18	sort of gut level response.
19	Q Did you do the same thing in meetings with the
20	group? Did you challenge
21	A I used some of the meetings that we had to do
22	that, to go through and take questions and problems that I
23	had and confront people with those; yes.
24	Q Mr. Rice, did your evaluation of the data base
25	and conclusions that you reached in any way depend upon

1	whether an individual allegation of intimidation caused a
2	defect at the plant?
3	A (WITNESS RICE) No. As a matter of fact, we
4	tried to stay away from that kind of a judgment, with the
5	understanding that that was being looked at independently
6	by other people.
7	Q So you ignored any possible downstream effect,
8	would be the answer?
9	A We ignored it and I don't think the record would
10	have been such that we could have done anything with it if
11	we had tried to.
12	Q I'm sorry to hear you say that.
13 .	Dr. Margulies?
14	A (WITNESS MARGULIES) Yes, I agree with that. We
15	had, in my opinion, very little information to make that
15 16	
	had, in my opinion, very little information to make that
16	had, in my opinion, very little information to make that judgment and I think there was a technical report that
16 17	had, in my opinion, very little information to make that judgment and I think there was a technical report that we saw where somebody else made those judgments. But I
16 17 18	had, in my opinion, very little information to make that judgment and I think there was a technical report that we saw where somebody else made those judgments. But I don't there wasn't enough, really, and it wasn't, again,
16 17 18 19	had, in my opinion, very little information to make that judgment and I think there was a technical report that we saw where somebody else made those judgments. But I don't there wasn't enough, really, and it wasn't, again, the charge. The charge was simply to look at the climate,
16 17 18 19 20	had, in my opinion, very little information to make that judgment and I think there was a technical report that we saw where somebody else made those judgments. But I don't there wasn't enough, really, and it wasn't, again, the charge. The charge was simply to look at the climate, recognizing that there are, again, implications downstream,
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16 17 18 19 20 21 22	had, in my opinion, very little information to make that judgment and I think there was a technical report that we saw where somebody else made those judgments. But I don't there wasn't enough, really, and it wasn't, again, the charge. The charge was simply to look at the climate, recognizing that there are, again, implications downstream, but we really didn't get into that. Q Recognizing that there could, there might be?
16 17 18 19 20 21 22 23	<pre>had, in my opinion, very little information to make that judgment and I think there was a technical report that we saw where somebody else made those judgments. But I don't there wasn't enough, really, and it wasn't, again, the charge. The charge was simply to look at the climate, recognizing that there are, again, implications downstream, but we really didn't get into that. Q Recognizing that there could, there might be? A Sure. Or might not.</pre>

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1	MR. TREBY: All right. Mr. Roisman now has his
2	hour, I think Rather than take our break so we can
3	maintain the schedule for the panel, we'll just move on.
4	EXAMINATION
5	BY MR. ROISMAN:
6	Q Dr. Bowers, I forgot to ask you, when you did
7	your work did you take notes?
8	A (WITNESS BOWERS) I took notes, counted things
9	and so on, sitting up at my cottage; yes.
10	Q Have you got copies?
11	A No, they don't exist because when I finished the
12	report I threw them away.
13	Q What about your assistant; did she keep notes of
14	that telephone conversation?
15	A No. No.
16	Q Of that telephone conversation? Either with you
17	or with the person who called her about the project?
18	A No. All that she did was to call my at the lake
19	and tell me the gist of it, asked me what me response or
20	interest was. When I knew I was coming here I asked her
21	if she had been the one that had taken the call. She was
22	rather strained and said: Yes, I think so. So there are
23	no notes or anything that she would have,
24	Q Okay. Mr. Kaplan, looking now at this thing you
25	started talking about briefly this morning, in the letter

1	of July 31 to Mr. Leach, which has been previously marked
2	as Exhibit 5, there is a paragraph at the end of the first
3	page of the attachment. It says, "the basic question the
4	team has to attempt to answer is"; can you please tell
5	me where did that basic question come from?
6	A (WITNESS KAPLAN) It came from me, in terms of
7	where did it come from. I spoke with I wrote the words
8	and I based that on conversations with the essentially
9	with Stu Treby and Tom Ippolito, in terms of what their
10	needs were, to the best of my understanding of what we
11	would I had to put that into a framework I could work
12	with and see if it made sense as an area of investigation.
13	Q Did the input outside of your own knowledge come
14	through a single meeting or several meetings?
15	A I had, I guess I had conversation with Mark
16	Williams.
17	Q Mark Williams is
18	A NRC staff.
19	MR. TREBY: Just to clarify the record, Mark
20	Williams is a contracting person on the staff who had made
21	the initial contact to see
22	A (WITNESS KAPLAN) Prior to
23	MR. TREBY: Let me finish the sentence to see
24	whether EG&G Idaho would be available to do the work and
25	had the necessary expertise to do the kind of work.

1	BY MR. ROISMAN:
2	Q Go ahead.
3	A Prior to my conversation with Treby and Ippolito,
4	I had spoken with several people I had already started to
5	consider as possible resources for doing this task.
6	Q And who were those people?
7	A I'd have to check my notes.
8	Q Are those notes that you produced for us?
9	A Yes.
10	Q Okay. That's fine. And then how many times did
11	you talk to Ippolito before the time that you wrote this
12	July 31
13	A I only recall talking with Ippolito in Texas,
14	and meeting him there for the first time and talking with
15	him. So it was basically the day it was based on a day
16	in Texas.
. 17	Q Was that the first time you met with Mr. Treby?
18	A Yes.
19	Q And there are notes of those conversations?
20	A There are notes of those conversations. I have
21	a few; yes.
22	Q Okay. Are those the ones that you have turned
23	over?
24	MR. TREBY: That's right.
25	MR. ROISMAN: Both the Ippolito and yours?

1	MR. TREBY: First of all, it was two days, it
2	wasn't one day. It was July 18th and 19th. As I
3	understand it, the 19th was a very short follow-up meeting
4	where there were just it was a follow-up meeting where
5	they just went off to do something. But, yes, there are.
6	Those are the notes that have not yet been turned over and
7	they occurred at least with regard to myself, at the Glen
8	Rose Motor Inn. Both Mr. Kaplan, Dr. Stratton, and I
9	think Mr. Rice, came to the motel with Mr. Ippolito. So I
10	think it is possible they had spoken to him ahead of time
11	while I was at the meeting.
12	MR. ROISMAN: The only notes you held back were
13	notes that you or the staff attorneys
14	MR. TREBY: I didn't notice any notes of prior
15	discussions before they got to the hotel. It seemed to me
16	that the notes were strictly the meeting in the hotel room.
17	MR. ROISMAN: Okay.
18	BY MR. ROISMAN:
19	Q At the meeting that you had that Mr. Treby
20	attended, was it your understanding Mr. Treby was giving
21	you any legal advice? Was he acting in as your lawyer?
22	A (WITNESS KAPLAN) NO.
23	Q Was he, in your judgment well, what did you
24	think he was doing there? What was he doing? I don't
25	want you to tell me what he said for the moment. I just

1	want you to tell me what sort of things was he talking to
2	you about?
3	A Giving us some understanding of what the case
4	was that they were involved with.
5	Q Yes.
6	A And trying to think through, verbalize how we
7	might be a resource to them.
8	Q Yes. Okay. And what role did Mr. Ippolito play
9	in that meeting?
10	A In that meeting I recall you guys check me
11	I recall Ippolito sitting back a lot and letting Stu
12	orient us to what was going on, what they were involved
13	with; and coming in more in a focusing, clarifying kind of
14	role.
15	Q Did you get facts at that meeting? In other
16	words, were you told: Well, here is a kind of incident
17	that we are dealing with, or here is an event or something
18	like that?
19	A I'm not sure. But I think that I would have
20	gotten some examples of the kind of things that were going
21	on.
22	Q What was it that you heard, or what was it that
23	you learned, that caused you to formulate the basic
24	question as distinct from any intimidation that some
25	inspector may have felt from actions on the part of crafts

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1 personnel? Can you remember what you heard or what you
2 knew that made you feel that should be part of the
3 definition?

A Actually, I think in my own experience coming back, I missed that part of it. And I think I got that encouragement from Bill -- if not Bill Stratton -- if not from Chuck -- if that was the area in which we were trying to work.

9 Q Dr. Stratton, was it you, as you remember? 10 (WITNESS STRATTON) I remember -- my recollection A 11 is that, yes, that what we were to look at was climate of 12 intimidation with some clarifying provisos, in a sense 13 that are, you know, listed under the section of specific problems, where we said we are not to look at specific 14 -15 cases of intimidation and decide whether in fact they were or were not -- management was or was not culpable; that we 16 17 were not to look at -- or that a climate of intimidation, there was a distinction -- we needed to get a definition 13 of climate of intimidation in our heads, or work one out, 19 that at least could distinguish that from something that 20 you might more loosely characterize as management style. 21 22 And we were to make no judgments about whether in fact there was a safety problem or not. That was clearly out 23 of our expertise. And that we were to look at, in a sense, 24 management's responsibility for this. 25

> 1 So that, if we were dealing with intimidation -- an 2 intimidating act on the part of a craftsman, we would look 3 at management's responsibility in that when they became 4 aware of it, did they react appropriately? Did they do 5 things to try and prevent it or whatever? But not that that would be -- if there were a lot of individual 6 7 incidents, I Suppose, with craftsmen brow-beating 8 inspectors that management never knew anything about or 9 whatever, that that wasn't the thing -- we needed to make 10 a distinction about management's involvement in whatever climate there was versus other people's involvement, the 11 focus being on management's responsibility. 12 13 0 And you got that in your conversations with 14 Messrs. Treby and Ippolito? Or you got that on your own? 15 A No, I believe -- my recollection is that that's one of the factors that came out of that conversation. 16

17 And I believe that it was the distinction on the second 18 day when we met actually at the site.

19 MR. TREBY: I thought about it a little bit 20 further and I think the second day I also was at the 21 meeting, and that was mainly one where you provided us a 22 schedule. We had talked in terms of what the scope might 23 be on the first day and then, at that point, we still had 24 this potential hearing coming up on August 20th, and were 25 to go back and develop a schedule overnight as to how they

1	would meet various milestones, and that we'd have a
2	document, or testimony or whatever on the August date.
3	BY MR. ROISMAN:
4	Q Dr. Stratton, if you were conducting your own
5	survey, unconstrained by the contract here, trying to find
6	out whether or not the workforce was being discouraged
7	from reporting safety problems not "who is to blame"
8	would you look at the issue of whether crafts people were,
9	unbeknownst to anybody except themselves, discouraging the
10	inspectors from reporting safety violations?
11	A (WITNESS STRATTON) Well, I don't know if I'd go
12	out the way you pose the question, I don't know if I'd
13	go out and ask that question, specifically look for that.
14	Q If you had that information coming to you, would
15	you
16	A I assume I would cast the net that would include
17	that.
18	Q And what about the question of management style?
19	Do you feel that management style is irrelevant to the
20	question of how comfortable the workforce feels about
21	reporting problems if they see them? Is that a relevant
22	part of answering that question? Forgetting about this
23	intimidation thing for a moment; just to that question.
24	A The way that you ask the question, I think I
25	would have to agree that, sure, management style is a part

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1 of the climate that people work in.

2 Q And it can influence whether they do or do not 3 feel comfortable about reporting a safety problem or 4 complaining about their wages or whatever?

5 A Well, see, I'm not sure at what point, when it 6 gets specific to talking safety, that you are talking now 7 to talk about a subset of their behavior that I would 8 include in the intimidation climate part of things.

9 Q I'm not even thinking so much -- for the moment 10 I'm stripping the word "intimidation" out and I'm just 11 dealing with perhaps a broader or a different set. And 12 the set is employees who feel, for whatever the reasons 13 are, a reluctance to report safety problems. And I'm trying to look -- if you were looking at that question: 14 15 "Do the employees at this plant feel a reluctance to report safety problems" -- would you look at whether craft 16 people were the source of any reluctance that they might 17 feel? Or would you look at management style, as to just 18 how they dealt with their employees in trying to find that 19 20 out? Would those be relevant factors that you would 21 examine?

A I'm having trouble responding and I'm not sure why. I think I'm not thinking along the same wavelength or characterizing things the same way you are.

25 As soon as you start asking a question about reluctance

1 to respond, then the issue of "why" and "what's behind that" and "intimidation" is what's on my mind and you are 2 3 trying to divorce that from intimidation and that's my --4 I don't mean to divorce it. I mean not to focus 0 5 exclusively on it. I assume there are other things that 6 might not be called intimidation that might be the reason why you were reluctant. For instance, I think yesterday 7 one of you drew the distinction between harassment and 8 9 intimidation. And you might simply say: It is not worth 10 it.

11 For instance, are any of you familiar with a recent, 12 within the last year or so, report, that came out from the 13 Federal Government on the issue of whistle-blowers? And 14 in that report they discuss the question of: What is it 15 that causes employees to be reluctant, if they are 16 reluctant, to blow the whistle? And one of the very high 17 positive answers was: We are reluctant if we think, by 18 blowing the whistle, that nothing will happen; in other 19 words, that there will not be any action taken.

That, I don't think -- in your definitions I don't think any of you would call that intimidation. Those employees weren't being intimidated but they were being turned off. They were being discouraged. So that might be an example of an action which could be a management style which would -- which would be -- and what I'm asking

> 1 is, do you agree with this or not agree with this --2 A Yes, and I think it's one of the things we looked at. We looked at management response. It's one of 3 the bullets we had under our "climate" definition was --4 5 You looked at management response to allegations Q 6 of intimidation? 7 A Okay. Or management -- I believe we also looked 8 at -- yes, that's right. 9 And similarly, when you looked at response, you Q 10 didn't necessarily look at style; isn't that right? You excluded -- if the results of Mr. Tolson, to use the 11 12 example that's been used a lot here -- if the results of Mr. Tolson's work was to "address the problem," the fact 13 that his style may have been intimidating was not, in your 14 15 judgment, a factor which was part of your mandate? You 16 were looking to see, when Tolson got done, did we think that he had responded to the allegation of intimidation by 17 18 X over here, not what was his style in responding to it? 19 A I'm not sure I can answer that. First of all, as I told you yesterday, I didn't read all these 20 21 depositions. 22 0 No, I understand. 23 So I am not familiar with how Tolson reacted and A there are some stylistic things you are not going to catch 24

25 from a written record either. So I don't know if I can

1 respond to that.

2 Q Maybe that's a little too detailed. I think you 3 answered the question.

Dr. Margulies, do you have anything to add to that question, or the answer that Dr. Stratton there, in terms of what role management style and craft personnel intimidation of workers which did not become known to management necessarily, or at least knowledge that you saw told you that it did -- what role that would play?

10 A (WITNESS MARGULIES) Well, you asked earlier, I 11 think the question that you posed was: Well, if you were 12 going to kind of go in and look at the question, would you 13 kind of explore the role or relationship of craft and -- I 14 think that's a legitimate factor to look at.

15 Q If the question were as I defined it rather than 16 as the question was defined for your work?

A No. Even as defined, I'm saying if we started out with the question and said -- in fact, if I might just reiterate, I think what David said early this morning would be ideally the way to go, which would have been kind of explore what's going on here in a kind of general sense and then get more pointed about the data collection.

23 Q Let me interrupt, you meant when he talked about 24 going and interviewing and making sure everyone knew were 25 you anonymous, et cetera, to get your own first

1 impressions?

A You develop the dimensionality of the issue.
And in fact, I guess Bill also said you sort of throw out
a wide net.

5 So, I think the number one question worked with the 6 data set that we had. And I think secondly there were in 7 a number of places, as I said yesterday, interface issues 8 between QC and craft that are not insignificant issues.

9 So, it kind of emerged but it wasn't a focal point.10 That was one question you asked.

The other question about the impact of management style, 11 12 I mean from an academic point of view, I think that management style does influence climate in the general 13 sense. You can think about a climate as being open or 14 closed or on some continuum, and the management philosophy 15 and operating policies and behavioral style all influence --16 that is one factor and an important factor in the climate. 17 The fact that you have an open or closed climate does 18 not necessarily -- I don't think you were implying this, I 19 just want to underline it -- does not necessarily imply an 20 intimidator. That's what you were saying. 21

22 Q And you were excluding the management style. In 23 other words, you were not trying to answer the question: 24 Is this workforce reluctant to report safety problems for 25 whatever the reasons. You were trying to answer a

1	narrower question than that?
2	A I think it was a narrower focus. But I think if
3	you remember, recall in the report we did make a point of
4	discussing style because we did think it was an important
5	consideration.
6	Q It showed up?
7	A Do you remember that?
8	Q Yes. Yes. I do remember that you talked about
9	that.
10	A So it did emerge and we thought it was important
11	enough to identify but it was not part of the scope of
12	what we were asked to do.
13	Q So, for instance, when you've answered questions
14	here in the last couple of days on the question, "did you
15	see in the '79 surveys as much as you might have thought,"
16	what you were talking about was not "did you see as much
17	concern about management style or complaints about
18	pressure from craft." You were talking about the smaller
19	subset
20	A That's right.
21	Q the intimidation originating out of
22	management or allowing to be continued with management's
23	knowledge?
24	A That's right. That's right.
25	Q That was the subject?

1	A That's right.
2	Q Mr. Kaplan, when you did you team selection
3	A (WITNESS KAPLAN) Could I?
4	Q Yes.
5	A On the last question, I just wonder if my
6	silence there implies my agreement.
7	Q No, your silence there implies that I didn't
8	care to take a piece of my hour to ask you that.
9	A Go ahead.
10	Q No. Your silence here reflects nothing other
11	than those kinds of irrelevancies to the substance of the
12	discussion.
13	A Fine.
14	Q When you did the team selection, I noticed
15	throughout the contracting documents there was I was in
16	government long enough to know what it takes to get a sole
17	source contract for anything more than \$50, and you all
18	managed to get one through and I notice throughout all
19	those contracts there was reference to the enormous cost
20	of delay associated with having to go through a more
21	laborious contracting process than the sole source
22	approach.
23	Were you a part of the decision process that decided
24	how to frame that?
25	A NO

> 1 Q So you were aware --2 A Let me say I wasn't part of the decision-making 3 process. I probably provided some of the information they 4 used to make that decision. 5 Who came up with the information that a day of 0 6 delay would cost \$625,000? 7 A I'm not sure, but I was under the impression 8 that that was the -- that delaying the schedule for 9 loading fuel and such like that, was such that I was under 10 the impression that hold ups in hearings or the dragging 11 out the hearing process in general meant that the chances of operating a plant would be delayed and that there was --12 13 Q But how did you get that knowledge? I mean now did you learn that there was a fuel load schedule and how 14 15 did you learn what price tag had been placed on a day's 16 delay in meeting that fuel load schedule? 17 A I believe I asked something about that when I 18 met with Ippolito. 19 0 So, Mr. Ippolito, did he give you the dollar 20 number? I don't specifically recall his -- I don't know, 21 A really, where 625 came from. I may have j in my notes 22 23 but I don't recall the number. 24 Why did you ask about it? What made you think 0 it was relevant? 25

I think cost is relevant in research. 1 A 2 0 I'm sorry? 3 I think cost is relevant in business research. A 4 It's one of the factors. 5 0 Why was delay relevant? I mean, you had a 6 contract. The contractor told you to deliver your product 7 by a certain date, August whatever. 8 A Right. 9 0 I think a draft to the staff by August 10th and 10 a final by August 20th. Why did it matter why your contractor was demanding those deadlines? What difference 11 12 did that make? 13 A I thought I just said. My understanding is - 14 -there were people there trying to -- who had built the 15 plant, mostly, who were trying to find out if it was 16 adequate or not, who were geting ready to be closer to an 17 operational phase, and that if the government could conduct its work in a way that didn't interfere with that, 18 that was desirable. And to the extent that it did, that 19 government processes delayed the opening of the plant, 20 21 that somebody was going to incur a cost, and that was the Utility and ultimately all of us. 22 23 Did you make any judgment as to whether the Q amount of time that you were going to have available was 24

25 so short that the quality of your work would be adversely

1	affected and that even if it would take five more days,
2	that it was important to do it right?
3	A To phrase the question a little bit differently,
4	I felt that I needed to do a quality job and if it took
5	longer, then it took longer.
6	Q Well, my question is that you were prepared to
7	work on a very tight time schedule?
8	A Yes.
9	Q Is it fair to assume that if you had more time
10	you could have done more?
11	A Could have done more?
12	Q Yes. You could have done
13	A Sure.
14	Q and your job would have been more thorough;
15	right? You wouldn't have been just sitting around for
16	five more days if you had five more days?
17	A I feel like we did a very thorough job.
18,	Q That wasn't my question. I don't think you'd be
19	here if you didn't think you did. But could you have done
20	a more thorough job by the five more days? Were you
21	squeezed by the time limit or was there plenty of time?
22	A Oh, no. I was continually conscious of the time
23	and working to do a good job within that time.
24	Q You realize that the plant if your report had
25	concluded that there was widespread and pervasive

1	intimidation at the plant site, that the plant would not
2	have gotten an operating license and there would have been
3	no delay cost?
4	A I don't know that the whole thing would have
5	hedged on I guess I even doubt that my particular
6	findings would have been the basis on which the plant was
7	licensed.
8	Q You understand if it didn't get an operating
9	license
10	A Then there's no delay.
11	Q no delay cost?
12	A Correct.
13	MR. TREBY: I might just add at this point that
14	when we had that meeting and talked about scheduling, we
15	really didn't give them a choice. We told them that this
16	was our requirement. So it wasn't a matter of if he
17	wanted 5 days or 10 days
18	MR. ROISMAN: I understand that. That's why I
19	didn't realize how much it matters how much the delay
20	costs. Who pays the fiddler calls the tune.
21	MR. TREBY: I think that's just an explanation
22	for sole source contracting.
23	MR. ROISMAN: I was just a little curious about
24	what all those factors were doing in a contract
25	MR. TREBY: We'll give you the extra three

> 1 minutes but I'm surprised at the 600-some-odd dollar number because the only number I remember having been 2 mentioned at any of these meetings, and I'm not sure if we 3 did -- but I think we did talk about the prehearing 4 conference that had taken place in June. During the 5 prehearing conference there was lots of discussion about 6 "every day of delay is \$1 million." And there was lots of 7 banter back and forth about: "All right, I've just cost 8 9 you \$7 million" -- or something like that.

I'm sure in the course of our discussions about why the 10 schedule was so important and these people were not very 11 happy when we told them we have these depositions, we 12 13 expect that there's going to be 80 or 90 of these things to read and we want a report by such and such a day, and 14 15 they said: Well, what's the great urgency and why is the 16 board deciding to do this on such a rushed schedule? 17 We indicated one of the questions is fuel loading and during this prehearing conference this \$1 million a day 18 19 has come up.

20 MR. ROISMAN: By the way, just as an historical 21 footnote, you know fuel loading was in fact postponed. 22 A (WITNESS KAPLAN) So that there was no cost. 23 MR. ROISMAN: In a "lessons learned" context, 24 that seems to be one of the hardest lessons that gets 25 learned here.

1	A (WITNESS KAPLAN) The hardest lesson is what?
2	MR. ROISMAN: Is that those fuel load dates seem
3	to come and go with grade regularity and there doesn't
4	seem to be it's always hard to figure out when is the
5	deadline. There's a book how you can negotiate
6	anything. And one of the theses of the book is that there
7	is only one deadline. The trick is figuring out which it
8	is, in negotiation.
9	BY MR. ROISMAN:
10	Q . Mr. Rice, what role did Mr. Andrognini play in
11	your work? I notice there are notes that appear to be in
12	someone else's handwriting and I assume those were his?
13	A (WITNESS RICE) That's right. Several things.
14	The first thing is that because of the short deadline we
15	felt that the only way to get through the bulk of the
16	depositions in time to begin to put together a draft
17	report, that he would read some and I would read some. I
18	also had other commitments. So he was able to review
19	depositions when I wasn't there. I was able to, in that
20	initial phase, screen some out and say: These do not
21	appear to be of significance.
22	It also gave somebody on-site for me to bounce ideas
23	back and forth on and
24	Q By "on-site" you mean
25	A In my office.

1	Q In your office. All right.
2	A I think I would like to answer the part, what
3	would have happened if you had five more days.
4	Q In all respect, I'm on a short time limit and
5	A This is sticking to that answer.
6	Q With all due respect, I don't want to know your
7	answer to that question at this point.
8	A Okay.
9	Q What I am interested in knowing is whether any
10	of the views that are expressed in here are dependent on
11	work that Mr. Andrognini did that you did not yourself
12	also do?
13	A No.
14	Q So every transcript that he read that was
15	relevant you also read?
16	A That's correct. And even some of the ones that
17	he said didn't appear to be particularly relevant, I read
18	also.
19	Q The two of you, would you say it was a
20	collaborative effort on your part, in terms of doing the
21	analysis of the record and reaching some preliminary
22	conclusions?
23	A I would say that; yes.
24	Q Are you and Mr. Andrognini, have you lists of
25	publications that, say in the last few years, that you all

....

1	have authored? In journals or books or speeches you have
2	given or letters to the editor?
3	A No. I quit, when I got out of the purely
4	technical side of things some years ago, quit producing
5	papers for of that kind. We turned out probably three
6	or four reports a month related to analyses, evaluations
7	of nuclear plants, nuclear operations.
8	Q But these are reports for which someone
9	contracts with you and you provide them with the report?
10	A That is correct. That is correct.
11	Q How about Mr. Andrognini. Has he published
12	anything?
13	A I think he's in the same category. I think the
14	answer would be "no."
15	MR. ROISMAN: I'll give you a request on
16	publications list of people in the normal, formal way.
17	BY MR. ROISMAN:
18	Q Mr. Rice, in looking at the data that you had,
19	how aware were you of the limitations in the data base
20	that you were looking at? For instance, did you believe
21	that you had before you all of the people who were
22	complaining about alleged intimidation, that you were
23	reading their complaints through the various different
24	sources that you had?
25	A (WITNESS RICE) I have no basis for knowing

1 whether it was all of them or not.

2 Q So it may have been that there were 200 allegers 3 and only 10 showed up as witnesses for Case, for all you 4 know?

5 A For all I know that could be the case. 6 Q Dr. Margulies, you also made no assumptions 7 about whether what you saw was necessarily either a 8 representative sample or the whole universe or anything 9 else?

10 A (WITNESS MARGULIES) Oh, I'll tell you, my 11 assumption was that what I was getting was the entire 12 available data base, the entire available record relevant 13 to this issue. Let me say it again: The entire available 14 data base relevant to this issue, that's what I thought I 15 was getting.

16 Q Which means only that you did not -- if there
17 was somebody else who had a deposition that was taken, you
18 assumed you had gotten it?

19 A Yes, sir.

20 Q Not that, if there was a Corey Allen out there 21 who had never showed up to be a witness in a hearing, that 22 in fact there wasn't such a person?

A No. I'm just saying of everything that was
available, on the radar, I thought I had it.

25 Q And you meant by "available," in writing some

1	way? Available in that sense?
2	A Correct.
3	Q So that the chart that appears on page 16, and
4	the ratios there, are all qualified by the "data available"
5	limitation, as opposed to: These are the ratios in the
6	universe. These are just the ratios in the available data?
7	A That's exactly right.
8	Q And if the available data was not representative
9	of the universe, the ratios in the universe might be
10	dramatically different? Higher, lower
11	A Certainly.
12	Q Now, I would like to try to understand and I'll
13	start with you, Dr. Margulies, and then Mr. Rice, because
14	I think you are the two who did the most looking at the
15	data, how you get with I'm still not clear how you
16	dealt with ambiguous evidence in the record. You have
17	indicated to a certain extent that you, Dr. Margulies,
18	took the transcript at face value. And sometimes taking
19	it at face value meant that you took contradictory
20	perceptions.
21	I mean, you have Darlene Steiner saying that while
22	management claims that they were being very supportive and
23	helpful of Darlene and doing the right thing, and Darlene

said "everything that they did was having exactly the

25 opposite effect on me."

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Now, on the one hand you have a question, "management response." How did management respond to Darlene Steiner's claim? You have her view and management's claim. How did you deal with it in your analysis here, reaching your conclusions?

6 A Let me try to describe it. It would have been 7 lovely had we had X number of incidents, reported 8 incidents, and in addition to that we even had the results 9 of whatever the procecution is to decide: Yes, it was; no, it wasn't. It would have been lovely. Then it would have 10 11 sorted out and I would have had: Guess was, X were 12 reported and three were legitimate and three were not; and 13 I could even make some judgments perhaps about the impact 14 and magnitude, et cetera. At that point in time I didn't 15 have that. And I guess, if I wanted to think through my 16 rationale, I could make a judgment that says: Well, let's 17 say 50 percent are and 50 percent aren't legitimate. But 18 the most important thing for me at that point was to begin 19 to discern the patterns, the patterns.

For example, I want to look at how widespread allegations of intimidation are, so let me look at the material and decide, in any disposition -- okay? In any report, how many people are named as allegers? How many people are really identified as complaining about intimidation?

1 How many people are identified in any one report as complaining about -- as being identified, and "accused" of 2 intimidating? So that's the -- so I began to sort through 3 4 some dimensions of the case without making judgments about 5 whether it was a legitimate or nonlegitimate instance. 6 I also looked to see, for example, in people -- the 7 people who were providing depositional material, 8 information: how many are management personnel and how 9 many are nonmanagement personnel? I mean, I would like to 10 understand that. What's the array of data provided? Are they mostly managers? Like, are they -- just making up 11 some numbers, 75 managers providing information about one 12 case of intimidation? What's the array of providers in 13 14 those categories?

15 And then I tried to do the same thing in some of the other documentation. I looked at some of the available 16 Office of Investigation reports to try to make the same 17 judgments: Who were the data providers; how many allegers 18 19 are named; how many intimidators? Are they localized? Are they all within one or two units within QA/QC or are 20 they spread throughout QA/QC? Just to try to get a sense 21 of the breadth in which complaints and allegations are 22 23 being made.

24 Q Can I stop you there for one second?
25 A Sure.

> 1 How do you know whether the breadth that you are 0 looking at is a relevant breadth, if you don't know 2 3 whether or not the way in which the data that you are 4 looking at was assembled in a representative way? What if 5 OI was not a representative example of people coming forward with complaints? What if theirs was some 6 7 unrepresentative example, for whatever the reason might be? 8 What if the witnesses who were called at the hearing were 9 called in a way that, if you knew that way, you would say: 10 "Oh, well, gee, that didn't give me a very representative 11 look." You didn't seem to have any way of knowing how your data got assembled and what criteria were used; how 12 13 do you know what it showed you was a representative slice? 14 A Well, I think for example, in the OI reports, if 15 I remember correctly -- and I'm sure the numbers are in . here -- just the numbers of people that were included in 16 17 providing data for those reports were enough to 18 demonstrate some breadth of the investigation. So, again, 19 I can say, you know, there were a reasonable amount of 20 data providers. So I think I'm getting a pretty good 21 profile. 22 Now again, the kinds of questions that you continually drive at are important questions. But they tend to be out 23

of the context of, at that point in time, what was available.

> 1 For example, implied in what you say is ideally, ideally, do you have all of the relevant data that you 2 3 need constructed in the best possible way that we know about in organizational behavior to do this job? And, if 4 you say "ideally," then I have to say well, we worked with 5 6 what we had. I think it was a pretty good array of data with pretty good breadth, but it certainly wasn't ideal. 7 No. But the question is more fundamental than 8 0 9 that. 10 A Okay. I understand you all are very confident with and 11 Q when asked questions seem to be very confident on the 12 conclusions. You all had a body of data. You all took a 13 14 look at it. 15 That from my perspective is not worth anything more than if I were to bring you a photograph of the plant and 16 then ask you to tell me what does this nuclear plant look 17 like. That depends on where I stood, how wide the lens, 18 19 not to mention 1000 other factors. And nobody who wants 20 to know what the plant really looks like would give a damn 21 what you thought after you looked at my photograph; not,

22 at least, until they knew everything that had to be known 23 until they knew how the photograph was taken to get that. 24 A But if I knew enough about the plant -- not

25 everything, but enough -- and you showed me the photograph,

I I'll bet I could make inferences, although I have never been there, about what the other side of the plant looks like.

4 That's fine. And my question to you is, putting 0 5 aside your own knowledge and looking only at the 6 photograph for a moment to continue the analogy, how do you know that the photograph gave you enough of a picture 7 that your assumptions from other experiences have validly 8 9 allowed you to make some more generic conclusions? The 10 bottom line is, how do you defend the claim that this report is relevant in the overal' question that's being 11 asked, forgetting about whether it is valid. Is it 12 relevant? How do you defend that if you don't know more 13 14 about how the data that you looked at was assembled and whether it was or was not a representative sample? 15 16 With regard to -- now, again, one more time. I A think it's a matter of looking at the array of information, 17 all the indicators that went into making the final 18 judgment. And, in some cases, for example, I would 19 probably rate my confidence in the data higher than in 20 21 other cases. But I don't want to take it apart that way. 22 I think I need to look at the array of what I've got. The survey is, I think, again, not ideally constructed 23 or administered, but I felt pretty decently -- that the 24 data was pretty decent and could allow me to make pretty 25

sound inferences about what was going on. So, while I think I don't know everything about what -- pursuing the line of questioning this morning, while I can't judge the "motivations" of the survey designers, I think the dimensionality is fairly clear, if you look at the items. And I have confidence in the dimensionality.

So I do think I know something about how, certainly in
8 the case of the surveys, the data collection process was
9 constructed. I think I can say that.

10 Q What did you learn in the transcripts, the 11 deposition transcripts, about what was the nature of 12 management response to the portions of the 1979 survey 13 complaints that went to management style, craft/QC 14 interface, and actual intimidation?

15 A Say it again? What was the management response 16 to the '79 survey? Gosh, I really -- I don't recall that. 17 I'm sorry.

18 Q Okay. Let's take a different one. Mr. Rice, 19 I'm going to skip you because my time is running short, 20 but probably during the hearings you can expect that 21 you'll get a chance to answer that.

A (WITNESS RICE) That's why I have been writing
 down the questions.

24 Q You'll also get a copy of the transcript, I'm 25 sure.

I don't know which one of you or who wrote or takes the
 most direct responsibility for the section beginning at
 page 20 and over to the top of page 21 that deals with the
 Kahler, Keeley, and Spangler investigation?

A I think I'm probably the most responsible there. O Oh, good, Mr. Rice. Tell me something: In looking at that particular document, as I understand it you use it as a good example of a management response to an allegation of intimidation and cover-up, since the two were together in the one document -- is that right?

11 A That is correct.

12 What did you think of the portion of the report 0 which Kahler, Keeley, and Spangler summarize, and this is 13 14 what they say: "It appears that there's a difference in 15 philosophy between QA/QC management and some audit team 16 leaders. QA/QC management takes a practical approach to 17 the application of the quality criteria of appendix B. Audit team leaders who also adhere to this philosophy have 18 19 no problems with the report review process.

20 "On the other hand, the purest philosophy of some audit 21 team leaders is directly opposed to that of management. 22 This may be the source of their problems with the report 23 review process. These team leaders often feels that they 24 must go to great length to justify to their own management 25 the validity of their findings. Apparently QA/QC

1	management has not been able to convey their philosophy
2	regarding quality assurance to all of the audit group
3	members."
4	Do you remember that part of the report?
5	A As I recall let me try and get the whole
6	thing back into perspective. Wasn't it Kessler and
7	Q X?
8	A X? Sorry about that.
9	Q X. We have two people who haven't signed the
10	A They were called out to do an audit. The result
11	of the audit was presented to the quality assurance,
12	quality control manager on-site. He did not agree with
13	some of the findings that were there and, as I recall,
14	within the prerogatives of his responsibilities, modified
15	maybe it was a guy in Dallas. But the report was it
16	was Vega
17	Q It was Tolson who didn't agree with it, but Vega
18	was the one who made the modifications?
19	A Who modified it. That's right. And the
20	immediate response was, as far as I can tell, X and
21	Kessler indicated the problem to probably to Vega. And
22	Vega immediately assigned Keeley, Spangler, and Kahler as
23	a committee to yo down and take a look at what the
24	situation was and handle it.
25	I think there is apparently there were some

personality problems involved in this thing. Those particular words, yes, I remember reading them, but to try and put them into a context that says how important that was to this entire process, I guess I'd have a tougher time doing at this point.

6 Let me be more specific, then, with my questions. 0 The part of your report, page 20, that seems to focus on 7 8 the existence of the Kahler, Keeley and Spangler report -that is, the fact that it was ordered relatively quickly, 9 that these three people went out, they did a fairly in-depth 10 audit, and that was a positive thing; and my question to 11 you is isn't it equally important if not more important to 12 13 know not only was there a follow-up but what were the results of the follow-up? And I didn't see any discussion -14 ... 15 in here and I was trying to find out how aware you were of what the results were. You were aware that the paragraph 16 17 was used to explain why the "cover-up" was not an 18 objectionable activity?

19 A Yes.

20 Q And were you also aware that Kessler and X, one 21 just before and one after the completion of the audit, 22 left the plant site?

23 A That's correct.

24 Q And one of them said they left the plant site 25 because they didn't feel the problem of intimidation had

1 been dealt with properly?

2 A Yes.

3 How did you factor that into your judgments that 0 this represented an example of a good, positive, 4 5 management response to an intimidation allegation? 6 A Like most of these incidents it had some parts of it that were favorable. It had some parts of it that 7 were questionable. The -- I read the original draft that 8 9 they had presented. I read the comments that Vega had 10 made on it in the final version as it came out. 11 My net feeling there was that the entire process that 12 had been followed by QA/QC management was within the normal frame of what a QA/QC organization and QA/QC 13 management should do. I had no problem with it as far as 14 15 that was concerned. 16 How about as far as the way Kessler and X 0 17 responded to it?

18 A Without attempting to beg the issue at all, I 19 would say that I -- I put the response of X and Kessler 20 into the category of being people who felt that they had 21 been intimidated.

22 Q But I'm focusing now on the management response 23 side of the issue. I understand both you and 24 Dr. Margulies said we'll count Kessler and X as two -- or 25 at least one of them as an alleger on the intimidation

1	side.
2	Now the other piece of this is management response. It
3	all became part of the same equation.
4	So, management response, one response was to say on the
5	cover-up question that there was a philosophical
6	difference; and you said you come down on the side of the
7	philosophy of Mr. Vega and the second audit team and not
8	on the Kessler and X side?
9	A That's correct.
10	Q What about the response with regard to the
11	person who felt intimidated? The report did reach that
12	is the Kahler, Keeley and Spangler report KK&S
13	A There are too many Ks
14	Q That's right did come down with certain
15	factual determinations, as I remember, with regard to the
16	allegation of intimidation. Do you remember that? Well,
17	let me
18	A Only that they didn't, as I recall, did not
19	agree either with Tolson's explanation or with Vega's
20	change to the report.
21	Q You are focusing on cover-up. I'm talking about
22	Vega Tolson was accused of saying, "If auditors work
23	hard enough at finding problems and making these known to
24	construction personnel, someone is going to get hurt,
25	physically or politically."

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1	Now, the second audit team confirmed that that was said.
2	What happened? What did the audit team recommend happen
3	and what actually happened in terms of evaluating
4	management response to the initial complaint of
5	intimidation on the part of Tolson?
6	A I think, if you will look further in the report
7	I've forgotten precisely where it is you will find a
8	comment to the effect that management's response to
9	demonstrated intimidation was not always as prompt as it
10	could have been. I have forgotten precisely where that
11	occurs.
12	Q Let's presume that was there.
13	A This is one of the instances page 22.
14	Q All right. Do you have the statement on page 20,
15	"It appears that the report is thorough and detailed,
16	indicating a serious attempt on the part of management to
17	deal with the issues at hand." And my question to you is
18	how did they deal with Mr. Tolson that is representative
19	of a serious attempt on their part to deal with the issue
20	at hand?
21	A I reference you to the last sentence just above
22	3.2.1.4 on page 22.
23	Q "Prompt" implies that it happened, but it
24	happened late. What response did you find in the record
25	that was taken in response to Mr. Tolson that was made in

1	response that an auditor claimed he felt intimidated?
2	A I don't know about anything that happened until
3	his ultimate transfer from the site.
4	Q Which was, as you understand it, at his request?
5	A That's what the record says.
6	Q And, actually it wasn't that he was physically
7	transferred from the site, he changed his position; isn't
8	that correct?
9	A That's what my my recollection is he
10	became part of the hearing process.
11	Q When you get around to reading, if you do, and
12	during the hearing, you'll find that everyone else
13	confirms that this happened only because Tolson asks for
14 -	it to happen. Nobody was prepared to say that he was
15	fired or forced to ask for a transfer.
16	When you all were counting up for your chart on page 16,
17	the allegers, we've got a number of allegers I think 10.
18	How did you count the T-shirt people? Did you count any?
19	A (WITNESS MARGULIES) If they were named, then I
20	counted it.
21	Q Well, there were several places in the
22	transcript where I know many times it was mentioned
23	that there were eight people wearing T-shirts that day,
24	and I know that at some place in the transcript all eight
25	names are given. I can't remember whether they occurred

at the time of the depositions that you looked at or later.
 A I can't remember either. If they were named,
 then I counted it.

Q The T-shirt people were people about whom it was alleged they were being intimidated. If you remember the incident, there was an anonymous phone call to the Nuclear Regulatory Commission on-site saying: "They got eight guys. They got them locked up in a room. They are searching through their files and so forth. Come and do something for them."

I'm just trying to understand how you did your accounting? Did you put "8" down and say, "We've got eight people of whom it's alleged they were being intimidated"? Or did you not count them at all?

15 A No. If there were eight names, then they would 16 be counted. If somebody said: "So-and-so and so-and-so 17 were intimidated," then they were counted.

18 Well, I'm almost certain that the anonymous 0 caller didn't use the word "intimidated." The anonymous 19 caller said that "Something very improper is going on. 20 21 These people are being held against their will in a room, and their personal belongings are being searched and 22 23 seized"; and had called the NRC to complain about it. Just what I've told you. If that appeared in the 24 record, did that appear on our list? 25

1	A No. If it was described that way it's only the
2	alleger.
3	If someone said: "Oh, there's eight people over there,"
4	that's the alleger.
5	Q I see. Not the eight people about whom the
6	event is being alleged to have happened?
7	A Right.
8	Q So when you had one person of a team of 10 like
9	Bill Dunham, who came forward and was complaining about
10	things that were happening in the paint coatings, you
11	counted Bill? .
12	A Counted as the alleger.
13	Q But not any of the people who he said felt the
14	same way he did, et cetera. Okay. All right.
15	A Yes.
16	MR. TREBY: Let me give you a five-minute
17	warning.
18	MR. ROISMAN: Okay. All right.
19	BY MR. ROISMAN:
20	Q Dr. Margulies, I'm going to ask you some
21	questions about your handwritten notes.
22	A Sure.
23	MR. HIRSCHHORN: Whose notes were you looking at?
24	MR. ROISMAN: I hoped I was looking at
25	Margulies' notes, but I'm not sure

1	MR. RICE: They are way too neat to be mine.
2	MR. ROISMAN: Got his little name tag, but it
3	was not his notes. Let's see if I can find them.
4	MR. TREBY: I put those little name tags on
5	things that I got from him. They may have been papers
6	that he produced.
7	MR. ROISMAN. I was looking at a set of notes
8	yesterday. I thought I was looking at his notes. I'll
9	just check and see.
10	(Discussion off the record.)
11	BY MR. ROISMAN:
12	Q On your notes, this group came clipped together.
13	Does that look familiar? Up at the top it's got, " define,
14	No. 1, intimidation and nonunion" over on the right side
15	A (WITNESS MARGULIES) Yes.
16	Q It was clipped together like a set.
17	MR. HIRSCHHORN: How many sheets is that?
18	MR. ROISMAN: Oh, it looks like about 10 or 12.
19	BY MR. ROISMAN:
20	Q Now, over on the third page you've got written
21	over on the left-hand side just after the middle of the
22	page, "my note: Does not take things at face value. Word
23	games. Attorneys are narrow minded." Can you see that?
24	You understand why that jumped out at me.
25	A (WITNESS MARGULIES) Wait a minute. Let me find

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1	it. I'm sure it's right
2	Q I knew you would agree with that?
3	A Let me try to find that.
4	Q I think it may be actually you've got it, it
5	might be 4. It's got an 8-2 at the top?
6	A Oh, got it. Got you. Okay.
7	Q What's that note referencing? First of all,
8	about whom are you talking when you say "does not take
9	things at face value; word games."
10	A I think I was sitting in on one of those
11	on a deposition.
12	Q Yes.
13	A And I I think I was talking about whoever was
14	being interviewed at the time.
15	Q Is this date 8-2 at the top there not the date?
16	A Yes, that is the date.
17	Q I didn't remember your being there that late.
18	That's the second of August, according to these notes.
19	And that's just a few days before you all were going into
20	a final draft?
21	A That's not the date, then. It may be the date I
22	sent this together, or
23	Q What are you referring to, "does not take things
24	at face value. Word games."
25	A I felt that there was a lot of evasiveness going

1	on in the data collection in the deposition.
2	Q Evasiveness by whom?
3	A The person who was being asked for information.
4	Q Now, up above that you have the name "David,
5	deliberate annoyance, do some thus, wrong to do" do you
6	see all that?
7	A I think that was the person, in fact I know it
8	was, and these are just my notes about what was going on.
9	Q On the next page you have "10:30, David Chapman,
10	manager, QA." Is that the David you were referring to
11	back on the previous page?
12	A Yes.
13	Q And was this do you think this is based upon
14	reading the transcript of Chapman?
15	A No.
16	Q You think this is based on
17	A I know it. I may have missed the date, but I
18	know those notes were my sitting in on I know that.
19	What's the date?
20	A (WITNESS STRATTON) According to my notes, it
21	was the 2nd.
22	MR. ROISMAN: I'm sorry
23	A (WITNESS MARGULIES) Just trying to trap me again,
24	Tony no I know I was there.
25	BY MR. ROISMAN:

1	Q "Attorneys are narrow-minded"; but substantively
2	what do you mean?
3	A Substantively it wasn't personality, although
4	I felt that way anyway
5	(Laughter.)
6	the questioning was so narrow that it was going off
7	into areas that I just felt were away, away from what, at
8	least in my perception, was the issue present, what the
9	data collection was all about. And was spending so much
10	time focusing on an area that to me was extremely narrow.
11	And I couldn't to be polite about it I couldn't see
12	the relevance.
13	Q So if you had been doing the questioning and
14	Chapman had been in front of you, you would have been
15	asking different questions and getting different
16	information than what actually happened?
17	A I think that's the problem I have with the
18	depositional material.
19	Q Can you remember now what sort of question it
20	was? I don't mean a particular question, what kind of
21	things did you think Chapman should have been asked that
22	he didn't get asked at that time?
23	A I don't really remember. It's just my kind of
24	impressionistic feelings at the time.
25	I remember, for example, the notes on the rest of that,

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1	on the bottom of the page were some things that I think
2	got were discussed. There were some questions. These
3	notes referred to that. "Yes, we have a management
4	development program. It is very humanistic. We go to a
5	section and some psychologist comes in and tells us about
6	psychology." That's the overall philosophy of the man.
7	So I felt: Yes, that's nice, but I don't know what
8	that has to do with the particular issue. It was kind of,
9	you know I know, I know, I know
10	Q I felt the same way.
11	A That's funny.
12	MR. WATKINS: And you were asking the questions.
13	DR. MARGULIES: So those were those notes. It
14	was David Chapman at that time.
15	MR. Roisman -
16	MR. TREBY: My clock tells me that you guys have
17	done your duty. I The record as far as the briefing
18	session is concerned, the record is closed.
19	(Whereupon, at 1:25 p.m., the briefing session
20	was concluded.)
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24	
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CERTIFICATE OF OFFICIAL REPORTER

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

NAME OF PROCEEDING: TEXAS UTILITIES GENERATING COMPANY, et al. (Comanche Peak Steam Electric Station, Units 1 and 2)

DOCKET NO .:

50-445-0L2 50-446-0L2

PLACE:

BETHESDA, MARYLAND

DATE:

FRIDAY, NOVEMBER 9, 1984

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

(sigt (TYPED)

JOEL BREITNER

Official Reporter ACE-FEDERAL REPORTERS, INC. Reporter's Affiliation

Ex 10 9 NOV 84 \$3

VIIA

Name: Bowers, David Glenn

Born: June 2, 1931, in Akron, Ohio

Marital Status: Married June 1957, two children

#### EDUCATION

- B.S. in Business Administration, 1957: Kent State University, Kent, Chio (1949-50; 1954-57); major in Industrial Psychological Procedures (concentrated major in psychology, economics, and business administration).
- M.A., 1958: Kent State University (1957-58); major in psychology, minor in sociology.
- Ph.D. completed December 1961; degree awarded January 1962: The University of Michigan (1958-61) -- industrial psychology.

Doctoral dissertation: "Some Aspects of Affiliative Behavior in Work Groups."

## WORK EXPERIENCE

- 1950-54: Military service in the U.S. Air Force: career guidance specialist, involved in the administration and scoring of tests of ability, aptitudes, and proficiencies; later personnel sergeant-major, responsible for keeping personnel records for an aircraft control and warning group.
- 1957-58: Graduate assistant to Dean of Students, Kent State University, Kent, Ohio; developed an inspection program and inspected off-campus housing.

#### Research Experience

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- 1958-61: Assistant Study Director, Survey Research Center, Institute for Social Research, The University of Michigan; performing the following functions:
  - Participated in questionnaire construction, administration, analysis, and report writing in a two-year field experiment.

## Vita - D. Bowers

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- 1962-66: Study Director, Survey Research Center; performing the following functions:
  - Responsible for designing and carrying out an in-depth interview
     study of insurance executives, plus write-up and presentation of research findings.
  - Responsible for design and administration of a survey of a second sample of life insurance agencies.
  - Responsible for a study of management change, involving a questionnaire survey, periodic observation, and interviewing in two plants of a clothing manufacturing company.
  - Responsible for designing and conducting a national representative sample interview study of Peace Corps applicants.
  - Responsible for design and administration of a study of the role of the "working foreman," an hourly paid, union-member supervisor, in an electrical appliance firm.
  - Responsible for planning, designing, and administering a study of a "matrix organization"—coordination through membership in vertical and horizontal teams.
- 1966: Program Associate, Center for Research on Utilization of Scientific Knowledge; performing the following functions:
  - Responsible, with others, for planning, designing, and computing a program of studies involving both research and utilization activities in business organizations.
  - 2. Responsible, with others, for planning and developing an eightyear longitudinal study of organizations.
- 1971: Program Director, Center for Research on Utilization of Scientific Knowledge; performing the following functions:
  - Responsible for planning, designing, and conducting a program of studies involving both research and utilization activities in business organizations.
  - Responsible for planning and developing a longitudinal study of organizational practices and development within organizations.

Vita - D. Bowers .

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1972-73: Acting Director, Center for Research on Utilization of Scientific Knowledge.

1979-80: Acting Director, Center for Research on Utilization of Scientific Knowledge.

1978-present: Vice-chairman and President, Rensis Likert Associates.

1978-present: Vice-chairman and Resident Agent, Foundation for Research on Human Behavior.

Professional Memberships

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American Psychological Association Fellow (Divisions 14 and 19).

Inter-University Seminar on the Armed Forces and Society.

## Vita - D. Bowers

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# Teaching Experience

Psychology 565 (Survey of Personnel Psychology), U-M campus, Fall Term, 1965, and at Flint Extension Canter, Spring Term, 1966.

AO 561 (Organizational Theory), School of Business Administration, U-M campus, Spring Term, 1970.

Psychology 968 (Theory of Organizational Change), U-M campus, Fall Terms, 1970 and 1971.

Member Organizational Psychology Executive Committee, 1972.

Advisor, first-year Organizational Psychology students.

Psychology 765 (Theory of Organizational Change and Development), U-M campus, Fall Term, 1972.

OB-IR 501 (Human Behavior and Organization), School of Business Administration, U-M campus, Winter Term, 1973.

Psychology 766 (Theory of Organizational Change and Development), U-M campus, Fall Term, 1973.

OB-IR 501-2 (Human Schavior and Organization), School of Business Administration, U-M campus, Winter Term, 1974.

Psychology 766 (Theory of Organizational Change and Development), U-M

Psychology 766 (Theory of Organizational Change and Development), U-M campus, Winter Term, 1976.

Psychology 766 (Theory of Organizational Change and Development), U-M campus, Fall Tarm, 1976.

Psychology 766 (Theory of Organizational Change and Development), U-M campus, Fail Term, 1977.

Psychology 765 (Theory of Organizational Change and Development), U-M campus, Fall Term, 1978.

Psychology 766 (Theory of Organizational Change and Development), U-M campus, Fall Term, 1979.

Psychology 766 (Theory of Organizational Change and Development), U-M campus, Fall Term, 1980.

Psychology 766 (Theory of Organizational Change and Development), U-M campus, Fall Term, 1981.

Mary 1983 - 5

### PUBLICATIONS

- Leadership and organizational performance in an insurance company. Paper presented at the annual meeting of the American Psychological Association, September 1962.
- Self-esteem and the diffusion of leadership style. Journal of Applied Psychology, 1963, 47(2).
- (With S. E. Seashore) Changing the structure and functioning of an organization-report of a field experiment. Research monograph. Ann Arbor: Institute for Social Research, 1963.
- (Ed.) Applying modern management principles to sales organizations. Ann Arbor: Foundation for Research on Human Behavior, 1963.
- 5. Organizational control in an insurance company. Sociometry, June 1964.
- 6. Self-esteem and supervision. Personnel Administration, July-August 1964.
  - (With J. G. Bachman and F. M. Marcus) Bases of supervisory power: A comparative study in five organizational settings. Paper read at the American Psychological Association Convention, September 1965.
  - (With S. E. Seashore) Predicting organizational effectiveness with a four-factor theory of leadership. Administrative Science Quarterly, September 1965.
  - 9. (With S. E. Seashore and A. J. Marrow) Management by participation. New York: Harper and Row, 1967.
  - 10. (With S. E. Seashors) Peer leadership within work groups. Personnel Administration, September-October 1967.
  - 11. (With R. Likert) Organizational theory and human resource accounting. American Psychologist, June 1969, 24, 585-592.
  - 12. (With R. Norman) Strategies for changing an organization. Innovation, 1969, 5, 50-55.
  - 13. (With S. E. Seeshore) Predicting organizational effectiveness with a four-factor theory of leadership. In Leadership. New York: Penguin Books, 1969. (Also reprinted in Concepts in sir force leadership. Haxwell Air Force Base, Alabama: AFROTT, 1969.)
  - 14. (With S. E. Seashore) The durability of organizational change. Azerican Psychologist, 1969, 25, 227-233.
  - 15. (With R. Likert and R. Norman) How to increase a firm's lead time in recognizing and dealing with problems of managing its human organization. *Hichigan Business Review*, January 1969, <u>21</u>(1), 12-17.

- (With S. E. Seashore) Changing the structure and functioning of an organization. In W. M. Evan (Ed.), Organizational Experiments. New York: Harper and Row, 1970.
- 17. System 4: The ideas of Rensis Likert. New York: Basic Books, 1970.
- 18. (With R. Likert) Conflict strategies related to organizational theories and margement systems. In Attitudes, conflict, and social change. New York and London: Academic Press, 1972.
- 19. (With J. L. Franklin) Survey-guided development: Using human resources measurement in organizational change. Journal of Contemporary Business, Summer 1972, 1(3), 43-55.
- 20. The survey of organizations: A machine-scored, standardized questionnaire instrument. Ann Arbor: Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, 1972.
- CD techniques and their results in Z3 organizations: The Michigan ICL. study. Journal of Applied Behavioral Science, 1973, 9(1), 21-43.
- 22. (With R. Likert) Improving the accuracy of P/L reports by estimating the change in dollar value of the human organization. Michigan Business Review, March 1973, 25(2), 15-26.
- 23. (With J. L. Franklin) Basic concepts of survey feedback. In Pfeiffer and Jones (Eds.), Handbook for group facilitators. 1974.
- 24. Systems of arganization: Management of the human resource. Ann Arbor: University of Michigan Press, 1975.
- 25. (With J. L. Franklin and F. A. Percorella) Matching problems, precursors, and interventions in OD: A systemic approach. Journal of Applied Behavioral Science, 1975, 11, 391-409.
- 26. (With P. A. Pecorella) A current value approach to human resources accounting. Accounting Forum, December 1975, 25-40.
- 27. Hierarchy, function, and the generalizability of Teadership practices. Organization and Administrative Sciences, 1975. 6(2-3), 167-180. Also in J. G. Hunt and L. L. Larson (Eds.), Leadership frontiers. Kent, Ohio: Kent State University Press, 1975.
- 28. (With D. L. Hausser) An empirical typology of work groups in civilian and military organizations. Unpublished paper.
- (With D. L. Hausser) Work group types and intervention effects in organization development. Administrative Science Quarterly, March 1977, 22, 76-94.
- 30. (With G. J. Spencer) Structure and process in a social systems framework. Organization and Administrative Sciences, 1977, 8(1), 13-21.

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May 1983 - 7

- 31. Organizational development: Promises, performances, possibilities. Organizational Dynamics, 1976, 4(4), 50-62.
- 32. Work-related attitudes of military personnel. Social Psychology of Military Service, 1976, 6. Also reproduced by Sage Publications, Inc., NWC 77-78, ESP 504, T-9, R-a.
- 33. (With J. L. Franklin) American work values and preferences. Michigan Business Review, March 1977, 29(2), 14-22.
- 34. (With S. E. Seashore) Durahility of organizational change. In R. T. Golembianski and L. Blumberg (Eds.), Sensitivity training and the laboratory approach: Readings about concepts and applications (3rd ed.). Itasca, Ill.: F. E. Peacock, 1977.
- 35. Work humanization in practice: What is business doing? In W. J. Heisler and J. W. Houck (Eds.), A matter of dignity: Inquiries into the humanization of work. Notre Dame: University of Notre Dame, 1977.
- 36. (With G. J. Spencer) Structure and process in a social systems framework. In E. A. Burack and A. R. Negandhi (Eds.), Organizational design: Theoretical perspectives and empirical findings. Kent, Ohio: Kent State University Press, 1977.
- 37. What would make 11,500 persons quit their jobs? Organizational Dynamics, Winter 1983.

Mary 1983 - 8

## Vita - D. Bowers

### MAJOR RESEARCH REPORTS

- 1. (With M. Patchen) Factors determining first-line supervision. Survey Research Canter, 1960.
- (With S. E. Seashore) Study of Life insurance agents and agencies. Report I: Methods. Survey Research Center, 1961.
- (With S. E. Seashore) Study of life insurance agents and agencies. Report II: Descriptive summary-comparison between better and poorer performing agencies. Survey Research Center, 1962.
- 4. (With N. Creswell) Study of agents and agency management: Report of field research. Survey Research Center, 1963.
- 5. A marrative report on the role of the working foreman. Survey Research Center, 1965.
- 6. (With S. E. Seashore) A study of Peace Corps declinations: Two narrative reports. Institute for Social Research, 1963.
- 7. A report on leadership and personal background of respondents. Center for Research on Utilization of Scientific Knowledge, 1966.
- 8. (With K. R. Student) A test of the two-factor theory of job satisfaction. Institute for Social Research, 1967.
- 9. Cats from ICLS pilat year. Center for Research on Utilization of Scientific Knowledge, 1967.
- 10. Changes is core profiles. 1965-1967, for continuous process manufacturing sites. Canter for Research on Utilization of Scientific Knowledge, 1967.
- 11. Core questionnaire format and position response biss. Center for Research on Etilization of Scientific Knowledge, 1968.
- 12. A theory of system functioning and organizational change. Center for Research on Utilization of Scientific Knowledge, 1968.
- 13. Predicting arganization effectiveness scrass time. The Executive Study Conference, 1968.
- 14. Measurement-based organizational development. Internal Revenue Service, 1968.
- 15. The purpose and functioning of ICLS. Institute of Internal Auditors, 1968.
- 16. Variables in managerial behavior affecting personnel retention. Navy Conference on Personnel Retention Research, December 1968.
- 17. Use of the results of social science research. Office of Aerospace Research, 1969.

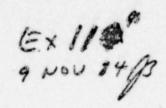
May 1983 - 9

- Symposium on organizational behavior in the air force. U.S. Air Force Academy, 1969.
- 19. Professional Personnel Management Course. Air University, Maxwell Air Force Base, 1969.
- 20. The effects of group composition and work situation upon peer leadership. Institute for Social Research, September 1969.
- 21. Three studies in change: An account of data-based organization development activities in three continuous process firms. Institute for Social Research, September 1969.
- 22. Work organization as dynamic systems. Institute for Social Research, September 1969.
- 23. Perspectives in organizational development. Institute for Social Research, September 1970.
- 24. The survey of organizations: Toward a machine-scored, standardized questionnaire instrument. Institute for Social Research, December 1970.
- 25. (With R. Likert) Conflict strategies related to organizational theories and management systems. Institute for Social Research, December 1970.
- 25. Change is five plants: An analysis of the current state of development afforts n the GM-Institute for Social Research project. Institute for Social Research, May 1971 (restricted distribution).
- 27. Development techniques and organizational change: An overview of results from the Michigan inter-company longitudinal study. Institute for Social Research, September 1971.
- 28. Development techniques and organizational climate: An evaluation of the comparative importance of two potential forces for organizational change. Institute for Social Research, October 1971.
- 29. (With J. L. Franklin) Survey-guided development: Using human resources measurement in organizational change. Institute for Social Research, 1971.
- 30. Change agentry in the third year of the GM-Institute for Social Research project: Some comparative analyses of content and style. Institute for Social Research, June 1972.
- 31. (With J. L. Franklin and P. A. Pecorella) A taxonomy of intervention: The science of organizational development. Institute for Social Research, May 1973.
- 32. (With J. A. Drexler) Navy retention rates and human resources management. Institute for Social Research, May 1973.
- 33. Values and their impact for navy and civilian respondents. Institute for Social Research, June 1973.

May 1983 - 10

- 34. (With J. L. Franklin) The navy as a functioning organization: A diagnosis. Institute for Social Research, June 1973.
- 35. Organizational practices and the decision to re-enlist. Institute for Social Research, December 1973.
- 36. Expressed preferences and organizational practices experienced by navy officers. Institute for Social Research, December 1973.
- 37. Organizational diagnosis: A review and a proposed method. Institute for Social Research, September 1974.
- 38. (With J. G. Bachman) Military manpower and modern values. Institute for Social Research, October 1974.
- 39. (With D. L. Hausser) Group types and intervention effects in organizational development. Institute for Social Research, November 1974.
- 40. Multivariate diagnostic processes: The PANAL program. Institute for Social Research, June 1975.
- 11. Havy manpower: Values, practices, and human resources requirements. Institute for Social Research, June 1975.
- 42. (With J. L. Franklin) Surrey-guided development: Data-based organizational change. Institute for Social Research, June 1975.
- 43. Work values and preferences of afficers and enlisteds in the U.S. Army. Institute for Social Research, September 1975.
- 44. (With P. A. Pecorella) Future performance trend indicators: A current value approach to human resources accounting. Institute for Social Research, September 1976.
- (With P. A. Pecorella) Foture performance trend indicators: A current value approach to human resources accounting. Report II. Institute for Social Research, November 1976.
- 46. (With P. A. Peccrella) Future performance trend indicators: A current value approach to human resources accounting. Report III. Institute for Social Research, January 1977.
- 47. (With A. S. Davenport and J. B. LaPointe) Future performance trend indicators: A current value approach to human resources accounting. Report IV. Institute for Social Research, June 1977.
- 48. (With A. S. Davenport and G. E. Wheeler) Comparative issues and methods in organizational diagnosis. Institute for Social Research, November 1977.

- 69. (With A. S. Davenport and J. B. LaPointe) Future performance trend indicators: A current value approach to human resources accounting. Report V: The value attribution process. Institute for Social Research, January 1978.
- Buman resources accounting for the military. In L. A. Broedling and R. Penn (Eds.), Military productivity and work activation: Conference proceedings. Final report to Navy Personnel Research and Development Canter, San Diego, August 1978.
- SI\_ (With J. L. Franklin and F. A. Peccrella) Fature indicators of newy performance: An extension of current value concepts to navy data. Institute for Social Research, July 1978.
- (With A. S. Davenport) Future performance trend indicators: A current value approach to human resources accounting. Report VII: Utilization problems tied to methodological issues. Institute for Social Research, August 1978.
- (With P. A. Pecorella, A. S. Davenport, and J. B. LaPointe) Forecasting performance in organizations: An application of current-value human resources accounting. Institute for Social Research, August 1978.
- 54. (With G. H. H. Ross) A model of inter-organizational influences on organizational processes. Report 1. Institute for Social Research, August 1979.
- -55. (With A. S. Davenport, H. St. Claire, and R. Farrell) A model of interorganizational influences on organizational processes. Final report on hierarchy and models of command: Influences on army unit effectiveness. Institute for Social Research and Vector Research, Inc., April 1980.
- 56. (With L. M. Jones and S. H. Fuller) Management and employee relationships within the Federal Aviation Administration. Vol. I. Institute for Social Research and McKinsey and Co., Inc., March 1982.
- 57. (With L. M. Jones and S. H. Fuller) Management and employee relationships within the Federal Aviation Administration. Vol. II: A compilation of data supplementary to Vol. I. Institute for Social Research and McKinsey and Co., Inc., March 1982.
- 58. (With L. S. Kraux and D. R. Denison) Cases of Project Upgrade: Results of Interview Studies is 14 Fleet Units. Technical report to the Office of Naval Research, 1983.
- 59. (With L. S. Krauz) Organizational Correlates of Project Upgrade. Final report to the Office of Naval Research, 1983.
- 60. (With D. R. Demison) Forecasting unit performance: a current value to human resources accounting system for Navy organizations. Final report to the Office of Naval Research, 1983.



bcc: B. L. Barnes

L. P. Leach SmillO B. L. Kaplan Central File C. F. Obenchain File g

July 27, 1984

Dr. David Bowers Institute for Social Research 426 Thompson University of Michigan Ann Arbor, Michigan 48109

MANAGEMENT-RELATED ALLEGATIONS AT COMANCHE PEAK - Oben-27-84

Dear Dr. Bowers:

I am writing to you on behalf of Bruce Kaplan who is on vacation for the next week. He wanted me to express his pleasure at your accepting a role in our current project with the Nuclear Regulatory Commission. We are especially appreciative of your willingness to respond within our rather tight time constraints.

First, by way of introduction, I would like to give you some background information regarding the project. At a nuclear power plant nearing completion, allegations have been put forward by a number of individuals involved in the QA/QC area (Quality Assurance/Quality Control) that management created an atmosphere of intimidation during construction of the plant which inhibited QC inspectors from performing their duties according to written standards and regulations, to the extent that the safety of the plant might be compromised. In the context of issuing an operating license to this plant the NRC is taking depositions from those alleging irregularities and from the applicant company in anticipation of a formal hearing. These depositions are being reviewed by a team of experts from both the nuclear industry and academia to make a judgment as to the accuracy of the allegations.

As part of their own management of the situation, the applicant company conducted a survey of its QA/QC personnel in an attempt to determine the atmosphere/climate in which they perceived themselves to be operating. A copy of the set of returned questionnaires has been sent to you for analysis. It is my understanding that you and your staff will undertake an analysis of the responses and draw whatever conclusions you can reasonably make from them. This study will include a statistical analysis of the checked responses and forms. Dr. David Bowers July 27. 1984 Oben-27-84 Page 2

The basic question you are to attempt to answer is: did management by its actions create an atmosphere of intimidation for the QA/QC inspectors such that they performed their duties in a way that there is some likelihood of impact on the safety and quality of the plant. This is distinct from intimidation that some inspectors may have felt from actions on the part of crafts personnel. The intent is to establish if a pattern of intimidation existed, as opposed to whether certain individuals were in fact intimidated. There is also some distinction to be made in terms of what is really a climate of intimidation compared to what might be described as a fairly hard-nosed management style in the plant.

This issue of a definition of "intimidation" should be considered. Naturally the applicant company tends to see all its actions as management style. Those making the allegations tend to see all these same management behaviors as intimidation. A third view is to define intimidation as involving some violation of written procedures for construction, inspection or testing due to some incident, action, or statement on the part of management. It is this third view that is probably the most useful and applicable definition. In any case, an explicit definition of climate of intimidation should be included in your report.

I expect that in order to draw your conclusions from the questionnaires you would like to have some information regarding the development and administration of the questionnaire itself, such as the process of sample selection, response rate, provisions of anonymity, etc. Please address these questions to me as soon as possible by phone at 208/526-9696 and I will see that you get the needed information.

We need your completed report in our hands by August 5, 1984. It should be mailed to: Bruce Kaplan, EG&G Idaho, Inc., WCB, P.O. Box. 1625, Idaho Falls, ID 83415.

Under separate cover, Bill Stratton has mailed to you via Jane Delaney a request for a copy of your resume and a "Statement of Non-Disclosure" to be signed by all individuals working with the questionnaires. Both the resume and the signed statements should be returned to me as soon as possible.

Should you have any questions or need attitional information of any kind, please don't hesitate to contact me at 208/526-9696.

Dr. David Bowers July 27, 1984 Oben-27-84 Page 3

Again, we are very pleased with your involvement in this project. Both Bruce and I look forward to working with you.

Very truly yours,

Benchi

C. F. Obenchain, Manager NRC Technical Assistance Programs Branch

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cc: B. Stratton, ISU J. O. Zane, EG&G Idaho survey analysis - (1979) 9 Nov 97

The following is an analyisis of a survey involving QC inspectors which was administared in 1979. This information provides a historical perspective on the question under investigation. The purpose of the survey seems to be investigatory in nature, inquiring into the feelings and perceptions of QC inspectors about their jobs, quality of supervision, support of QC management, and a general expoloration into probels experiences or observed at the Comanche Beak site.

Becuse the survey was not designed to address the specific concerns of thes as TO which questions are relevant TO THIS STUGG study there is a judgmental process which includes sorting those questions in the mark precess are survey which seem to be germain to the question and those which do not appear to be relevant. A careful inspection of 10% of the questionnaires was conducted to ascertain whether or not the questions is excluded would also exclude relevant fnformation. initial of The Survey

An inial inspection, led to the conclusion that three questions on the survey seemed relavant to the study; questions If (2), question 2, and question 5. Cur careful inspection of the 105 sample led to the conclusion that no relevant data would be excluded by eleminating the other questions.

A content analysis was performed on the responses to these 3 questions and summarized below.

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TOTAL NUMBER of Respondents N= 126. Responses To questions Do not represent Yom many people responded. Some Deutified more Heins than others. Some PID DOT Respond. THE NUNTBERS represent THE Frequency with with the stem or There was mentioned.

I.d (2) WHAT MAKES YOU UNCONFORTABLE ABOUT YOUR LOB?

No. of responses -

Azocetural Violations. 5 Difficulties Due To 5 Differences in Policies between BBR & TUGCO. Lack of Feedback on dob 3 REFORMENCE Audiems w Arsonalities 4 Communication. (Poor) 5 CEAST. Too Accountion ariented - QC INTERSPICE. 4 Wages - Megoinies 3 The consistent Application of Percodures / Parcies. 10 Audiqueure Procedures. JOB SECURITY. (JOB COMPLETION) 12 Anitude of ac inspector. 3 UNSophisticated / UN Propessional MENT. 12 (Born in PROB . Soluing. \$ HE.

\* Nor a Predominance of Procesoral violations. \* Issues in The Skill, Sophistication of Management. (communication, consistency, interface Mgur.).

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Analysis Question 1 d (2). All responses on This question were listed without modification of af uppeding. Frequencies were THOUGHTED on. listed responses that were essentially the Same. Iters were THOUGHTED on. Suptressized to retain the Dasic Theme of responses but without destroying Heurs which essen were intended to communicate a different kenoge. For example, seems relating to quality of wangement were grouped his their heading regardless of the specific stample of phill descussed by The respondent.

Eleven defferent categories energed in response to the question. Three were related to The technical too payment by impectors. (procedural vialations, seconsistant and antiguous procedures, and differences in polices between Onoran and Root & Moco). of These why 20 regenses in total make up haponen on The service other issues such as linge mequities and tob security are management and human resources issues There were saw repours (12) indecated preserves were quality & avangement and perpersion. There is an obvious small number of responses that indicated concerns with pocedural violaters whele technical crocerus whe indicated on the survey these where straightforward technical sesues and bid act explicitly reflect on The climate. In an "mitundating chinate" where a get pervaising attitude of " cutting convers" exists 2 cooned expect to find wore uncontableners with biolations than inducated by these responses. There is lettle question that issue surfaces by this questions reflect provagement issues of communication, attrifue, and confidence by subsidurate in The leadably at CRSET.

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Supervision. & Supervision Support. Rating The level of perceived Supervisory Support. Excellent - 5 Satisfacrocy - 25 9000 - 18 Inadequate - 23 SHIERS SHIERS SHIERS marginal - 28 Positive Response Favorable 48 200 ----Negative 222 \$ 51. (UNFAcerable) 0 Responses indicate almost a split in Feelings of level of supervisory support. for. inspectors. There is an issue in The Relationship bet. Inspectore. & supervision. Inspectors feel That Superidizer. 1. Use POOR Jurgment. 2. Do not KNOW THE ANSwers They are supposed to KNOW. 3. general quality of supervision is Low 4. Do not Hawage The QC-CRAFT INTERFACE \* Special Individual Problems were mentioned. Analysis of Question 2. Thes question asks specifically atmit superousy . ) support and the gradity of supervision. On the support question The response flow 99 individuals as split almost 50.00. There were essentially 48 positive responses and 51 vegetive regionses indicating that about half of the respondents yel that find sugeries sugert of QC injectors is not what it could or pluried lie. The qualitations jugats indicate that there is a relationship jucklein between sugerousing and 000 suggestor. Ingrators fall that about and judgement of le maninatere . I an a trais -1 1 ---

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ves	wurder Provoleurs expirit, at Coses.	-1 -
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2	PAY & WAGE INEquities -	44
•	TECHNICAL TRAINing of inspectors.	20
• .	Communication.	31
	INTERFACE bet. QC/CRAPT. (UNDERSTANDing de QC FUNCTION) Teamuedorie	25
30 SHEE 100 SHEE 106 SHEE	Quality of supervision (Desking us/ Petsonalities, arritudes_)	)17
	POOR MGILT. (BER, TUGCO')	10
6	Morale	20.
	Fear factor, firings. for petty Don't make waves, reasons.	4
C .	Organization! Inconsistencies. Too many levels,	3
	Nor People oniented.	GI
	Abocedures need Re- whiting	5
1	# High No. of responses INDicate Dissortisfiction w/	
1.	INTERFACES, TECHNICAL TRAINing	
	* Quality & Management / Supervision.	
	* VERy Few on "Fear", "Intimidation". etc.	
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Analysis of question 5. Thes question asked generally what problems exist in the exc againston. Expectations are that some overlap world exist acloss these questions (1d(2), 2, and 5). again Iten was listed, synthesystand categoris created to Anylify the data. Elevan categories energed. Texportant to note that the predominant problems as seen by impedios were Pay wegutier, Commentari, Interface villo Crafe, and Technical Training of inspectors. again, the quality of variagement and Supervision is prepartant are judged is reflected by toucerus in the high frequency categories our feequency tem were "Fear Factor", "Procedural deficultien", and "organizational structure " The most over itan affecting " clemate of internedation" ded not sleave up in reporce to question 5.

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Common steries - recurring issues \* PERCEPTIONS APOUT THE QUALITY & Skill of Supervision. \* QC - CRATT. INTERFACE - TELMWOOT y communication. \* Improved Human (people) orientation. THESE HEWS CONTRIBUTE TO " Climate". Supervision way be primary source - influencing Perceptions of org. & Top Agent. In Des not Represent overall the Morale, esprit etc. But does not indicate a pervaise "Intimidating" climate. There Appears To be guite A Bit HATS of data \* Openness about The Qual of Supervision; dissetisfaction Pry, se. and other climate fo abour Overall, The data is not unlike The profile of other That is problems seen similar, are most likely the resurt of management practices which COULD AND SCHULD BE Improved. While THE responses To The questions do indicate a slightly more negative set of responses , with regard to quality of management & Supervision, The issues of communication, and interfaces are not uncommon IT works be different to Ascentain the efistence of a " climate of intimitation." Using The dette data. from The Survey. The survey has its limitate in this respect.

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