

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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GENERAL PUBLIC UTILITIES CORPORATION, :  
JERSEY CENTRAL POWER & LIGHT COMPANY, :  
METROPOLITAN EDISON COMPANY and :  
PENNSYLVANIA ELECTRIC COMPANY, :

Plaintiffs, :

CIVIL ACTION  
NO. 80 CIV.  
1683 (R.O.)

-against-

THE BABCOCK & WILCOX COMPANY and :  
J. RAY McDERMOTT & CO., INC., :

Defendants. :

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Deposition of the Defendant, THE

BABCOCK & WILCOX COMPANY, by JAMES FRANKLIN  
WALTERS, taken by Plaintiffs, pursuant to  
notice, at the offices of Kaye, Scholer,  
Fierman, Hays & Handler, Esqs., 425 Park  
Avenue, New York, New York, on April 13,  
1981, at 10:00 a.m., before Charles Shapiro,  
a Certified Shorthand Reporter and Notary  
Public of the State of New York.



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A p p e a r a n c e s :

KAYE, SCHOLER, FIERMAN, HAYS & HANDLER, ESQS.,  
Attorneys for Plaintiffs,  
425 Park Avenue,  
New York, New York

BY: RICHARD C. SELTZER, ESQ.  
and  
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of Counsel

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Attorneys for Defendants,  
One Chase Manhattan Plaza,  
New York, New York 10005

BY: DANIEL F. KOLB, ESQ.  
and  
LINDA E. CHATMAN, ESQ.,  
of Counsel

ALSO PRESENT:

DAVID TAYLOR  
oOo

IT IS HEREBY STIPULATED AND AGREED by and  
among the attorneys for the respective parties  
hereto that the sealing, filing and certifica-  
tion of the within deposition be, and the same  
hereby are, waived; and that the transcript may  
be signed before any Notary Public with the same  
force and effect as if signed before the Court.

IT IS FURTHER STIPULATED AND AGREED that  
all objections, except as to form, shall be  
reserved to the time of trial.

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JAMES FRANKLIN WALTERS,  
having been first duly sworn, was examined  
and testified as follows:

EXAMINATION BY

MR. MacDONALD:

Q Will you state your full name, please,  
Mr. Walters?

A James Franklin Walters.

Q Your address?

A 402 Lakewood Street, Lynchburg, Virginia.

Q Who is your current employer, Mr.  
Walters?

A Babcock & Wilcox.

Q How long have you been employed by  
B&W?

A Since February of '69.

Q Who was your employer before B&W?

A Brown Engineering Company.

Q For how long did you work for Brown  
Engineering?

A Four and a half years.

MR. MacDONALD: I would like to mark  
as GPU Exhibit 126 a copy of the resume  
of James Franklin Walters that was used in Mr.

1  
2 Walters' Rogovin deposition.

3 (Resume of James Franklin Walters  
4 marked GPU Exhibit 126 for identification,  
5 as of this date.)

6 BY MR. MacDONALD:

7 Q Mr. Walters, is this an accurate  
8 representation of your educational and work  
9 related experience?

10 MR. KOLB: Could I ask whether you mean  
11 accurate as of the date it was used?

12 MR. MacDONALD: Accurate as of the  
13 date it was prepared.

14 A Yes, it is.

15 Q What is your current position at B&W?

16 A I am a Project Engineer in a Project  
17 Engineering Unit.

18 Q That is in the Engineering Department?

19 A Yes.

20 Q So you are no longer in the Nuclear  
21 Service Department?

22 A That's correct.

23 Q Have you ever had occasion from the  
24 time you have been at B&W to produce copies of  
25 your resume for use other than the one we see

2 here by the company?

3 A Yes, I believe -- my resumes have been  
4 used for -- by the company.

5 Q Is the resume a copy of what we see  
6 here or was it in a different form?

7 A It was in a different form.

8 Q Who was that resume produced for?

9 A I have no knowledge of the specific people  
10 it was prepared for.

11 Q When was it made up?

12 A I am not aware of that.

13 Q Did it contain more detail than we see  
14 on GPU Exhibit 126?

15 A Yes, I believe it did.

16 Q What additional information was con-  
17 tained on that resume that you prepared that is  
18 not in GPU Exhibit 126?

19 A I don't remember in detail.

20 Q In substance, if you can recall.

21 A I think mainly it was for a slightly dif-  
22 ferent purpose, it was to be used as --

23 MR. KOLB: The question is only what  
24 was in it, not what it was used for.

25 A Well, it covers essentially the same

2 information, a little more detail on the start-ups,  
3 specific job identification at Oconee, at Arkansas,  
4 a little more specific on some of the detail  
5 problems I had been involved with.

6 Q What was the specific purpose this  
7 resume was produced for?

8 A From time to time, B&W offers people to our  
9 customers for assisting their engineers, on-site  
10 engineers, for work and that's what it was used  
11 for.

12 Q In other words, it was used to give  
13 to customers to judge the qualifications of the  
14 personnel who were to be assisting them?

15 A Yes.

16 Q Did other individuals within your  
17 section at B&W at the time you prepared this also  
18 prepare a resume?

19 A I don't remember specifically.

20 Q Were you requested by your superior  
21 at the time to prepare this resume?

22 A As I remember, yes.

23 Q And others in your unit were also?

24 A Yes.

25 Q Were these resumes then put together

1  
2 in a package, do you know, to be shown to the  
3 customers or were they shown to the customer  
4 individually?

5 A I have no knowledge of exactly how they were  
6 shown to the customer.

7 Q Have you seen a copy of anybody else's  
8 resume that was prepared as a result of the  
9 request?

10 MR. KOLB: Meaning the same type of  
11 request we were just discussing?

12 MR. MacDONALD: Correct.

13 A I believe I have seen some of the engineers  
14 that worked for me.

15 Q Was a description prepared of the  
16 unit or the section responsibilities or expertise  
17 aside from individual resumes?

18 A I have no knowledge of that.

19 Q You did not work on anything like  
20 that?

21 A No.

22 Q You only prepared your own resume?

23 A Yes.

24 Q Was a copy of that resume turned over  
25 in the course of this lawsuit, do you know?

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A I have no knowledge of whether it was or not.

Q Do you have a regular document retention policy at B&W presently?

A Yes.

Q Could you tell me what that policy entails?

A What documents are we talking about?

Q Documents that are prepared in the regular course of business.

MR. KOLB: He is talking about a company policy now, something that would be the general practice of the company as you understand it.

THE WITNESS: Yes.

A Yes, we have a policy and procedures manual for production of related documents in the areas I was working in.

Q What do those policies call for in terms of retention of documents?

A It varies from document to document. Generally, I remember that there are criteria for filing in the Central Files specific documents and mainly in the job I was in we -- most of my

2 stuff was filed in the Service Library, itself.

3 Q Have there been any specific  
4 directives after the TMI-2 accident of March  
5 28th, 1979 regarding retention of documents at B&W?

6 MR. KOLB: To the extent you know.

7 MR. MacDONALD: Always to the extent  
8 that he knows.

9 MR. KOLB: Yes. It's a very broad  
10 question. That's why I made the statement  
11 I did.

12 A I don't remember.

13 Q Have you received any memo or directive  
14 or have been told verbally of any retention policy  
15 on documents that you either write or receive in  
16 your normal course of business at B&W since the  
17 TMI-2 accident?

18 MR. KOLB: Would you read the question  
19 back.

20 (Record read.)

21 A I don't recall of any.

22 Q Do you personally have a document  
23 retention policy of your own that you have de-  
24 veloped as to which documents you retain in your  
25 files and which you may discard?

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A No, I have not.

Q Are the guidelines that you use in document retention generally the ones that are in the B&W policies and procedures directive?

A Generally.

Q And in the policy and procedures directive is there any guidance on what documents to retain and which to discard?

A Not that I recall.

Q So the policies and procedures directive deals with where documents should be sent, i.e., if to Central Files or maintained by the individual?

MR. KOLB: You are asking for the state of his recollection as to the procedures.

MR. MacDONALD: Yes.

MR. KOLB: Just the best you know now.

A Yes, that's to the best of my knowledge.

What is your policy in terms of which documents you retain in your files since the TMI-2 accident?

MR. KOLB: Just to be clear, are you talking about all documents or are you

2 talking about documents with respect to  
3 TMI-2 or some specific subject?

4 MR. MacDONALD: All documents.

5 MR. KOLB: O.K.

6 A I don't believe I have ever developed a  
7 specific policy for specific documents.

8 Q Do you have any general policy in terms  
9 of what you maintain in your files as a matter  
10 of regular course of business?

11 A Yes, I retain copies of memos that I have  
12 written to other people within the company on  
13 general subjects and information or memos I have  
14 received from people within the company usually  
15 listed by subject matter.

16 Q Are the memos that you retain which  
17 you yourself authored kept in a chronological  
18 file?

19 A Yes.

20 Q For how long have you maintained the  
21 chronological file?

22 A I believe it was either '77 or '78. I  
23 forget the exact year.

24 Q Have you received any specific directives  
25 since the TMI-2 accident regarding maintenance

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of TMI related material?

A What do you mean by maintenance?

Q Retention.

A Yes.

Q What was that directive?

MR. KOLB: If I may.

(Witness confers with counsel.)

MR. KOLB: I just inquired of Walters to be certain, I thought and I believe I am correct, the material he is referring to came from counsel and that as far as we are concerned is privileged.

MR. MacDONALD: The fact that he has received such a directive would be all I am looking for.

MR. KOLB: I think you asked that and he has given you an answer.

I understand if there is a communication you are entitled to know there was such a communication but it is as to the content I raise my objection.

BY MR. MacDOLAND:

Q So it is your testimony you have seen some directive after TMI that relates to

1  
2 maintenance of TMI related files?

3 A Yes.

4 Q So before when you testified about  
5 ten minutes ago that you hadn't received any  
6 directive after the TMI-2 accident regarding  
7 retention of your files, that statement was not  
8 correct?

9 MR. KOLB: Now, first of all, whatever  
10 his prior statement was the record speaks  
11 for itself on that.

12 Secondly, you will recall that I  
13 asked earlier a clarifying question as to  
14 whether you were asking about specific  
15 retention directives as to TMI or whether  
16 you were asking generally.

17 You indicated you were asking  
18 generally.

19 MR. MacDONALD: That's correct.

20 MR. KOLB: I think, therefore, the  
21 implication of your remark is uncalled for  
22 because of the way you phrased your prior  
23 questions and because of the way you  
24 responded to my inquiry.

25 Let me say again, though, whatever

1  
2 his prior testimony is, it speaks for  
3 itself, and if you want to go back to  
4 question him about it, I will ask to have  
5 the record read back.

6 MR. MacDONALD: I think we will  
7 glean from his prior testimony and my  
8 questions it was a general question before  
9 you even inserted whether or not it was  
10 generally or specifically and his answer  
11 was, I think the record will correctly  
12 reflect he received no directive after the  
13 accident regarding the maintenance of  
14 files at B&W and now he said he has  
15 received a directive relating to TMI  
16 related files.

17 Indeed, one is a subset of the other  
18 and if in fact the answer to the first  
19 question should have been yes, all I am  
20 attempting to do is to go back and establish  
21 that there had been directive related to  
22 TMI related documents and indeed his  
23 prior answer as to generally should have  
24 been yes.

25 MR. KOLB: I think that you will have

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to go back and deal with the prior record

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however you please. I don't agree with

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your characterization of his prior

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testimony. We have been sitting here

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listening to the testimony and there is no

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purpose debating it beyond that.

8

I think the record is a good one on

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the subject and you had your answers on both

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questions, both in general and in specifics.

11

BY MR. MacDONALD:

12

Q Have you maintained since the TMI-2

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accident all TMI related files?

14

A Yes.

15

Q Did you turn those files over to

16

counsel at some time after the accident?

17

A Yes.

18

Q Did you turn any other material over

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to counsel after the TMI-2 accident?

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MR. KOLB: These would now be documents

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other than documents relating to the TMI-2

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accident, is that what you are asking about?

23

MR. MacDONALD: Other than documents

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relating to TMI as a TMI-1 or TMI-2, not

25

specifically relating to the accident on

1  
2 March 28th, 1979, as it related to the day  
3 of the accident.

4 MR. KOLB: You are asking about something  
5 that didn't relate to TMI, did he turn over  
6 anything else besides things related to  
7 TMI.

8 MR. MacDONALD: My question dealt  
9 with whether he turned over all TMI related  
10 material and the answer I think was yes.  
11 I want to find out if he turned over any  
12 other material aside from his TMI related  
13 material.

14 MR. KOLB: O.K. You can answer that.

15 A Yes, I think there are other materials that  
16 were turned over that were not specifically related  
17 to TMI.

18 Q Do you produce on any regular basis  
19 activity reports?

20 A Yes.

21 Q For how long have you done that?

22 A Three, four years.

23 Q Since the time you were in Plant  
24 Performance Services?

25 A Yes.

1

2

Q And before that time?

3

A Not on a regularly scheduled manner, or any that I retained.

4

5

Q So it's been since 2/77 that you generated these particular monthly activity reports?

6

7

8

A I believe that's correct, yes.

9

Q Who are those reports sent to?

10

A My immediate supervisor, Don Hallman.

11

Q Has he been your supervisor since

12

the time you became Supervisory Engineer for Plant Performance Services?

13

14

A Yes, until January of this year.

15

Q Which is when you changed to Project

16

Engineer?

17

A That is correct.

18

Q Who do you report to now?

19

A Bob Baker.

20

Q Is Project Engineering a unit in the

21

Engineering Department?

22

A Yes, it is.

23

Q What section is it in?

24

A It's in the Project Engineering Section.

25

There is two groups under Project Engineering,

1  
2 start-up plants -- excuse me, operating plants  
3 and units that haven't been started up yet.

4 Q Were your monthly activity reports,  
5 while you were a member of Plant Performance  
6 Section Services Section, produced in the course  
7 of the lawsuit turned over to counsel? Excuse me.

8 MR. KOLB: Which do you mean?

9 MR. MacDONALD: I will say turned over  
10 to counsel because I don't know whether Mr.  
11 Walters will know whether they are produced  
12 or not.

13 MR. KOLB: Let me say beyond the very  
14 general questions you inquired about, you  
15 put to the witness earlier, I think it is  
16 inappropriate for you to be asking specific  
17 questions as to which particular documents  
18 he may or may not have turned over to  
19 counsel as that gets into the whole question  
20 of how we have and have not dealt with  
21 particular witnesses and particular documents.

22 This particular question is simply  
23 the point where I am going to draw the line  
24 and I think that if you just keep to the  
25 general and ask questions where we are not

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talking about attorney-client privilege  
that I will have no problem.

MR. MacDONALD: I don't want to deal  
in the specifics of what was discussed  
between the attorney and the client. What I  
want to find out is if there are any relevant  
documents pertaining to this particular  
lawsuit especially monthly activity reports  
which we have gotten as of late before  
depositions or after depositions, but what I  
want to find out is whether or not he retains  
such documents which he testified to and  
whether he turned them over to counsel because  
if he did not we sure would like to see those  
particular monthly activity reports regardless  
of communications that have gone on between  
counsel.

I don't want to deal in specifics into  
each year, but this is general and I want to  
find out if he indeed turned over these  
documents.

MR. KOLB: I want you to understand  
my objection is not directed at whether you  
should or should not have access to these

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2 reports, my complaint is only with the  
3 phrasing of the question because it calls  
4 for the transmittal of the materials, what the  
5 content of the transmittal was between the  
6 client and the lawyer. You can ask the  
7 questions in ways that will permit you to  
8 obtain the information you are looking for  
9 without getting into communications with  
10 counsel, I am sure, and I will ask you to  
11 do it that way.

12 MR. MacDONALD: Well --

13 MR. KOLB: Or in those ways.

14 MR. MacDONALD: Let's proceed and see  
15 where we go.

16 BY MR. MacDONALD:

17 Q Do you still maintain a file of monthly  
18 activity reports, Mr. Walters?

19 A Yes, I do.

20 Q Have you ever parted with that file  
21 at any point in time during the last year and a  
22 half?

23 A Yes.

24 Q And when was that?

25 MR. KOLB: Just the time.

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MR. MacDONALD: Just the time.

A The first day of each year.

Q What happened on the first day of each year?

A Well, I had a policy of throwing away the previous year's progress reports.

Q In January of 1980, did you discard the monthly activity reports for 1979?

A Yes.

Q Did you maintain any copies of those in your files aside from -- you said you discarded a copy of the '79 progress reports in January 1980.

Are there any copies maintained elsewhere in B&W, did you send a copy of those to the central files?

MR. KOLB: You have asked three questions and I would ask you to break that down.

MR. MacDONALD: Let's start this way:

Q Did you maintain or were there maintained after January 1, 1980 any other copies of your 1979 monthly activity reports?

MR. KOLB: Are you asking about copies within the company or copies within his own

2

personal file?

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MR. MacDONALD: Within his own personal

4

files.

5

MR. KOLB: Within his own personal

6

files.

7

A No, I do not have any of the copies of those

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in my own personal file.

9

Q Within B&W?

10

A There may be. I am not aware that they are

11

still retained.

12

Q By individuals you may have sent the

13

monthly activity reports to?

14

A Yes.

15

Q You did not at the same time you

16

discarded a copy of the monthly activity reports

17

simultaneously or any time thereafter send a copy

18

to central files for filing purposes?

19

A No, I don't believe I have ever sent a copy

20

of my progress reports to central files.

21

Q In January of 1981, did you discard

22

copies of your 1980 monthly activity reports?

23

A Yes, I did.

24

Q Were any copies maintained in your

25

files?

2 A No.

3 Q Any sent to central files?

4 A No.

5 Q The only ones that might exist would  
6 be ones that other people who received copies of  
7 those reports have retained?

8 A That is correct.

9 Q The only activity reports that you  
10 currently have within your files are the copies  
11 of the reports since January 1, 1981?

12 A That's true.

13 Q If you wanted to find copies of your  
14 prior monthly activity reports, previous years,  
15 where would you go?

16 MR. KOLB: I will object as to form,  
17 but he can try to answer the question.

18 A I would go to the person that I sent a copy  
19 of those progress reports to.

20 Q Would that be Mr. Hallman?

21 A Yes.

22 Q Would there be anyone else who you  
23 sent copies of those progress reports to?

24 A No.

25 Q Were these monthly activity reports,

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1979 monthly activity reports, you discarded in January of 1980 after you received a directive to maintain TMI related documents?

A I don't remember specifically.

Q Do you have any general recollection?

A No.

Q In January 1981, when you discarded 1980 monthly activity reports, do you know whether this was after you received any directive regarding maintenance of TMI related files?

A Yes.

Q Had you already received before January 1981 the directive to maintain TMI related files?

A Yes.

Q But after January 1, 1980?

A I don't recall exactly when I received the document to retain the files.

Q But you did receive it before January 1, 1981?

A Yes.

Q Is there any material in your monthly activity reports for 1980 that related to TMI or issues that would affect TMI?

MR. KOLB: TMI generally or the TMI-2

1  
2 accident?

3 MR. MacDONALD: No, TMI-2 generally.

4 MR. KOLB: So that would include the  
5 accident?

6 MR. MacDONALD: It would include the  
7 accident obviously, anything that relates  
8 to TMI specifically or generically that  
9 would affect the 177 fuel assembly plant.

10 A I don't recall specifically that there is  
11 information but as to generic, 177 plant,  
12 possibly.

13 Q When you said "possibly," what  
14 triggers your recollection as to material that  
15 might relate generically to 177 FA plants?

16 A Well, I only meant that since I worked on the  
17 operating plants I am sure there are items relating  
18 to -- over a period of years to some of the  
19 operating plants.

20 Q That would have generic implication  
21 or application to TMI?

22 A Yes.

23 Q Does your section, your prior section,  
24 excuse me, Plant Performance Services maintain any  
25 common files or shelf files of any sort in your

2

work area?

3

A Yes, we do.

4

Q What do those files contain?

5

A Well, the most files of the group's work

6

is contained in the Nuclear Service Library.

7

Documents produced by us.

8

Q Is that all documents produced by

9

individuals within the Plant Performance Section?

10

A Major documents, not memos, that type of

11

references.

12

Q Will you make the distinction what

13

you mean by major documents as opposed to memos?

14

A Well, major documents is the responsibility

15

of the group of writing specific test procedures,

16

test specifications, that's what I am talking

17

about as major documents.

18

Q Draft operating procedures, tech

19

specs, documents like that?

20

A Yes.

21

Q What else aside from the things that

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you and I have just mentioned are maintained in

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these shelf files?

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A Well, I have subject files in my own desk

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and I have my own file cabinet that had subject

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files in them.

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Q At the time that you turned over documents to counsel, did you go through your files yourself and look for material to turn over to counsel?

A Yes, I believe I did.

Q Did you look at all your files during the course of that review?

MR. KOLB: I will object as to form.

A I don't recall whether I went through all my files. I am sure I looked through the files and responded with the ones that were -- that I thought were TMI related.

Q Did you review all your subject files?

A I don't recall.

Q Do you maintain any subject files that are generically applicable to all 177 FA plants?

A Yes.

Q Did you review those files?

MR. KOLB: Are you referring to all of them?

MR. MacDONALD: All the ones that he

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maintained that are generically applicable to 177 FA plants.

A I don't remember if I looked at all of them.

Q Did you look at some of them?

A Yes.

Q Which ones in particular, can you recall, that you looked at?

A Files of information of data, memos, that related to the TMI-2 accident that I had in my possession.

Q So when you reviewed your files, you specifically looked for documents that related to the TMI-2 accident?

A Yes.

Q Did you look for any other material that related to TMI-1 or 2 that did not relate specifically to the accident on March 28th, 1979?

A I believe I have. I don't recall specific documents.

Q Did you indeed turn over documents to counsel other than documents that related just specifically to the TMI-2 accident?

A I have.

Q Did you receive any monthly activity

1

2 reports from anybody in the GP Section during  
3 the time you were a supervisory engineer?

4 A Yes, I received reports on the engineers  
5 that worked for me.

6 Q How many engineers worked for you  
7 during the course of time that you were a  
8 supervisory engineer in GPS?

9 A Six to eight.

10 Q At any given time there were six to  
11 eight?

12 A Yes.

13 Q Did each one submit to you monthly a  
14 monthly activity report?

15 A Yes, they did.

16 Q These were in writing?

17 A Yes.

18 Q Did you then review these monthly  
19 activity reports and incorporate some of their  
20 subject matter into your monthly activity report  
21 that you sent on to Mr. Hallman?

22 A That is true.

23 Q Did you maintain copies of the monthly  
24 activity reports that were sent to you by the  
25 engineers who worked for you?

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A No, I did not.

Q Did you maintain copies of those reports for any length of time after you received them from the engineers?

A Generally it may be a month, until the next progress report was due.

Q And then you discarded that former or prior progress report?

A That's correct.

Q As of January 1981, did you, when you moved from Supervisory Engineer in PPS to Project Engineer in the Project Engineering Section, at that point in time maintain or have any activity reports from the engineers who reported to you in PPS?

MR. KOLB: Would you read the question back, please.

(Record read.)

MR. KOLB: I will object to the question because I think it is unclear what point in time specifically you are referring to.

MR. MacDONALD: I will try to rephrase it.

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BY MR. MacDONALD:

Q As of January 1981, did you maintain or have in your possession any activity reports from any of the engineers who reported to you in the PPS Section?

A I don't recall that I did.

Q Do you maintain a daily diary or any sort of daily log of your activities at B&W?

A Not specifically daily diary.

Q Do you maintain a diary or a log of your activities at B&W?

A Yes.

Q How long have you maintained such a diary?

A About three years, '78 to '80.

Q During the time that you were a Supervisory Engineer in the Plant Performance Services Section?

A That's correct.

Q Do you maintain copies of this diary after year's end?

A Yes.

Q Do you currently have copies of your diary for time periods since you became a member

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of the Plant Performance Services Section at  
B&W?

MR. KOLB: Would you repeat the  
question, please.

(Record read.)

A Yes, I do.

Q What kind of entries, as a general  
matter, do you make in this diary?

A Usually things that I wanted to keep  
for my own future reference for specific meetings  
that might occur throughout the building on  
specific subjects or problems that occur during  
the year.

Q Do you keep notes in your diary of  
what occurred at meetings?

A On a case-by-case basis.

Q Do you keep a record of who attended  
meetings that you were present at?

A That's correct.

Q Time and place of those meetings?

A Yes.

Q The subject matter?

A Yes.

Q Did you review this diary during the

2 course of your review of documents in relation  
3 to this lawsuit?

4 MR. KOLB: I object as to form  
5 again and let me state the objection so you  
6 understand this time. You are assuming  
7 there is one review.

8 MR. MacDONALD: O.K.

9 MR. KOLB: I take it that some of  
10 the questioning and the answers earlier  
11 pertained to Mr. Walters' review on a prior  
12 occasion. That's my objection. He can  
13 try to answer the question as stated, but  
14 I will have to object to it as to form.

15 You might read it back so he has it  
16 in mind.

17 MR. MacDONALD: I will rephrase it.

18 BY MR. MacDONALD:

19 Q At any point in time since the TMI-2  
20 accident, have you reviewed your daily diary  
21 to glean whether or not there are TMI related  
22 activities that you were involved in that you  
23 recorded in your diary?

24 A Yes, I have.

25 Q Did you turn that material over to

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counsel?

MR. KOLB: Again, I object because that goes into the specifics of what materials were turned over to counsel and I would simply ask you to find another way to get the information you are searching for.

MR. MacDONALD: I think that what we are dealing with here is documents that should have been or were produced, you know, in the course of this litigation. I think that I am perfectly within my rights to ask what documents he turned over.

I am not getting into the substance of any conversations that may have occurred between counsel and Mr. Walters, just whether or not he turned over any documents that related to a specific subject.

MR. KOLB: Your good intentions are not in question. You have to make your inquiry about matters which are not confidential and not a matter of communication between the attorney and

1  
2 client and I am sure you can get this  
3 information that you are looking for  
4 without getting into the communications  
5 between the attorney and client.

6 So that you are not being obstructed  
7 in any way from getting what you want, you  
8 are simply being asked to keep away from  
9 communications between counsel and client.

10 MR. MacDONALD: Well, I am asking  
11 only to the extent that there were documents  
12 that Mr. Walters produced or turned over  
13 in the course of his review for production  
14 in a lawsuit.

15 I don't see many other ways I can  
16 get to Mr. Walters to find out whether he  
17 turned over material and documents that  
18 may or may not be relevant in this particular  
19 lawsuit.

20 MR. KOLB: Of course, you can ask  
21 him questions as to what he did, up to the  
22 point where you get to counsel's  
23 communication, and then you can inquire of  
24 us, I suppose.

25 MR. MacDONALD: I just --

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MR. KOLB: That's a different question.

MR. MacDONALD: Yes, I can do that obviously, but you are not sitting in the chair right now being deposed.

MR. KOLB: Yes, I am simply pointing out there are other ways in getting the information.

MR. MacDONALD: Not from Mr. Walters.

MR. KOLB: You don't have to get everything from Mr. Walters.

MR. MacDONALD: Well, let me just ask you then if in fact material that related to the day of the accident or any other TMI related material that was in Mr. Walters' diary was in fact produced in the course of the lawsuit?

MR. KOLB: I would at this point like to just have a moment with Miss Chatman and Mr. Walters. Maybe we can just step out a second. I think we can help you shorten this.

MR. MacDONALD: Fine.

(Witness and counsel leave the

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examination room.)

MR. KOLB: I wanted to take a moment to inquire to be certain that my statement was going to be correct for the record.

First of all, the files of Mr. Walters have been examined either by counsel or by Mr. Walters on more than one occasion which was the reason I interjected my objection earlier.

We have been trying both with Mr. Walters and with other witnesses as counsel to try to be certain that full compliance with your document production was had.

In connection with the book, the diary, as it has been described Mr. Walters testified about a moment ago, that we brought some additional documents with us today because we found such documents, they are not voluminous and we would like to have them stamped in the fashion that's become acceptable in the case and turn them over to you, that would be done, I think, no later than tomorrow morning and certainly well before you have to conclude your

1  
2 examination of Mr. Walters. The material  
3 is not voluminous. That, as far as we  
4 know, based on our own review and Mr.  
5 Walters' review, gives you everything you  
6 have asked for.

7 If there is anything that turns up  
8 that you should have gotten by virtue of  
9 any further questions assuming it's  
10 appropriate that we do so in relation to  
11 your request, we will go back and look for  
12 it again but we have made a significant  
13 effort here to try to be certain that for  
14 this deposition as soon as we could you  
15 had all the necessary materials.

16 MR. SELTZER: Can we just go off  
17 the record for a second?

18 MR. KOLB: Yes.

19 MR. SELTZER: Off the record.

20 (Discussion off the record.)

21 BY MR. MacDONALD:

22 Q Mr. Walters, did you ever write a  
23 memo to Mr. Hallman after the TMI-2 accident that  
24 recounted your lessons learned from TMI?

25 A I don't believe I did.

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Q Were you ever asked to write a memo recounting any evaluation of yours of the TMI-2 accident?

A No, I wasn't.

Q Did you ever write any memo relating to that subject matter?

MR. KOLB: Relating to the accident?

MR. MacDONALD: An evaluation of the accident.

A Yes, I wrote a memo evaluating the accident.

Q When was that written?

A In '79. Somewhere around May, I believe, of '79.

Q What was the substance of that evaluation or memo?

MR. KOLB: Are you asking him to characterize the memo?

MR. MacDONALD: No, what it contained substantially.

MR. KOLB: Subjects treated, that kind of thing?

MR. MacDONALD: And any more detail he can recall about it.

1  
2 MR. KOLB: I think as to detail the  
3 memo will speak for itself.

4 MR. MacDONALD: Let's deal with the  
5 subject first and then we will go on from  
6 there.

7 A I wrote a memo that was eventually a  
8 scenario of events that occurred during the TMI-2  
9 accident.

10 Q Were you asked to write such a  
11 scenario by anyone?

12 A No, I wasn't.

13 Q Who did you send this scenario to,  
14 if anyone?

15 A I don't remember the specific names on the  
16 memo. It was addressed to Mr. Hallman.

17 Q Do you know whether that evaluation  
18 or scenario was included in a report or any draft  
19 reports by a committee of B&W called the Technical  
20 Review Committee?

21 A I do not have knowledge that it was.

22 Q Have you ever heard of the Technical  
23 Review Committee?

24 A Yes.

25 Q Do you know who was on that Committee?

2 A No, I don't.

3 Q Have you ever read any of the reports  
4 that were generated by that committee?

5 A I don't recall that I have.

6 Q Have you ever produced any documents  
7 for that committee or for any member of the  
8 committee?

9 A I am not sure since I don't remember the  
10 specific people or recall the specific people that  
11 were on that committee.

12 Q You don't know of anybody that you  
13 can recall today who was on that committee?

14 A The only person that pops in my head  
15 was Russ Ball.

16 Q Who was Mr. Ball?

17 A He was the Manager of R&D related activities  
18 or something of that nature.

19 Q Did you ever meet with Mr. Ball or  
20 any other members of the TRC at any point in  
21 time?

22 A I may have, but I don't recall.

23 Q Did you ever generate any other memos  
24 or documents after the TMI-2 accident which  
25 discussed the accident or the cause of the

2 accident?

3 A Yes.

4 Q What are those documents?

5 A I was part -- party to the development of  
6 B&W's sequence of events document or of the  
7 accident. I wrote some chapters in there, I  
8 believe.

9 Q Was that sequence of events document  
10 prepared under your direction?

11 A The latter one?

12 Q The one you are speaking about.

13 A No.

14 Q Was the first one that you spoke of,  
15 the scenario, prepared under your direction?

16 A Yes.

17 Q A moment ago you said you may have  
18 met with Mr. Ball, but you don't recall.

19 Why did you answer "I may have"?

20 A I remember meeting with Mr. Ball at some  
21 time, but I don't recall when. It was sometime  
22 after the accident.

23 Q What do you recall of the subject  
24 matter of that meeting?

25 A He was asking about the data acquisition

1  
2 system that was running at the time of the  
3 accident, the B&W react, so-called reactimeter  
4 system, and was wanting some general and specific  
5 information about that data acquisition system.

6 Q And what was your response during  
7 that discussion?

8 A The best I recall I related what the equipment  
9 was, how it performed, that it was a highspeed  
10 data acquisition system and something generally  
11 to that nature.

12 Q Did you do anything after the  
13 discussion in relation to the subject matter that  
14 was discussed?

15 A I don't recall.

16 Q In relation to the second sequence  
17 of events that you have discussed, who was in  
18 charge of preparing that?

19 MR. KOLB: I am not sure I understand  
20 what that question means.

21 Would you read it back, please.

22 (Record read.)

23 MR. KOLB: Can you be more precise  
24 when you say sequence of events? I am not  
25 sure what you mean.

2

MR. MacDONALD: I think Mr. Walters

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has stated that there was a document that

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he was involved in producing that involved

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a sequence of events of the TMI-2 accident.

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I want to know if he can tell me who was in

7

charge of producing that particular document.

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MR. KOLB: So it's the document you are

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referring to?

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MR. MacDONALD: Yes.

11

A The person that I know, that I reported to,

12

was a Mr. Ken Schroeder, I believe his name is.

13

Q What is his position at B&W?

14

A I don't know.

15

Q What was his position then?

16

A I don't know that.

17

Q Who else was involved in this effort

18

for the production of this document?

19

A There were various people within B&W. I

20

don't recall their names at this time.

21

Q Do you recall anyone else who was

22

involved?

23

A I believe there was a Mr. Sun from our

24

Alliance Research Division.

25

Q What did you understand that

2 Schroeder was responsible for at that time, at  
3 the time of the production of this document?

4 A To try to piece together from available  
5 information what was or what had been the  
6 scenario of events or the sequence of events  
7 during the TMI-2 transient.

8 Q When this document was produced, do  
9 you know whether or not it was included in any  
10 report that was generated by the Technical Review  
11 Committee?

12 A I do not know specifically how the  
13 information was used or reported.

14 Q Do you know generally whether or  
15 not this sequence of events was used in any of  
16 the drafts or final versions of the Technical  
17 Review Committee report?

18 A I do not know what the final Technical  
19 Review document or report was. It may have been,  
20 but I do not know what they produced.

21 Q In your resume marked GPU Exhibit  
22 126 for identification your education has BSNE.

23 Is that a bachelor of science in  
24 nuclear engineering?

25 A That is correct.

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Q What areas of concentration did you study or have in North Carolina State College regarding your BSNE?

A Specific background in nuclear reactor physics, some additional work in nuclear instrumentation and general physics and thermodynamics as most colleges, engineering degrees offer.

Q That pertained specifically to nuclear reactors?

A Yes.

Q Courses that might have included or did include subject matter on core cooling and heat transfer and -- those two specifically?

MR. KOLB: Is the question whether they did include those subjects, not might have?

MR. MacDONALD: They did.

A To the best of my recollection, they did.

Q Have you ever taken any other post graduate courses or attended seminars or lectures since your graduation from North Carolina State College?

MR. KOLB: Could we have that

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question read back so we can have that list  
of items in mind.

(Record read.)

A Yes.

Q What specifically were those courses  
or seminars or lectures?

A The seminar was on nuclear rocket  
propulsion.

Q Was this during the time you were  
at Brown Engineering?

A That's correct.

Q Were there any other courses or  
lectures or seminars that you participated in or  
attended since your graduation from North  
Carolina State College?

A I haven't attended any others.

Q None since you were employed by  
B&W?

A That is correct.

(Continued on following page.)

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Q You came to B&W in 1969 and in February of 1969 until September 1971, you were Performance Engineer in the Steam Generator Group of Component Engineering; is that correct?

A Yes, it is.

Q How did you receive your assignment to that section?

A That was the initial hiring location within B&W when I came to work for them.

Q Why did you leave Brown Engineering?

A Because the aerospace industry funding and all was running out and I was looking for future work.

Q How did you come to be employed by B&W?

A As best I remember, I received an employment application from a recruiter, local recruiter in Huntisville, Alabama that a B&W representative would be in touch and he wanted to talk to me.

Q On the basis of that, did you go and speak to the representative and then you were hired by B&W?

A I did.

Q What were the duties that you performed

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2 as Performance Engineer in the Steam Generator  
3 Group?

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A Initially, it was familiarization with the B&W steam generator as a Test Engineer or an Assistant Test Engineer on tests that were run at the Alliance Research Division on performance of the steam generator and compilation, reduction of that data into a couple of documents within B&W Company.

Q Did you ever do any analysis or have occasion to study other manufacturers' steam generators in the course of your work with the B&W Steam Generator Group?

A I don't recall that I had any detailed information on other vendors' steam generators.

Q Was there anybody within the group that did perform such analysis or studies?

A I believe there was, yes.

Q Do you know who that was?

A I don't recall his name at this time.

Q Was he an engineer?

A Yes.

Q Did you report to him?

A No.

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Q Did he report to you?

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A No.

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Q Was it part of the responsibility of the Steam Generator Group to review site problem reports that were associated with steam generators?

7

A I don't recall.

8

Q Did you do any such review?

9

A Not at that time.

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Q Did you have any occasion at all during the course of time when you were a Performance Engineer in the Steam Generator Group to review or read site problem reports?

14

A I don't recall.

15

Q You don't recall having reviewed any?

16

A That's correct.

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Q What were the two documents that you just referred to that you helped compile during the course and time when you were a Performance Engineer in the Steam Generator Group?

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A I don't recall the exact names of the documents or the numbers of them. One of them had to do with the performance testing of the integral economizer generator.

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The other one had to do with the accelerated

1  
2 fouling test run on the 90 tube blue model of  
3 ARC.

4 Q Are you aware of any differences in  
5 the B&W once through steam generator from other  
6 steam generators employed by other manufacturers?

7 A Yes.

8 Q Is it a fact that the water capacity  
9 of the B&W once through steam generator is less  
10 than Westinghouse's steam generator?

11 A Yes, I believe that's correct.

12 Q From September of 1971 until December  
13 of 1972 your resume reflects that you were an  
14 engineer assigned to write test specifications  
15 and train operators in various aspects of startup  
16 physics testing.

17 Were you at that point in time also  
18 still a member of the Component Engineering  
19 Department?

20 A No, I wasn't.

21 Q What section or unit or department were  
22 you in at that point in time?

23 A I transferred to the Nuclear Service  
24 Department.

25 Q Was there a section within Nuclear

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Service that you were assigned to at this point in time?

A Yes. I am trying to recall the name of it. Something like Operating Reactors Section or something like that.

Q What were your duties and responsibilities in that section aside from what is reflected on your resume?

A I believe the only additional activity was that I was assigned to the B&W data acquisition system that we were or would employ in the startup of the power plants once we started them up and I was becoming familiar with this system so when we were able to use it, I would have knowledge of it.

Q What did the system entail?

A It was a high data acquisition computer driven system and also calculated reactivity in the core that we would use during physics startup testing.

Q Was it only designed for use during physics startup testing?

A That's correct.

Q Has it been utilized since that time

1  
2 for any other purpose aside from physics startup  
3 testing?

4 A Yes, it has.

5 Q And what is that?

6 A Essentially, as a plant transient monitor  
7 to catch data during unforeseen trips or transients.

8 Q What was your involvement with this  
9 project?

10 A The data acquisition system? It was built  
11 by our Research Division and I had taken the  
12 system, become familiar with it, understood what  
13 it did and how we would interface it with the  
14 utilities information system to be used during a  
15 normal startup testing of that particular unit.

16 Q Did you write any procedures or any  
17 other documentation to be used by utilities  
18 relating to this data acquisition system?

19 A I believe I did prepare an operating  
20 procedure for that piece of equipment.

21 Q In your resume it has the phrase "train  
22 operators."

23 What specifically were your tasks  
24 relating to training operators during the time  
25 that you were an engineer in the Operator Reactor

1  
2 Section?

3 MR. KOLB: Just so the record is  
4 clear, it says "train operators in various  
5 aspects of startup physics testing." It  
6 doesn't just say "train operators."

7 The witness can answer the question.

8 A I had occasions to instruct the operators  
9 in what the normal reactor core physics testing  
10 consists of and how we would operate the plant  
11 during these physics testing once we started up  
12 that unit and to present them to specific  
13 operating methods that they would be called on to  
14 do throughout the operation of the core.

15 Q Was that training done at the utility  
16 or at B&W?

17 A It was done at B&W.

18 Q How many such training sessions were  
19 you involved in?

20 A Probably more than 10, 10 to 20.

21 Q Did you engage in a training session  
22 for each startup that you were involved in?

23 MR. KOLB: Is the question whether  
24 there was a single training session for  
25 each startup?

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MR. MacDONALD: Was he involved in training sessions for each startup that he was involved in.

A I don't understand the question.

Q Let me back up.

When you said you trained operators in various aspects of physics testing and it was done at B&W, startup physics testing, did you perform the training each time a utility was starting up a nuclear power plant, a B&W nuclear power plant?

MR. KOLB: I want to be sure we've got the question clearly in mind.

Are you asking whether he personally engaged in this activity in every single instance that there was a B&W plant started up?

MR. MacDONALD: Since the time that he was involved as an engineer.

Q How many reactor startups were you involved in at B&W in the time since you have been employed at B&W?

A Are you talking about initial startups or initial startups plus restarts?

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Q Let's deal with initial startups.

3

A Two.

4

Q What plants were those?

5

A Oconee I and Arkansas Power & Light Unit 1.

6

Q What time period was each?

7

A The Oconee unit was in early 1973 and

8

the Arkansas unit was a period of two years,

9

about, in 1973 to '75.

10

Q Did you perform training of operators

11

in the aspects of startup physics testing

12

for each one of these initial startups?

13

A I don't recall that I did for either. I

14

did for some of the Arkansas operators.

15

Q But not for the Oconee?

16

A I don't recall.

17

Q Did you provide any training for any

18

other utility personnel on start up physics

19

testing?

20

A Yes.

21

Q For which?

22

A Florida Power & Light.

23

Q Was that in connection with a specific

24

startup or restart?

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A No. It was essentially initial prototype

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training.

Q Which restarts have you been involved with?

A Well, I have been involved in all restarts, in the period of time I was in the Plant Performance Service Section, in one capacity or the other.

Q Since February of 1977, that is --

A Yes.

Q -- until January 1981?

A Yes.

Q Prior to February 1977, were you involved in any plant restarts?

A Not in plant restarts.

Q Will you describe your duties other than training of operators in the aspects of startup physics testing on each of the two initial startups that you were involved in?

A My training of operators consisted wholly of startup physics testing of the operators in the particular sections. I had no other instructions to carry out at that time.

Q You had no other duties in relation to those startups, just training the operators?

1

2 A Yes, in the startup physics testing area.

3 Q Did you have any other duties regarding  
4 the initial startups of these plants other than  
5 training of operators?

6 A Yes.

7 Q What were those duties?

8 A The other duties consisted of writing  
9 specifications, test specifications, operating  
10 draft procedures that B&W supplied as part of the  
11 contract to the individual utilities.

12 Q Did you ever perform any on-site work  
13 during any of these startups? The initial  
14 startups I am speaking about.

15 A Yes, I did.

16 Q What did that entail?

17 A I believe it entailed review of the utility  
18 procedures at Oconee I, sometime during the six  
19 or eight months I was there, and writing of and  
20 review of specific procedures before the startup  
21 at Arkansas.

22 Q And this was done at the site?

23 A Yes.

24 Q The draft procedures that you spoke  
25 of a moment ago, how were they prepared?

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A I don't recall the specific details of the draft procedures. Most of mine covered the startup testing specifications or test specifications.

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Q What was the basis for the test specifications or draft procedures, was there input from Engineering that underlined the procedure or test specification?

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11

MR. KOLB: I know you mean that to be one question but it is really two.

12

MR. MacDONALD: I will break it down.

13

14

15

16

Q Was there any input from the Engineering Department that you used in drafting the test specifications or the draft procedures used for startup physics testing?

17

A Yes.

18

Q And what was that input?

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A Well, it varied from procedure to procedure but generally consisted of equipment specifications, design specifications for equipment, conversations with specific Engineering personnel, the PSAR, preliminary safety analysis reports, plant specific drawings, fluid hydraulic drawings known as FHD's the NRG reg guide on initial startup testing,

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generally that nature of information.

Q Was there anybody else that provided input?

A Various more senior people within the Service Group than I.

Q And what did their input consist of, generally?

A Usually it consisted of reviewing the procedure that I had prepared, making comments on it for my resolution to them or to find out if that in particular was a misunderstanding or was it a correct evaluation of what I had written.

Q In the course of your training of operators in startup physics testing, did you work at all with any people in B&W's Training Department?

A Yes.

Q What was your contact with the Training Department in the course of the training of those operators?

A My contacts mainly consisted of questions from these experienced on how specific portions of the plant operated, for they understood more about the plant than I did from an operation

2 standpoint and I was trying to glean information  
3 from them that would be bearing on my factual  
4 instruction of the operators in the physics  
5 testing area, since we had to interface closely  
6 with the operators to accomplish this physics  
7 testing.

8 Q Who in the Training Department did  
9 you speak with?

10 A Well, it varies over a period of time. Four  
11 names come to mind, and they are a Mr. Goslow,  
12 Mr. Herb Smith, Mr. Bill Street and Mr. Phil  
13 Griffin.

14 Q These were all B&W training  
15 instructors?

16 A Yes.

17 Q Did you provide any simulation work  
18 during the course of your training of operators  
19 in startup physics testing?

20 A Yes, I believe we did.

21 Q What type of simulation work?

22 A We simulated on the simulator as best we  
23 could, using the data acquisition system that I  
24 previously talked about in interface with the  
25 simulator for the operator to make the

2 corresponding manipulations that we as engineers  
3 needed to get the data for later analysis.

4 Q Was the simulation performed in all  
5 instances for each group that you trained in  
6 startup physics testing?

7 A I believe it was but I don't recall  
8 specifically that it was.

9 Q Were you involved in any way in  
10 drafting operating or abnormal emergency procedures  
11 for Arkansas or Oconee I?

12 MR. KOLB: Would you read the question  
13 back, please.

14 (The reporter read back the last  
15 question.)

16 MR. KOLB: I will object as to form.  
17 I am not sure what you mean by "abnormal  
18 operating procedures."

19 Q Mr. Walters, do you know what I mean  
20 when I refer to "abnormal operating procedures,"  
21 procedures for abnormal operation?

22 A Yes, I have my opinion on what abnormal  
23 procedures we are talking about.

24 Q Were you involved in any way in  
25 drafting any operating procedures regarding

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abnormal operation at ANO-1 or Oconee I?

A I believe I was.

Q What did those procedures entail?

A The only ones that come to mind to me right now were at Arkansas, and those were the loss of off-site power and reactor trip, turbine trip procedure. There may have been others but that's the only two I recall right now.

Q And you drafted those procedures?

A I don't recall that I drafted the entire document. I either added to or embellished or took the previous B&W procedure or some outline from Arkansas and produced the document from it.

Q Did you use the Lynchburg simulator at all? By "you" I mean did you personally operate the Lynchburg simulator during any of these training sessions on startup physics testing.

A Not during startup physics testing, no.

Q At any other time?

A Yes.

Q When was that?

A Initially, when I came into service, I had a 10-day training course on the simulator, plant

2 operations course, that was, and portions were on  
3 the simulator.

4 Q What did that course entail?

5 A General operation and understanding of how  
6 the B&W NSS unit operated under various transient  
7 conditions.

8 Q During the training of the operators  
9 on startup physics testing, did the members of  
10 the Training Department provide the instruction on  
11 the simulator for the utility students?

12 A Yes.

13 Q What was your role in relation to  
14 that?

15 A Mainly as we would function later on as  
16 overall or shift test coordinator to tell the  
17 operators what we needed to do when and to offer any  
18 advice that was needed for accomplishing of the  
19 physics testing.

20 Q What specifically did you do on the  
21 simulator during the course of your training at  
22 the time you came into the Plant Performance  
23 Services Section at B&W?

24 A It consisted of manipulating the control  
25 rods, drive system, the plant equipment to take

1  
2 the plant from a cold iron condition to 100  
3 percent power and then shutting the plant down  
4 to a normal shutdown of the transient.

5 Q Did you perform any simulations of  
6 any transients at the time you were taking this  
7 course on the simulator?

8 MR. KOLB: Would you read the  
9 question back, please.

10 (The reporter read back the last  
11 question.)

12 A I believe so. I don't recall the specifics  
13 but I believe so.

14 Q You don't recall specifically what  
15 transients may have been involved?

16 A Not specifically. I am sure there were  
17 various ones but I don't recall the specific ones.

18 Q Did you receive any instruction on  
19 the simulator regarding what procedures you  
20 should perform during transients in order to be  
21 able to shut the plant down on a normal cold  
22 shutdown?

23 A Our training, or at the time I was on the  
24 simulator, there were normal shutdown procedures  
25 there. I don't remember exactly how we used them

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or specifics about them.

Q Were you using, during the course of your simulator training, the simulator procedures that were developed for the simulator, the Old Forest Road procedures?

A During this training course, yes.

Q Did you at any point in time ever have any involvement in developing those Old Forest Road simulator procedures as a member of the Plant Performance Services Section at B&W or at any other time in your employment at B&W?

A I believe so.

Q What was your involvement?

A The one that sticks out in my mind was, I believe, I either was party to or reviewed the present in-place procedure on one called "Reactivity Balance Procedure."

Q What did that procedure entail?

A It offers instructions to the operators on how to determine the factors concerning critical rods in the core position, position of the estimated critical rods for a startup, how to change Boron concentrations during power operations if it was necessary to do so, and at

2 all times I would track the reactivity conditions  
3 of the core.

4 Q Do you know whether or not anybody  
5 else in the Plant performance Services Section  
6 reviewed simulator procedures, the Old Forest  
7 Road procedures?

8 A I don't recall.

9 Q You don't recall anybody doing so?

10 A I don't recall any specifics, procedures  
11 and people doing that.

12 Q Do you recall generally whether anyone  
13 in plant Performance Services reviewed or helped  
14 to write any of the procedures used by B&W on  
15 the simulator to train operators?

16 MR. KOLB: Would you read the question  
17 back, please.

18 (The reporter read back the last  
19 question.)

20 MR. KOLB: At what point in time?

21 MR. MacDONALD: At any point in time  
22 that he knows.

23 A I don't remember when I was Supervisory  
24 Engineer in the Plant Performance Services Section.  
25 There may have been.

1  
2 Q At any time before that, during the  
3 course of your employment at B&W, where you knew  
4 of anybody reviewing or contributing to the Old  
5 Forest Road simulator procedures.

6 MR. KOLB: Are you now asking about  
7 anyone at all as opposed to confining it  
8 to a particular section or group?

9 MR. MacDONALD: That's right.

10 A As I remember, when I was initially in  
11 the Operating Reactors Group, we did review or  
12 people in, that were set around me, reviewed the  
13 procedures.

14 Q The simulator?

15 A The simulator procedures. I mainly think  
16 these were in the area of physics testing or  
17 startup, shutdown, the reactivity balance  
18 procedure.

19 Q Is there still a section in B&W today  
20 that deals with the Operator Reactor Section or  
21 is there a section such as that?

22 A There is still a Plant Performance Services  
23 Section, if that's the question.

24 Q The section that you were involved in  
25 in 1971 to '72 had the name Operation Reactor

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Section?

A Operating Reactors Group or something like that, Section.

Q And that is the one that had input in the simulator procedure?

A I think mainly we reviewed the procedures that were written by the B&W training instructors and offered comments of that nature. As I stated previously, reactivity balance procedure may have been written by us.

Q Is that a group that then later became known as the Plant Performance Services Section?

A Yes.

Q In 1973 to '75, you were Test Coordinator for initial startup testing on AP&L ANO-1.

Were you at that time still in the Operating Reactors Section?

A Administratively, yes.

Q And also before that in 1972 and '73 when you were First-of-a-Kind Test Engineer, Assistant Shift Engineer and Shift Engineer for the B&W Advice and Consultation Team for Oconee I?

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A Yes.

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Q Then in 1975 to '77, you became Senior Engineer in the Mechanical Equipment Section for Nuclear Service, which is a different section from the Operating Reactor Section?

7

A That is correct.

8

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11

Q In your instruction on the simulator when you became Supervisory Engineer in the early part of 1977 in PPS, did it include any training or instruction on going solid?

12

A Did my training?

13

Q Yes.

14

MR. KOLB: Will you please repeat the question.

15

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(The reporter read back the last question.)

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19

A I don't recall having received any instruction or training during this period of time.

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Q You said you took a course at a point in time that you, unless I am mistaken, that you became Supervisory Engineer in PPS and part of that course was simulator training. That is what I am referring to.

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A I'm sorry if I misled you.

It was the initial time when I came into the Service Group in 1971.

Q 1971-72?

A Right.

Q Back at that point in time -- and that was the only training that you had on the B&W simulator?

A That's the only formal training I have had, yes.

Q During the course of that training, did you have any instruction on taking the plant solid?

A I don't recall whether I did or I didn't.

Q Were there any occasions during the course of that simulator training when you indeed did take the plant solid under simulated conditions?

A I don't recall that either.

Q What, if anything, did you understand from that training you had on the simulator regarding the advisability of taking a plant solid?

A I don't recall anything from that specific training program.

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Q Prior to the TMI-2 accident, when did you learn, if you did, anything regarding the advisability of taking a plant solid?

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A Would you repeat the question?

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MR. MacDONALD: Please repeat the question.

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(The reporter read back the question as requested.)

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A In general terms, it was my opinion or --

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MR. KOLB: The question is when, if at all, not what your opinion was.

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MR. MacDONALD: Is that stated in the form of an objection?

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MR. KOLB: I think he was clearly going over and answering something you hadn't asked.

16

17

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A I don't remember when I became specifically aware of that particular action.

19

20

Q What do you understand regarding the advisability of taking a plant solid?

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MR. KOLB: I will object as to form.

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Q Prior to TMI, what was your understanding of the advisability of taking the plant solid?

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MR. KOLB: I will object as to form  
again.

A I understood that it was something that --  
I understood myself that it was something that  
should not be done unnecessarily.

Q What do you mean when you say  
"unnecessarily"?

A That action is, operator action is, or  
what I had understood that this was not something  
that you wanted to normally do with a power  
plant.

(Continued on page 74.)

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Q Why was that not advisable?

3

A Simply, basically because you lose pressure control over the system when you do that, in the normal manner.

4

5

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Q What happens as a result of losing pressure control?

7

8

A It depends on the specific transient or the specific scenario as to what would actually happen.

10

11

Q From what did you develop your understanding that it was not advisable to take the plant solid?

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MR. KOLB: I didn't hear him testify that way. I think his testimony was more specific than that and as to his understanding the record speaks for itself.

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If you would like to ask him how he formed that understanding, that's a fair question, but let's not recharacterize his testimony.

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MR. MacDONALD: The record does speak for itself, but I am going to ask him.

24

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Q What did you develop from your

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understanding on the advisability of taking a  
plant solid?

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A Other than the loss of pressure control

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I had, over the years, a great deal of

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conversation between general people, general

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persons that I come in contact with, some

8

probably being operators, and over a period of

9

time I had also I thought were realizations

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that there was very certain that operators or that

11

I understood this is something you were not

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doing indiscriminately and for various reasons.

13

Q Did you gain this understanding

14

through conversations with people in B&W's

15

Training Department?

16

A It may have been. I am sure I discussed --

17

had discussions with them in the early portion

18

of time.

19

Q Was there anybody else you had

20

conversations with regarding taking the plant

21

solid?

22

A None that I can recall specifically.

23

Q Can you recall anybody that you had

24

discussions with in a general manner?

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A No.

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Q Prior to TMI did you have any understanding taking the plant solid could create problems with vessel mechanics?

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A I remember having making -- having made such a statement, yes.

6

7

Q And when was that?

8

A In the latter part of '77.

9

Q What was the basis for that statement?

10

A It was a memo drafted by me to a Mr. Joe Kelly.

11

12

Q What was the basis for the proposition that it might create problems with vessel mechanics to take a plant solid?

13

14

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A It was based on my concern of whether or not if we took the plant solid that we would ever pressurize it, cause ensuing stresses in the vessel or piping or steam generators, and, therefore, cause a loss of generation or down time for the specific utility involved.

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Q How long had you held that belief with regard to the vessel mechanics regarding taking the plant solid?

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MR. KOLB: How long before he made the statement to Mr. Kelly?

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MR. MacDONALD: That's right.

A I don't recall.

Q Would there be any other problems associated with taking the plant solid?

A Sure, in certain instances, I have stated a loss of pressure control as a possibility, also I thought at the time that there was a possibility we could cause unnecessary LOCA's by going solid in the system.

Q What knowledge or training did you have that created that concern in your mind regarding vessel mechanics in late '77?

A I have no specific training in the area of brittle fracture or vessel mechanics or stress analysis.

Q Did you have any concerns that led you to believe that there was a problem with vessel mechanics if you took the plant solid?

A Not specifically, no.

Q Had you asked anybody within B&W to do any analyses or had any analyses been performed that led to your opinion that there could be a problem with vessel mechanics if indeed a plant w taken solid?

1

2 A I was not aware of any if they existed.

3 Q You hadn't seen any?

4 A No, I hadn't.

5 MR. KOLB: Off the record.

6 (Discussion off the record.)

7 BY MR. MacDONALD:

8 Q Was there anything in particular that  
9 triggered this belief that you had regarding a  
10 problem in vessel mechanics if indeed a plant was  
11 taken solid?

12 A No. I used those terms, vessel mechanics,  
13 purely in relation to an overpressurization of  
14 the system and in what the ensuing problems would  
15 be if that had occurred.

16 My first impression was as far as  
17 paperwork in getting that utility's reactor  
18 back into operation if that indeed occurred.

19 Q But you had no personal knowledge or  
20 concerns gleaned from discussions or anything  
21 that you had read at B&W that would have led you  
22 to form that understanding?

23 MR. KOLB: Read the question back,  
24 please.

25 (Record read.)

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A I had read nothing that said that there would be a vessel problem, vessel mechanics problem, from an overpressurization.

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Q Had anybody informed you that there would be such a problem?

6

7

A Not that I recall.

8

Q Or could be such a problem?

9

A No, no one had informed me of that.

10

MR. MacDONALD: Off the record.

11

(Discussion off the record.)

12

(Recess.)

13

BY MR. MacDONALD:

14

Q Will you describe your duties as

15

First-of-a-Kind Test Engineer between 1972

16

and 1973?

17

A On the Duke Oconee I unit was B&W's

18

first prototype unit to go in operation. As a

19

part of the initial startup testing there was

20

various first-of-a-kind tests for that unit

21

that had to be performed and I had the

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responsibility for seeing that the instrumentation

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was installed and the data was taken, analyzed

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and sent back to B&W Lynchburg in this particular

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case.

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Q As an Assistant Shift Engineer in the same startup project, what were your duties?

A I was assisting the Shift Engineer which we were there as advising and consultation to the Duke Power Shift Engineer, Shift Test people for any assistance that they might need during startup.

Q You were on site, in other words?

A Yes.

Q Did you spend time in the control room?

A Yes.

Q During startup?

A Yes.

Q What types of duties did you perform in that role in the control room?

A As a Shift Test Engineer?

Q As an Assistant Shift Engineer.

A I -- this was during the startup testing, physics startup testing, zero power physics testing. As I said, to offer any advice and consultation to the Duke engineers or to the Duke operators if questions were asked, my main function was to be aware of what data was

1  
2 being taken, how it was being taken and as soon  
3 as we got to a stopping point to analyze such  
4 data along with the Duke engineers for comparison  
5 to prediction data.

6 Q And as Shift Engineer for the advice  
7 and consultation team, what were your duties?

8 A Then I took over a particular shift and had  
9 an assistant working for me and essentially the  
10 same type of work, but now it is from the Lead  
11 Engineer on the shift.

12 Q Was the B&W Advice and Consultation  
13 Team utilized in any other startups aside from  
14 Oconee I?

15 A B&W engineers were utilized in other  
16 startups.

17 Q Was it part of an Advice and  
18 Consultation Team?

19 A No.

20 Q Was this the only time that an Advice  
21 and Consultation Team for an initial startup  
22 was put together by B&W?

23 A No.

24 Q What other instances?

25 A All initial startups had a B&W Advice and

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Consultation engineer at the site.

Q Were you involved in that Advice and Consultation effort in any other instances other than Oconee I?

A No.

Q As Test Coordinator for initial startup testing at AP&L ANO-1, you didn't perform that same function as you did at Oconee I?

A No.

Q What were your duties as Test Coordinator at AP&L?

A Well, the main difference is that at Duke the initial startup activity was advice and consultation in the NSS contract.

At Arkansas I provided many of the same duties with other leadership roles, but this was on a master service contract to the particular utility.

Q And what did your duties as Test Coordinator entail?

A I had around five to six engineers, B&W engineers, that reported to me that would be Shift Engineers and Data Analysis Engineers, once we started the unit up, and had overall

1  
2 responsibility reporting to their Plant Nuclear  
3 Engineer for the collection of the test data,  
4 running the tests, seeing that the analysis,  
5 on-site analysis, was done and any problems that  
6 were -- that came up were reported along the chain  
7 quickly or to be aware where problems could occur  
8 and advise management that certain tests were  
9 going to be performed at different times, just a  
10 general coordination of the test program.

11 Q Did you have any on-site  
12 responsibilities as Test Coordinator?

13 A I was on site.

14 Q You were on site. As a Senior  
15 Engineer in the Mechanical Equipment Section of  
16 Nuclear Service, what were your duties?

17 A Generally to find solutions to any problems  
18 that were coming in from the units at startup,  
19 talk with the Engineering Department, find the  
20 resolution to the particular problems that were  
21 either coming in by phone or by our site problem  
22 report, if a solution had to be had very quickly  
23 to try to turn it around and get that back to the  
24 site operations manager at each of the sites.

25 Q Did you review as part of your job as

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Senior Engineer site problem reports relating to the units that you were involved in startup on?

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A I may have. I don't recall specific ones.

5

Q In general, did you make it part of your routine to review those site problem reports?

6

7

A Not in general, no.

8

Q Only when they came to your attention?

9

A That's correct.

10

Q Who would send them to your attention?

11

A Usually one of two sources, either the very small section that handled SPR's, logging, categorizing, and then sending them out or for my immediate supervisor, Mr. Ken Ellison at that time.

15

16

Q What section or unit or department was responsible for categorizing or logging those SPR's?

17

18

19

A It was part of the Operating Plant Section of Nuclear Service.

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Q That Operating Reactor Section that you had been in?

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A No.

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Q This was an Operating Plant?

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A An Operating Plant Service Section I believe

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is what it is called.

Q How often did you receive site problem reports from the Operating Plant Service Section when you were a Senior Engineer in the Mechanical Equipment Section?

A I don't recall any specific time period or the amount that came in per day or per week or per month.

Q Did they come immediately to your attention or were they routed to you by someone else in the department?

A They were routed to me usually by Mr. Ellison.

Q Mr. Ellison, did he also route the SPR's to anyone else within the Mechanical Equipment Section?

A Very possibly, yes.

Q Would it depend on what the SPR was related to?

A That's correct.

Q Did you receive the SPR's that dealt with startup?

A Yes.

Q Did you receive any other SPR's?

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A I believe they all dealt with startups.

Q What other SPR's were reviewed by people in the Mechanical Equipment Section?

A Well, just generally SPR's that had to do with our supply equipment, hardware, and any problems with that.

Q Did you review any SPR's relating to any reactor trips?

A I don't recall of any during the time I was in this specific section.

Q Had you reviewed any prior to the time that you were in this specific section?

A Yes, I had reviewed the trips when I was at Oconee I and also at Arkansas when I was on site.

Q Did you review all of the SPR's relating to reactor trips when you were on site at Oconee?

A I don't believe I reviewed all of them, no.

Q Was it part of your job function to review the SPR's when you were on site at Oconee?

A Only in the aspect of understanding what had happened and to be aware, if there was something that came out of that particular report

2 that we didn't already know or was not expected  
3 or some specific piece of information like that.  
4 I did not have responsibility, if that's what  
5 you are inferring, for reading every SPR and  
6 communicating that along to somebody.

7 Q But you had responsibility for  
8 reviewing that to determine if there was  
9 something that may have related to the startup  
10 of Oconee I?

11 A Only in the function that would help me do  
12 my job better as a startup Test Engineer.

13 Q Would all the information relating  
14 to reactor trips have been relevant to your job as  
15 a startup Test Engineer?

16 MR. KOLB: Relevant in what sense?

17 MR. MacDONALD: In the sense that  
18 he referred to it as part of his job  
19 performance to know what went on at Oconee  
20 I.

21 A Not specifically to the startup physics  
22 testing, only in that it would make me more  
23 informed, a startup Test Engineer.

24 Q At Arkansas Power & Light did you  
25 review SPR's as a general matter?

2 A Yes.

3 Q What types of SPR's did you review?

4 A Well, usually I reviewed them as a function  
5 so that the Master Service Team would know that  
6 the B&W team was sending an SPR back to Lynchburg,  
7 the general information that was in it.

8 Q Did you review all SPR's that related  
9 to Arkansas Power & Light?

10 A I don't know that I reviewed it each and  
11 every one.

12 Q Was it part of your job function to  
13 review those SPR's?

14 A Only in that again that I would -- was aware  
15 if I had not been on shift or not on site the day  
16 it happened or something, that I was aware of a  
17 trip, what the nature of it was and did it impact  
18 my test program or was it as a result of it or  
19 that type of information.

20 Q Were you on the routing of any of  
21 the SPR's that might have been generated at  
22 Arkansas Power & Light that were not on your shift?

23 A I would usually see a copy of them, yes,  
24 at some time, right.

25 Q Is the same true for Oconee?

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A If I took it upon myself to look for them,  
I would see copies of most of them.

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Q When you became Senior Engineer in  
the Plant Performance Services Section of the  
Nuclear Service, who was in charge of the Nuclear  
Service Section?

8

9

MR. KOLB: Is that a precise  
description?

10

THE WITNESS: No.

11

12

13

MR. KOLB: I don't think you  
precisely described his role. I wish you  
would restate the question.

14

MR. MacDONALD: O.K.

15

BY MR. MacDONALD:

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17

18

Q When you became Supervisory Engineer in  
the Plant Performance Services Section, Nuclear  
Service --

19

MR. KOLB: O.K.

20

MR. MacDONALD: That's what I thought

21

I said. Excuse me.

22

23

Q -- who was in charge of the Nuclear  
Service Department?

24

A I believe it's Mr. Andy Olds.

25

Q What is Mr. Olds' position today?

2 A I believe he is Manager of Field Engineering  
3 and Services of the Customer Service Department  
4 today.

5 Q Is that a section of Customer  
6 Service?

7 A Yes.

8 Q Is Plant Performance Services a  
9 section?

10 A No, it would be a unit. It consists of  
11 several sections.

12 Q So you would call that a unit. In  
13 the hierarchy at B&W, I had thought that it went  
14 unit to section to department. Am I correct?

15 A That section, his section consists of  
16 various units.

17 Q Who replaced Mr. Olds as Manager of  
18 Nuclear Service?

19 A Mr. Dick Kosiba is presently the Manager  
20 of Customer Service.

21 Q It is now called Customer Service?

22 A Yes.

23 Q Is Field Service another name for  
24 Nuclear Service?

25 A Yes.

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Q When did Mr. Kosiba take charge as the manager of Nuclear or Customer Service?

A To the best of my recollection, it was in 1979.

Q Do you recall whether it was before or after the TMI-2 accident?

A I believe it was slightly before.

Q What was Mr. Kosiba's position before he took over as the Manager of Nuclear Service?

A I don't recall.

MR. KOLB: Would this be a good time to break for lunch?

MR. MacDONALD: Sure.

(Whereupon, at 12:35 p.m., a lunch recess was taken.)

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AFTERNOON SESSION

2:05 p.m.

oOo

J A M E S        F R A N K L I N        W A L T E R S ,

having been previously duly sworn, was  
examined and testified as follows:

EXAMINATION (Continued)

BY MR. MacDONALD:

Q        You are aware, Mr. Walters, that your  
testimony continues under oath this afternoon?

A        Yes, sir.

Q        As Supervisor Engineer in the Plant  
Performance Services Section of the Nuclear Service  
Department, what were your specific duties?

A        I was responsible for seeing that the  
contract documentation for each of the reload  
cores from B&W to the utilities was completed  
and sent to project management who delivered it  
to the particular utility involved. This  
consisted of mainly the physics test data and  
any changes to tests, methods in the core testing  
that would occur on that particular reload.

Q        Are you responsible for anything  
else within Plant Performance Services aside

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from this reload function?

A Yes. The group as a whole is responsible for any changes to operating procedures, draft operating procedures that were supplied by B&W to utilities. I think generally that's the two basic functions of the group.

Q When you say "of the group," you mean of the Plant Performance Services Section?

A Right.

Q Did you also prepare plant limits and precautions?

A No.

Q Plant set points?

A No.

Q Technical specifications?

A We would review some suggested tech specs every once in a while that Engineering would send around for review and comment on, but we did not actually prepare them.

Q Who did you send your comments to after you reviewed them?

A I believe the Licensing Department acted as a focal point to get all the comments back and then redistribute them to the Engineering

1

2 Department or who had ever written them to  
3 begin with.

4 Q Did you review any of the limits  
5 and precautions?

6 A Yes, I have reviewed the limits and  
7 precautions documents.

8 Q Was that a part of the function of  
9 the Plant Performance Services Section?

10 MR. KOLB: Do you mean was it part of  
11 the function to read the document?

12 MR. MacDONALD: To review the  
13 document.

14 Q Limits and precautions.

15 A Let's say we would review it for our  
16 particular area, that being the core operation  
17 if there was anything in there on that, but not  
18 as a general rule, the whole document, no.

19 Q You testified that you yourself have  
20 reviewed limits and precautions?

21 A I have reviewed the document at some  
22 time in the past.

23 Q Do you recall when?

24 A Well, probably early on before I went or  
25 while I was at either one of the two sites.

2

Q And the two sites would be Oconee

3

or Arkansas Power & Light?

4

A Correct.

5

Q Were the limits and precautions

6

generic to all 177 B&W plants?

7

A The document was, yes.

8

Q So your review would have been

9

applicable to any B&W 177 plants?

10

A In general.

11

Q After your review of the limits

12

and precautions, was there anything that you

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did as a result of that review? Did you pass

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comments on to anybody or have discussions with

15

anyone?

16

A If that had been warranted. I don't

17

remember any specific times that may have occurred.

18

Q You stated that Plant Performance

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Services was responsible for preparation of draft

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procedures.

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Have you been involved in the

22

preparation of draft operating procedures?

23

A We are talking about the pre-TMI-2

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accident?

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Q Yes, prior to TMI-2.

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2 A Yes, early on, very early.

3 Q When was that?

4 A When I went into Service. I think I was  
5 involved in like the normal operating procedure  
6 for heatup and cooldown and plant operation,  
7 those three specific documents.

8 Q When was that?

9 A Sometime in '71, '72, '73, that time frame.

10 Q Did you participate in drafting  
11 procedures in your position as Supervisory  
12 Engineer in PPS?

13 A Yes, if the -- if we had the chance to  
14 do so, to perform this function. I don't remember  
15 us having -- I mean I don't remember a specific  
16 procedure we had written in the last couple of  
17 years.

18 Q Have you had occasion to review  
19 procedures, draft operating procedures prepared  
20 by others in the Plant Performances Services  
21 Section?

22 MR. KOLB: Could I hear the question  
23 again, please?

24 (Record read.)

25 A What time period are we talking about?

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Q Let's start pre-TMI.

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A I don't recall any specific ones, but I am sure somewhere along the line I did.

4

5

Q Who within B&W is responsible for preparing draft operating procedures to be sent out to operating utilities?

6

7

A I believe the Plant Performance Service Section would have that responsibility.

8

9

Q Is there anyone within PPS,

10

specifically, who has that responsibility?

11

A Not a specific individual, I don't believe, no.

12

13

Q Is there anyone who was in charge

14

of preparing the draft operating procedures?

15

MR. KOLB: In the same organization?

16

MR. MacDONALD: Within PPS.

17

A Yes, as far as administrative control there is.

18

19

Q Who would that be?

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A Well, it would depend whether or not it was a startup plant or an operating plant. If it was an operating plant, I would have the responsibility for seeing that the work was finalized and sent out. Early on there was a

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2 startup group that would have the responsibility  
3 for the initial procedures. I would have  
4 essentially revisions to the initial document  
5 if they were to be sent out.

6 Q Who was in charge of the startup  
7 unit in PPS prior to TMI?

8 A Ron Finnin, I believe.

9 Q So prior to the TMI-2 accident your  
10 unit within PPS was in charge of drafting  
11 operating procedures for B&W?

12 A Yes.

13 Q What was the process by which draft  
14 operating procedures were prepared within your  
15 unit of PPS?

16 MR. KOLB: During what time period?

17 MR. MacDONALD: During the time  
18 period prior to the TMI accident.

19 MR. KOLB: At any time while he was  
20 in the unit?

21 MR. MacDONALD: While he was Supervisory  
22 Engineer.

23 MR. KOLB: All right.

24 A Well, during that period of time it probably  
25 would apply to the revision. I don't recall any

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new procedures that came along.

There is B&W policies and procedures that outline the format of the documents, what type of information might be researched to go into these documents, a hierarchy of signoffs, the writer, the reviewer, reviewed by Engineering and then distribution to the Project Managers.

Q Who were, from the time you were Supervisory Engineer up to the time of the TMI-2 accident, the people who had to sign off on the draft operating procedures?

A Well, the reviewer -- the preparer within the Service Group, a reviewer in the Service Section which might be an engineer, that reported to me or myself, and then a parallel review by the cognizant engineering group on that particular system or procedure or operating procedure.

Q Was there a special section within the Engineering Group that dealt with signing off on the draft operating procedures?

A At one time there was. I don't remember specifically when it was formed.

Q What do you think now?

A The Plant Integration Group of Engineering.

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Q They were the ones who signed off for the Engineering Department?

A Yes.

Q On the draft operating procedures?

A Yes.

Q Who was in charge of Plant Integration prior to the TMI-2 accident?

A I believe Mr. Bruce Karrasch was.

Q Is he still in charge of that section today, do you know?

A No.

Q Does such a section exist?

A By name, no.

Q Is there still today a group in Engineering that normally signs off on draft operating procedures?

A Yes.

Q What group is that?

A It's called Plant Performance Engineering.

Q Who heads that group?

A Mr. Ed Kane.

Q Was there anybody else who is required to sign off on draft operating procedures prior to TMI-2 before they were issued to the

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utility?

A I don't recall that there was.

(Continued on following page.)

2 Q What revisions and operating procedures  
3 did you participate in as Supervisory Engineer  
4 prior to the TMI-2 accident?

5 A The only one I recall is a power operation  
6 procedure.

7 Q What was the substance of the change in  
8 that procedure?

9 A It dealt with the mode of operation of a  
10 B&W core essentially. We have two modes of  
11 operation, a boron chem shim mode of operation  
12 and a rodded mode of operation. Some of the  
13 units sold were of one mode and some were of the  
14 other mode of operation. As time went on, most  
15 of the plants that were operating rodded changed  
16 to the all-rods-out mode of operation. When that  
17 happened, we revised the procedure that had been  
18 sent to them initially to include the other mode  
19 of operation in it.

20 Q During the course of your employment  
21 as Supervisory Engineer in PPS, was it also part of  
22 your job function to review SPR's?

23 A Not a primary function but I have reviewed  
24 the SPR's from time to time.

25 Q Did you review SPR's on a regular

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2 basis?

3 A No.

4 Q Was there anyone within PPS who was  
5 charged with the review of SPR's?

6 A I don't recall that there was.

7 Q Was there anybody in PPS who reviewed  
8 SPR's on any regular basis to determine if  
9 they were applicable or should be adopted into  
10 draft operating procedures?

11 A I don't recall.

12 Q You don't recall that there were any?

13 A I don't recall any specific instances.

14 Q Do you recall generally whether or not  
15 there was anybody within PPS who regularly reviewed  
16 the SPR's to see whether or not the operating  
17 plant experience which they contained was  
18 applicable to the draft operating procedures that  
19 were prepared by PPS?20 A I don't recall that anybody other than  
21 specifically on my group would have had that  
22 responsibility but I don't recall any specific  
23 people doing that or person doing that.24 MR. MacDONALD: Please read the answer  
25 back.

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(The reporter read back the answer.)

Q Are you saying there was nobody specifically assigned within PPS to review SPR's to see whether they were applicable to any draft operating procedures that were sent out from PPS to the utilities?

A There was nobody assigned on a regular basis as a matter of everyday job to do that that I'm aware of.

Q Did SPR's get reviewed on occasion by people within the Plant Performance Service Section?

A Yes, from time to time they were reviewed.

Q Were those reviews performed as a result of an SPR being routed to PPS by some other section or unit or department within B&W?

A Generally, yes.

Q Did anyone from the Plant Performance Services Section receive SPR's on a regular basis?

A I am not aware that anyone did.

Q When they were routed to PPS, was there any unit or department within B&W that generally was the initiator of the routing?

A What specific group did the routing?

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Q That's correct.

A Yes, there was a small group of people in Operating Plant Services that received them, catalogued them and then routed them to a defined list of people.

Q Was there a set of SPR's kept in the Plant Performance Service Section files?

A Not in the Plant Performance Service Section.

Q Was there a set kept by any individual in PPS of the SPR's?

A I'm not aware of any individual having a set of them.

Q Did the Operating Plant Service Section have the responsibility to review the SPR's or just to catalogue them and then route them along?

A I think they did both.

Q Prior to the TMI accident, who was in charge of the Operating Plant Service Section?

A I believe it was a Mr. Jim Phinney.

Q When you received, when anyone within Plant Performance Services received a copy of an SPR, what was the responsibility of PPS in terms of analyzing or acting upon the SPR?

A If we did receive such an SPR, our major

1  
2 responsibility was to see if what had happened or  
3 the particular problem, how it impacted plant  
4 operation or control of the plant. If it did,  
5 then we would try to get with the particular  
6 engineering organization that was most aware of  
7 this particular problem or the piece of equipment  
8 or whatever it was and see if indeed there was  
9 some problem that needed correcting.

10 Q I think you have testified that you  
11 had personally reviewed SPR's while you were a  
12 Supervisory Engineer at PPS; is that correct?

13 MR. KOLB: I don't want you to ask  
14 him what his prior testimony was. That  
15 speaks for itself. If you want to ask him  
16 the question, just for context, that is all  
17 right but let's not put it in terms of what  
18 the prior testimony was.

19 MR. MacDONALD: I am asking him if  
20 that's correct, as to the question.

21 MR. KOLB: As I say, I don't object  
22 to your asking in this instance, even though  
23 it may be different from the prior question,  
24 but I don't want you asking him in terms  
25 of prior testimony.

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BY MR. MacDONALD:

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Q You have indeed reviewed SPR's as a Supervisory Engineer in the Plant Performance Services Section; correct?

6

A I have reviewed SPR's from time to time.

7

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Q In the course of reviewing an SPR, do you have a normal procedure that you follow?

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MR. KOLB: Are you asking whether he followed a normal procedure at the time when he did this?

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MR. MacDONALD: When he reviewed the SPR, did he have a normal procedure that he went about in terms of the review.

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A I don't recall if I followed or if I had a specific procedure in mind when I reviewed those documents or not.

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Q What did you generally do when you received an SPR?

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A I read the problem, tried to understand what the problem was, either myself or if I assigned it to one of the engineers working for me would go down and talk with Engineering or go to Engineering and talk with them, see if they had already received a copy of it and were working on

2 it and was there a reason to effect a change or  
3 some document operating procedure in our case  
4 or was the problem still under investigation.

5 Q The Plant Performance Services  
6 Section, was that located in the same physical  
7 building as the Engineering Department?

8 A Yes.

9 Q Were they on the same floor as members  
10 of the Engineering Department?

11 A No. There are two floors in the building  
12 and Engineering is on both floors. So there is  
13 more than one floor.

14 Q So Plant Performance Services, the  
15 personnel who made up Plant Performance Services  
16 were on the same floor as some members of the  
17 Engineering Department?

18 A As some members of the Engineering Department.

19 Q Generally, if you have a problem  
20 understanding an SPR, would you seek out someone  
21 from the appropriate Engineering Section whom you  
22 thought had the expertise in that field to discuss  
23 the problem with?

24 A Yes.

25 Q If the information in the SPR related

2 to an operating procedure, were there others  
3 within Neclear Service that you also talked to  
4 regarding the issue as a general matter?

5 A In the general context of doing my job, I  
6 probably would consult other people within the  
7 service organization, yes.

8 Q Anybody specifically?

9 A Well, the only people that I have in mind  
10 are ex-Training people that I would contact from  
11 time to time to supplement my understanding.

12 Q Who were those ex-Training people?

13 A I don't remember all of their names.

14 Q Who would be some that you can recall?

15 A I think the ones I have related to in the  
16 past, Mr. Goslow, Mr. Smith, Mr. Street.

17 Q Any others that you can recall?

18 A Those are the only three I remember.

19 Q Why would you speak to these gentlemen  
20 in particular, because they had some experience  
21 in the Training Department?

22 A That was the primary reason, yes.

23 Q What would that add to your  
24 understanding of the problem?

25 A Well, I was seeking information to reinforce

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2 my own thinking or to see that I was correct or  
3 incorrect in my present thinking. Another avenue  
4 of information.

5 Q You would go to these three  
6 individuals to provide you with input on what  
7 the Training Department would indeed have  
8 experience on regarding the issue that had arisen  
9 in the SPR?

10 A I don't know that it ever occurred to me  
11 that they were giving me information that the B&W  
12 Training Department was passing along. It was  
13 more like I knew they were ex-Training people and  
14 I knew their quality of understanding and I went  
15 to them to see that what I understood was what  
16 they understood.

17 Q But the reason you sought them out  
18 was because of their background in training of  
19 operators?

20 A Yes.

21 Q Are there any instances that you can  
22 recall when you spoke to the ex-Training people  
23 regarding an issue that had arisen in an SPR?

24 MR. KOLB: Are you asking whether he  
25 can recall an instance that he read an

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SPR and then went and talked to them?

MR. MacDONALD: That he spoke to these three individuals concerning an issue that had arisen out of an SPR.

A I don't recall at this time any specific instance.

Q Did you speak to anybody in the Training Department itself at any point in time regarding issues that may have arisen as a result of your reviewing an SPR?

MR. KOLB: When you say "at any point in time" --

MR. MacDONALD: Prior to TMI.

A I may have.

Q Can you give me the instances that you can recall?

A I don't recall any specific instances but it would not be unlikely that I did not talk to them.

MR. KOLB: Will you read the answer back.

(The reporter read back the answer.)

Q Are you saying that you have spoken to Training Department personnel regarding issues

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that had arisen out of the SPR review?

A That is certainly possible, yes.

Q Who in the Training Department would you speak to on this subject?

MR. KOLB: Are you asking if he has an actual recollection of conversations with people?

MR. MacDONALD: A general recollection of doing it, who he spoke to.

A I don't recall any specific people at specific times. I mean, certainly it would change over a period from 1971 to '77.

Q In the time from 1977 to the TMI accident, were there people whom you would speak to in the Training Department regarding issues that arose out of a review of an SPR?

A If I did during this time, I think the person's name is John Lind, I believe.

Q L-i-n-d?

Was he the lead instructor for the Training Department at this point in time?

A I don't remember. He was at some point in time in there.

Q Were there any other people within the

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Training Department whom you spoke to regarding any issues on a regular basis?

A Possibly but I certainly don't remember any specific cases or individuals' names.

Q Did you ever have discussions with Norman Elliott.

MR. KOLB: Is this now confined to the same period or at any time?

MR. MacDONALD: Generally.

MR. KOLB: Do you understand? The question is whether you ever spoke to Mr. Elliott.

A I'm sure I spoke to him at some time, yes.

Q Did you have occasion to speak to him in relation to review of SPR's or issues that arose out of SPR's?

A I certainly don't recall any issues or times.

Q Is the Training Department also located within the same building as Plant Performance Services?

A Yes.

Q The whole Nuclear Service Department is located within that building?

A Yes.

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Q And the whole Engineering is located in that building?

A In two buildings. Two buildings that are adjacent to each other.

Q Just to back up and run something by, I thought you said before there were two floors and Engineering was on both floors.

Is that all confined within one building?

MR. KOLB: Is your question whether when he was speaking of two floors before what he was speaking of was all in one building or is your question whether or not Engineering is all in one building?

MR. MacDONALD: I had thought, perhaps I was wrong, I had spoken of it as one location.

Q You said two floors. All I am trying to find out is whether or not it is one building that Engineering occupies two floors in, and where the Nuclear Service Department is also located, or whether it is two buildings?

A I think we there refer to the old and the new building.

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2

Q Are they connected?

3

A Yes.

4

Q What are your present duties as

5

Projects Engineer in the Projects Engineering

6

Unit?

7

A They are twofold, part of my duties are the

8

licensing aspect of each reload for, in my case,

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SMUD and TECO, Toledo Edison for reloads, any

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problem or any dealings with the NRC that come

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up in a licensing connection; the other aspect is

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I am assigned specific projects from time to time

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that usually have been asked for by the owners'

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group or a specific utility for engineering

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support or work to be done by the B&W Engineering

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Department, and I coordinate scheduling, manpower,

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resources to get Engineering or engineers to work

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on certain projects to effect a solution and pass

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the solution on as a memo or report or whatever

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to the Project Managers who then send it to the

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utilities.

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Q What specific or special projects have

23

you been involved in since January 1981?

24

MR. KOLB: Just in general?

25

MR. MacDONALD: Subject category areas.

2 A Steam generator tube rupture transient  
3 is one area that we have offered a proposal to the  
4 utilities to do some work; the other area is a  
5 matter of brittle fracture or thermal shock of  
6 the reactor coolant system.

7 Q In your present position, do you have  
8 engineers that report to you directly?

9 A No.

10 Q Whom do you report to directly?

11 A I report to the Senior Project Engineer,  
12 Mr. Bob Baker.

13 Q Who is the Manager of the Project  
14 Engineering Unit?

15 A Mr. Ken Suhrke.

16 Q And Mr. Baker reports to Mr. Suhrke?

17 A That's correct.

18 Q Have there been any changes since  
19 the TMI-2 accident in the Plant Performance  
20 Services Section in regard to the procedure for  
21 drafting instructions to be sent to the sites?

22 MR. KOLB: Would you read the question  
23 back, please, Mr. Reporter.

24 (The reporter read back the last  
25 question.)

2 A I don't recall any.

3 Q So up until the time that you left  
4 the Plant Performance Services Section in January  
5 of 1981, the procedure remained much the same  
6 as it had been prior to the TMI-2 accident?

7 A That's what I recall, yes, sir.

8 Q Were the sign-offs basically the same  
9 after the TMI-2 accident in terms of who was  
10 required to sign off on the draft operating  
11 procedures as before?

12 A Essentially. The group changed from  
13 Integration to Plant Performance Engineering but  
14 essentially the same.

15 MR. MacDONALD: I would like to mark  
16 as GPU Exhibit 127 for identification, a  
17 memo from Don Hallman to PPSS personnel,  
18 dated July 30, 1979.

19 (Memo from Don Hallman to PPSS  
20 personnel dated July 30, 1979 was marked  
21 as GPU Exhibit No. 127 for identification,  
22 as of this date.)

23 Q Is this a copy of a memo that you  
24 sent out for Don Hallman in or about July 30, 1979  
25 in the regular course of business?

2 A Yes, sir.

3 Q Is that your signature, "J. S.  
4 Walters for D. F. Hallman" at the bottom of the  
5 page?

6 A Yes.

7 Q Did you author this document, GPU 127?

8 A No, I did not.

9 Q Was Mr. Hallman unavailable to sign  
10 the document and you signed it for him and sent  
11 it out?

12 A That must have been it, yes.

13 Q In the first sentence, the document  
14 reads, "All future instructions to operating  
15 plants concerning how the plants should be operated  
16 during normal or abnormal conditions must be  
17 reviewed by Training prior to customer transmittal."

18 Was this a new procedure that was  
19 being implemented in regard to the instructions  
20 to be sent to utilities after the TMI-2 accident?

21 A Yes, or at least it is a formalization of  
22 intended practice.

23 Q It says "All future instructions."  
24 Does it mean instructions after the date of  
25 July 30, 1979?

2 A That's the way I would read it, yes.

3 Q Prior to July 30, 1979 the Training  
4 Department had not reviewed draft operating  
5 procedures for either normal or abnormal conditions  
6 prior to their transmittal to utility customers;  
7 is that correct?

8 MR. KOLB: Would you read the  
9 question back, please.

10 (The reporter read back the last  
11 question.)

12 MR. KOLB: Is that question intended  
13 to determine whether it was a practice of  
14 having them review them or not, or do you  
15 mean had the Training Department ever in  
16 any instance reviewed something that had  
17 gone out?

18 MR. MacDONALD: I think we are talking  
19 here in terms of a procedure for review by  
20 the Training Department and the question is  
21 geared towards all future instructions  
22 which I am seeking to elicit whether it is  
23 a change in procedure from what happened as to  
24 both before July 30, 1979. And the question  
25 is simply, prior to July 30, 1979 did the

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Training Department review draft operating procedures during the normal or abnormal conditions prior to the transmittal to the customer.

MR. KOLB: The problem is the same, though. The way the question is phrased you could be asking whether it ever, but it seems you want to find out whether there was a regular procedure.

MR. MacDONALD: Let's deal with a regular procedure and then we will deal with that.

BY MR. MacDONALD:

Q As a matter of general practice prior to July 30, 1979, did the Training Department review draft operating procedures prior to submission to operating utility customers of B&W?

A I am familiar early on that the Training Department did indeed review the procedures, the operating procedures that were sent out later, or the group at that time, the Operating Reactors Group at that time. I do not know that they reviewed all revisions to them or I'm not aware of any specific cases along that line but I do

1  
2 know that they did review them when I was in the  
3 office back in the 1971, '72, '73 area.

4 Q Were those procedures that related to  
5 startup physics testing?

6 MR. KOLB: Is your question whether  
7 all the procedures he is referring to were  
8 of that type or whether some of them were  
9 of that type?

10 MR. MacDONALD: Let's see whether  
11 some of them were.

12 A Yes, they reviewed the physics testing.

13 Q Did they review any other type of  
14 draft operating procedure?

15 A Yes, mainly their review was of the draft  
16 operating procedure.

17 Q Now, this particular memo states that  
18 "All future instructions to operating plants  
19 concerning how the plants should be operated  
20 during normal or abnormal conditions must be  
21 reviewed by Training prior to customer transmittal."

22 Is that a change from the practice  
23 that existed prior to July 30, 1979?

24 MR. KOLB: If we may, I think it  
25 would be useful to read the next sentence,

1  
2 which says, "This verifies verbal instructions  
3 already transmitted to many of you."

4 MR. MacDONALD: I have no problem  
5 reading that sentence if it helps the  
6 witness.

7 MR. KOLB: I think it helps give the  
8 context to the question and for the purpose  
9 of understanding the record.

10 A Well, as I stated before, I think the memo  
11 gives a formal administrative guideline to follow  
12 from this point on but at no time, at least to  
13 my own opinion, that we excluded Training from  
14 review of procedures.

15 Q So it is your belief that Training was  
16 involved in review of procedures at all times  
17 prior to July 30, 1979?

18 A No, I wouldn't say "all times." But they  
19 did review procedures.

20 Q In the normal course of sending draft  
21 procedures to the utility site prior to this,  
22 the date of this memo, Training was involved in  
23 that review?

24 A As best I can recollect, they were.

25 Q Did Training or anyone from the

2 Training Department sign off or were they required  
3 to sign off by the Policy and Procedures Manual  
4 on the draft operating procedures?

5 A I don't recall.

6 Q In the second paragraph of the memo  
7 it states, "By copy of this memo, N. S. Elliott is  
8 requested to provide a list of names authorized  
9 by him to provide required signatures for Training,  
10 and to instruct such designees that expedited  
11 reviews are often required for these documents."

12 Was that list of names subsequently  
13 provided to PPSS by Mr. Elliott?

14 A I believe it was or at least a name was  
15 provided.

16 Q And these were the individuals who  
17 would then be required to sign off from the  
18 Training Department in the future on the draft  
19 operating procedures before they were sent out to  
20 the utility sites?

21 A That's correct.

22 Q Is it your understanding that that  
23 sign-off signature was a change in procedure as  
24 of approximately the date of this memo?

25 A I view it as a change in the formal aspect

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of the procedure.

Q        Could you explain for me the difference between an operating guideline and a site instruction, if there is any?

A        An operating guideline is a specific piece of information that would talk about things, various controls or how to operate the plant under certain conditions. It is an instruction.

          The site instruction is a formal procedure by which the Service Department could deliver any information to the Service Manager or Project Manager which would be relayed directly to the utility on a very quick turnaround basis, which would then be followed up by some formal memo, document, something as we could furnish the paper work.

Q        Was there any requirement prior to the TMI-2 accident that site instructions be signed off by any other people within B&W other than PPS?

A        I don't recall at this time.

Q        Was there any sign-off within the Plant Performance Services Section required before the site instruction was sent out?

2 A On matters that involved plant operation, I  
3 believe there was, yes.

4 Q Who would have to sign off?

5 A Don Hallman or his designee.

6 Q Were you his designee at times?

7 A I was one of them, yes.

8 Q Were there others?

9 A Yes.

10 Q Who were they?

11 A Well, the two Supervisory Engineers, one  
12 of the Startup Group and one of the Operating  
13 Reactors Group. I was one, the other was --  
14 the individuals' names were Ron Finnin and Jim  
15 Veenstra. I believe those were the only two  
16 during the time I was there.

17 Q Finnin preceded Veenstra?

18 A Yes.

19 Q In the context of operating guidelines  
20 and site instructions, how do draft operating  
21 procedures fit in? Are they classified as  
22 operating guidelines?

23 MR. KOLB: Would you read the question  
24 again, please.

25 MR. MacDONALD: Let me break that up.

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It is a little convoluted.

Q In the context of operating guidelines and site instructions, how do draft operating procedures fit in?

A Draft operating guidelines is B&W's document that we would send the utility for its incorporation into operating procedures, plant specific operating procedures.

Q So it is not the same animal as an operating guideline?

MR. KOLB: I would have to ask you what you mean by "same animal." I am not sure how far to take that.

Q It is not --

MR. KOLB: My question is, do you want the genus and species or what?

Q It is not the same as an operating guideline, a draft procedure?

MR. KOLB: We are talking about a draft operating procedure --

MR. MacDONALD: Yes.

MR. KOLB: -- and I think he has explained to you how the two relate to each other and I am unclear as to what additional

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information you want.

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MR. MacDONALD: I was a little confused, and mybe it is just my fault, but in his answer before he used the term "draft operating guideline" in the first sentence of his answer and that is what confused me. I did not know whether he was referring to operating guidelines as is, as we see in the July 30, 1979 GPU Exhibit 127 memo or not.

MR. KOLB: Let me make this suggestion. His answer just a couple of answers back, why don't we have that read back, because I do think it is clear, and if it is not, it would be easier to see what isn't clear about it if we have it read back.

MR. MacDONALD: That's fine.

Will you please repeat the answer.

(The reporter read back the answer as requested.)

MR. KOLB: That is very clear.

BY MR. MacDONALD:

Q What confuses me is the term "draft operating guidelines" when my question dealt with draft operating procedures. What I am trying to

1  
2 glean is whether or not the draft operating  
3 procedure is the same as an operator guideline --

4 MR. KOLB: But --

5 Q -- if you can answer that question.

6 MR. KOLB: But as the answer read  
7 indicated, he referred in his testimony to  
8 both operating procedures and operating  
9 guidelines and explained their relationship.  
10 Now, I don't have any problem with either  
11 having him repeat that relationship or  
12 repeating the answer again, but it seems to  
13 me that he has given you the answer and I  
14 don't understand what additional information  
15 you are looking for.

16 MR. MacDONALD: Well, let's just go  
17 back to it for a minute because I didn't  
18 quite understand his answer and I would like  
19 to make it clear in my own mind.

20 (Continued on page 128.)  
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2 Q An operating guideline is different  
3 from a draft operating procedure, as I understand  
4 it, is that correct?

5 MR. KOLB: Do you mean different in  
6 words or do you mean different in some other  
7 respect?

8 MR. MacDONALD: Different in any  
9 respect at this point in time and then I  
10 will find out how it is different.

11 MR. KOLB: Do you understand the  
12 question or do you not understand?

13 THE WITNESS: Yes, I understand the  
14 question.

15 MR. KOLB: O.K., why don't you go  
16 ahead and try to answer it.

17 A Previous to the TMI-2 transient, we  
18 prepared, B&W prepared, draft operating  
19 procedures. Those were then embellished by the  
20 utility as they saw fit for various title  
21 documents.

22 After the TMI-2 transient there  
23 was a new procedure or new document name that  
24 came into existence called an Operating Guideline  
25 or could be Abnormal Operating Guideline.

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Q Did the Operating Guideline that came into existence after the TMI-2 accident substantially parallel the draft operating procedure that was used by B&W prior to the TMI-2 accident?

A Yes.

Q During the time you were involved as a Supervisory Engineer in the Plant Performance Section, did you have any occasion to deal with licensing at all or the licensing basis for plants?

MR. KOLB: That's possibly going to be two questions depending on how the response comes.

Could you break it down?

Q Let's take the first one first. Did you have any involvement in licensing?

A No.

Q Did you have occasion to work with the licensing basis required to license nuclear power plants?

A I had occasions to either be questioned by someone from licensing or offer my comments

2

on certain licensing aspects.

3

Q Can you recall specifically in what instances you were asked to comment on licensing aspects for a certain issue?

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A The only thing that jumps to mind is a branch technical position from the NRC on reload startup testing.

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Q Were you familiar at the time you were a member of the Plant Performance Services Section as a Supervisory Engineer with the requirements or guidelines of 10 CFR?

10

11

12

13

A I generally know what the document is.

14

Q You have read it, reviewed it?

15

A Not in any great detail, no.

16

Q Did you have occasion to work with

17

the document at all during the time you were a Supervisory Engineer at PPS?

18

19

A I don't recall ever having any occasion to except for the previous, I just mentioned there was, I believe, a licensing -- a Xerox page from that document that I looked at when we were talking about the restart physics testing.

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Q In drafting or revising

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operating draft procedures prior to the

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TMI-2 accident, did you perform this function with the guidelines of 10 CFR in mind?

A I don't believe I ever recall addressing that issue.

Q During the time you were a Supervisory Engineer in PPS, did you have any regular meetings of the Plant Performance Services Section that you attended?

A I don't believe we had any regular scheduled meetings of the Section.

Q You had no monthly, Mr. Hallman did not call any monthly meetings or any other regular meetings for the Plant Performance Section?

A No.

Q Did you have any other regular meetings during the time you were a Supervisory Engineer for PPS at which only some members of PPS would be involved?

A I had meetings from time to time with two or three of the engineers that worked for me from time to time on particular issues.

Q Did you have any regular meetings among yourself and Mr. Hallman and Mr. Finnin at any time while you were a Supervisory

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Engineer?

A Not regularly scheduled meetings.

Q You did have meetings?

A From time to time, yes.

Q Would the same hold true for meetings with Mr. Veenstra and Mr. Hallman and yourself?

A Yes.

Q At those meetings that were not regularly scheduled, was there any agenda prepared or anything else that would give you guidance as to what the meeting would discuss?

A There wasn't any regular agenda.

Q Were there at times agendas prepared for such meetings?

A I don't believe so, no.

Q What were the purposes for such meetings?

A Administrative to begin with, passing along to us Supervisory Engineers the workload in respect to manpower resources that we had to do work was the biggest reason for the meetings.

Q Discussing the workload and the issues that were to be resolved by the section within a period of time?

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A Yes, and a prioritizing of the workload.

Q Were there any meetings among PPS personnel other than the ones you have just mentioned which were not regular meetings, but which were held from time to time in the Plant Performance Services Section of Nuclear Service?

A There were no regularly scheduled meetings other than the ones we have talked about. There possibly was a meeting from time to time on specific subjects and I may or may not have been in attendance.

Q Can you recall the substance of any of those specific meetings?

A What time period are we talking about?

Q At the time you were a Supervisory Engineer.

A Yes.

Q What were those?

A Well, a particular issue of the -- of a big workload that came into the section in 1979, I believe it was, later referred to as the ATOG work, abnormal transient operating guideline work, where I and several of my engineers met quite often and quite frequently to develop a

2 philosophy for this new operating guideline.

3 Q The abnormal transient operating  
4 guidelines were prepared by people within PPS?

5 A Yes.

6 Q Was there any involvement from others  
7 outside of PPS?

8 A Yes.

9 Q Who were they?

10 A Well, various engineering people were involved  
11 in the project.

12 Q This was a project that was begun as  
13 a result of the TMI-2 accident?

14 A That is true.

15 Q Can you name any of the specific  
16 people who were involved outside of the personnel  
17 from PPS?

18 A Yes. Mr. Lou Cartin, Mr. Eric Swanson,  
19 Mr. Joe Kelly, Mr. Tally and others that I don't  
20 remember their names right at the moment.

21 Q Mr. Cartin and Mr. Swanson were  
22 members of the Plant Integration Unit?

23 A Yes.

24 Q Was Mr. Kelly also?

25 A Yes, I think so.

1

2

Q What unit or section was Mr. Tally  
in?

3

4

A Control System Analysis or Controls Analysis,  
I believe.

5

6

Q Was that in the Engineering  
Department?

7

8

A Yes.

9

Q Was he a Unit Manager?

10

A No. I think he was a Lead Engineer.

11

Q Who aside from yourself within PPS was  
involved in ATOG?

12

13

A Mr. Bob Twilley, Mr. Ted Book. They are  
the major ones.

14

15

Q What was Mr. Twilley's position at the  
time?

16

17

A He was an engineer that reported to me.

18

Q Is he still an engineer within PPS?

19

A Yes.

20

Q And Mr. Book's position?

21

A He was an engineer reporting also to me.

22

Q Did Mr. Book also used to be a training  
instructor?

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24

A Yes, he was in the Training Department.

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Q Was he an instructor in the Training

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Department?

A Yes.

Q What time period was he an instructor in the Training Department, to the best of your knowledge?

A A year or two years preceding when he came to work for me which was prior to '79 I reckon.

Q Who was in overall charge of the ATOG Program?

A From a technical or administrative?

Q Let's try administrative.

A Denny Napir.

Q The same for the technical?

A No, Mr. Joe Kelly was.

Q What portions of the ATOG Program were you involved in?

A I was involved with the conception to the final production of the specific procedure that was sent to Arkansas.

Q Were you involved in the drafting of the procedures?

A Yes.

Q Were you involved in providing the technical backup for the drafting procedures?

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A I was involved in obtaining or relating to Engineering and then in ensuing discussion with Engineering about the needed work or needed technical backup for the procedure.

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Q Who was the person or persons in engineering who you discussed the need for backup for ATOG with?

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A Mr. Swanson, Mr. Cartin, Mr. Kelly.

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Q They provided the technical backup to support the new draft operating procedures that were produced by ATOG?

A That's true.

MR. MacDONALD: Off the record.

(Discussion off the record.)

(Recess.)

MR. MacDONALD: I would like to mark for identification as GPU Exhibit 128 a memorandum from Frank Walters to Don Hallman dated 12/22/1978.

(Memorandum from Frank Walters to Don Hallman dated 12/22/1978 marked GPU Exhibit 128 for identification, as of this date.)

Q Mr. Walters, is this a memo that you

1  
2 authored and sent to Mr. Don Hallman on or about  
3 December 22nd, 1978?

4 A It is.

5 Q Under "Subject" on the fourth line  
6 from the top it says "PPS Workload problem areas."

7 What did you mean when you said  
8 "problem areas"?

9 A Areas of work or items of awareness that  
10 I wanted to specifically highlight to Don as  
11 mixed in with all of the other workload in the  
12 group for his consideration in the workload  
13 that the group had to do.

14 Q Are these items that you thought  
15 needed additional investigation or correction?

16 A I think these were items that I thought  
17 to be doing better than an average job in our  
18 area that we should be addressing on some  
19 future schedule or priority.

20 Q Were these arranged in any priority  
21 order by you?

22 A I don't believe so.

23 Q In the first sentence it says the  
24 following:

25 "The following is a summary of

1  
2 the various problem areas or areas that need  
3 additional investigation to assure our standing in  
4 the service field as competent and aware  
5 engineers available for master service work as  
6 well as accomplishing our contractual" -- can you  
7 read that?

8 A "Work."

9 Q -- "work in a competent and efficient  
10 manner."

11 Did these areas that you brought to  
12 Mr. Hallman's attention in December of 1978  
13 receive additional investigation?

14 A I don't recall whether all items did or  
15 not.

16 Q Did some of the items?

17 A Yes.

18 Q Would you identify which items  
19 received additional investigation?

20 MR. KOLB: To the extent he is aware.

21 MR. MacDONALD: That is always to the  
22 extent he is aware.

23 A Well, most of these are areas of work that  
24 I wanted to -- to assure that Don understood  
25 that we were working on along with other

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information for work that was coming up.

Item No. 4 addressed from time to time and addressed in the last year or so with the individual utilities.

Item 5 I think resulted in a -- what I am sure in additional work by both us and the Engineering Department.

Item 6 I responded with a memo, I believe, to Engineering on that particular subject and I believe I received one back from them.

Item 7 actually resulted in a piece of equipment to do that item.

Item 11 I did indeed generate a generic nuclear engineer training program for plant nuclear engineers.

Item 15 has been addressed in the company in various manners since that time as well as within the Service Department for scheduling simulator training for engineers in the Plant Performance Service Section.

Item 17 resulted in a new test method that was sent to Arkansas.

Those are the items I remember recalling at least some work or additional evaluation happening

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on.

Q When was the work on item No. 4 prepared?

A I don't recall the exact date that we started work on it.

Q Approximately when was it? Was it sometime in 1979?

A I really don't remember.

Q Was it after the TMI-2 accident?

A I believe it was before.

Q No. 4 says, "Evaluate our position on NRC's recommendation that we assist utilities in development of dual acceptance criterias."

A Yes, sir.

Q Could you describe for me what dual acceptance criterias are?

A The NRC passed along a memo from Paul Check drafted by one of their people that asked that testing that was done in the future should have a review criteria and an acceptance criteria for the particular test data when it was performed.

Our procedures in the past only contained an acceptance criteria, and I was asking

2 her whether or not it was B&W's or his opinion  
3 that we should take some time to talk with the  
4 utilities and see which way they wanted to go  
5 as far as complying with this recommendation or  
6 continuing the practice that we had been going  
7 with for several years.

8 Q On the basis of that you developed a  
9 review and acceptance criteria?

10 A On the basis of that I looked into certain  
11 of our test and certain of the acceptance  
12 criteria and tried to determine how much  
13 resources would be needed if indeed the utilities  
14 want to comply with this dual acceptance criteria.

15 Q And what did you determine in terms  
16 of resources that would be needed to comply?

17 A I determined that there was indeed a couple of  
18 cases in point that were not, the information was  
19 not readily available, indeed it bounded on  
20 philosophical interpretation of tech spec  
21 numbers, or already accepted, acceptance criteria  
22 and that any deviation from that would require  
23 an in-depth evaluation by Engineering to determine  
24 a new review criteria and certainly this would  
25 have to be talked to with the utilities about

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how they wanted to approach this.

Q No. 5 says, "Re-evaluate present PIDC acceptance criteria with new information available."

What does PIDC stand for?

A Power Imbalance Detector Correlation test.

Q And what does that, in substance, entail?

A It is a correlation between the out-of-core detectors and the in-core detectors that allows the out-of-core system, which is an input to the reactor protection system, to be calibrated to a certain criteria so that in under any transient RPS or reactor protection system would be conservative during this transient when an established power imbalance in the core occurred.

Q Now, this reevaluation you passed on for additional work by the Engineering Department?

A Yes, it was passed on to the Engineering Department.

Q Do you know what the outcome was in the Engineering Department?

A The Engineering Department ran some

2 analysis to try to duplicate some of the  
3 information that we had received from sites or  
4 at least to evaluate as best they could a --  
5 from an input paramter how that would affect  
6 the in-core to out-of-core correlation.

7 Q Who in the Engineering Department did  
8 you pass this on to?

9 A I think it was a Mr. Marv Gudorf.

10 Q What section or unit was he involved  
11 in?

12 A He was the head of the Nuclear Operation  
13 Analysis Unit of Fuels Engineering.

14 Q Did you get an answer back from this  
15 gentleman regarding the issue?

16 A Yes, I received a correspondence on that  
17 sometime later. I don't remember the date.

18 Q Do you recall when the work was done?

19 A Not at this time.

20 Q Or when you passed along the concern?

21 A No, I don't even remember when I passed it  
22 along.

23 Q No. 6 says, "Evaluate impact of" --  
24 you will have to tell me what that symbol means.

25 A Westinghouse. Super bar W.

2

Q -- "Westinghouse rod" --

3

A "Swap."

4

Q -- "swap technique on plant

5

availability and customer demands."

6

Will you explain what Westinghouse

7

rod swap technique is or was?

8

A I became aware in review of certain

9

information that is routinely passed along to us

10

from our Washington correspondence from the NRC,

11

from public documents, that Westinghouse at

12

certain units was experimenting with a new

13

technique measuring rod worths, as a result of

14

this information I evaluated that particular

15

technique versus the boron swap technique that

16

we had been using in our startups, and came to

17

the conclusion that it looked like we could save

18

a few hours in the zero power physics testing by

19

employing this rod swap technique and was asking

20

Don his thoughts on the process and whether I

21

should go any further with Engineering on the

22

subject.

23

Q Did Mr. Hallman give his O.K. to go

24

further with Engineering on the subject?

25

A Yes, indeed.

1

2

Q Did you then pass this concern along  
to Engineering?

3

4

A Yes.

5

Q Who in Engineering?

6

A The same Mr. Marv Gudorf.

7

Q Did you get an answer back from  
Engineering?

8

9

A Yes, I think so.

10

Q Were there any other instances that  
you can recall obtaining information from public  
documents regarding the NSS systems of other  
manufacturers, Westinghouse, GE, Combustion  
Engineering?

11

12

13

14

15

MR. KOLB: Which systems?

16

MR. MacDONALD: Westinghouse, GE.

17

MR. KOLB: Which systems?

18

MR. MacDONALD: NSS.

19

MR. KOLB: NSS. O.K.

20

A I don't recall in specific. There are always  
public documents that are available for review  
or to look at.

21

22

23

Q Was there anybody within B&W who  
regularly took part in such a review of those  
public documents?

24

25

2 A I am not sure whether there was or not.

3 Q No. 7 says, "Complete development of  
4 RAMP generator and new reactivity calculator.  
5 Ensure complete closeout" --

6 A "Checkout."

7 Q "Checkout," excuse me.

8 -- "and field tested."

9 Will you explain to me that this  
10 concern was about?

11 MR. KOLB: Just a second.

12 Go ahead.

13 MR. MacDONALD: Will you please repeat  
14 the question.

15 (Record read.)

16 A Yes, for some time I had been in Fuels  
17 Engineering and I had discussed the subject of  
18 the individual utilities using their own  
19 reactimeter in measuring the physics startup  
20 parameters and since we were responsible, B&W  
21 was responsible, for the safety analysis of those  
22 units, how could we back equipment that was not  
23 B&W supplied.

24 As a result of that I asked some --  
25 the C&I Group of B&W could we build a RAMP

1  
2 generator that we could go to the utility site  
3 and input to their reactivity calculator and  
4 check the output with the same RAMP generator  
5 to our reactivity calculator and see how far  
6 different they were. If it indeed was the same  
7 as ours, there would be no problem with using  
8 their measured data in our safety analysis  
9 evaluations. That was the RAMP generator.

10 The new reactivity calculator, the  
11 old data reactivity calculator was of '69, '70  
12 vintage electronics and to remain competent and  
13 with the latest equipment in the field we needed  
14 to use some capital money and build a new up to  
15 the state of the art with an electronic system  
16 reactivity calculator.

17 Q Did you pass along this concern to  
18 anyone at another department within B&W?

19 A I think Safety Analysis themselves were  
20 aware of it, at least Mr. Vosberg in Safety  
21 Analysis. I believe I remember discussing it  
22 with him.

23 Q In addition --

24 A I --

25 Q Excuse me.

1

2 A I don't remember other people. There may  
3 have been other discussions.

4 Q In addition to writing this memo to  
5 Mr. Hallman, do you remember at some point in  
6 time discussing it with Mr. Vosberg?

7 A Yes, I think I probably discussed it with  
8 him at some point in time.

9 Q Is Mr. Vosberg the Manager of  
10 Safety Analysis?

11 A I do not believe he was Manager. He was  
12 probably a Supervisory Engineer in Safety  
13 Analysis.

14 Q Was Mr. LaBelle the Manager?

15 A I believe that's correct.

16 Q Was there any resolution of this concern  
17 in No. 7 as to either the RAMP generator or the  
18 new reactivity calculator?

19 A Well, we were successful in getting  
20 both products built and indeed have used both of  
21 them today.

22 Q Do you recall whether either items  
23 5, 6 or 7, the work performed, was performed  
24 prior to the TMI-2 accident or after the TMI-2  
25 accident?

1

2

A To the best of my recollection, it was probably an ongoing subject that was touched on before and it continues afterward.

3

4

5

Q Did you have discussions with people in the Engineering Department on items No. 5 and 6?

6

7

8

A Yes, I did.

9

10

Q On item 5, how many discussions can you recall having with people in Engineering?

11

A I don't remember the exact number.

12

Q More than one?

13

A Sure.

14

Q Was it several?

15

A Yes.

16

17

Q Item No. 6, can you recall having more than one discussion with people in the Engineering Department regarding this concern?

18

19

A At least several times.

20

21

Q Item No. 7, can you recall having discussions with people in the Engineering Department regarding this concern, more than one? You stated one with Mr. Vosberg.

22

23

24

A I had at least two discussions with Mr. Gudorf on the subject.

25

2 Q In addition to the conversation with  
3 Mr. Vosberg?

4 A Yes.

5 Q Can you recall any other conversations?

6 A I am sure at some time or another I talked  
7 to Mr. Hallman about it.

8 Q Did you specifically talk to Mr.  
9 Hallman about all the items that are in Exhibit  
10 GPU 128?

11 A I don't believe I ever met him and we went  
12 down it on an item item basis, no.

13 Q But do you believe you have discussed  
14 the items on GPU Exhibit 128 marked for  
15 identification with Mr. Hallman?

16 A At some time or another, I think we have  
17 touched on each of them.

18 Q No. 8 says, "Obtain new data  
19 acquisition system to replace obsolete hardware  
20 now being used."

21 What was the new data acquisition  
22 system that you were referring to in No. 8?

23 A Essentially the same piece of equipment I  
24 was referring to in No. 7, reactivity calculator/  
25 data acquisition system, a new 1978-79 vantage

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electronics compared with the '69 vintage  
electronics that we had that we used on startup  
testing.

(Continued on following page.)

2 Q Did you have any discussions on Item  
3 No. 8 with anybody in Engineering aside from  
4 the ones you have already recounted in relation  
5 to No. 7?

6 A I don't recall any conversations about the  
7 data acquisition system.

8 Q No. 9 says, "Develop new data handling  
9 tools once new data acquisition is bought."

10 Will you explain to me what the  
11 "new data handling tools" were that you were  
12 referring to in Item No. 9?

13 A It would be new computer software, plotting  
14 software that would be used on the new hardware,  
15 if it were bought, in Item 8.

16 Q Was that new data acquisition system  
17 put in place since the time of your writing of  
18 12/22/78?

19 A We do have one unit in hand, yes.

20 Q When was that obtained?

21 A It must have been early '80.

22 Q And the software has also been  
23 obtained for that hardware unit?

24 A I'm not aware it has been produced yet.

25 Q Did you have conversations with

1

2

Engineering regarding, concerning No. 9, about  
the software?

3

4

A No, I have not.

5

6

Q Have you had any discussions with  
anyone else at B&W regarding Item No. 9?

7

8

A Yes, I have had discussions with some of  
the C&I people in Service that are responsible for  
maintaining the system.

9

10

Q Have you had more than one discussion?

11

A Yes.

12

Q Have you had several discussions?

13

A At least two.

14

Q With which individuals in C&I?

15

A Mr. Norbert Seeling and Bill Nielson.

16

17

Q Have you sent them any memos on the  
subject?

18

A I don't recall any at this time.

19

20

Q Item No. 10 says, "Develop and Q/A  
data reduction codes for small mini-computer."

21

Does this relate to plant data?

22

A It relates to reduction of plant startup  
test data during the startup physics testing.

23

24

25

Q Did you discuss this concern with  
anybody at B&W?

1

2

A With Mr. Hallman and engineers within my group.

3

4

Q Anyone from outside of your group?

5

A I don't recall any.

6

Q Has the current concern that you

7

express here been resolved?

8

A Item No. 10?

9

Q Yes.

10

A Yes.

11

Q When did that occur?

12

A Well, it was on an ongoing basis. We

13

developed a small LOCA computer calculation and

14

we -- I believe we used an Engineering or B&W

15

procedure by which we Q/A'd that little program

16

and filed it in the files on an as-needed basis.

17

Q No. 11 says, "Develop nuclear engineer

18

training program for generic plant."

19

This was performed by you when?

20

A I don't remember specific dates. There

21

were times when I completed that.

22

Q When did you begin?

23

A I don't remember that either.

24

Q Do you recall approximately when it

25

was completed?

1

2 A Sometime between a request from Florida  
3 Power & Light for such a training course and  
4 their acceptance of it, whenever that was. I  
5 don't remember, '79, '78.

6 Q This was a training program for  
7 Florida Power & Light personnel?

8 A The first one was.

9 Q No. 13 says, "Does PPS's work scope  
10 ever intend to have an objective of some type  
11 of data analysis on problem areas or coordination  
12 of these problems?"

13 The "problem areas" that you referred  
14 to there, are they plant problem areas or  
15 did you have something else in mind?

16 A I believe I had other problem areas in mind.

17 Q What were those other problem areas?

18 A Well, I asked that question in the context  
19 of the first paragraph of this memo. It was my  
20 belief that if we were to remain an outstanding  
21 group in what we were doing, that we should offer  
22 a question concerning, to the utilities, concerning  
23 how much analysis or how much involvement should  
24 we have in analysis of or looking at each  
25 specific transient or trip that the plant might get

2 into.

3 Q What prompted your concern or your  
4 statement to Mr. Hallman in No. 13?

5 A I don't recall.

6 Q No. 14 says, "Study and evaluate our  
7 competition test programs so we are not in  
8 dark as to where our program stands."

9 Did you ever discuss this with  
10 anybody outside of relaying the information to  
11 Mr. Hallman, regarding No. 14?

12 A Yes, I'm sure I have.

13 Q Can you recall with whom?

14 A Well, it was certainly with engineers  
15 that worked for me, we discussed it, yes.

16 Q Was there anyone outside of PPS?

17 A I think I may have had a passing comment  
18 with Mr. Jim Phinney, Manager of Operating Plant  
19 Services, about availability of plants and from  
20 that could we minimize the startup testing time  
21 in the relay physics testing.

22 Q Was there any resolution of the  
23 concern?

24 A Well, I didn't state it as a concern. I  
25 don't know what you mean by that. Is it possible

1  
2 that we can evaluate the different test programs  
3 and indeed improve the one that is already in  
4 existence.

5 Q Was anything done as a result of your  
6 comment to Mr. Hallman?

7 A I do not believe we made any changes.

8 Q No. 15 says, "Ensure our engineers  
9 received a training course from Engineering and  
10 on the simulator."

11 By "our engineers" you mean the  
12 engineers within the Nuclear Service Section?

13 A No. B&W engineers in the Engineering  
14 Department -- oh, excuse me. "Our engineers,"  
15 yes, Plant Performance Service engineers.

16 Q And by "received a training course  
17 from Engineering," you mean the personnel within  
18 the Engineering Department?

19 A That is correct.

20 Q And "on the simulator," by that you  
21 mean on the B&W training simulator?

22 A That's correct.

23 Q Has that program been put into place  
24 since the time you write this memo?

25 A I did result in establishing a training

2 course for my engineers from the Safety Analysis  
3 Department which I mainly had back in my mind  
4 here.

5 Q When did that program begin?

6 A I don't remember the exact dates that that  
7 training program was accomplished.

8 Q Why did you consider it important that  
9 such a program be instituted?

10 A It is always important to have engineers  
11 that are involved in testing, in operation of a  
12 nuclear power plant, to understand the basic input  
13 from the Safety Analysis Department, how the  
14 limits are set, what goes into setting the limits  
15 and an understanding of those limits so that when  
16 you are out testing, you can evaluate any abnormal  
17 or condition that you are in where it is a serious  
18 problem, where it is something that should go back  
19 to B&W or at least how to evaluate the problem  
20 that you are in.

21 Q This was a new program that was  
22 instituted, correct?

23 A I wouldn't say it was a new program that was  
24 instituted.

25 I was successful in getting the training that

2 I thought necessary for the engineers that were  
3 in the section at the time.

4 Q And that was the training from the  
5 Engineering Department and the training on the  
6 simulator?

7 A Yes.

8 Q No. 16 says, "Have someone become  
9 aware that the 205 PMIS software and the plant  
10 computer area in general as of now we have zero  
11 expertise in this area."

12 Q What does the "205 PMIS software" that  
13 you were referring to in there refer to?

14 A I was referring to the on-line computer  
15 software for the 205 plant, which is Plant  
16 Performance Information System, I believe is what  
17 that stands for. It is essentially an on-line  
18 computer for the 205 plants.

19 Q And you were saying that there was  
20 nobody within PPS that had expertise in this  
21 area as of that time?

22 A That's correct.

23 Q Has there been any resolution of that  
24 particular concern that you expressed in Item  
25 No. 16?

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A I am not aware that any solution to that has been effected.

Q Did you talk to anybody within PPS aside from Mr. Hallman regarding the substance of Item 16?

A None other than one or two engineers that worked for me.

Q Did you speak with anyone outside of PPS?

A I don't believe so.

Q No. 20 says, "Present RPRINT data reduction tool is an embarrassment at best."

Can you explain what "RPRINT data reduction tool" is?

A That's the name given to an in-house code for data reduction from the data acquisition system that we previously referred to.

Q Did you discuss this particular concern with anybody other than Mr. Hallman?

A Yes, I believe I did.

Q Can you recall with whom?

A I believe with Mr. Kelly -- not the same Kelly we talked about before.

Q Not Joe Kelly?

1

2

A Not Joe Kelly, Mr. Bill Kelly at sometime  
3 about it, and also a programmer from the  
4 Computer Group.

4

5

Q What section is Mr. Bill Kelly in?

6

A At that time, when I talked to him, he was  
7 in the Plant Performance Service Section.

7

8

Q Can you recall when it was that you  
9 spoke to him?

9

10

A It was in 1978. I believe in the middle of  
11 the year or something.

11

12

Q Before the time you wrote this memo  
13 to Mr. Hallman?

13

14

A Yes, I'm sure.

15

Q Was there any resolution of the  
16 concern you expressed in Item No. 10?

16

17

A Not that I am aware of.

18

MR. MacDONALD: This is a good place  
19 to call a halt for today.

19

20

MR. KOLB: O. K.

21

(Time noted: 4:33 p.m.)

22

James Franklin Walters

23

Subscribed and sworn to before me

24

this day of 1981.

25



I N D E X

Witness	Page
James Franklin Walters	3

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E X H I B I T S

GPU FOR IDENTIFICATION		PAGE
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128	Memorandum from Frank Walters to Don Hallman dated 12/22/1979.	137

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