

C O N T E N T S

1

<u>2 WITNESSES</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>REDIRECT</u>	<u>RE CROSS</u>
3 John J. McGarry, Sr.				
By Mr. Selkowitz	3521			
4 By Mr. R. Adler		3532		
5 Daniel Shovlin				
By Mr. Blake		3541		
6 By Mr. Selkowitz			3542	
By Mr. R. Adler				3571
7 By Mr. R. Adler			(Further)	3589
By Mr. Blake				VOIR DIRE 3590
8 By Mr. Swanson		3606		
		Afternoon Session p.3613		
9 Murray N. Leakway				
10 By Mr. Selkowitz	3613			
By Mr. Swanson		3622		
11 By Mr. Blake		3627		
12 Earl Meck				
By Mr Selkowitz	3683			
13 Elmer B. Eisenhour				
14 By Mr. Selkowitz	3706			

E X H I B I T S

<u>16 NUMBER</u>	<u>FOR IDENTIFICATION</u>	<u>IN EVIDENCE</u>
17 16	3522	
18 17A	3545	
17B-F incl.	3546	
19 18	3558	
17A, 17F, 18		3578
20 19	3578	
19		3580
21 20	3584	
20		3592
22 21	3593	
22	3593	
23 21-22		3602
23	3617	
24 23		3620
29A-C incl.	3631	
25		

8010310541

EXHIBITS

<u>2</u> NUMBER	<u>FOR IDENTIFICATION</u>	<u>IN EVIDENCE</u>
1		
324A-C incl.	WITHDRAWN 3638	
25	3640	
426	3643	
27	3644	
526 & 27	REJECTED 3652	
28	3652	
628		3666
29A-D incl.	3670	
729A-D incl.	REJECTED 3675	
30A-E incl.	3686	
830A-E incl.	WITHDRAWN 3690	
31	3690	
931		3698
32	3699	
1032	REJECTED 3704	
33A-33M incl.	3711	
1133A-33M incl.		3718
34A-34C incl.	3719	
1234D-34I incl.	3720	
34J-34K incl.	3721	
1334A-34K incl.		3728
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

-----x
In the matter of:
METROPOLITAN EDISON COMPANY
(Three Mile Island Unit 1)

Docket No. 50-289
(Restart)

25 North Court Street,
Harrisburg, Pennsylvania

Thursday, October 23, 1980

Evidentiary hearing in the above-entitled
matter was resumed, pursuant to adjournment, at 9:00 a.m.

BEFORE:

IVAN W. SMITH, Esq., Chairman,
Atomic Safety and Licensing Board

DR. WALTER H. JORDAN, Member

DR. LINDA W. LITTLE, Member

Also present on behalf of the Board:

MS. DORIS MORAN,
Clerk to the Board

1 APPEARANCES:

2 On behalf of the Licensee, Metropolitan Edison
3 Company:

4 GEORGE F. TROWBRIDGE, Esq.
5 ERNEST BLAKE, Esq.
6 DEBORAH BERNSTEIN, Esq.
7 Shaw, Pittman, Potts and Trowbridge,
8 1800 M Street, N.W.,
9 Washington, D. C.

10 On behalf of the Commonwealth of Pennsylvania:

11 KARIN W. CARTER, Esq.
12 ROBERT ADLER, Esq.
13 Assistant Attorney General,
14 505 Executive House,
15 Harrisburg, Pennsylvania
16 WILLIAM DORNIFE,
17 Nuclear Engineer

18 On behalf of Three Mile Island Alert:

19 LARRY B. SELKOWITZ, Esq.
20 Widoff, Reager, Selkowitz & Adler,
21 P.O. Box 1547,
22 Harrisburg, Pennsylvania

23 On behalf of the Regulatory Staff:

24 JAMES TOURTELLOTTE, Esq.
25 DANIEL SWANSON, Esq.
Office of Executive Legal Director,
United States Nuclear Regulatory Commission,
Washington, D. C.

P R O C E E D I N G S

1
2 CHAIRMAN SMITH: Shall we proceed?

3 Mr. Selkowitz, before the break yesterday
4afternoon, the Board was speculating or pondering the
5relationship between Mr. McGarry and the exhibits. It is
6not apparent why, to the Board why this particular witness
7is being called for these particular work orders.

8 MR. SELKOWITZ: There is no particular connection
9between this witness, or in fact any of the witnesses and
10the particular work orders. The reason for that is the
11variety of people that were involved in the variety of work
12orders would have made this nearly impossible to parade that
13many witnesses through here at any moment in time because as
14you I think realize now, there's more than one person in
15different sections. And besides that, the information that
16we wish to highlight is general information that is readily
17apparent usually on the face of these.

18 Third is that the gentlemen we have identified are
19foremen who have a broader knowledge of perhaps the
20mechanics involved and the systems involved.

21 So we thought, we really want more general
22information anyway, they are all familiar with the process,
23and we have some background questions to ask each of them
24anyway as to their particular knowledge on systems and
25priorities and so on. Then we could just use them to get

1 the other information off the face of these.

2 CHAIRMAN SMITH: Well, are the witnesses
3 interchangeable to work requests?

4 I mean, have you tried to associate work requests
5 with witnesses who perhaps don't have direct knowledge of
6 the activity in the work requests but have a discipline
7 which is --

8 MR. SELKOWITZ: No, in fact we tried to do that,
9 just the opposite. We tried to take, if it was something
10 involving mechanicals, we tried very hard to make sure we
11 gave that to a mechanical foreman.

12 CHAIRMAN SMITH: All right. That's my question.

13 MR. SELKOWITZ: If it was instruments, we tried to
14 give it to, I believe it is Mr. Nokes, who is an instrument
15 engineer.

16 CHAIRMAN SMITH: All right, that's exactly my
17 question.

18 MR. BLAKE: Mr. Smith, I had essentially the same
19 question, I have the same problem, but I wondered if a way
20 to cure that was for Mr. Selkowitz to indicate with respect
21 to the work requests, as he offers them into evidence, what
22 it is they are being offered for, which of the various
23 allegations in Contention 5.

24 I don't know now, there isn't the association
25 between the witnesses and the exhibits which I had

1 anticipated with respect to these work requests. I wonder
2 if -- I expect that the ones to date have been with respect
3 to deferral of maintenance. I wonder if each time an
4 exhibit is offered, if we might be given the purpose for
5 which it is being offered.

6 CHAIRMAN SMITH: I thought that up till now the
7 purpose was rather apparent, but I think that probably would
8 be a prudent practice.

9 Proceed.

10 Whereupon,

11 JOHN J. MC GARRY, SR.

12 resumed the stand, having been previously duly sworn, was
13 further examined and testified as follows:

14 DIRECT (AS ON CROSS) EXAMINATION -- Resumed

15 BY MR. SELKOWITZ: (Resuming)

16 Q Good morning, Mr. McGarry. We have shortened by
17 quite a bit the amount of questioning we have for you this
18 morning so we can cut this down a bit.

19 I want to refer you, sir, to work request No.
20 15350, which was originally identified on the list for you,
21 the first one.

22 CHAIRMAN SMITH: That will be 16?

23 MR. SELKOWITZ: Yes, sir.

24 (The document referred to was
25 marked TMIA Exhibit No. 16

1 for identification.)

2 BY MR. SELKOWITZ: (Resuming)

3 Q Do you have that, sir?

4 A No, I do not.

5 Q Once again, sir, the format of this is very
6 similar to the forms that we have previously identified, is
7 that correct?

8 A Yes.

9 Q The pages after the first two are also similar to
10 those that we have seen. It is a procedure and some quality
11 control tickets.

12 A Yes.

13 CHAIRMAN SMITH: I have trouble with this
14 exhibit. The copy the Board has, perhaps three-fourths of
15 it is illegible. We can see the check marks in the
16 appropriate columns all right, but much of it is blurred.
17 We see the priority. Well --

18 MR. SELKOWITZ: As I understand it, it was taken
19 off of a microfilm. The copy that Mr. McGarry now has was
20 later supplied to me by Mr. Blake, is a better copy. We can
21 try to have some copies made from his copy to give you an
22 improved version of it.

23 CHAIRMAN SMITH: Well, why don't you proceed.

24 MR. SELKOWITZ: All right. My questioning on this
25 will be quite brief.

1 BY MR. SELKOWITZ: (Resuming)

2 Q This involves the intermediate cooling system,
3 does it not, sir?

4 A Yes.

5 Q And there are two filters that are to be changed.
6 It is ICF 1A and 1B.

7 A Yes.

8 Q And it says on there it is due to high delta P.

9 A Yes.

10 Q We have had testimony on the meaning of that.
11 The origination date is what, sir?

12 A It looks like 5/11/76.

13 Q Okay.

14 If we can turn over to block 19 --

15 CHAIRMAN SMITH: What is the date?

16 THE WITNESS: 5/11/76 it appears on mine.

17 BY MR. SELKOWITZ: (Resuming)

18 Q If we turn to the next page and we see No. 19, the
19 date the work was completed, it originally seemed to have
20 said the same date, and then that was scratched out and
21 initialled, is that correct?

22 A Yes.

23 Q And a new date was inserted, 2/4/78?

24 A Yes.

25 Q Would it be your understanding, sir, that that was

1 the corrected work completion date?

2 A I'm sorry, I couldn't hear you.

3 Q Is it your understanding, just by looking at this,
4 that that would be the corrected completion date?

5 A It is difficult to tell what happened here with
6 this work request, and my presumption is that it was used a
7 second time to do this work.

8 Q I believe you explained to us yesterday a second
9 sheet that was in use for that purpose called a --

10 A No, that was only, that particular item, the
11 packing traveler, was only used with valves.

12 Q All right. Now, if we look down to Item 22, there
13 is no correction, is there? There is merely a 2/13/78, is
14 that correct?

15 A Item No. 2?

16 Q 22.

17 A Oh. Yes, 2/13/78 is what I see.

18 Now, what was the question?

19 Q What I am curious, sir, knowing that there is
20 still only one QC review, is it still your feeling that this
21 was used twice?

22 A Yes.

23 Q And therefore the first time it was used QC did
24 not perform the operation required of it, is that your
25 feeling about this?

1 A QC does not have to witness every QC related work
2 request. This particular work request is not stamped for
3 quality assurance surveillance.

4 Q I understand, but it does require that QC sign off
5 on it?

6 A That's correct.

7 Q And can we infer correctly from this, sir, that
8 they did not sign off on it after the work was done on the
9 first date?

10 A Yes.

11 CHAIRMAN SMITH: I wonder if you are really
12 representing this exhibit accurately with respect to quality
13 control. On line 22, on whatever date, it says it has not
14 been surveilled.

15 MR. SELKOWITZ: I was going to ask the witness
16 what he understood what that means. As a matter of fact, I
17 think he just testified to something along that line.

18 THE WITNESS: I'm sorry, I didn't hear your
19 statement.

20 BY MR. SELKOWITZ: (Resuming)

21 Q There is the notation "not surveilled" on No. 22.
22 What does that kind of notation mean to you, sir?

23 A Are you asking me what does it mean or what do I
24 think it means?

25 Q What do you think it means?

1 A It means that they did not look at that particular
2 job, that they did not desire to look at that particular
3 evolution, whether it was performed once, twice or a dozen
4 times.

5 Q In other words, they didn't need to be present
6 when the work was being done.

7 A I'm sorry, the acoustics here are very bad and I
8 cannot hear you.

9 Q Does it mean, sir -- is this any better?

10 A Yes.

11 Q Does it mean that they did not desire to be
12 present when the actual work was being done?

13 A That is correct.

14 Q It does not mean that they don't have to complete
15 a review of the work after it has been done.

16 A They do not have to look at the work. They look
17 at the work request and ascertain that everything in the
18 work request and that the material used was correct. That
19 is what the signature is for.

20 Q And they did that review on 2/13/78.

21 A I don't know.

22 Q Well, that's what the date would indicate from the
23 face of the document at least, isn't that correct?

24 A They could have reviewed it. I don't know if they
25 did or not.

1 Q One final question about this work order. In the
2 bottom left hand corner it indicates that it took how many
3 hours to do this work?

4 A Eight.

5 CHAIRMAN SMITH: On your copy, on line 21, what
6 are the dates that are crossed out and initialled?

7 THE WITNESS: It says 1976.

8 CHAIRMAN SMITH: And the initial is crossed out.
9 Are these by different initialers?

10 THE WITNESS: It would appear so.

11 CHAIRMAN SMITH: My copy, it actually looks like
12 the same person crossed out and initialled the date on line
13 19, 20 and 21. It seems to be the same initial.

14 THE WITNESS: Yes.

15 MR. SELKOWITZ: That's all the questions that I
16 have of Mr. McGarry, and I would ask that TMIA Exhibit 16 --

17 CHAIRMAN SMITH: Mr. McGarry, may the Board
18 examine your copy, please, of that?

19 MR. SELKOWITZ: -- be moved into evidence.

20 (Pause)

21 CHAIRMAN SMITH: Are these filters changed on a
22 regular schedule or just when there is a high delta P?

23 THE WITNESS: Just when there is a high delta P.

24 CHAIRMAN SMITH: Are you familiar with the
25 practice of using the same work request again, that is, for

1 the same job?

2 THE WITNESS: That is the first time I have ever
3 seen something like that on a work request. We have in the
4 past used one work request and leave it open to change
5 filters over a period of time. The most changing is done at
6 a restart because a lot of miscellaneous things in the
7 system break loose and clog the filters. So we would have a
8 work request such as this and use it to change the filters
9 out. It is a dual filtration system where you valve one
10 into service and valve the other out and change the filters.

11 CHAIRMAN SMITH: Mr. Blake, did you want to argue
12 the --

13 MR. BLAKE: Mr. Chairman, I did not hear the
14 purpose for which it was being entered.

15 MR. SELKOWITZ: No, I didn't get to that because
16 the Board began to ask questions.

17 CHAIRMAN SMITH: All right, go ahead.

18 MR. SELKOWITZ: Perhaps I could ask Mr. McGarry
19 one follow-up question.

20 BY MR. SELKOWITZ: (Resuming)

21 Q Mr. McGarry, is it the standard practice when you
22 do have to make a correction, as you are filling out a work
23 ticket, to initial the correction?

24 A Repeat the question.

25 Q Isn't it standard practice when you are making a

1 correction to a work request, let's say you check the wrong
2 block on line 6, that you scratch that out and initial the
3 change?

4 A Yes.

5 MR. SELKOWITZ: Now, I would offer this in support
6 of our contention of deferred maintenance because I believe
7 the dates that were changed indicate when the work was done,
8 but if not, there certainly is a failure of quality control
9 to review it in a timely fashion. The intermediate cooling
10 system filters which are referred to here were discussed at
11 some length by Mr. Colitz at transcript pages 2850, 3135,
12 3137 and 3138, and a failure of the filters would lead to an
13 increased temperature in the reactor control rod drive
14 mechanisms, and we had quite some discussion about that.
15 That is why we believe it is related to the safe operation
16 of the plant.

17 (Pause)

18 MR. BLAKE: Mr. Smith, did you want to hear our
19 argument now or wait?

20 Did you want to hear argument about admissibility
21 now or wait?

22 CHAIRMAN SMITH: Now.

23 MR. BLAKE: Mr. Smith, Mr. Selkowitz has correctly
24 observed that Mr. Colitz discussed these particular
25 filters. Mr. Selkowitz stated that a loss of the filters

1 could result, as Mr. Colitz described, at the outside a
2 higher temperature in the control rod drive mechanisms. But
3 we are not here talking about a loss of these filters.
4 Indeed, on the face, these work requests involve a
5 change-out of the filters, and I believe Mr. Colitz also
6 testified that a mere high DP on the filters would not in
7 and of itself result in high temperatures.

8 So we are not talking about loss of these filters;
9 we are talking about whether or not they changed them out
10 and whether or not that sort of activity has safety related
11 significance. In Licensee's view, it does not, and
12 therefore we object to the admission of this exhibit into
13 evidence for this contention.

14 CHAIRMAN SMITH: Mr. Swanson?

15 MR. SWANSON: Staff also would object to the
16 introduction of this document into evidence on the basis
17 that there has been an inadequate showing that it is safety
18 related. The only evidence we have as to its safety
19 significance, I believe, is the line item 9 on the work
20 request is checked no, does it have an effect on nuclear
21 safety; and the testimony of Mr. Colitz, and his testimony
22 suggests that there is no nuclear safety significance
23 attached to the failure of these filters.

24 I would therefore argue that there has been an
25 inadequate showing of safety significance, and therefore the

1 document has not met the threshold test of relevance.

2 MR. SELKOWITZ: If I could, Mr. Chairman, I think
3 both gentlemen are misunderstanding the degree of
4 significance to whether there is any, which I think is the
5 threshold test, is there any. Mr. Colitz testified that
6 having those filters in a condition where they must be
7 changed because of high delta P -- and we don't know how
8 high here -- we would argue that because they were left in
9 place from the date this work was originated for over a
10 year, they may have become very high indeed, that that
11 increases the temperatures to the control rod drive
12 mechanisms. It went on to say what that can lead to.

13 Now, one thing I think we have learned from the
14 accident is that some things which we didn't think were
15 safety related can have an effect on the system and lead to
16 very serious problems.

17 It is up to the Board to determine whether this is
18 the kind that can lead to a serious problem or not a serious
19 problem, but that is a judgment on the merits. That does
20 not go to the admissibility having met the threshold test.

21 CHAIRMAN SMITH: We believe that the testimony on
22 TR 2853 establishes that the work order is sufficiently
23 related to nuclear safety to fall within the scope of the
24 contention. However, we believe that the work order, the
25 exhibit, is now sufficiently reliable to indicate that the

1 A I'm sorry, I couldn't hear you.

2 CHAIRMAN SMITH: Welcome. You have to keep your
3 microphone, no matter what we do, it still is a proximity
4 sensitive microphone. You still have to have it very close
5 to your mouth.

6 BY MR. ROBERT ADLER: (Resuming)

7 Q Can you hear this?

8 A Still low.

9 Q Can you hear this?

10 A Yes.

11 Q Mr. McGarry, can you turn to the first request,
12 21290, TMIA Exhibit 11?

13 A Yes.

14 Q Do you recall that you agreed with Mr. Selkowitz
15 that there was a delay between the final work and the final
16 sign-off by the QC department?

17 Do you recall that in that discussion?

18 A I recall that he asked me a question about the
19 dates of the origination and completion, and I said that
20 yes, there was, there appeared to be a year difference in
21 the sign-off.

22 Q Are you at all familiar with the procedures in the
23 quality control department?

24 For example, would you know how they decide their
25 priorities in terms of when they would do their work?

1 A No. It was purely arbitrary as far as I knew.

2 Now, if they had a particular reason for doing it,
3 it was never evident to me.

4 Q Can I ask the same question for the operations
5 department? They signed off at approximately the same
6 time. Would you know why they would incur a seven month,
7 approximately a seven month delay in sign-off? Do they have
8 any particular procedures?

9 A They don't have a difference in procedures, but we
10 had just completed a shutdown which had extended three
11 months or so, and we had hundreds of work requests that were
12 sent to the control room to be signed off.

13 Now, sometimes because of the backlog of this
14 paperwork, it would be a long time before they finally
15 signed it off, and this is not uncommon.

16 Q So you would say that the explanation for the
17 delay would be that you had -- that the QC department and
18 the operations department had too much work, essentially, in
19 terms of the amount of personnel that they had to do that
20 work.

21 A Yes.

22 MR. ROBERT ADLER: Mr. Chairman, I might note for
23 the record that we have had expert testimony on the priority
24 system in terms of when the work is performed. We have had
25 no testimony about the QC procedures, the procedures in the

1 QC department and the operations department, and it seems
2 that in a number of the work requests, the delays that TMIA
3 has demonstrated have been not always in the work performed
4 but in the QC and in the operations sign-off, and it might
5 be useful to get testimony on that sort of --

6 CHAIRMAN SMITH: The testimony that we have
7 requested from the Licensee and the staff was expressly
8 requested that it concentrate on QC/QA, not only practices
9 in place but record maintenance of it, too. So that was the
10 emphasis on that testimony that we wanted.

11 So I think we have already done what you are
12 requesting now.

13 MR. ROBERT ADLER: As I recall, that was a purely
14 prospective inquiry as to their current procedures.

15 CHAIRMAN SMITH: No, sir, it was exactly to the
16 contrary. It was, although our interest is in their current
17 procedures, we have an interest in the procedures that were
18 in place during a relevant period roughly included by this
19 testimony, because we believe that if there is a showing
20 that the quality assurance practices were deficient in that
21 period, a greater showing must be made that they are
22 satisfactory today than would otherwise be required.

23 If your review of the transcript should indicate
24 that we did not make that clear, why, I would be -- if there
25 is confusion I would appreciate your bringing that to our

1 attention, and I will check the transcript, too, but I
2 thought that point was pretty clear.

3 MR. ROBERT ADLER: Okay, fine.

4 CHAIRMAN SMITH: Now, the thing remaining is we
5 have not agreed upon the relevant period that should be
6 produced, and the parties were requested to get together to
7 see if they could agree upon what would be a suitable period
8 for review on that testimony.

9 MR. ROBERT ADLER: Our problem is that when we can
10 listen to the testimony, and when the work was performed, it
11 was some prospective. Right now we are listening to the
12 testimony on the delays in the QC procedures in a void, and
13 it is difficult to analyze whether there was an appropriate
14 justification for delays.

15 CHAIRMAN SMITH: That's right. The Board had the
16 same problem. That is why we directed the testimony, or the
17 evidence.

18 BY MR. ROBERT ADLER: (Resuming)

19 Q Mr. McGarry, can you turn to Work Order 18471,
20 which is Exhibit TMIA 12?

21 Mr. McGarry, this appeared to involve a safety
22 related change in the feedwater system, and we were
23 interested in the reasons for this change being made; in
24 particular, was this change -- do you know whether this
25 change was as a result of an NRC requirement, was it

1 initiated by Metropolitan Edison on their own?

2 A I do not know.

3 Q Mr. McGarry, there was a significant delay in the
4 approval to commence work, which would be in block 18.

5 Would you know why there was that significant delay?

6 A No, sir, I don't know why. I can only look at the
7 package and say that it was in engineering's hands, that the
8 whole change was being engineered by the time the work
9 request was written, and this was the normal policy at that
10 time, to initiate a work request to be associated with a
11 change mod, and it would then be in engineering's hands
12 until they completed their engineering change modification,
13 at which time, and in the interim the material would be
14 ordered, and then when everything was ready, it would be
15 signed to go to work.

16 Q Would it be more normal to have such a delay where
17 there was a change modification rather than a normal
18 maintenance procedure? Would that be the explanation?

19 A I'm sorry. Repeat the question.

20 Q This work request involved a change in the plant,
21 a modification.

22 A Yes.

23 Q Rather than a simple maintenance procedure.

24 Is it normal that there is a more significant time
25 interval between the origination and the approval to

1 commence work in those caes?

2 A Yes.

3 Q Mr. McGarry, can you turn to Work Order 20856,
4 which is TMIA Exhibit 15.

5 A Yes.

6 Q Do you recall that this work order involved the
7 snubbers for seismic stress?

8 A Yes.

9 Q Do you know if this maintenance was as a result of
10 an ongoing test procedure to test the adequacy of the
11 snubbers? Is it something you periodically check?

12 A This is something we periodically check. Whether
13 this particular work request was initiated for that reason I
14 am not sure.

15 Q And there is no way for the maintenance people to
16 tell from the form itself whether there was some specific
17 problem that prompted the work request or whether it was an
18 ongoing normal maintenance procedure.

19 A At one period early in the start-up of the plant,
20 we had a problem with snubber seals, and this is what caused
21 the ongoing program to continually check them. And I don't
22 know if this is the work request to change out from one
23 material to another, a better sealing material, or if this
24 was part of the ongoing program.

25 Q My question is aimed at determining whether the

1 maintenance people could determine whether the particular
2 snubbers at issue in this work order had any particular
3 defect, and as I understand it, your answer to that question
4 is no.

5 A Your statement was could they tell if these were
6 particular problems that we knew of beforehand?

7 A That is correct. When this goes through your
8 maintenance system, this work request, I would like to know
9 whether the various personnel could tell from reading this
10 work request whether the problem involved a particular
11 identified problem with the snubbers, or whether it was part
12 of a routine, ongoing testing program.

13 A I would say that you could not tell.

14 MR. ROBERT ADLER: Thank you, Mr. Chairman. We
15 are finished.

16 CHAIRMAN SMITH: Anything further for Mr. McGarry?

17 MR. SELKOWITZ: Nothing.

18 CHAIRMAN SMITH: Mr. Swanson?

19 MR. SWANSON: Did the Licensee pass?

20 MR. BLAKE: I have no questions.

21 CHAIRMAN SMITH: Everyone has completed with Mr.
22 McGarry except you.

23 MR. SWANSON: Yes, we do have at least one
24 question.

25 BY MR. SWANSON:

1 Q Again referring to Exhibit 15, TMIA Exhibit 15,
2 the description of the malfunction modification indicates --

3 MR. BLAKE: I'm sorry, Mr. Chairman, I cannot hear.

4 BY MR. SWANSON: (Resuming)

5 Q The description of the malfunction and
6 modification on the work request suggests that this is an
7 overhaul and test of snubbers for spares.

8 Can you tell from this work request whether these
9 snubbers were actually installed, the ones that are the
10 subject of the work request?

11 A I am sorry, sir, I couldn't hear you.

12 Q Can you tell from this work request whether or not
13 the snubbers being overhauled and tested are in fact
14 installed, or whether they are spare snubbers?

15 A It indicates they were for spare.

16 Q And would that suggest to you one explanation as
17 to why it was given a lower priority?

18 A Yes.

19 MR. SWANSON: No further questions.

20 CHAIRMAN SMITH: You are excused, sir. Thank you
21 very much for appearing.

22 (The Witness was excused.)

23 MR. SELKOWITZ: We would ask to recall Mr. Shovlin.

24 CHAIRMAN SMITH: Mr. Adler, do you have a copy of
25 the transcript? It was yesterday morning that we directed

1 testimony on the subject of your concern.

2 MR. ROBERT ADLER: Yes, we do, and I recall when
3 you made that ruling. I will look for it now.

4 CHAIRMAN SMITH: That was Mr. Robert Adler that
5 was speaking.

6 MR. BLAKE: Mr. Smith?

7 CHAIRMAN SMITH: Mr. Blake?

8 MR. BLAKE: Mr. Selkowitz has allowed me, with Mr.
9 Shovlin back on here, to correct one minor piece of his past
10 testimony, which Mr. Shovlin would like to do.

11 CHAIRMAN SMITH: All right.

12 Whereupon,

13 DANIEL SHOVLIN,
14 resumed the stand, and having been previously duly sworn,
15 was further examined and testified as follows:

16 CROSS (AS ON REDIRECT) EXAMINATION -- Resumed

17 BY MR. BLAKE:

18 Q Mr. Shovlin, when you appeared earlier in this
19 proceeding, you were asked about the status update and
20 procedures and priorities which would implement your
21 suggestion with respect to the four-priority system as
22 opposed to the current three.

23 I believe at that time you stated that that
24 procedure had not yet been approved by the PORC at the time
25 you were testifying, and that was the hold-up.

1 Have you learned differently?

2 A Yes, I found that after further looking into it
3 that the PORC did approve the change, but the evolution of
4 distributing the change documents did not. That was the
5 hold-up.

6 MR. BLAKE: Thank you.

7 MR. SELKOWITZ: Perhaps we'll want to find out
8 when it was they approved it. I don't believe he gave us a
9 timeframe on that.

10 THE WITNESS: It was March, I believe it was March
11 3, 1980.

12 MR. SELKOWITZ: Thank you.

13 Along this vein of cleaning up some loose ends
14 with Mr. Shovlin, we have one question that was related to
15 some of the questioning by Mr. Adler. I believe it appears
16 at 2691 of the transcript, and I have one or two quick
17 questions on that since we have him here.

18 CHAIRMAN SMITH: Is there any objection?

19 MR. BLAKE: The transcript page again was?

20 CHAIRMAN SMITH: 2691.

21 MR. BLAKE: I don't have any objection to trying
22 to fill out the record.

23 REDIRECT (AS ON RECROSS) EXAMINATION - Resumed

24 BY MR. SELKOWITZ:

25 Q Mr. Shovlin, we neglected to inquire of you at the

1time, or at any time, did you have any meetings concerning
2overtime hours and any difficulties that the workers were
3having with overtime hours?

4 A Yes, I had many meetings.

5 Q Did you meet, sir, at any time with Mr. Herbein,
6for example?

7 A No. I met with union representatives with regards
8to overtime and schedules.

9 Q Did you ever meet with Mr. Arnold to discuss those
10kinds of questions?

11 A No, negative.

12 Q Thank you.

13 Now, sir, if we could turn to a set of work orders
14which, on the list that was distributed earlier, begins with
1525124 --

16 CHAIRMAN SMITH: Under which?

17 MR. SELKOWITZ: Under Mr. Shovlin, on the list
18that was earlier distributed by the Licensee.

19 CHAIRMAN SMITH: All right, that would be about
20two-thirds of the way down the pile.

21 MR. SELKOWITZ: Perhaps three-quarters.

22 THE WITNESS: Sir, are those job tickets the ones
23that were distributed to me previously? Are those the ones
24you are going to discuss? I have the copies of those.

25 MR. SELKOWITZ: It was the ones previously given,

1 that is correct.

2 CHAIRMAN SMITH: The only way you can find these
3 is simply by luck. There is no other way, just be lucky
4 that you happen to open the pile at the given document.

5 MR. SELKOWITZ: I would be happy, sir, to take a
6 a break and to take the Board's copy of these and put them
7 in numerical order for you so you will be able to get at
8 them by some logic.

9 CHAIRMAN SMITH: So far luck has been working all
10 right, so let's exhaust that first. Let's just allow me to
11 complain. That's harmless.

12 MR. SELKOWITZ: Now, this is a set of work orders
13 that begins with 25124.

14 Does the Board have the balance which is listed
15 across that line and was indicated as one item in toto in
16 the cover letter with that document?

17 CHAIRMAN SMITH: You want 25056?

18 Okay.

19 MR. SELKOWITZ: Do you have all of them across
20 that line, 23058, 23579?

21 CHAIRMAN SMITH: They are in the sequence you have
22 provided them.

23 BY MR. SELKOWITZ: (Resuming)

24 Q Mr. Shovlin, I am going to start with 23579, if we
25 could, and then I am going to relate the other ones, with

1 your assistance, back to it.

2 I believe you testified --

3 CHAIRMAN SMITH: If you are going to examine on
4 this, let's give it an exhibit number.

5 MR. SELKOWITZ: I'm sorry.

6 THE WITNESS: 23579?

7 MR. SELKOWITZ: Yes.

8 It would be my preference, if it is appropriate,
9 to number this with the next number, and each of the
10 succeeding work orders included in the package as a subpart
11 of it, such as the first one would be, I guess, 17A. Then
12 the next one would be 17B, so that the package all has the
13 same number.

14 CHAIRMAN SMITH: All right, 23579 will be what,
15 then?

16 MR. SELKOWITZ: I think if we are at 17, it would
17 be 17A.

18 CHAIRMAN SMITH: 23579 is 17A.

19 (The document referred to was
20 marked TMIA Exhibit No. 17A
21 for identification.)

22 CHAIRMAN SMITH: Well, while we are at it --

23 MR. SELKOWITZ: 23858 would be B.

24 CHAIRMAN SMITH: Wait a minute.

25 All right.

1 (The document referred to was
2 marked TMIA Exhibit No. 17B
3 for identification.)

4 MR. SELKOWITZ: 24252 would be C.

5 CHAIRMAN SMITH: Got it.

6 (The document referred to was
7 marked TMIA Exhibit No. 17C
8 for identification.)

9 MR. SELKOWITZ: Did I just give you D or C?
10 25056 is D as in dog.

11 CHAIRMAN SMITH: Go ahead.

12 (The document referred to was
13 marked TMIA Exhibit No. 17D
14 for identification.)

15 MR. SELKOWITZ: 25124 is E.

16 (The document referred to was
17 marked TMIA Exhibit No. 17E
18 for identification.)

19 MR. SELKOWITZ: And 25129 is F.

20 (The document referred to was
21 marked TMIA Exhibit No. 17F
22 for identification.)

23 CHAIRMAN SMITH: How about 23136?

24 MR. SELKOWITZ: I have eliminated that one as
25 being a slightly different problem that doesn't really fit

1 in this package.

2 CHAIRMAN SMITH: It is not in this series then.

3 MR. SELKOWITZ: That's correct, and it will not be
4 the subject of any questioning.

5 BY MR. SELKOWITZ: (Resuming)

6 Q Now, sir, if you look at 23579, this is a 1A
7 priority work request, is that correct?

8 CHAIRMAN SMITH: Use the exhibit number.

9 MR. SELKOWITZ: I'm sorry.

10 BY MR. SELKOWITZ: (Resuming)

11 Q 17A.

12 A That is correct.

13 Q And it deals with the nuclear river pumps, is that
14 correct?

15 A That is correct.

16 Q This particular one lists three of the pumps, and
17 it states in all cases that they are leaking badly at the
18 shaft seal, correct?

19 A That is correct.

20 Q If we look down at lines 8A and 8B, it is both a
21 QC component and it is indicated to have an effect on
22 nuclear safety, is that correct?

23 A It is my understanding that you said does it say
24 yes for nuclear safety. That is correct.

25 Q Now, sir, excuse me, it was originated on 4/2/78.

1 A That is correct.

2 Q Now, if we turn the page, however, we notice that
3 the second page is not at all filled out, and if we go to
4 the third page, we see something that is called an
5 interoffice memo, Catalytic, Inc., I-n-c.

6 Can you just tell us, sir, if you know, what that
7 Catalytic, Inc. interoffice memo represents?

8 A This was a job that was assigned to Catalytic as
9 identified by their work request No. 23579, and job order
10 103737.

11 Q Just as a point of clarification, sir, is the
12 10373, is Catalytic's number for that?

13 A That is correct.

14 Q And it says at the bottom of that that it was
15 reassigned to mechanical maintenance on February 13th of
16 '79, is that correct?

17 A That is correct.

18 Q Okay.

19 It goes on to say that it was purged on 11/6/79.
20 Is that correct?

21 A That is correct.

22 Q And I believe you testified earlier that there
23 were some times that you have gone back through the system
24 and purged duplicate work orders.

25 Do you recall that testimony?

1 A That is correct.

2 Q And then would it be your feeling, sir, that that
3 is why this one is marked purged?

4 A That is my feeling, yes.

5 Q Now, sir, if we look at 17B, this is a 1A priority
6 on one of the same pumps, is it not?

7 A I don't --

8 MR. BLAKE: I don't think the witness has
9 identified them by the exhibit numbers.

10 MR. SELKOWITZ: I'm sorry, it is 23858.

11 THE WITNESS: 23858? Yes, sir.

12 BY MR. SELKOWITZ: (Resuming)

13 Q Now, this is another work order on one of the same
14 pumps as the prior exhibit, is it not?

15 A That is a work order that identifies NRP 1B.

16 Q And that is Nuclear River Pump 1B.

17 A That is correct.

18 Q And this one says that there is excessive packing
19 weight, am I correct?

20 A And it says adjust or repack, that is correct.

21 Q And once again it is identified as a QC component
22 in line 8, and line 8B is marked yes.

23 A That is correct.

24 Q If we turn the page, we see that it didn't go any
25 further, and I take it that the reason it was cancelled per

1 work order 23579, which has already been identified as
2 Exhibit 17A, correct?

3 A That is correct.

4 Q Now, this represents that when someone was looking
5 at 17B, 23858, they realized that there was another work
6 order by which this was being processed, in this case 23579.

7 Is that your understanding?

8 A Yes, that would be so. That is correct.

9 Q Now, this one was originated on May 13, '78,
10 several weeks after the prior exhibit, is that correct?

11 A This one was originated the 13th of May 1978, that
12 is correct.

13 Q Now, if we could go on to TMIA Exhibit 17C, which
14 is 24252.

15 A Yes, sir.

16 Q Once again, this is Nuclear River Pump 1B, correct?

17 A That is correct.

18 Q This time it has at least at this stage been
19 determined to be a 2 priority.

20 A That is correct.

21 Q And although it is marked as a quality control
22 component, line 8B is now marked no, is that correct?

23 A That it has no effect on nuclear safety, that is
24 correct.

25 Q We see that this one was started on June 17th,

1 '78, approximately a month after Exhibit 17B.

2 A That is the date that this work request was
3 submitted, that is correct.

4 Q And once again this one was cancelled I presume
5 for the same reasons as the last one, and we are referred to
6 Exhibit 17B which is work request 23858.

7 A That is correct.

8 Q Which referred us to 23579, which was cancelled,
9 purged, correct?

10 A That is correct.

11 Q I ask you, sir, when this type of system is being
12 conducted, this purging that you have testified to, would it
13 be common to cancel the work requests, such as 242152, by
14 reference to the actual one by which the work was done?

15 A I am going to have to explain to you, sir, this is
16 a real bad example. In the previous testimony, I mentioned
17 that various shifts or anyone that identifies a problem
18 submits a job ticket. Now, when a job ticket, as described
19 here, as you well pointed out, on one of those documents or
20 two of the documents, the individual that answered the
21 questions, did it have an effect on nuclear safety, he said
22 yes, and it was a 1A priority, and on this other job ticket,
23 25056 he identified that as a 2A priority, and it had no
24 effect on nuclear safety.

25 What is very difficult under normal operating

1 conditions, it is required to have a leak-off on these
2 pumps. It is a judgment, when an individual recognizes and
3 goes over, is it excessive or not. The real danger here is
4 that you do not have a leak-off. The reason you have a
5 leak-off is for lubrication of your packing. It is nuclear
6 river water, it is not radioactive, it goes back into the
7 river. The leak-off from the gland goes back into the river.

8 What I am trying to identify here, the individual
9 who suggests it has an effect on nuclear safety, he was
10 making a very conservative judgment. If I was assigning the
11 yes and noes here in this particular case, I would say no,
12 it did not have an effect on nuclear safety, although I have
13 taken a conservative approach on a number of job tickets.

14 Q Excuse me, sir, what do you mean, sir, by
15 conservative approach in that regard?

16 A For example, the conservative is being very
17 cautious. Rather than saying no, it does not have an effect
18 on nuclear safety, we use, as identified here, GP 1008 as a
19 guide. The gent I know, and his marks here, I know that was
20 a supervisor of maintenance, the previous supervisor of
21 maintenance's check marks. If you take the conservative
22 approach you say you have three nuclear river water pump
23 Bs. Now, if you have a leaky packing gland on one of them,
24 or if you had a leaky packing gland on all three, if you had
25 to take down on the packing on that pump and there was no

1 gland left, you would have to either add packing or
2 completely repack the pump. You would have to take that
3 pump out of service in order to do that. If the same
4 similar condition happened to the other pump, say pump B,
5 you would have to put that pump out of service. If they
6 both happened simultaneously, you would be down to one
7 pump. Then you would be into a time clock problem. So the
8 conservative approach is, in this particular gent's case, he
9 has lost two pumps and he is down to one pump, looking at
10 that.

11 Now, what happens here, and quite often is an
12 individual going around and looking and seeing that he has
13 excessive leak-off on a packing gland, which is really, the
14 most serious consequence here is a household problem because
15 the water is splashing out and going over, and you could get
16 the water all over your clothes. Okay, that is the most
17 serious consequence; that a mechanic has gone over and made
18 a slight adjustment to the gland.

19 During the interim of all these job tickets, that
20 is a possibility, that someone went down there and took up
21 on the gland, all right?

22 Q Mr. Shovlin, I am still trying to understand your
23 use of the term "conservative." By conservative, are you
24 saying --

25 A Being very cautious.

1 Q And therefore you would tend to mark things as
2 having an effect on nuclear safety when in doubt.

3 A That is correct.

4 Q Now, just so we know, 17C, which is work order
5 524252, says in the body of block 3, packing leaks
6 excessively and is throwing much water. Is that correct?

7 A That is correct.

8 Q Now, you made reference -- well, you haven't
9 answered really my first question, which is when you were
10 doing this purge, was it customary to cancel by reference to
11 the work order on which the work was done or to some other
12 work order that just happened to be on the same component?

13 A Sir, if you would refer back to your work request
14 No. 23579, going to the third page, it was not an arbitrary
15 decision to just purge this particular job without first
16 going to ensure that the condition did not exist.

17 Q I understand, sir. That is not my question.
18 Perhaps we could come back to that.

19 A What I said --

20 CHAIRMAN SMITH: I think he is answering your
21 question.

22 MR. SELKOWITZ: I am asking about --

23 CHAIRMAN SMITH: Just a moment. You can withdraw
24 the question if you want to, but he has asked it, you either
25 have to allow him to respond.

1 MR. SELKOWITZ: Well, if it is the Board's ruling
2 that they think he is answering my question, I'll certainly
3 let him finish, but perhaps I am not asking the proper
4 question, and I will let him finish that, certainly.

5 BY MR. SELKOWITZ: (Resuming)

6 Q You were saying, sir, that it was not arbitrarily
7 cancelled on 23579 and you wanted to finish that.

8 A Yes. We would go to operation as in the case of
9 work request 23579. Mike Ross, who was the supervisor of
10 operations, concurred that that condition no longer existed.

11 Q I understand.

12 What I am specifically trying to find out is this
13 process of purging. When you looked at work order 214252,
14 which is 17C -- are you with me?

15 A Yes, sir.

16 Q That is cancelled as per 23858.

17 A That is correct.

18 Q And 23858 is cancelled as per 23579.

19 Now, what I am curious about is why is it you
20 wouldn't cancel 214245 by referring it to 23579 as well?
21 Why this chain?

22 A I have no idea, sir. This looks like it was
23 purged by the supervisor in the mechanical area, okay?

24 Q And what leads you to that conclusion?

25 A It is my conclusion, looking at the writing. I am

1 familiar with the writing.

2 Q So you feel you identified the handwriting.

3 A Yes, sir. In most cases it would be the
4 supervisor of that discipline that would purge the job
5 tickets through the work log, and after first assuring
6 himself that the condition did not exist.

7 Q Okay.

8 Now, you mentioned 25056, which has been
9 identified as 17D.

10 A 25256?

11 Q 25056.

12 A Yes, sir.

13 Q And the same component, priority 2A, correct?

14 A Yes, sir.

15 Q And this was started a bit later than the last
16 three we looked at. This one was in August of '78.

17 A Yes, sir.

18 Q And it, too, was cancelled, referring back to a
19 prior exhibit.

20 A Yes, sir.

21 Q And just to wrap it up, if we look at 17E and 17F,
22 which are work requests 25124 and 25129, we have exactly the
23 same situation, the same component, correct?

24 A Would you repeat that question, sir?

25 Q The same component is involved.

1 A NRP 1B, that is correct.

2 Q Now, there is a difference I see, however, on
3 325124. The question of nuclear safety is checked yes, and
4 it is also checked yes on 25129, is that correct?

5 A That is correct, yes, sir.

6 Q Although in this case they are both considered
7 Priority 2As at this stage of the paperwork.

8 A The initiator felt that that was a 2A, that is
9 correct.

10 Q And that was agreed in by his supervisor, is that
11 correct?

12 A Yes, sir.

13 Q Now, as to this package of work requests where you
14 just identified all on that same component, at least so far
15 as this piece of the history is concerned, the work is not
16 yet identified as being done, at least not by a work order,
17 is that correct?

18 A That is correct.

19 Q And the only thing we have to go by on this record
20 is that in November of 1979 Mr. Ross said it was okay,
21 cancel it.

22 A That is correct.

23 Q Now I would like to refer you, sir, and the Board,
24 to a work request that was previously identified to Mr.
25 Shovlin, 18626, which should be just a couple more down

1 below the group the Board has.

2 CHAIRMAN SMITH: 18626?

3 MR. SELKOWITZ: Correct.

4 CHAIRMAN SMITH: This is going to be an exhibit?

5 MR. SELKOWITZ: Maybe Exhibit 18.

6 (The document referred to was
7 marked TMIA Exhibit No. 18
8 for identification.)

9 BY MR. SELKOWITZ: (Resuming)

10 Q Now, sir, we see this one was instituted on
11 1/22/77, which was before any of the ones we have identified
12 in Exhibit 17, is that correct?

13 A Yes, sir.

14 Q And this one includes the same component, Nuclear
15 River Pump Unit 1B, is that correct?

16 A That is one of the pumps described, yes, sir.

17 Q It also includes 1C.

18 A Yes, sir, that is correct.

19 Q Now, those are two out of three that performed a
20 similar function in the same area of the plant, is that
21 correct?

22 A That is correct.

23 Q And once again, block 3 says excessive packing
24 leakage.

25 A That is correct.

1 Q This one, however, if we turn the page, was
2 completed on 1/10/79, is that correct?

3 A That is correct.

4 Q That is about two years from the origination date.

5 A That is correct.

6 Q And just so we identify the rest for the record,
7 it has quality control tags for all of the parts that are
8 attached to the back.

9 Is that correct, sir?

10 A That is correct, yes, sir.

11 Q Would it be your understanding, sir, that given
12 both exhibits 17 and 18, that it appears that the reason you
13 could not see where the work was done on 17 was because it
14 was done by this one, work order 18.

15 A No, I couldn't say that was so, sir.

16 Q And despite the fact that the time period here
17 surrounds, so to speak, the time limits in Exhibit 17, you
18 don't feel that we could draw that conclusion?

19 A No, sir, and I can explain why if you would like.

20 Q I'm sorry, you said you could explain?

21 A Yes, sir.

22 Q Are you familiar with when this work was done?

23 A No, but I am familiar with, until a job is
24 actually purged by the supervisors in each discipline, it is
25 possible for a job ticket to be in his custody over a long

1 period of time, and it also has happened that when he did,
2 and he has these documented in his log, in this particular
3 log, that oftentimes when there is already an existing job
4 ticket identifying a problem, he would go ahead and use that
5 existing job ticket to perform the work function.

6 So when there is a two year span, to me, in my
7 capacity as superintendent of maintenance, I could envision
8 that he took a job ticket that he already had in his office
9 over a long period of time and used that to perform the work
10 function.

11 Q So what you are saying is he used 18626 as the
12 operating document to do that work.

13 A I am saying it is a possibility, yes, sir.

14 MR. SELKOWITZ: With that, Mr. Chairman, I would
15 move Exhibit 17 with its subparts A through F, and Exhibit
16 18 into the record on several bases; first of all, that as a
17 group it identifies work that was deferred for over a year,
18 that had nuclear safety significance, both by the opinion of
19 several supervisors in the plant, and also by the fact, as
20 demonstrated by Mr. Colitz, that these pumps have technical
21 specifications -- perhaps that is the wrong word, but there
22 are requirements for certain numbers of them to be operating.

23 There is a short time clock, I think he said, if
24 you have to take down the second one with one already out.
25 We think this demonstrates that this has an effect on

1 nuclear safety, to have allowed this kind of work to go
2 undone for such a long period of time.

3 And third, we think it demonstrates, because of
4 the confusion apparent on the face of these documents by
5 supervisors with these responsibilities, as to what impact
6 this was to have, we feel that it demonstrates a faulty
7 maintenance system, perhaps not in the keeping of the
8 records, but certainly in the day to day utilization of them
9 which causes a lot of things to happen at that plant by way
10 of what work gets done and when.

11 CHAIRMAN SMITH: Mr. Blake?

12 MR. BLAKE: I am not sure that I understand the
13 last comment. It is not offered to support their allegation
14 that they failed to keep accurate maintenance records
15 related to safety items, but rather some other term or
16 phrase which I don't see.

17 MR. SELKOWITZ: That the actual operation of this
18 maintenance system which would allow for the various
19 interpretations of work to be done, of the same part with
20 the same identification of the problem, is in and of itself
21 evidence of incompetent maintenance of that plant.

22 MR. BLAKE: Mr. Smith, Licensee opposes the
23 admission of TMIA's proposed Exhibits 17 and 18 into
24 evidence in support of their Contentin 5. The testimony to
25 date with regard to the significance of and the importance

1 of packing, in fact, packing leaks surrounding the nuclear
2 river pumps, has been addressed both by Mr. Colitz and now
3 by Mr. Shovlin. In the opinion of neither of these
4 gentlemen has leakage posed a significant problem, nor has
5 there been safety significance which has attached to it.
6 And that is the state of the record at this time.

7 Both gentlemen have indeed alluded to the fact
8 that if you lost nuclear river pumps, there being three, if
9 you lost two of them, you would come up against a technical
10 specification requirement which would require you, if you
11 did not recover one of those two, to shut down within a time
12 period. My recollection of Mr. Colitz's testimony is that
13 there was a 72 hour time frame that would attach. But
14 neither of these gentlemen have connected that up with the
15 leakage. In fact, both of them have observed that the
16 problems with these pumps, any real problems that would
17 cause them to shut down would be with lack of leakage.
18 There just plain has not been a showing here that we have an
19 item of safety significance involved in these maintenance
20 items.

21 MR. SELKOWITZ: If I can address that to the
22 Board, we are not contending that because there is water
23 leaking out of these pumps that that is a problem. We have
24 contended all along that we have deferred maintenance
25 improperly, and we would argue here that they have an

1 understanding that if they have to take down these pumps and
2 they cannot meet the time clocks, they have to shut down.
3 That is in Mr. Colitz's testimony.

4 The contention or the argument that this supports
5 is that on the face of these documents, two of these pumps
6 had excessive packing leakage which, as Mr. Shovlin
7 described, if that continues, the only way to fix it is to
8 take them out. It is not much of a difficult argument to
9 say that they deferred that very item, taking them out,
10 because they knew and required shutting down the plant.
11 That is, of course, key to the support of our contention.

12 CHAIRMAN SMITH: So you challenge the adequacy of
13 the tech specs?

14 MR. SELKOWITZ: I'm sorry?

15 CHAIRMAN SMITH: Do you challenge the adequacy of
16 the tech spec?

17 MR. SELKOWITZ: No, sir. You mean the tech spec
18 that says if they come down they have to go to the short
19 time clock on the second pump? No, sir. What we are saying
20 is that on the face of it, the Licensee knowing that, they
21 deferred doing this maintenance, and I think these documents
22 support an argument based on these documents that the
23 maintenance which would have meant bringing the pumps down
24 was deferred in the face of knowledge that it might lead to
25 bringing the plant down, part of the tech spec.

1 CHAIRMAN SMITH: I understand.

2 The Board is going to have to confer on these
3 exhibits.

4 (A brief recess was taken.)

5 CHAIRMAN SMITH: Mr. Swanson, would you care to
6 comment?

7 Before you comment, however, maybe you can be
8 helpful. The Board has ended up with a feeling on this
9 series of exhibits that we just simply don't know enough
10 about it to make a good ruling.

11 You could be helpful.

12 MR. SWANSON: I am not sure I can give you the
13 information you really need.

14 The staff's position is that certainly a threshold
15 test of safety related relevance has been made. A more
16 serious question comes on the materiality of the documents.
17 There has been a great deal of discussion as to significance
18 of leaking and how important the repair is, how fast it has
19 to be done.

20 I think balancing everything, the staff conclusion
21 is that we would not object to the admission. I think there
22 is a serious question as to whether or not it proves
23 anything, but I think that really goes more to the weight of
24 the evidence.

25 CHAIRMAN SMITH: That is about where we were.

1 DR. LITTLE: Mr. Shovlin, I have some questions
2 about all of the exhibits we have been discussing, and we
3 will start with Exhibit No. 18, which is work request No.
4 18626, and line 4 on that request indicates that a number of
5 the nuclear river pumps were reported as malfunctioning due
6 to excessive packing leakage on January 22, 1977, is that
7 correct?

8 THE WITNESS: Yes, ma'am.

9 DR. LITTLE: All right.

10 In the interim, after that date, on 4/22/78,
11 5/13/78, 6/17/78, 8/28/78, 9/2/78 and 9/4/78, there were a
12 number of work requests generated dealing with one or more
13 of the nuclear river water pumps, correct?

14 THE WITNESS: Yes, ma'am, that is correct.

15 DR. LITTLE: Then on December 4, 1978, there was a
16 sign-off that a PORC reviewed sign-off had to be done. That
17 was done on 12/4/78, and this is on Exhibit No. 18, 18626,
18 line 10A. So there was a lapse of time between January 22,
19 '77 till 12/4/78 before the PORC review indication was made,
20 is that correct?

21 THE WITNESS: That is correct.

22 DR. LITTLE: And then if we look on page 2 of
23 18626, Exhibit 18, it indicates that the day following the
24 PORC review, you gave approval to commence the work, the
25 foreman gave approval to commence the work the following --

1 well, the same day, 12/5/78, and then it was done within the
2 next month.

3 THE WITNESS: That is correct.

4 DR. LITTLE: My question is what was the status of
5 work request 18626 between the date of origination, 1/22/77,
6 and the time that the review PORC was indicated on 12/4/78?

7 THE WITNESS: I can only surmise, ma'am. If this
8 work request was identified on 1/22/77, as I previously
9 testified that each discipline supervisor would have a
10 number of outstanding job tickets in his possession, and it
11 is possible that this condition came up during the period
12 of, again, during the period of 1/22/77 and the time that
13 they did the work, the work was completed on 1/10/79.
14 Knowing what has transpired in the past, I would envision
15 that they would take a job ticket that they had in their
16 file and use it as a working document rather than either
17 initiate another job ticket or, if they received a job
18 ticket that identified the same problem of a job ticket that
19 they already had in hand, in file in their office, they
20 would just discard the other one and use the latest one they
21 had on file.

22 DR. LITTLE: Do we have anything indicating that
23 those particular pumps -- how can we tell whether or not
24 there was any work done on those particular pumps in the
25 time between 1/22/77 and 12/5/78?

1 THE WITNESS: Ma'am, when you discuss packing
2 leakage, okay, many times it is identified to maintenance,
3 we in maintenance as excessive packing leakage, and we go
4 out to the component and in our judgment it is not
5 excessive, it is a proper leak-off to give the proper
6 lubrication to the packing, so we wouldn't do anything with
7 that job ticket. It is not a true condition to us. It is
8 not a condition we want to change.

9 So that is why I say this is really a bad example,
10 actually, of a work function that has been prolonged over a
11 long period of time. Although our system does let anyone
12 identify what a problem -- they can identify a problem, many
13 times when we go out to inspect and scope the job out, the
14 condition is not such that is described on item 3 of the job
15 ticket.

16 DR. LITTLE: So there is no way to feed back into
17 the system that somebody looked at it and it was a
18 non-problem?

19 THE WITNESS: Our feedback to the system would be
20 ideally meeting and saying this is not a problem. This is
21 operations here. In fact, on this particular job or work
22 request, H.R. Hitz is the shift supervisor. At our daily
23 meeting we would tell him, hey, you do not have a problem;
24 the leak-off is proper. And that is the end of the
25 discussion. There is no more discussion on that item.

1 DR. LITTLE: But there is no place to put that on
2 the record that that has occurred.

3 THE WITNESS: Pardon me, ma'am?

4 DR. LITTLE: But there is no place to put on your
5 records that you have had this discussion and decided it is
6 not a problem.

7 THE WITNESS: No, there is not.

8 DR. LITTLE: Thank you.

9 CHAIRMAN SMITH: Is the Commonwealth going to
10 comment on this?

11 MR. SELKOWITZ: Mr. Chairman, before you take that
12 comment, I think that the questions by Mrs. Little have
13 raised the need to ask a few additional questions of Mr.
14 Shovlin to put some of that into perspective.

15 CHAIRMAN SMITH: Questions by whom?

16 MR. SELKOWITZ: By myself, if that is
17 permissible. It has to do with one line on each of those
18 tickets, the same line.

19 CHAIRMAN SMITH: All right, go ahead.

20 BY MR. SELKOWITZ: (Resuming)

21 Q Sir, you are indicating that it may have been a
22 non-problem in the view of some of the supervisors, and that
23 is why the work wasn't done. Is that correct?

24 A I didn't understand your first part, sir.

25 Q You are saying one of the explanations may have

1 been that this really was not a problem, even though it was
2 identified by an originator as one.

3 A That is a possibility, yes, sir.

4 Q So what you would be saying, sir, is that on
5 Exhibit 17A, for example, Mr. Carr and Mr. Pilsitts, who are
6 the originator and the supervisor, would be correct.

7 Is that your testimony?

8 A Is that on work request 23579?

9 Q Yes, sir.

10 A That is correct.

11 Q Do you know who Mr. Pilsitts was or is, hopefully?

12 A I believe he was a shift foreman at the time.

13 Q A shift foreman for maintenance?

14 A Operations.

15 Q For operations.

16 A Yes, sir.

17 Q And operations, I think we have decided, had a
18 great deal to say about what work got done and when, isn't
19 that correct?

20 A They had a great deal to say. They would identify
21 a problem to maintenance. It doesn't necessarily mean that
22 we totally agreed at all times with their observations.

23 Q And then if we go to 23858, which is 17B, we have
24 a different originator. We have a Mr. Kendig, I believe.
25 So if your theory of what might have occurred is correct,

1 Mr. Kendig is also correct.

2 Q Is that correct?

3 A That is a possibility, yes, sir.

4 Q And the supervisor there was someone for M. Ross,
5 M. Ross. I assume that was Mike Ross?

6 A Who is presently operations supervisor. At that
7 time I believe he was shift supervisor.

8 Q So that his designee's concurrence was also
9 incorrect.

10 A That is a possibility.

11 Q And without belaboring this, we go through all the
12 rest of those work requests, we could ask the same
13 questions, and your theory of what might have happened would
14 have us believe that in every case both the originator and
15 his supervisor turned out to be wrong.

16 A I didn't say that. I said that as a possibility.

17 Q All right, I understand it is a possibility.

18 A Yes, sir. In the interim someone could have went
19 out there with a crescent wrench and adjusted that packing,
20 okay?

21 Q Well, sir, would it seem reasonable to you that
22 such adjustments took place when you have a series of work
23 tickets, April 22, May 13, June 17, August 23, and September
24 2, and September 4? Does it sound to you, sir, as if
25 someone has gone out there and adjusted the leak?

1 A Is that all in the same year?

2 A Those are all in 1978.

3 A That is a possibility.

4 MR. SELKOWITZ: No other questions.

5 CHAIRMAN SMITH: Mr. Adler?

6 MR. ROBERT ADLER: We have one question we would
7 like to ask.

8 RE-cross (AS ON REDIRECT) EXAMINATION

9 BY MR. ROBERT ADLER:

10 Q Mr. Shovlin, you indicated that in the event of a
11 leak, the worst possible effect would in essence be a
12 housekeeping problem, is that correct?

13 A Yes, that is correct.

14 Q Could not the leak be bad enough, be excessive
15 enough so as to blow out the packing, and if so, would this
16 not interfere with the pump operation?

17 A That would all depend on the position of your
18 packing gland, whether the packing gland was bottomed out,
19 whether there was no more adjustment. That is a
20 possibility, yes, sir.

21 Q So it is a possibility to interfere with the
22 operation of the pump?

23 A The greater possibility would be if you had no
24 leakage and the packing deteriorated, then it would
25 deteriorate and blow out. That would be the extreme case.

1 Q If the extreme case did occur

2 A The extreme case would be not having any leakage
3at all. That would be the extreme case.

4 Q That would create more pressure?

5 A That would create overheating of the packing,
6which would cause scoring to the shaft, which would cause
7packing deterioration, which could cause serious problems,
8yes.

9 Q If that occurred, would there be an indication of
10that in the control room to the operator?

11 A The operations, each shift surveils, there is a
12surveillance made by the auxiliary operators. That is part
13of their job, to surveil each piece of equipment.

14 Q In other words, they would have to surveil that
15equipment in order to determine the existence of that
16condition and it would not be indicated automatically in the
17control room?

18 A Whether the packing was overheating?

19 Q That is correct.

20 A No, that would be a visual inspection.

21 Q What about whether the pump was operational?

22 A That would still be a visual. There is no way or
23there's no methods to indicate whether a packing gland is
24overheating unless you visually go down.

25 Q I am not sure you understand the question.

1 We are talking -- we are referring to the
2 operation of the pump itself.

3 A Yes, sir.

4 Q Is there any indication of the pump operation in
5 the control room?

6 A Oh, yes, sir, there are parameters.

7 MR. ROBERT ADLER: That's all.

8 DR. JORDAN: Mr. Shovlin, you said this was
9 primarily a housekeeping problem, excessive leakage, and yet
10 isn't it a bit surprising that two of these supervisors
11 assigned it a Priority 1A for a matter that was nothing but
12 a housekeeping problem?

13 THE WITNESS: Sir, I just wanted to indicate to
14 you that excessive leakage, although it was assigned a
15 Priority A, the extreme case in this is the water, the
16 discharge of the leakage from the gland could either go onto
17 the floor, into a drain, back into the river. That was my
18 only --

19 DR. JORDAN: Okay.

20 Would your changed priority system, had that been
21 in effect, do you think that would have caught this?

22 I believe what you are saying is it really wasn't
23 a 1A priority, that they made a mistake. Would your changed
24 priority system, do you think?

25 THE WITNESS: The new priority system in effect, I

1 would probably indicate that other than a Priority 1.

2 DR. JORDAN: I see. So it would not have gotten a
3 1A classification.

4 THE WITNESS: It would not have gotten a 1A
5 classification.

6 CHAIRMAN SMITH: The Board is going to receive 17A
7 through 17F and Exhibit 18, but in accepting these exhibits
8 at this time, and as we progress along this contention, I
9 think it might be appropriate to bring into perspective what
10 we are doing here, and what is happening is that we are
11 analyzing each of these work requests as if the issue is --
12 whether or not the work request was handled correctly, which
13 of course is the issue immediately facing us, is the factual
14 issue immediately facing us.

15 But let's keep it in perspective, what we are
16 trying to establish. You are trying to establish that there
17 is a pattern, that there is a sufficient number of deferred
18 maintenance work items to establish a pattern that the
19 management at that time was incompetent, which in turn, as
20 the Board has ruled, raises some type of suggestion that a
21 greater showing is required to show that management today is
22 incompetent.

23 So therefore, you could have a situation where yo
24 might take every one of your work requests and establish
25 that their demonstration of improperly deferred maintenance

1 would show up having a management which was not technically
2 qualified to recognize the need to have proper maintenance,
3 and still lose your case if it is shown that management is
4 today technically qualified. You could still lose.

5 And I want to remind you, we have another step we
6 have to go after we arrive at that point, and that is the
7 Commission's order of CLI-85, which was issued on March 6,
8 1980, and they address the technical capability to operate
9 Unit 1, and it is Item No. 11 in that order, and that is
10 whether Metropolitan Edison possesses sufficient in-house
11 technical capability to assure the simultaneous safe
12 operation of Unit 1 and clean-up of Unit 2. If Metropolitan
13 Edison possesses insufficient technical resources, the Board
14 should examine arrangements, if any, which Metropolitan
15 Edison has made with its vendor and architect engineer to
16 supply necessary technical expertise.

17 So I am trying to point out that we cannot sit
18 here week after week after week analyzing in exhaustive
19 detail whether or not the specific work order in issue was
20 handled correctly or not. We arrived at one where arguments
21 are good on both sides.

22 The purpose of this is trying to bring into
23 perspective -- we have to assign some priorities to the
24 hearing time we allow, and it is my view that the case is
25 going to have to be made somewhat differently than it is

1 being made right now because you have so far to go.

2 Now, that doesn't mean we don't regard it as
3 relevant, competent evidence.

4 MR. SELKOWITZ: I understand that.

5 CHAIRMAN SMITH: But I want to disabuse you of any
6 thought that as far as this Board member is concerned that
7 you are going to prevail, or that you can count on
8 prevailing on the quality of the evidence without a lot
9 more, I mean, a lot more. There is a long way to go before
10 what you are undertaking to establish can really be
11 established.

12 MR. SELKOWITZ: And all of this is related to step
13 one, really, of your outline. There is no question, and it
14 brings to mind the proverb of something about the journey of
15 a thousand miles. But I know of no other way to get into
16 the evidence of how that plant was maintained but to do it
17 that way.

18 CHAIRMAN SMITH: We are accepting evidence on
19 that, but I am just requesting the parties to keep their eye
20 on what your overall, the overall posture of these issues in
21 this case. And I have the same tendency to try to inquire
22 in these things as if it is a show cause proceeding or a
23 civil penalty or something like that, and to make the record
24 complete on the individual performance of management in the
25 particular case, when really what we are trying to establish

1 is a pattern.

2 So it may be that if we get bogged down on one,
3 the evidence is indefinite, the better thing for us to do is
4 drop it and move it along, because there are many of these.

5 MR. SELKOWITZ: Well, I would agree, this is going
6 to be a monstrous task. If we have similar disputes over
7 every one of the remaining work tickets, there is no
8 question about it. Some of them, I think --

9 CHAIRMAN SMITH: And it would still wind up being
10 an inconclusive record.

11 MR. SELKOWITZ: That is for argument, I suppose.

12 CHAIRMAN SMITH: This is not an admonition
13 directed to you. It is directed to everybody.

14 MR. SELKOWITZ: I understand.

15 CHAIRMAN SMITH: And it is a reminder to myself
16 also, that the tendency is to answer a question which may
17 just satisfy curiosity at the moment.

18 Well, maybe we should forebear from that and try
19 to figure out how it really pertains, what we really
20 believe, how it relates to the management competence at that
21 time to recognize and to maintain the system for not
22 deferring maintenance.

23 But with that gratuitous lecture, let us get on to
24 the next one.

25 But the Commission did make the point in their

1 CLI-5 that before we come to the end of the road in thta
2 proceeding, even if we should find that they possess
3 insufficient technical resources, the Board then has to go
4 the additional step, and that is are the technical resources
5 available.

6 (The document referred to,
7 previously marked for identi-
8 fication as TMIA Exhibit Nos.
9 17A through 17F, and 18, were
10 received in evidence.

11 MR. SELKOWITZ: If we could turn, then, to work
12 request 19590 and have that marked as TMIA Exhibit 19.

13 (The document referred to was
14 marked TMIA Exhibit No. 19
15 for identification.)

16 BY MR. SELKOWITZ: (Resuming)

17 Q Mr. Shovlin, this work request deals with the
18 once-through steam generators A and B, is that correct?

19 A That is correct.

20 Q That notation A and B indicates two steam
21 generators of equal capability.

22 A That is correct.

23 Q So it is not the B part of one and the A part of
24 the same one. Those are just two different steam generators.

25 A That is correct.

1 Q And if we look down in the body of the description
2 of No. 3, we find that work needs to be done or is suggested
3 to be done on upper and lower manways, auxiliary nozzles,
4 handholds, and then in parentheses it says "PRI for both A
5 and B."

6 Is that, sir, a notation meaning on the primary
7 side?

8 A Primary, that is correct.

9 Q And just briefly, this one has line No. 9 checked
10 as to an effect on nuclear safety.

11 Is that correct?

12 A That is correct.

13 Q And it was originated on April 7th of '77 and was
14 completed, at least as on line 20, on 1/16/79.

15 Is that correct?

16 A That is correct.

17 MR. SELKOWITZ: I ask that TMIA Exhibit 19 be
18 accepted into evidence.

19 I have been requested by Mr. Blake to state the
20 basis. This, I think, is clearly evidence of deferred
21 maintenance beyond a reasonable time on a component that by
22 the company's judgment involved nuclear safety, and by Mr.
23 Colitz's testimony, because it is on the primary side, he
24 feels it has a safety significance.

25 CHAIRMAN SMITH: Mr. Swanson?

1 MR. SWANSON: No objection.

2 CHAIRMAN SMITH: Mr. Robert Adler?

3 MR. ROBERT ADLER: No questions.

4 CHAIRMAN SMITH: If there are no objections, the
5 exhibit is received.

6 (The document referred to,
7 previously marked for identi-
8 fication as TMIA Exhibit No.
9 19, was received in evidence.)

10 MR. SELKOWITZ: Now, sir, if we could look at
11 Exhibit 22181.

12 CHAIRMAN SMITH: 22 what?

13 MR. SELKOWITZ: Can I have just a moment?

14 We had originally identified this as in Mr.
15 Toole's package, and he has since by discussion been dropped
16 from our needs as a witness, so it is 22181. It was
17 originally identified for Mr. Toole, and it has been moved
18 for Mr. Shovlin.

19 CHAIRMAN SMITH: So it is 22 --

20 MR. SELKOWITZ: -181.

21 MR. BLAKE: I am not sure I understand that. They
22 asked that Mr. Toole be withdrawn as a witness, and in fact
23 this subpoena be quashed, and it was, and now do I
24 understand that Mr. Shovlin is to be questioned on other
25 work requests than those identified?

1 MR. SELKOWITZ: I thought the discussion at the
2time was that Mr. Toole really wasn't the person that we
3thought he was, and that we would move his work requests
4that had been identified for him as inappropriate to another
5witness.

6 We also indicated in the cover letter to this
7document that Mr. Shovlin would need to be available to
8answer questions on any of them because he has expertise
9that covers every single work request, and that is contained
10in the letter of October 3.

11 MR. BLAKE: Let me say first that at the time that
12Mr. Toole's subpoena was quashed, there was no such
13discussion that his specific work requests would be covered
14by individuals.

15 Now I might pass to their observation that they
16expect Mr. Shovlin to be responsible for the over 80 work
17requests which they identified. I object to that as well.
18That was not part and parcel of the approach that we were to
19take here.

20 MR. SELKOWITZ: Sir, I think the time has passed
21for objection to that. It was noted specifically on October
223, and we haven't heard a peep about it since then.

23 As we can see from my questioning --

24 CHAIRMAN SMITH: Tell me where it was noted on
25October 3.

1 How many October 3 communications --

2 MR. SELKOWITZ: There were at least two letters of
3 that date.

4 MR. BLAKE: Mr. Smith, I think I can identify the
5 October 3 filings.

6 CHAIRMAN SMITH: I beg your pardon?

7 MR. BLAKE: The October 3 date was the date
8 following our conference call agreements, and in the parcel
9 of documents we got from TMIA, we got an amended trial brief
10 with respect to Mr. Good. We got Mr. Bonetti's testimony.
11 We got an identification which was to have been five work
12 requests for each of the individuals identified in Footnote
13 4 of page 2 of their trial brief. Those were the items that
14 we got an explanation letter on.

15 CHAIRMAN SMITH: Dr. Little just pointed out to me
16 one letter dated October 3, 1980, from Mr. Adler to the
17 Chairman, says in addition to the work requests specifically
18 identified for Daniel Shovlin and R. J. Toole, Shovlin and
19 Toole will also, because of their supervisory capacity, be
20 expected to testify on any work requests identified for the
21 other witnesses.

22 MR. BLAKE: That is the letter he is referring to.

23 CHAIRMAN SMITH: Yes.

24 Well, I have lost the thread of the argument,
25 then, I guess. It seems to me that he has forewarned all of

1 the parties that Mr. Shovlin will testify on any work
2 requests listed.

3 MR. BLAKE: Yes, sir.

4 CHAIRMAN SMITH: Well, I am telling you that I
5 have lost the thread of your argument. If you want to try
6 it again, okay. I missed the thread of it. I don't
7 understand it.

8 MR. BLAKE: The argument was that while that may
9 have been what they wanted on October 3, that did not follow
10 the Board's order which said, identified five per.

11 I have not taken issue with their October 3
12 letter, but by George, it doesn't follow the Board's order
13 in several respects, and I will outline them for the Board
14 now.

15 First of all, the agreement was to have five
16 individual work requests as a starting point identified for
17 each of the individuals identified in Footnote 4 on page 2
18 of their trial brief. What we got were almost 80 or more
19 than 80 work requests. What we got were work requests
20 identified for more individuals than those which appeared
21 originally in that footnote, and what we got in the case of
22 Mr. Toole and Mr. Shovlin was they ought to be responsible
23 for all work requests.

24 Now, I have not taken objection to the fact that
25 where they added more people to be questioned on work

1 requests, where there was a reasonable number I have just
2 kept quiet. But I do not regard it as anywhere within the
3 Board's order and merely their representation that that is
4 what they want. I don't go along with it, and I don't think
5 Mr. Shovlin was understood by the Board or by us to have
6 been responsible for more than 80 work requests, merely
7 because he is the supervisor of maintenance.

8 CHAIRMAN SMITH: Let's proceed.

9 Mr. Shovlin can't be responsible for them. If he
10 can't answer questions on them, all right, but nothing in my
11 experience gives me the wisdom to rule on this. It is just,
12 I am going to be arbitrary whichever way we do it. Let's
13 just proceed.

14 BY MR. SELKOWITZ: (Resuming)

15 Q Mr. Shovlin, do you have 22181 available to you?

16 MR. BLAKE: 22181 is the number.

17 THE WITNESS: I don't have that.

18 MR. SELKOWITZ: We would like to have that marked
19 as TMIA Exhibit 20.

20 (The document referred to was
21 marked TMIA Exhibit No. 20
22 for identification.)

23 DR. LITTLE: It is third from the bottom of the
24 stack.

25 BY MR. SELKOWITZ: (Resuming)

- 1 Q And just some brief questions on this.
- 2 The priority is what?
- 3 A 2D, which means the plant has to be in a shut down
4condition, cold shutdown.
- 5 Q And does it indicate on the bottom, under line 11,
6any notation as to plant condition as well?
- 7 A Shutdown, that is correct.
- 8 Q And what does it say about the work having an
9effect on nuclear safety, is it yes or no?
- 10 A The answer is yes.
- 11 Q Now, the origination date is what, sir?
- 12 A 12/13/77.
- 13 Q And if we look at line 19, line 20, what do we
14have for a date?
- 15 A 4/10/78.
- 16 Q And sir, if you could look at line 22 for just a
17moment, that is the quality control department's sign-off,
18is that correct?
- 19 A That is correct.
- 20 Q And they indicate the day on which they sign it at
21least, is that correct?
- 22 A They have a date.
- 23 Q And what is that date, sir?
- 24 A It looks, it appears to me to be 1/15/79.
- 25 Q That is approximately seven months after the work

1 completed date, is that correct?

2 A That is correct.

3 MR. SELKOWITZ: We would ask that Exhibit 20 be
4 accepted into evidence as one of those work orders which
5 indicates that their maintenance procedures were faulty and
6 that the quality control review which is required is on the
7 face of this document extremely late and therefore, we feel,
8 a significant deficiency.

9 DR. JORDAN: This seems to be a somewhat different
10 case than we have been running into before in that the work
11 seems to have been accomplished on schedule, namely, at the
12 next shutdown, and the main lack is that it didn't get
13 quality assurance until a much later time.

14 Now, has there been testimony or evidence
15 presented concerning the hold-up in getting quality
16 assurance, I mean, getting the sign-off of the final
17 inspection and of possible effects on safety, and so far as
18 I know, there have not been any statements made as to the
19 seriousness of the delayed inspection by quality control.

20 MR. SELKOWITZ: The only testimony I believe we
21 have had is some indication from Mr. Shovlin, his
22 understanding of some of the things that went into QC's
23 reviews, some of their time pressures and workload. I
24 believe he had something on that.

25 DR. JORDAN: It seems to me we have not had a

1 foundation laid, however, for that particular problem.

2 MR. SELKOWITZ: But perhaps the problem lies in GP
3 1008. However, there are things that I think are
4 self-evident, that the Board doesn't need to have a
5 foundation laid for, and one of those, it seems to me, would
6 be if they require QC to review it, quality control to come
7 in and look and see what happened, was that work done right,
8 are the parts right, that in and of itself means it was an
9 important step or they wouldn't be requiring it.

10 DR. JORDAN: You may be perfectly right, but I
11 don't know whether it is an urgent step or not. I just
12 don't now.

13 MR. SELKOWITZ: I can understand. There is
14 nothing in the record at this point that says by them
15 whether they think it is urgent or isn't urgent.

16 CHAIRMAN SMITH: Mr. Blake?

17 THE WITNESS: Sir, I would like to point out Item
18 16 of that job ticket has a QC supervisor's signature which
19 indicates that he approves the start-work and has reviewed
20 the total work package.

21 CHAIRMAN SMITH: Mr. Blake?

22 MR. BLAKE: Mr. Smith, I, too, object to the
23 admission of this. I do not think there has been a
24 foundation laid, and with respect to this particular
25 activity, Mr. Colitz did address this. It is an important

1 valve, but this activity that is involved here is inspecting
2 one of the switches on it. We are just not plain here into
3 a safety activity of any safety importance, and that is the
4 state of the record. There is no state of the record on the
5 QC. Actually it was Mr. McGarry that he is referring to who
6 I think his testimony also said he wasn't familiar with QC's
7 practices with regard to. At the end of the adage, I think
8 it was Mr. McGarry whose testimony Mr. Selkowitz was
9 referring to. I think Mr. McGarry also indicated he was not
10 familiar with QC's practices.

11 MR. SELKOWITZ: If the Board please, you know, you
12 have a QC system, it seems to me, because you have got doers
13 and you have got watchers. The QC people are in effect the
14 watchers. You don't want to have the doers looking over
15 their own shoulders because that doesn't assure you of any
16 quality control. You have somebody else do it.

17 I think it is self-evident that until those
18 quality people look at it, you have no assurance that the
19 job was done right, and if it is on a component that is
20 nuclear safety related, that meets the threshold test to
21 support our contention. Otherwise there is no reason to
22 have doers and watchers.

23 CHAIRMAN SMITH: Mr. Swanson?

24 MR. SWANSON: The staff would agree that the
25 relevancy of the safety-related aspect of the equipment may

1 well have been shown, but we do have a threshold test of
2 materiality as well, and although we couldn't preclude the
3 possibility that an adequate basis could be laid, we just
4 don't think it has been at this point, to show that the
5 delay in getting the quality control sign-off, that all the
6 paperwork had been done is in fact material to their
7 contention.

8 CHAIRMAN SMITH: Does the Commonwealth want to
9 take a position on this exhibit?

10 MR. ROBERT ADLER: We don't want to take a
11 position. We do have one question that might be relevant.

12 CHAIRMAN SMITH: All right.

13 FURTHER RECROSS (AS ON REDIRECT) EXAMINATION

14 BY MR. ROBERT ADLER:

15 Q Mr. Shovlin, in Block 3 it is indicated that there
16 be QC hold points in this procedure.

17 Do you see that?

18 A Yes, sir.

19 Q Can you show me where in this document it is
20 indicated where the QC hold points are supposed to be?

21 A It appears to me I do not see any arrows pointing
22 to any particular item, no, sir.

23 Q Mr. Shovlin, would you say it is normal procedure
24 not to have any indication on the document?

25 A No. You asked -- the stamp, the hold points

1 indicated -- the procedure does not indicate to me, going
2 through it, that there are any hold points that are
3 indicated.

4 Q My question is should there have been?

5 A I cannot answer that really. I don't know who is
6 the gent that puts that stamp on there, and this his
7 supervisor, you know, goes through and then he doesn't go
8 along. I don't have no knowledge of how that is.

9 Q Would not the stamp in block 3 indicate that there
10 should be QC hold points indicatedS?

11 A If I would have that procedure, that would
12 indicate to me that I should look for a hold point in that
13 procedure, yes, sir.

14 CHAIRMAN SMITH: We will receive --

15 MR. BLAKE: Mr. Chairman, I wonder if I might have
16 a chance on voir dire of this document to ask Mr. Shovlin
17 some additional questions on that point.

18 CHAIRMAN SMITH: All right.

19 VOIR DIRE

20 BY MR. BLAKE:

21 Q Mr. Shovlin, in looking at -- do you have a
22 Xeroxed or a copy of what is actually the real work request
23 22181? Is yours the original or do you have a Xeroxed copy
24 of it in front of you? Do you have the original?

25 A No, it looks to me --

1 Q Well, looking at the copy you have --

2 CHAIRMAN SMITH: Well wait a minute. I have a
3 copy which seems to clearly say the hold points indicated
4 have been crossed out and voided. Are you aware of that in
5 your questioning?

6 MR. BLAKE: That was the point of my questioning.

7 CHAIRMAN SMITH: We can get to these things much
8 quicker. Just say it.

9 How about this? Say it. I can sort of relax the
10 very informal rules of evidence in examination and just come
11 directly to the substantive point we are trying to get
12 across. We have, as you have mentioned, about 70 of them.
13 You could have said, how about this? It says hold point
14 voided, and we could have got to it much faster. And then I
15 might say, you know, I might say it then the correct way
16 later on, but that is a risky take.

17 MR. BLAKE: That was the only point of my
18 questioning.

19 MR. ROBERT ADLER: That would satisfy my
20 questioning. There is too much writing in this block and we
21 couldn't tell what was crossed out.

22 CHAIRMAN SMITH: The Board does not think that
23 this Exhibit proves very much, but we will provide a very
24 liberal standard for accepting these. The real significance
25 of them will come at the close of the record on this issue.

1 In the meantime we just simply don't know, so we are going
2 to accept it.

3 (The document referred to,
4 previously marked for identi-
5 fication as TMIA Exhibit No.
6 20, was received in evidence.)

7 MR. SELKOWITZ: I am going to try, sir, if I can,
8 to speed this up. I am sure this will be appreciated.

9 If we could look at work request 22268 and 25166,
10 they were all part of a package which was the last group for
11 Mr. Shovlin, and there were seven of them identified in that
12 package because they all have the common character about
13 them.

14 CHAIRMAN SMITH: I have two work orders, numbered
15 22268.

16 MR. SELKOWITZ: You have been blessed with an
17 extra. And then there will be a 25166.

18 I am not going to go through what the documents
19 say. They say it. But I just wonder if I can say something.

20 MR. BLAKE: I'm sorry, Mr. Selkowitz? Could you
21 give me the number again of the document you're going to
22 work with?

23 MR. SELKOWITZ: 22268. I would like to have
24 marked for identification as Exhibit 21.

25 (The document referred to was

1 marked TMIA Exhibit No. 21 for
2 identification.)

3 MR. SELKOWITZ: And 25166 as Exhibit 22.

4 (The document referred to was
5 marked TMIA Exhibit No. 22 for
6 identification.)

7 MR. SELKOWITZ: Does the Board have those?

8 CHAIRMAN SMITH: Yes.

9 BY MR. SELKOWITZ: (resuming)

10 Q Mr. Shovlin, do you have those?

11 A Yes, sir.

12 Q Just briefly, sir. These both have the nuclear
13 safety block checked. Is that right?

14 A That is correct.

15 Q And they are both marked "cancel, purged". Is
16 that correct?

17 A Yes, sir. That is correct.

18 Q Exhibit 21, which is 22268, on page 2, however,
19 indicates in block 19 that work was done pursuant to this
20 work request.

21 A That is correct.

22 Q And looking at Exhibit 22, 25166, that was also
23 cancelled and purged on -- this was 11/2/79, three days
24 before Exhibit 21 was purged.

25 I would just like for you to tell me, sir, whether

1 there's any place indicated on either of these documents
2 that I can know from this record whether that work was done,
3 one -- is there any way from the document itself that I can
4 tell that the work was completed?

5 A On either of the documents?

6 Q On either of the documents.

7 A On 22268 in the comments on work performed it
8 spells out exactly what was done.

9 Q We know some work was done, but we can't tell
10 whether all the work was done, can we?

11 A Well, the work is not completed until the
12 component is tested, so as far as the physical work was
13 performed it is indicated in item 19.

14 Q And on 22 we don't even have the benefit of that,
15 however, do we? That is 25166.

16 A No, that is correct.

17 Q So there is -- by the system you are operating for
18 these two safety-related components, as indicated on the
19 face of the work request it is impossible to tell what the
20 status of these two pieces of maintenance work is or was.
21 Isn't that correct?

22 A No, that is not totally correct.

23 Q Other than the "cancelled, purged"?

24 A It could indicate, in Exhibit 22, in the
25 maintenance work log that if it previously was indicated on

1 that job ticket that there was a change mod associated with
2 it.

3 Now I personally know that the reason that this
4 particular job was not done because there was a change mod
5 into the mechanism that corrected the particular problem
6 that was indicated in item 3.

7 Now, I don't know if the work log identifies that
8 change mod that corrected that particular problem, but that
9 is a possibility.

10 Q So that even knowing that something else happened
11 on this, therefore the knowledge is within the system. The
12 system does not process this work request to some conclusion
13 other than to have somebody write "cancelled, purged" on top
14 of it?

15 A After first knowing that -- after investigation
16 that either the job was done under another vehicle --
17 another job ticket -- or the problem was not there.

18 And I know the problem was not there in this
19 particular one because there was a change made.

20 Q Can you tell me, sir, on 22268, which is Exhibit
21 21, who wrote "cancelled, purged" other than maybe you
22 happen to identify the handwriting?

23 A No, I can't identify that particular writing.

24 Q And we can't see on this document what it was that
25 was discovered that made him write "cancelled, purged", can

1 we?

2 A On this document, no.

3 Q And that would be true of any document that
4 someone had written "cancelled, purged" and a date and
5 nothing else? We would have the same problem, wouldn't we?

6 A I am not certain that all job tickets have merely
7 cancelled and purged. Some could have an explanation.

8 Q I understand that. I'm saying if all there is
9 written on it is "cancelled, purged" we've got the same
10 problem with every one of them, don't we?

11 A As you have identified to me, yes, sir.

12 MR. SELKOWITZ: I would ask that TMIA 21 and 22 be
13 accepted into evidence as failure to maintain proper
14 safety-related records.

15 MR. BLAKE: Mr. Chairman, the purpose for which
16 these were being --

17 CHAIRMAN SMITH: Just records.

18 MR. BLAKE: Mr. Chairman, I object to the
19 admission of both of these. Again, no foundation laid that
20 these involved safety-significant items. Mr. Colitz
21 specifically addressed the item in TMIA's proposed Exhibit
22 22. I think Mr. Colitz was rather specific that it involved
23 a mechanism to allow a person to extract himself from
24 between two interconnecting doors.

25 It indeed involved personnel safety, but had

1 nothing to do with nuclear safety and, in fact, I think he
2 alluded as well to the fact that there had been a
3 modification since which had taken care of this -- even this
4 personnel problem.

5 CHAIRMAN SMITH: The document on its face says it
6 does, so that is a balancing the Board will have to make.

7 MR. BLAKE: I understand. The activity involved
8 in performing this maintenance, the document says, as
9 opposed to the component or the particular problem.

10 That is going to occur in a couple of these, Mr.
11 Smith, and I think probably I should have pointed that out
12 before. This question on its face is whether or not the
13 individual who checks it -- whether this activity could
14 have, not as to whether or not the component does or does
15 not.

16 CHAIRMAN SMITH: Well, I want to make this
17 observation again.

18 Now, one of the things about when we received the
19 last group of exhibits, I talked about the management
20 competence and where we are going to go with that, and where
21 it leads to the issues in this particular proceeding.

22 Now, let's take that one step further. Let's take
23 the system of safety-related maintenance recordkeeping. Now
24 that is in somewhat of a category of its own because
25 recordkeeping methods can be changed much easier than

1management.

2 So I just don't like to spend so much time on
3something that is not going to be that important in this
4overall case. I don't think it should be argued, each one,
5so thoroughly. The contention, incidentally, says "accurate
6maintenance records". I think it probably should have said
7"complete" as well as accurate. And I think we could read
8it to read that so long as the document itself -- on itself
9-- has some indication that it is safety-related, and so
10long as the document on its face leaves questions unanswered
11as to what happened to the item, I think that the Board
12should be able to consider it in view of the entire record
13on the issue.

14 MR. BLAKE: I understand, Mr. Smith, and I
15understand what the Board has indicated to the other parties
16with regard to the low threshold that you're going to apply
17to the admission of these.

18 CHAIRMAN SMITH: But do you understand what I mean
19about that particular aspect?

20 MR. BLAKE: I minimize how much I put into my
21objection -- the nature of my objections -- unless it is
22different. We'll all rely on the state of the record to
23date whether or not there is an indication that this one
24really is properly within the scope of the contention, by
25and large relying on Mr Colitz's testimony as to whether or

1 not this item had some nuclear safety importance.

2 And I will minimize how many words it takes me to
3 say that.

4 CHAIRMAN SMITH: Let's say that Mr. Colitz did say
5 that it had absolutely nothing to do with nuclear safety,
6 then he's demonstrated that the record may be inaccurate in
7 that respect, because it does have something to do with
8 nuclear safety.

9 MR. BLAKE: I don't think that's true, Mr. Smith.
10 What Mr. Colitz was talking about were the items
11 that were involved, not whether or not the activity.

12 Going in and out of the reactor building hatch,
13 these fellows may well have been right. It was something
14 that could involve, even conservatively, nuclear safety
15 significance. That is the chore to be done. What they had
16 to do once they got in there was take care of this interlock
17 protection device for personnel.

18 It is the latter which Mr Colitz addressed, and it
19 is the latter maintenance which is being deferred, which is
20 the subject, as I understand it, of TMIA's contention, and
21 that is really why I took Mr. Colitz through those.

22 Now those may be finalized, but I don't think they
23 are necessarily inconsistent.

24 CHAIRMAN SMITH: All right. Thank you.

25 Do you want to comment on this exhibit?

1 MR. BLAKE: Mr. Smith, I only need to add, because
2 I don't think I did, with respect to TMIA Exhibit 21 I would
3 object on the same grounds -- Mr. Colitz's testimony.

4 CHAIRMAN SMITH: Okay. Mr. Swanson?

5 MR. SWANSON: The staff would not object to the
6 documents. We have a problem of accepting as evidence a
7 checkmark that it is related to nuclear safety by an
8 anonymous person who is not here to be questioned.

9 But to the extent that it has some probative
10 value, it probably does pass the threshold test.

11 CHAIRMAN SMITH: I would think that that could not
12 be.

13 If the sole issue of this proceeding was this
14 particular work item, then we would be very reluctant to
15 accept that. However, it is a business record maintained in
16 the regular course of business and is being offered as a
17 pattern and it is being offered as to also records
18 sufficiency.

19 Does the Commonwealth want to comment?

20 MR. ROBERT ADLER: We have no objection.

21 BY MR. SELKOWITZ: (resuming)

22 Q Mr. Shovlin, this work order is, of course, not
23 the same form that is presently in use -- this being
24 Exhibits 21 and 22, rather?

25 A No, sir. That is correct.

1 Q Are you aware of anywhere, sir, on the new form
2 that contains a block or a space such as in paragraph 3, for
3 example, that is specifically designed to accommodate
4 someone going back and writing "cancelled, purged", and a
5 reason? Is there anything in the new system that is
6 specifically designed to take that into account?

7 A I believe there is a block that indicates whether
8 it was done by the code -- 2 I believe it is -- whether it
9 was done by another corrective maintenance action or whether
10 there was a duplicate, or whether it was purged, I believe.
11 Yes, sir.

12 Q And when you marked "purged", is there a space on
13 there, can you show us by virtue of a copy where one would
14 write why it was purged?

15 A No. I think that is written into the procedure,
16 1407, what exactly the two, A, B, and C mean.

17 MR. SELKOWITZ: Thank you.

18 I have culled, as we have gone through, some
19 additional work tickets which I think would just repeat some
20 of the same kinds of questioning and so this is all the
21 questions I have for Mr. Shovlin.

22 CHAIRMAN SMITH: All right. Now, do you want to
23 take advantage of the suggestion that your contention should
24 be amended to include records that are incomplete as well as
25 accurate?

1 MR. SELKOWITZ: Yes, sir. I was going to make
2 that oral request for a specific amendment to have it
3 accurate and complete, and I wasn't sure about what you were
4 saying -- whether it wasn't already going to be interpreted
5 in that fashion. But since we have no difficulty, I will
6 specifically request the amendment of the contention to
7 include the word "complete and accurate".

8 CHAIRMAN SMITH: All right. Do you have any
9 objection to that, Mr. Blake? I think it could be argued
10 that accurate subsumes complete.

11 MR. BLAKE: I'm not going to object, Mr. Chairman.

12 CHAIRMAN SMITH: Exhibits 21 and 22 are received.

13 (The documents referred to,
14 previously marked for identi-
15 fication as TMIA Exhibits No.
16 21 and 22 were received in
17 evidence.)

18 MR. SELKOWITZ: I will be moving on to the next
19 witness. Rather than starting and interrupt, would it be
20 the Board's suggestion to take the luncheon break?

21 CHAIRMAN SMITH: What is the pleasure of the
22 parties?

23 MR. SELKOWITZ: I would prefer some time, if I
24 could, so I could organize the next witness's material.

25 CHAIRMAN SMITH: Who is your next witness?

1 MR. SELKOWITZ: Mr. Leakway, and I believe he is
2 available.

3 CHAIRMAN SMITH: And will he be testifying on the
4 work orders associated with his name?

5 MR. SELKOWITZ: Yes, sir.

6 MR. BLAKE: And as well, I think, he was to cover
7 some of Mr. Donahey's.

8 MR. SELKOWITZ: Yes.

9 CHAIRMAN SMITH: All right. Could you list the
10 ones that are not associated with his name that you will
11 expect him to testify on?

12 MR. SELKOWITZ: They are all of the ones
13 associated with Mr. Donahey's name, except for I think it
14 was 21910. That one has already been covered by Mr. McGarry.

15 CHAIRMAN SMITH: All right.

16 Okay, now we had requested the parties to confer
17 to see if they could agree upon a relevant period of time
18 that there should be testimony presented on the quality of
19 the quality assurance organization and recordkeeping methods
20 prior to the accident. Has there been any agreement on that?

21 MR. BLAKE: No, there's been no discussion off the
22 record on that, Mr. Smith. I am afraid I may be at fault.
23 I think maybe I misunderstood. I thought when the Board
24 suggested one year and I heard no objection I thought that
25 meant one year prior to the accident.

1 But we can certainly talk about it and report back
2 to the Board.

3 CHAIRMAN SMITH: Okay.

4 We asked if a stipulation could be made on -- was
5 there any progress on the stipulation -- what was that?

6 MR. BLAKE: I think we have an agreement and we
7 typed up the stipulation, but Mr Selkowitz wasn't as
8 familiar and he needs to check with somebody back home.

9 MR. SELKOWITZ: I need to check with Mr. Benetti.
10 His RFs put on those numbers.

11 CHAIRMAN SMITH: Now that we're getting into where
12 the Board's beginning to understand what these forms mean
13 and what their patterns are, and although it has taken
14 longer than we would have wished, it has been helpful in
15 educating us generally. But now that you have accomplished
16 that somewhat, maybe you could agree on maybe other
17 shortcuts that you might have in mind and still preserve
18 your case and cut down on actual hearing time.

19 MR. SELKOWITZ: And we be given the Board's
20 rulings that we could come to grips and agreement with the
21 whole number of the balance and preserving various people's
22 objections at the time.

23 CHAIRMAN SMITH: Now I have not discussed this
24 with the Board, but I intend to at noon. I intend to
25 discuss with the Board the possibility of a staff expert

1 reviewing this transcript and these documents and giving
2 some advice or testimony to the Board.

3 Could you inquire sometime into the what the
4 staff's position might be if we were to make such a request,
5 assuming that the Board -- I just want to forewarn you that
6 this request might come up.

7 MR. SWANSON: You mean a staff evaluation of the
8 work requests that have been admitted?

9 CHAIRMAN SMITH: Yes, that will have been admitted.
10 Now I realize we had pending before us an
11 independent expert too, which the Board has not ruled upon,
12 but that might be germane.

13 MR. SWANSON: Would you contemplate that this
14 testimony would be presented as part of the direct case some
15 time from now?

16 CHAIRMAN SMITH: I don't know. The Board hasn't
17 talked about it. I just see where we're going along. We're
18 coming in with one work request after another, which does
19 not fall down clean on one side or another, and I am
20 anticipating the need for some help.

21 But I'm not making any request. I'm just trying
22 to give you early notice that this might come up.

23 MR. SWANSON: I appreciate that.

24 CHAIRMAN SMITH: As a matter of fact, it's
25 probably premature for me to raise it. It just happened to

1 pop into my mind, and I said it.

2 MR. SWANSON: Before we dismiss Mr. Shovlin, I
3 wasn't aware that the Board expected the parties to conduct
4 a cross on each work request as we went along. I did have a
5 couple of questions on one of the exhibits.

6 CHAIRMAN SMITH: Well, there had not been any
7 particular ruling.

8 MR. SWANSON: The staff would like to ask a couple
9 of questions on TMIA Exhibit 19 before he is dismissed.

10 CHAIRMAN SMITH: All right. 19?

11 MR. SWANSON: Yes, that is work request number
12 19590.

13 THE WITNESS: Yes, sir.

14 CROSS EXAMINATION

15 BY MR. SWANSON:

16 Q Can you tell by looking at this document whether
17 or not the work requested was preventive maintenance or
18 periodic maintenance?

19 A This -- after a heat-up an cool-down this would
20 indicate that it could fall within the preventative
21 maintenance because it is something of a continuing nature.

22 Q Can you tell from this document whether or not,
23 then, the work requested was done so as a result of a
24 problem that existed that had to be corrected, or merely,
25 that is, part of a periodic testing or adjustments that

1 might have to be made to this component?

2 A No. This came about as a vendor recommendation.

3 Q So the no is that it was not a problem in the
4 sense of the safety problem that had to be corrected right
5 away, but instead was just part of a periodic maintenance
6 program that was recommended by the vendor?

7 A Not to my knowledge that it was a problem that was
8 experienced and as a result from that this recommendation
9 came out.

10 I don't ever recall having that particular problem
11 at Three Mile Island Unit 1.

12 Q Just so the record is clear. You are saying this
13 is a periodic maintenance item recommended by the vendor as
14 opposed to a safety problem that arose that had to be
15 corrected?

16 A Yes, this came about as a result of a
17 recommendation from the vendor.

18 MR. SWANSON: We have no further questions.

19 DR. LITTLE: Sir, if I understand you correctly,
20 if we look at any given work request approval we will have
21 to read Item 3 and make some judgment as to whether that was
22 a malfunction that was described or whether that was just
23 routine preventive maintenance. We cannot tell it.

24 THE WITNESS: Item 3 would have to indicate that,
25 ma'am.

1 DR. LITTLE: But the way it indicates that is we
2 have to read the description there and decide whether it is
3 or not. It does not tell on the face of it whether it is or
4 is not.

5 THE WITNESS: No. For example, after heat-up and
6 cool-down that could be, in the case of one who had a fine
7 operating reactor, that could be a year and a half that that
8 could happen -- after heat-up and cool-down remove.

9 First of all, you'd have to have the cool-down,
10 and after you had cool-down for some particular time, then
11 during the heat-up you would perform that evolution.

12 DR. LITTLE: That's what I'm getting at. You just
13 can't look at the form on the face of it and tell whether
14 what is described there is a malfunction or preventive
15 maintenance. You have to read that and then you would know,
16 if you know something about the situation, whether it was
17 one or the other. Is that correct?

18 THE WITNESS: That is correct from your statement,
19 ma'am.

20 DR. LITTLE: Thank you.

21 DR. JORDAN: A matter then occurs to me. During
22 each shutdown there are a large number of preventive
23 maintenance items that must be accomplished during that
24 shutdown period. Is that not correct?

25 THE WITNESS: That is correct, sir.

1 DR. JORDAN: Now do those come in the form of work
2 requests such as this, or is there a printout in which you
3 get a single work request with maybe a hundred items on it?

4 THE WITNESS: No, sir. When you said a hundred
5 items, I can't envision any single work request to have a
6 hundred items.

7 DR. JORDAN: I guess -- what is the procedure --
8 can you tell me -- for initiating all of the jobs that have
9 to be done during a shutdown?

10 THE WITNESS: First of all, there are tech spec
11 surveillance work items that are identified that must be
12 done during, for example, a refueling period -- between
13 refuelings.

14 DR. JORDAN: I'm talking about a refueling
15 shutdown.

16 THE WITNESS: These are required to be done. Yes,
17 sir. They are identified.

18 DR. JORDAN: All right. Then how does maintenance
19 know which ones to do? Do they go to the procedures and on
20 their own initiative copy off the procedures, each
21 component, number-by-number, what has to be done? Or is
22 there some central organization that says to maintenance, do
23 these things?

24 THE WITNESS: First of all, sir, those refueling
25 work items are identified through our surveillance program.

1 They are identified by a particular procedure that is
2 identified with each surveillance to be performed.

3 The tech spec surveillance, which really is
4 another connotation, is a preventative maintenance measure.
5 Each one of those, separately, are identified as a task.

6 DR. JORDAN: Does it come with a work item like
7 this?

8 THE WITNESS: It could. It could.

9 DR. JORDAN: But does this mean that operations --
10 someone has to initiate a work request if you are to do it.
11 You don't yourself decide from the procedure manuals what
12 needs to be done during a refueling shutdown.

13 THE WITNESS: There are identified by a computer
14 runout that tells us these are the items that have to be
15 performed during refueling, and those are monitored. And
16 not only the refueling items, but those that must be done
17 monthly, semi-annually, quarterly, on a daily basis.

18 DR. JORDAN: Okay. I see. We have not seen an
19 example of that computer run.

20 THE WITNESS: No, sir.

21 DR. JORDAN: Okay, that was my question. Thank
22 you.

23 CHAIRMAN SMITH: Mr. Blake?

24 MR. BLAKE: Nothing more, Mr. Shovlin. Just one
25 administrative item. I think Mr Shovlin may be done and may

1 be excused.

2 CHAIRMAN SMITH: Anything further, Mr Shovlin?

3 Thank you, Mr. Shovlin, you are excused.

4 (The witness was excused.)

5 MR. BLAKE: It always falls to me to pick on the
6 reporter, and I have another one that I'd like to make sure
7 the record is clear on.

8 This one deals with TMIA's Exhibit 8, where the
9 index page -- it's October 16 transcript -- October 16. The
10 index page indicated it was TMIA Exhibit Number 8 was
11 received in evidence.

12 CHAIRMAN SMITH: That is incorrect.

13 MR. BLAKE: The indication actually on that page
14 indicates for a second time that it was marked for
15 identification. As long as the record reflects that earlier
16 TMIA 8 was marked for identification and was not received
17 into evidence and everybody understands that, I don't think
18 there's anything more that needs to be done with that.

19 That is October 16, Mr. Selkowitz. It was marked
20 for identification 8 and 9 on page 2961, and in the index
21 indicates that it came into evidence at 2979. That's the
22 correction I'd like to make.

23 CHAIRMAN SMITH: That is correct. Your
24 correction is correct.

25 MR. BLAKE: So after lunch we'll start with Mr.

1 Leakway?

2 CHAIRMAN SMITH: I beg your pardon?

3 MR. BLAKE: After lunch we'll start up with Mr.

4 Leakway?

5 CHAIRMAN SMITH: That's fine. Yes. We will

6 return at one o'clock.

7 (Whereupon, at 12:00 p.m., the hearing in the
8 above-entitled matter was recessed, to reconvene at 1:00
9 p.m. this same day.)

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

AFTERNOON SESSION

1

2 CHAIRMAN SMITH: Would you raise your right hand?

3 Do you swear to tell the truth, the whole truth,
4 and nothing but the truth in this hearing, so help you God?

5 MR. LEAKWAY: I do.

6 CHAIRMAN SMITH: Would you state your name, your
7 occupation, and your business address, please?8 THE WITNESS: My name is Murray Nelson Leakway. I
9 am a maintenance foreman at York Haven Hydrostation now.10 CHAIRMAN SMITH: And that would be your business
11 address?

12 THE WITNESS: Yes, sir, York Haven, Pennsylvania.

13 CHAIRMAN SMITH: And York Haven Hydrostation is a
14 Metropolitan Edison --

15 THE WITNESS: Subsidiary. Yes, sir.

16 CHAIRMAN SMITH:

17 Whereupon,

18 MURRAY NELSON LEAKWAY

19 was called as a witness, and having been first duly sworn,
20 took the stand, was examined, and testified as follows:

21 DIRECT (AS ON CROSS) EXAMINATION

22 BY MR. SELKOWITZ:

23 Q)Mr. Leakway, when did you assume your position at
24 York Haven Hydro?

25 A I was transferred to York Haven on 7/1/79.

1 Q And prior to that, sir, were you employed at Three
2 Mile Island?

3 A Yes, sir.

4 Q In what capacity?

5 A I was employed there -- I started there as first
6 class CW repairman at 6/7/76, and I was promoted to
7 maintenance foreman, nuclear, at 11/1/78.

8 Q And you held the position of maintenance foreman
9 until your transfer to York Haven?

10 A Yes, sir.

11 Q Just some general questions we are going to be
12 asking you about some work requests. Are you familiar with
13 some documents that were called work request forms?

14 A Am I familiar with them?

15 Q Yes, sir.

16 A Yes, sir.

17 Q Did you from time to time originate them?

18 A Yes, sir, from time to time.

19 Q Did you ever have occasion to sign one as an
20 originator supervisor?

21 A Yes, sir, I have.

22 Q And did you -- let me strike that.

23 You are familiar, sir, that there is a priority
24 system that is noted on work orders?

25 A Yes, sir.

1 Q Could you tell me what your understanding was at
2 the time you were working there of what a 1A work request
3 meant to you?

4 A If it was feasible at the time to accomplish that
5 work request.

6 Q And did you feel that it meant to be accomplished
7 right away?

8 A If possible, yes.

9 Q You say if feasible or if possible. Are you
10 referring to whether the plant was in the right condition to
11 do that work at that point?

12 A What I really mean, sir --

13 Q Mr. Leakway, could you speak directly into it? I
14 am having difficulty hearing you.

15 A Could you restate that, please?

16 Q Sure. Was one of the things that you mean when
17 you say you would do it right away if it was feasible or
18 possible was the plant's condition at the time you got the
19 work request?

20 A Well, the statement I made is, at the discretion
21 of the time of the shift supervisor.

22 Q So whatever the shift supervisor told you to do,
23 that is what was done?

24 A Yes, sir.

25 Q And despite what might have been the indicated

1 priority on the document?

2 A That is right, sir.

3 Q Is it your understanding, sir, that the priority
4 was designated by a shift foreman?

5 A It was usually designated -- the job ticket was
6 performed in our case because of shift maintenance of the
7 control room shift foreman.

8 Q And he is in operations. Is that correct?

9 A Yes, sir.

10 Q And if you wanted to discuss priorities for a work
11 request that was in the process of being generated, let's
12 say, by one of your people that you were going to have to
13 look at, would you talk to the shift supervisor? Is he the
14 right person to discuss priorities with?

15 A Yes, sir. When you make out a tagging application.

16 Q What is a tagging application?

17 A Well, it all depends on what apparatus has to be
18 taken out, what you are going to work on.

19 Q So you would discuss that with the shift
20 supervisor who is in operations?

21 A He has the final say.

22 Q I have given Mr. Blake a copy, and Mr. Murdoch
23 will now distribute copies of a work request -- the number
24 is 24246 -- which I would like to have marked as TMIA
25 Exhibit 22. I think that is the right number.

1 CHAIRMAN SMITH: Twenty-three?

2 MR. SELKOWITZ: Twenty-three. Thank you.

3 CHAIRMAN SMITH: Two five one six six is Exhibit
422.

5 MR. SELKOWITZ: The number of the exhibit is
624246. This is one of the ones not previously provided. It
7is on the list of those indicated that we would present
8today.

9 (The document referred to
10 was marked for identification
11 as TMIA Exhibit Number 23.

12 BY MR. SELKOWITZ: (Resuming)

13 Q Mr. Leakway, we have had prior testimony about the
14form and so on, and we need not repeat it. I just want to
15ask you whether you are personally aware of there being an
16interlock system on the access hatches to the reactor
17building.

18 A Yes, sir.

19 Q And is it your understanding, sir, that the
20purpose of that is to prevent both doors from being opened
21simultaneously?

22 A Yes, sir.

23 MR. SELKOWITZ: I would just note for the record,
24if I might, that the origination date is June 15, 1978, work
25completion date is March 14, 1979, and ask that TMIA Exhibit

1 23 be accepted in evidence.

2 MR. BLAKE: What was the purpose, Mr. Selkowitz?

3 MR. SELKOWITZ: I am sorry, the delay of nine
4 months for doing a maintenance item that is indicated to
5 have an effect on nuclear safety, that I think is indicated
6 as a 1A priority, we feel is an inappropriate deferred
7 maintenance, and especially as regards the testimony given
8 by Mr. Colitz explaining the purpose of this system, and
9 further, because it was, as it says in the body of it, and
10 this had been highlighted to the licensee by discussions
11 over an NRC unresolved item, which this work ticket followed
12 after the resolution of that item, and it still took that
13 amount of time.

14 The discussion is in the transcript at Pages 2936
15 and thereafter. I am sorry. That was for a prior one.

16 MR. BLAKE: Objection on the same basis. He had
17 no foundation in the record. In fact, I don't believe Mr.
18 Colitz discussed this one in particular at all.

19 CHAIRMAN SMITH: You don't believe he discussed
20 this one?

21 MR. BLAKE: No, sir.

22 MR. SELKOWITZ: I believe those page references
23 are still correct, because there was a discussion of the
24 hammers and punches used for access or exit from the reactor
25 building, and I believe in that discussion we also talked

1 about the interlock system. It is at 2936.

2 (Pause.)

3 MR. SELKOWITZ: I would add, sir, that this is one
4 of those items that is offered specially as in and of itself
5 evidence of inappropriately deferred maintenance which had
6 an effect on safety.

7 CHAIRMAN SMITH: It is your move. I think you
8 cited the correct transcript reference.

9 MR. BLAKE: For discussion of the limit switches?

10 CHAIRMAN SMITH: For a discussion of the hatches.

11 MR. BLAKE: I agree that it was the hatches that
12 were being discussed at that point in the transcript.

13 CHAIRMAN SMITH: Do you have any further comment?

14 MR. BLAKE: No, sir, other than to observe, was
15 the purpose for which this was being entered the deferred
16 maintenance?

17 CHAIRMAN SMITH: Yes.

18 MR. BLAKE: Within the definition as TMIA has
19 given it of one year?

20 MR. SELKOWITZ: No, sir. This is inappropriately
21 lengthy deferred maintenance for 1A.

22 CHAIRMAN SMITH: This is not a part of his
23 summaries. This is an independent document. The contention
24 doesn't say one year.

25 MR. BLAKE: My objection still stands, and only on

1 that basis.

2 CHAIRMAN SMITH: Okay. Mr. Swanson?

3 MR. SWANSON: No objection.

4 CHAIRMAN SMITH: Mr. Adler, Robert Adler?

5 MR. ROBERT ADLER: We have no comment, although I
6 might not -- we have not received a copy of the transcript.

7 No, we have not.

8 We would like to have a moment.

9 CHAIRMAN SMITH: I think it is very unlikely that
10 the Commonwealth is going to object to the receipt into
11 evidence.

12 MR. ROBERT ADLER: I am sorry.

13 CHAIRMAN SMITH: I didn't mean to anticipate your
14 position. I see you shaking your head yes. TMIA Exhibit 23
15 is received into evidence.

16 (The document referred to,
17 previously marked for
18 identification as TMIA
19 Exhibit Number 23, was
20 received in evidence.)

21 MR. SWANSON: Mr. Chairman?

22 CHAIRMAN SMITH: Mr. Swanson?

23 MR. SWANSON: Would the Board prefer that we
24 question each exhibit as it is considered by examination by
25 all the parties, or would you prefer that we hold off until

1 the end and have examination?

2 CHAIRMAN SMITH: Our preference, absent any reason
3 to the contrary, is, take each exhibit and the discussion of
4 it being completed at once, so do it now. It is going to be
5 a fragmented cross examination, but I think it is better
6 that way.

7 Is there any objection to that?

8 (Pause.)

9 CHAIRMAN SMITH: Mr. Swanson, you have someone
10 with you with the office of I&E counseling you?

11 MR. SWANSON: Yes, I do.

12 CHAIRMAN SMITH: This is the first time, as far as
13 I can see, that we have the issue of complying with NRC
14 inspection reports, and it might be helpful if we had at
15 this time in the record what an unresolved item is. I know
16 that that is a term understood to have some universally
17 understood meaning in I&E. Do you think that could be
18 arranged? We could have a statement of what that is
19 intended to be. Are you prepared for that?

20 MR. SWANSON: Yes, sir. Mr. Richard Kermig is
21 here with me from Region 1.

22 CHAIRMAN SMITH: Do you mind if we insert right
23 now in the record your description of what an unresolved
24 item is as it is used by I&E? What is your name, sir?

25 MR. KERMIG: Richard R. Kermig, K-e-r-m-i-g. An

1unresolved item is one which requires further information
2prior to determining whether the item is an item in
3non-compliance, a deviation, or has no effect on safety.

4 CHAIRMAN SMITH: There were a couple of
5prepositions there I didn't pick up. Would you state it
6again?

7 MR. KERMIG: An unresolved item is one on which we
8need to get additional information to determine whether it
9is an item of non-compliance, a deviation, or has no effect
10on nuclear safety.

11 CHAIRMAN SMITH: An item of non-compliance or
12deviation would have an effect on nuclear safety.

13 MR. KERMIG: Yes, sir.

14 CHAIRMAN SMITH: Whenever you are ready, Mr.
15Swanson.

16 MR. SWANSON: The licensee doesn't have any
17questions?

18 CHAIRMAN SMITH: Well, I didn't call upon Mr.
19Blake. I wasn't following any organized procedure.

20 MR. BLAKE: I don't have any questions on this
21exhibit.

22 CHAIRMAN SMITH: Mr. Swanson?

23 CROSS (AS ON DIRECT) EXAMINATION

24 BY MR. SWANSON:

25 Q Again, we are referring to Exhibit 23. Mr.

1 Leakway, can you determine from this document whether the
2 parts were available to complete this work item when the
3 work order was initiated?

4 A According to the description on the Point 3, you
5 say?

6 Q Well, from anything in this document

7 A According to the QC Accept tags, yes.

8 MR. SWANSON: Mr. Chairman, could we just have a
9 minute to look over this document?

10 (Pause.)

11 CHAIRMAN SMITH: The Board believes that any
12 reading of this matter in the transcript without being aware
13 that the I&E was aware that the work was not to have been
14 done until February of 1979, and that there were in place
15 administrative procedure controls for containment integrity
16 and alarms, monitoring position of each door -- let's see, I
17 forget how my sentence began, but that is very material and
18 relevant to the amount of time that it took to perform the
19 item, and this appears in the inspection report of -- the
20 report of inspection attached to the exhibit, which,
21 incidentally, was attached by Mr. Selkowitz, and he has
22 presented a complete package, as far as I can see.

23 BY MR. SWANSON: (Resuming)

24 Q Mr. Leakway, I would refer you to the inspection
25 report just mentioned by the Chairman on the page starting

1 with the word "Details."

2 MR. BLAKE: Excuse me. Could you give him more
3 information on where you want him to look?

4 MR. SWANSON: I am sorry, I couldn't hear that.

5 MR. BLAKE: I don't think the witness knows where
6 you want him to look.

7 MR. SWANSON: The I&E inspection report just
8 referred to by the Chairman, which is the last attachment to
9 this package. It is a three-page document. There is a
10 cover page, and then there are two pages. The one I am
11 referring to has centered at the top of the page, "Details."

12 MR. BLAKE: Mr. Leakway, I think it is the last
13 three pages in the whole package.

14 THE WITNESS: Where do you want me to start?

15 BY MR. SWANSON: (Resuming)

16 Q Maybe I should back up a second and just -- Back
17 up one page. The cover page of that document, which reads,
18 "U. S. Nuclear Regulatory Commission, Office of Inspection
19 Enforcement, Region 1."

20 A Yes, sir.

21 Q About a third of the way down the page, I just
22 want to make sure you agree with me, the inspection was
23 conducted in the November 6 through 9, November, 1978, time
24 frame. Do you agree with that?

25 A It is not quite clear on the dates on this copy I

1 have.

2 Q Okay. If you turn now to the next page, the one I
3 was referring to initially, with the word "Details" at the
4 top, and I refer you to the Item Number 2, licensee action
5 on previous inspection findings.

6 A Yes, sir.

7 Q And I refer you to the second paragraph underneath
8 that, and I refer you to a sentence which indicates, "New
9 limits which have been ordered and are scheduled for
10 installation February, 1979," and ask you if that helps you
11 to either refresh your memory, or if that is of any help in
12 answering my very first question, which is whether or not
13 the equipment was available when the work order request was
14 initiated.

15 A Can I make a statement here?

16 Q Sure.

17 A This is unfamiliar to me, because this is
18 electrical department and I am mechanical maintenance. I
19 have no idea.

20 Q So you are the wrong person to answer details
21 about this particular work request. Is that the problem?

22 A That's right.

23 CHAIRMAN SMITH: Of course, this document is an
24 NRC document, and I think it speaks pretty well for itself.

25 MR. SWANSON: I don't think we have any further

1 questions, then. I don't see that it would serve any
2 purpose.

3 CHAIRMAN SMITH: Mr. Flake?

4 MR. BLAKE: Mr. Smith, I wonder if we could agree
5 to strike the initial question and response from the NRC
6 staff to Mr. Leakway on this one, because otherwise, I am
7 going to ask to do some questioning. I think he can answer,
8 and quite frankly, I don't think he understood, but if we
9 could just agree to strike this exchange by the staff and
10 Mr. Leakway under their cross, I would be satisfied at this
11 point. I would move to strike. I can't say whether or no
12 we would have any objection.

13 CHAIRMAN SMITH: I would have to have a basis.

14 MR. BLAKE: Well, now that I understand, now that
15 we have Mr. Leakway, he had never seen this report, it was
16 not in his department. I don't think, quite frankly, he is
17 qualified to answer the question.

18 CHAIRMAN SMITH: From whom?

19 MR. BLAKE: And I do not think he understood it.

20 CHAIRMAN SMITH: The question from whom?

21 MR. BLAKE: From NRC's counsel. That is all I am
22 asking. None of Mr. Selkowitz's.

23 CHAIRMAN SMITH: I guess I missed the exchange. I
24 thought that was what he said.

25 MR. BLAKE: Initially, he did answer a question.

1 That is what I --

2 MR. SWANSON: I had initially asked him if he
3 could tell from the document itself whether or not parts
4 were available, and he indicated that he thought the parts
5 were available, but it subsequently was established that he
6 really isn't the right person to answer detailed questions
7 about this. I think the record would also reflect the fact
8 that this was one of the surprise documents. So, my
9 questioning really elicited no substantive information.

10 CHAIRMAN SMITH: Well, no matter how we treat
11 this, it raises a problem, however. It is one thing to ask
12 a witness to explain a document, but it is another thing to
13 ask a witness to read a document. The Board and the parties
14 in their review can read it as well as a witness, so let us
15 keep that distinction in mind.

16 But don't you think your record is satisfied now?
17 Well, go ahead and ask your questions. I don't want to
18 strike anything. I would rather clarify it.

19 MR. BLAKE: I would like an opportunity to ask a
20 couple of questions of Mr. Leakway.

21 CHAIRMAN SMITH: All right.

22 CROSS (AS ON DIRECT) EXAMINATION

23 BY MR. BLAKE:

24 Q Mr. Leakway, Mr. Swanson asked you the question
25 whether or not you could determine from the document that

1 you have in front of you and its attachments whether the
2 components or the materials which were necessary to perform
3 this maintenance activity were available at the time the
4 work request was initiated.

5 A No, I --

6 Q Your answer, as I understood it, was, yes, it
7 appears from these documents that materials were available.
8 I ask you how it was you made that determination, or if in
9 fact I understood that that was your answer.

10 A I misunderstood the question. I thought when he
11 asked the question if the material was available to do the
12 job, I assumed that. That is why I said yes at the time,
13 because of the QC tags, and the information that the job was
14 completed.

15 Q And when you now look at this work request, what
16 was the initiation date of this work request?

17 A 6/15/78.

18 Q And when you look at the QC tags which are
19 attached to it, do you see dates on those tags?

20 A 1/16/79.

21 Q And is it your testimony that they would indicate
22 or in any other way this whole package would indicate that
23 the materials were available at the time this work request
24 was initiated?

25 A I could not say that at the time.

1 Q You do not know or cannot determine from this?

2 A No.

3 Q Thank you.

4 CHAIRMAN SMITH: Okay. Now, this exchange brings
5to my mind a problem that is coming up in this case, and it
6comes up in many cases. We are going to have many exhibits,
7I assume, that will be multiple pages and a lot of
8information. Our routine procedure in such a case of
9complex litigation as I think this is is to have the parties
10underline in different colored markings the portion of the
11exhibit that they think is particularly relevant.

12 We cannot do that. However, I think what is
13perfectly appropriate to do is, when you have a docket
14before us, instead of going through the rather awkward,
15time-consuming method of asking the witness to point it out,
16just simply say, we bring to your attention this, this, and
17this.

18 Then, the record will, at the point it is being
19discussed in the transcript, will point out the important
20things, will highlight them.

21 Is there anything wrong with that?

22 MR. BLAKE: There is nothing wrong with that, and
23I would be happy for us to go as quickly as we could. My
24problem here is, I had a witness here that made a statement,
25and it was -- you know, that just doesn't correct my problem.

1 CHAIRMAN SMITH: That is exactly right. This is
2 somewhat different. I am talking about an even better
3 method. There is no use having a witness read a document.

4 MR. BLAKE: I have no problem with that, Mr. Smith.

5 CHAIRMAN SMITH: Mr. Swanson, do you think that
6 might be helpful?

7 MR. SWANSON: Yes. Yes, it would.

8 CHAIRMAN SMITH: I think we could have gotten to
9 the point about ordering the switches, you know, within just
10 a few seconds by that method, if we had used it. Okay?

11 Mr. Selkowitz?

12 MR. SELKOWITZ: If we can proceed --

13 CHAIRMAN SMITH: Yes. We have received Exhibit 23.

14 MR. SELKOWITZ: We would like to go on, Mr.
15 Leakway, to a review of three items that were originally for
16 Mr. Donahey which have been transferred to you, sir. It is
17 Work Request 25170, 24972, C0516.

18 CHAIRMAN SMITH: Wait a minute. If I have more
19 than two documents, I am certain to lose one at any given
20 moment. Would you repeat -- They are going to be identified
21 as exhibits.

22 MR. SELKOWITZ: 24A, B, and C.

23 CHAIRMAN SMITH: These are going to be identified
24 as Exhibits 24A through C?

25 MR. SELKOWITZ: A will be a new work request form,

1 Number C0516. It is the computerized. B is 24972.

2 CHAIRMAN SMITH: 24972.

3 MR. SELKOWITZ: And C is 25170.

4 (The documents referred to
5 were marked for identification
6 as TMIA Exhibits Number 29A,
7 29B, and 29C.)

8 CHAIRMAN SMITH: Those are 24A through C.

9 (Pause.)

10 CHAIRMAN SMITH: Okay.

11 BY MR. SELKOWITZ: (Resuming)

12 Q Have you had a chance to look at these three, sir?

13 A Yes.

14 Q Am I correct that they all relate to the same
15 component, main steam valve 1048?

16 A Yes, sir.

17 Q We have had testimony on this before, and I would
18 ask you to correct me if I am wrong, but what is going on
19 here is that the two earlier items, 25170 and 24972, were
20 cancelled in favor of C0516. Is that correct?

21 A Yes, sir.

22 Q And by reviewing C0516, we can determine that the
23 work was done pursuant to that particular work request?

24 A Yes, sir.

25 MR. SELKOWITZ: If the Board please, we have not

1 had an example, I don't believe, to this point of one of the
2 computerized job tickets which were described at some length
3 by Mr. Good. Does the Board have a blank sheet of this, or
4 would you like for us to review it at this point to get a
5 better understanding of what is in each block?

6 CHAIRMAN SMITH: Well, in answer to your first
7 question, we don't have a blank sheet of it. Should we have?

8 MR. SELKOWITZ: No, sir. I am just trying to
9 determine if perhaps it had been provided during Mr. Good's
10 examination. That's all.

11 CHAIRMAN SMITH: I don't believe -- no.

12 MR. BLAKE: I had a request from the Board to come
13 up with some blanks of the various kinds of work requests.
14 I do have enough of this one, which is a multi-page form,
15 and I could get those right now if you want it. I will ask
16 somebody to go. I don't have all the other forms way back
17 in history. I do have enough of this one to be able to pass
18 it out to people for at least ready reference.

19 CHAIRMAN SMITH: Why can't we use the exhibit
20 itself?

21 MR. BLAKE: You can, except what you have is a
22 portion of the whole form and a portion of the information
23 which is included. Other pages fill out more of the form.

24 BY MR. SELKOWITZ: (Resuming)

25 Q If we could turn, sir, to the top page of C0516,

1 we might be able to end this very quickly. Was this in
2 effect before you left the Island, this system?

3 A Yes, it just started.

4 Q And so you were somewhat familiar with its use?

5 A Somewhat. Yes, sir.

6 Q Am I correct, sir, that in the box directly
7 opposite the words "Describe malfunction or modification
8 desired" you find the same information that you found on the
9 gold work tickets in Block 3?

10 A Yes, sir.

11 Q And we have had identified for us by Mr. Shovlin
12 the fact that under the new system, the originator put a
13 recommended priority in the upper righthand corner. Is that
14 your understanding of this form, sir?

15 A Yes, sir.

16 Q And then a priority on this form was actually
17 assigned and the very last box in the bottom righthand
18 corner of the many boxes on that page. Do you see that?

19 A Yes, sir.

20 Q That is where the priority that was finally
21 assigned would be found. Is that correct, sir?

22 A Yes, sir. And the responsible location
23 contractor, who is responsible to do the job.

24 Q And the M in that case indicates mechanical?

25 A Yes, sir.

1 Q Now, if we turn the page, is it correct, sir, that
2 we find the same information generally that was formerly
3 contained in the first page of the past work request forms
4 in Items 6 through 9?

5 A What was the question again, sir?

6 Q We find the same information generally on the
7 second page of this new form that used to be on the first
8 page of the old form in Items 6 through 9.

9 A Yes, generally.

10 Q And this particularly, once again, is checked Yes
11 in the box on nuclear safety. I would just point that out
12 to the Board. That is not a question.

13 (Pause.)

14 Q And then if we turn to the third page, we would
15 find the questions that tell us when the work was
16 performed. In this case, it was performed in March of
17 1979. Is that correct?

18 A Yes, sir.

19 (Pause.)

20 MR. SELKOWITZ: I would ask the Board to accept
21 TMIA Exhibit 24A, B, and C into evidence on the following
22 basis. This is a Priority 1 safety-related item on the job
23 ticket by which the work was completed, which is C0516,
24 which is TMIA Exhibit 24A. Although not a year from start
25 to finish in all of these, we go from August of 1978 through

1 March of 1979. We feel that that is beyond the bounds of
2 the licensee's definition of a Priority 1, therefore
3 improper maintenance. It is not a year, but our contention,
4 as the Chairman pointed out, does not say a year, and we
5 don't have those exhibits in evidence anyway, and so I don't
6 believe we are bound to them being a year.

7 Finally, sir, we offer it as further evidence of a
8 new amended statement in the contention that it is
9 incomplete information in that Questions 15, 16, and 17 have
10 never been answered.

11 CHAIRMAN SMITH: Mr. Blake?

12 MR. BLAKE: Mr. Chairman, I have a fair amount to
13 say about that. First of all, licensee's definition of
14 greater than a year, or whatever he has indicated now that
15 this one exceeds, we have provided no definition of the time
16 frame associated with this work request which would be
17 applicable to this one, which was fixed in time. We just
18 plain haven't. That is just incorrect.

19 Second, with respect to the filling out of 15, 16,
20 and 17, I am going to take advantage of the Board's
21 invitation to me to try to make some sense out of an item.
22 Fifteen, 16, and 17 go with regard to the testing of the
23 item. We are now looking here at a document which involved
24 leaking packing on a little root valve, about which Mr.
25 Colitz said leaking of the root valve would have no nuclear

1 significance.

2 With regard to the testing, 15, 16, and 17, it
3 requires the plant to operate to test it. And we are
4 looking at a job that was done in March and April of 1979,
5 and the plant, for want of the completion of this
6 proceeding, is not operated.

7 I cannot imagine how that would prove anything.

8 MR. SELKOWITZ: I would concede the point to Mr.
9 Blake on that last requirement. I never put the two dates
10 together in my own mind, the fact the plant wasn't running
11 and there may have been some difficulty completing the
12 testing phase, so I would concede that it does not really go
13 to that point.

14 I do not concede, however, that the work was done
15 in a timely fashion.

16 CHAIRMAN SMITH: In a what fashion?

17 MR. SELKOWITZ: A timely fashion.

18 CHAIRMAN SMITH: All right. Another thing about
19 this exhibit, then, I think, should fairly appear in the
20 record at this point, and that is, when you are talking
21 about the times -- and what times are you asserting, from
22 identification --

23 MR. SELKOWITZ: From the date of origination until
24 the date indicated that the work was completed, which is on
25 the form itself, on Page 3, I believe. And what one must do

1 is go from the first date on the earliest date of the three,
2 because they each indicate -- you go to C0516, and it is our
3 contention this is merely a way of arriving at the same
4 delay. You either do it on one work request, and in this
5 case it was three, but you've got to look at the entire time
6 span.

7 CHAIRMAN SMITH: Wasn't this plant closed down
8 even when the work request was made?

9 MR. SELKOWITZ: Closed down by virtue of a normal
10 fueling outage?

11 CHAIRMAN SMITH: Well, this plant was closed down
12 -- When was the plant closed down?

13 MR. BLAKE: It was closed down -- I am not
14 certain, but I think it was closed down at the time that 24A
15 was initiated, February of 1979. Mr. Selkowitz's
16 observation here is that when the earlier work request which
17 he views as connected to this last one were initiated, that
18 the plant may well have been operating. However, if the
19 Board looks at the Priority 1D and 2D, T, and I will take
20 advantage of the Board's invitation, was that you cannot do
21 this work until the plant shut down.

22 CHAIRMAN SMITH: Mr. Swanson?

23 MR. SWANSON: I think the staff would have to
24 object also on the basis that I just don't see how it is
25 material to their contention. On the face of the documents,

1 it suggests that they perform the work when suggested.

2 MR. SELKOWITZ: With the Board's approval, having
3 had some of this information presented to me today by Mr.
4 Blake, I concur and I will withdraw it.

5 CHAIRMAN SMITH: You just avoided a rejection.

6 MR. SELKOWITZ: I didn't want to make four copies.

7 CHAIRMAN SMITH: I think that is very responsible,
8 Mr. Selkowitz. It is very helpful when you do that. So, do
9 you want your exhibit back?

10 So, the exhibit marked for identification 24A
11 through C has been withdrawn by TMIA.

12 (The documents referred to,
13 previously marked for
14 identification as TMIA
15 Exhibits Number 24A, B, and C,
16 were withdrawn.

17 MR. SELKOWITZ: Just to get some direction, Mr.
18 Chairman, shall I mark the next one 24 again, or shall I
19 mark it 25?

20 CHAIRMAN SMITH: No. Once marked, that number
21 stays with that exhibit indefinitely. So now we are at 25.

22 (Pause.)

23 MR. SELKOWITZ: I am going to ask while Mr.
24 Murdoch is distributing Work Request 23224 --

25 CHAIRMAN SMITH: Work Request what?

1 MR. SELKOWITZ: 23224, which is on the list
2 provided only to the Board. And ask that it be marked as
3 TMIA Exhibit 25.

4 MR. BLAKE: During this interval, I will make
5 available to the parties and the Board copies of the most
6 recent type of work request.

7 CHAIRMAN SMITH: Okay.

8 MR. SWANSON: Excuse me. I happen to have a copy
9 of 23224 provided to me by licensee.

10 MR. SELKOWITZ: That is right. It was originally
11 provided in Mr. Donahey's package. That is correct.

12 CHAIRMAN SMITH: Since this form has been
13 withdrawn, perhaps a better procedure would be to return it
14 to you.

15 MR. BLAKE: We are going to come up against this
16 form, I think, again. This is just for everybody's
17 reference. That is all.

18 CHAIRMAN SMITH: I understand about the blank
19 form. All right. I was hoping to end up with a set of
20 forms as an exhibit itself.

21 MR. BLAKE: I still have enough of these so that I
22 can put them together with the others when I get them.

23 CHAIRMAN SMITH: Thank you. Now, has anybody
24 provided 23224?

25 MR. BLAKE: That was in the package initially

1 distributed. It was one of Mr. Donahey's.

2 CHAIRMAN SMITH: All right. But it has not been
3 previously mentioned today. Oh, yes, it has. We have
4 already been forewarned that we would have -- it is not
5 correct that this work order appears only in the list
6 provided to us. It also appears on the list -- oh, okay.
7 I've got it.

8 You may proceed.

9 (The document referred to
10 was marked for identification
11 as TMIA Exhibit Number 25.)

12 BY MR. SELKOWITZ: (Resuming)

13 Q I see, Mr. Leakway, if we turn to the second page,
14 that the work completed date, which is 5/15/79, has the name
15 Bud Leakway beside it. Is that your name, sir?

16 A Yes, sir, that is my name.

17 Q Is that your signature?

18 A Yes, sir.

19 Q Just so we put this in perspective, the plan was
20 down from January, 1979, through the present time. Is that
21 correct, if you know?

22 A I can't recall.

23 CHAIRMAN SMITH: Do you know, Mr. Blake?

24 MR. BLAKE: I am not certain when it went down. I
25 thought it was February, but I do not know for sure. I will

1 find out.

2 CHAIRMAN SMITH: Would you check? Mr. McGarry is
3 shaking his head. Do you recall the exact date?

4 MR. MC GARRY: No, sir, it was February.

5 MR. SELKOWITZ: We are working on a stipulation
6 for all these dates. Between Mr. Blake and myself we will
7 have all the up and down dates on the record.

8 BY MR. SELKOWITZ: (Resuming)

9 Q This is a fuel wheel for fire service pump. Is
10 that correct?

11 A Yes, sir.

12 Q And can you tell us what that indication, V/V, is?
13 It is right in Number 3.

14 A I don't know what the indication means on the
15 description, but I recall the valve, and it is a
16 hand-operated valve with a lock valve to keep it locked
17 open. It is a manual valve.

18 Q And if we go to the change modification form that
19 is attached to this, to Page 1 of 2 -- Do you have that, sir?

20 A Yes, sir, major, minor?

21 Q That's right, major, minor change modification
22 request form. On Page 1 of 2, Paragraph 4 -- I would point
23 out to the Board that indicates that the valve is presently
24 leaking and cannot be repaired or replaced.

25 Now, when we see this valve is leaking, I take it

1 it is leaking diesel oil for this fire service pump. Is
2 that correct?

3 A Yes, sir.

4 Q And as I recall, it is only one of the fire
5 service pumps that is diesel operated. Is that correct?

6 A No. No, there is more than one.

7 Q How many of them are diesel operated? Do you
8 recall?

9 A Two of them in Unit I.

10 CHAIRMAN SMITH: Are you inferring diesel from
11 fuel oil, or does it say diesel some place? Oh, I see, it
12 does say diesel on the work request procedure.

13 BY MR. SELKOWITZ: (Resuming)

14 Q Now, you said this valve was to be locked in the
15 open position. Is that correct?

16 A Yes, sir.

17 Q And that is to allow this fuel to get from what
18 place to the other?

19 A Yes, sir. From the tank to the machinery, the
20 engine.

21 MR. SELKOWITZ: I am going to withhold moving this
22 one into evidence, because its safety significance is tied
23 to a later work request in the fire service system, and I
24 think it would be easier to argue that when we have all of
25 them in front of us. And unfortunately, through my lack of

1 organization, I do not have them for the same witness and
2 did not denote them for the same witness originally, if that
3 is acceptable.

4 CHAIRMAN SMITH: All right.

5 MR. BLAKE: Was this one ever identified with a
6 number?

7 CHAIRMAN SMITH: Yes, this was identified as
8 Exhibit 25.

9 BY MR. SELKOWITZ: (Resuming)

10 Q I ask you, sir, to take a look at Work Request
11 23814.

12 CHAIRMAN SMITH: Repeat, please.

13 MR. SELKOWITZ: 23814, which was one of the ones
14 that was originally identified for Mr. Leakway.

15 CHAIRMAN SMITH: That will be TMIA Exhibit 26 for
16 identification.

17 MR. SELKOWITZ: Yes, sir.

18 (The document referred to was
19 marked for identification as
20 TMIA Exhibit Number 26.)

21 MR. SELKOWITZ: And I am asking Mr. Murdoch to
22 pass out another exhibit which we would ask to be marked
23 TMIA 27. It is Work Request 16212.

24 (The document referred to was
25 marked for identification as

1 TMIA Exhibit Number 27.)

2 (Pause.)

3 MR. SELKOWITZ: I am hesitating, Mr. Chairman,
4 because I think I have met one of these situations where I
5 need merely point out what is evidence and don't ask this
6 particular witness questions about it and then move it and
7 see what happens.

8 CHAIRMAN SMITH: Okay.

9 MR. SELKOWITZ: I would indicate to the Board that
10 both of these are on the Hay's gas analyzer. TMIA 26
11 indicates that they were unable to draw samples on the
12 system, and it needed to be modified. That was indicated on
13 May 1 of 1978. Work was completed in September of 1979. I
14 point that out to the Board as being beyond a year, and
15 therefore deferred.

16 TMIA 27, I have brought to the Board's attention
17 as also the Hay's gas analyzer. The work was identified to
18 be done in 1976, in July, and was not completed until 1979,
19 thus encompassing a great deal of the same time as TMIA 26.

20 I have put them together and move them into
21 evidence at this time. We have had a great deal of
22 testimony from Mr. Colitz as to what the Hay's gas analyzer
23 did. He told us that it analyzed the potential
24 combustibility of these waste disposal gas tanks which have,
25 among other gases in them, the radioactive waste gases in

1 this plant, and we believe that the failure to be able to
2 sample over such a long period of time indicates a disregard
3 for a safety item which could have produced an explosive
4 situation.

5 CHAIRMAN SMITH: On TMIA 27, I see the date
6 originated as July, 1976.

7 MR. SELKOWITZ: That is correct.

8 CHAIRMAN SMITH: But the date completed on Item
9 Block 19 --

10 MR. SELKOWITZ: Yes.

11 CHAIRMAN SMITH: -- and Item 20 and 21 are all
12 illegible on my copy.

13 MR. SELKOWITZ: The only thing we could ask is
14 that the licensees provide the original, sir.

15 CHAIRMAN SMITH: That might not be necessary, if
16 you could agree upon what dates go in there.

17 MR. BLAKE: I do have a date I can make out on the
18 lefthand side on 19. It appears to me to be 7/28/76 date.

19 CHAIRMAN SMITH: Well, that is one of the reasons
20 why I am concerned about it. Where did you come up with
21 your dates?

22 MR. SELKOWITZ: I am reading them from my copy,
23 sir, and also from information we got as we went through the
24 process of looking at these many forms, including the most
25 illegible copies available in the documents room.

1 CHAIRMAN SMITH: Well, let us see your copy then.

2 DR. JORDAN: But the date you are quoting, is that
3 12/22?

4 MR. SELKOWITZ: My copies only say 2, 9, and then
5 what I know to be a 79, but I don't think you are going to
6 see a 79 directly on my copy of it.

7 CHAIRMAN SMITH: Okay.

8 MR. SELKOWITZ: And I am not willing to agree that
9 the 7/28/76 date is the work completed date. I think that
10 refers to the partial work that was done as highlighted in
11 Paragraph 19.

12 CHAIRMAN SMITH: So your suggestion is, they did
13 the first phase of the work on 7/28/76, and they had to
14 order new gauges --

15 MR. SELKOWITZ: And that the work was not
16 subsequently completed until 2/9/79. Checked by quality
17 control on 4/17/79. Signed off on 5/14/79. If it is 1976,
18 sir, then we have a three-year delay before the Quality
19 Control Department reviewed it, which also raises
20 interesting questions, I suppose.

21 MR. BLAKE: Mr. Smith, I just connect them from
22 the dates on the copy I have. I will endeavor to try to
23 determine these if the Board wants to defer ruling on these,
24 as I understand that they were offered for deferral of
25 maintenance, not for the QC problem.

1 CHAIRMAN SMITH: Well, certainly 27 cannot be
2 used. But how about 26, the dates there? Originated May
3 31st, 1978, and work performed 9/4/79. Is that your view?

4 MR. SELKOWITZ: Yes, sir.

5 MR. BLAKE: My understanding of this document,
6 that is, TMIA's 26, is that it is one of a pattern. It is
7 not one of those which they held back which in and of
8 themselves they mean to show something. It is of a pattern
9 of deferred maintenance which they have identified as one
10 year in length.

11 CHAIRMAN SMITH: That fits into that category, yes.

12 MR. BLAKE: My objection to 26, and it will be my
13 objection to 27, it relies only on Mr. Colitz's view of the
14 importance and the state of the record of the importance of
15 the Hay's gas analyzer, Mr. Colitz's views having been
16 expressed in some detail on this particular point.

17 CHAIRMAN SMITH: Mr. Swanson?

18 MR. SWANSON: The staff would also object. There
19 is no indication on the face of these documents that they
20 are related to nuclear safety, and again, referring to the
21 record, Mr. Colitz, at Transcript Page 3155, indicated he
22 would not put a nuclear safety related significance on this
23 system.

24 It seems to me on the basis laid thus far that
25 these documents are not related to TMIA Contention 5.

1 (Pause.)

2 MR. BLAKE: Does the Board need the transcript
3 references for Mr. Colitz's --

4 (Pause.)

5 CHAIRMAN SMITH: The Board is sustaining the
6 objection. We decline to accept TMIA's Exhibit 26. The
7 foundation referred to by Mr. Swanson at 3155 is
8 controlling. Dr. Jordan does not have any views
9 inconsistent with that testimony. Therefore you have failed
10 to establish a foundation of a safety significance.

11 MR. SELKOWITZ: For purposes of preserving our
12 rights on appeal, could I have a statement, sir, as to
13 whether the ruling takes into account the fact that if this
14 tank should become explosive, that worst case -- if it
15 should explode, that does not matter to the nuclear safety
16 as the Board sees it?

17 CHAIRMAN SMITH: Now, wait a minute. It so
18 happens that in this particular case, Dr. Jordan discussed
19 that. As a courtesy, we will tell you that. However, we
20 will not be probed on a bases of applying independent
21 expertise in determining whether we on our own will go
22 beyond the record.

23 You see, we could have just stopped and said, you
24 don't make it on the record. But sometimes we will say,
25 well, on our own, we are going to go beyond it and require

1 further inquiry, but we will not be probed on our reasons
2 for not doing that. Do you understand that?

3 MR. SELKOWITZ: Yes, sir, I understand that.

4 CHAIRMAN SMITH: If that were the case, we would
5 seldom ever go beyond the record.

6 MR. SELKOWITZ: I am sorry. I understand. I was
7 trying to ask the question with reference to the record only.

8 CHAIRMAN SMITH: The record speaks for itself.

9 MR. SELKOWITZ: Perhaps I am not asking the
10 question right. Part of our problem, sir, is, I think, to
11 some degree we differ with what standard is applied to
12 determine what is safety and not safety related as per these
13 work requests. I am just trying to get some feeling at this
14 point for purposes of the record whether such things as the
15 radiation that would potentially come from such a tank
16 because the tank is just sitting there --

17 CHAIRMAN SMITH: Where is the record on that?

18 MR. SELKOWITZ: The record is that Mr. Colitz has
19 told us that they are monitoring this to protect against a
20 potentially explosive situation in that tank, the buildup of
21 hydrogen and oxygen, and our connection was, and my argument
22 for its relevance was that failing the inability to test for
23 that, despite Mr. Colitz's assurances that it would happen
24 slowly and therefore they could keep track, but the
25 inability to test for that is a serious safety --

1 CHAIRMAN SMITH: That is not the testimony.

2 MR. SELKOWITZ: What isn't?

3 CHAIRMAN SMITH: The testimony is, I could take a
4 manual sample.

5 MR. SELKOWITZ: Right. He went on to -- or I
6 should strike that. I can't recall for sure which manual
7 sample he was talking about.

8 CHAIRMAN SMITH: Well, you win some, you lose
9 some. You have lost this one. You could appeal. The
10 record is where it is. It is not improper to ask for
11 reconsideration, but it is going to have to be rather
12 concise and direct when you do.

13 DR. LITTLE: If you look at Transcript Page 3155,
14 the Hay's gas analyzer system can be operated or you can get
15 the same information by taking a manual sample according to
16 the testimony there.

17 MR. BLAKE: Mr. Smith, did you rule on 27, or are
18 you deferring?

19 CHAIRMAN SMITH: Twenty-seven was deferred because
20 we can't read it.

21 MR. BLAKE: You can't read the dates?

22 CHAIRMAN SMITH: Yes. We will defer it until you
23 can come up with a report.

24 Does anybody recall what was done with 25?

25 MR. BLAKE: I withheld moving it until I can

1 associate it with a related one.

2 CHAIRMAN SMITH: All right.

3 MR. SWANSON: Excuse me, Mr. Chairman.

4 CHAIRMAN SMITH: Mr. Swanson?

5 MR. SWANSON: I am just wondering if Exhibit 27 is
6 going to have the same consideration as 26, whether that is
7 going to have to be deferred regardless or completely
8 independent of the dates.

9 CHAIRMAN SMITH: That is a good point.

10 MR. SELKOWITZ: In this case, as I would interpret
11 it, Paragraph 3 in my arguments specifically, we have a
12 situation in which these decay tanks are susceptible of
13 gaseous releases and therefore radioactive gases, and it is
14 on this basis and at this point on that basis alone that we
15 would suggest that that is a safety hazard as we mean it in
16 our contention.

17 (Pause.)

18 MR. BLAKE: Mr. Chairman, I have not seen this one
19 before today. I would like an opportunity to take more time
20 to look at TMIA's Exhibit 27, and also check on the dates
21 for you.

22 CHAIRMAN SMITH: However, we don't see any
23 difference between the two exhibits as far as our ruling was
24 concerned.

25 MR. SELKOWITZ: Well, that helps answer what I was

1 trying to ask before quite nicely for purposes of the
2 record, so I understand your ruling, and I am satisfied to
3 proceed.

4 CHAIRMAN SMITH: Okay.

5 MR. SELKOWITZ: Twenty-seven therefore is
6 rejected, sir?

7 CHAIRMAN SMITH: Yes, 27 is rejected.

8 (The documents referred to,
9 previously marked for
10 identification as TMIA
11 Exhibits Number 26 and 27, were
12 rejected.

13 MR. SELKOWITZ: Trying once again to do this as
14 efficiently as possible, I would refer to Work Request
15 15349. I have no particular questions of the witness
16 regarding this.

17 CHAIRMAN SMITH: What is the work order number?

18 MR. SELKOWITZ: This would be 15349, identified
19 for Mr. Donahey originally. I would ask that it be marked
20 as Exhibit 28.

21 (The document referred to was
22 marked for identification as
23 TMIA Exhibit Number 28.

24 MR. SELKOWITZ: I will state the basis on which I
25 ask that this be taken into evidence, if that is acceptable.

1 CHAIRMAN SMITH: Does everyone agree that that is
2a Priority 1A?

3 MR. SELKOWITZ: I will give you what I am sure is
4a better copy of this, sir.

5 (Pause.)

6 CHAIRMAN SMITH: This is a makeup system, makeup
7filter needs to be changed due to high delta pressure.

8 MR. SELKOWITZ: That is correct. It is a 1A, and
9the origination and completion dates --

10 CHAIRMAN SMITH: 5/11/76 is origination.

11 MR. SELKOWITZ: And the work completed date is
12very difficult to understand. It appears to be, on the copy
13that I have, earlier than the day it was originated, which
14doesn't seem to be very logical. We therefore have looked
15to the testing completed, and component released for normal
16use date, which is 2/2/78, which has an arrow which seems to
17be indicating that that is to be placed on the line above.

18 CHAIRMAN SMITH: What page is that on? My second
19page is different --

20 MR. SELKOWITZ: Your second page -- If you look on
21the other copy, that particular copy contained no second
22page, and we did not have a second page until we got the
23other copy that you originally were working with, so you
24kind of have to put the two together.

25 CHAIRMAN SMITH: Mr. Blake? I think that is a

1 fair description of the document.

2 MR. BLAKE: I cannot tell from mine. Is it MUF 1A
3 and 1B?

4 CHAIRMAN SMITH: Yes.

5 MR. SELKOWITZ: That is correct.

6 MR. BLAKE: That is the components that are
7 involved here?

8 MR. SELKOWITZ: Yes, and the testimony on it was
9 on Transcript Pages 2899 and 2900. Our position would be
10 very similar to that that we argued earlier today on another
11 set of filters, which is that the system -- and this one has
12 to do with the letdown from primary coolant -- is there so
13 that one can operate while the other one needs to be
14 replaced.

15 In this case, just as the one we indicated this
16 morning, both of them need to be replaced simultaneously,
17 and the work sits and is not done, and therefore creates a
18 threat to the safe operation of the system of which this is
19 a part.

20 MR. BLAKE: I am sorry. My recordkeeping has
21 broken down. I need a moment.

22 (Pause.)

23 CHAIRMAN SMITH: Off the record.

24 (Whereupon, a discussion was held off the record.)

25 CHAIRMAN SMITH: Mr. Blake?

1 MR. BLAKE: Mr. Smith, I cannot determine that Mr.
2 Colitz specifically dealt with 1A and 1B; 2A and 2B I can
3 determine in the transcript.

4 MR. SELKOWITZ: On the top of Page 2900, they are
5 specifically mentioned.

6 MR. BLAKE: I see the components mentioned, but no
7 discussion of their importance. Mr. Selkowitz is correct in
8 that. So, my position in this is, absent having shown
9 nuclear safety significance of these components, but not
10 because Mr. Colitz specifically came to that conclusion, I
11 would oppose the admission of TMIA's Exhibit 28 into
12 evidence.

13 CHAIRMAN SMITH: This is part of the primary
14 coolant system, the filters themselves.

15 MR. BLAKE: These are in the makeup system.

16 CHAIRMAN SMITH: For the primary.

17 MR. BLAKE: That's right.

18 (Pause.)

19 CHAIRMAN SMITH: Is the question here one of water
20 quality or water quantity?

21 MR. SELKOWITZ: I am not sure I understand your
22 question, sir. The filters have to do -- they filter for
23 quality. Are you asking me whether their failure leads to a
24 problem of quantity?

25 It would be my position that, as with the case of

1 other filters which become in need of change because of high
2 Delta P, that they are both failing to do their job, i.e.,
3 quality, because they can no longer perform a filtering
4 function in the manner that they are intended to, and 3,
5 clogged filters deflect the flow through them, and
6 therefore, in the case of air, you get lower pressure on the
7 downstream side than is required, and in the case of water,
8 you get a decreased flow.

9 CHAIRMAN SMITH: Mr. Swanson?

10 MR. SWANSON: Just one minute.

11 (Pause.)

12 MR. SWANSON: I think this is another one of those
13 situations where there is a question of whether there is a
14 threshold of materiality. Looking through the testimony of
15 Mr. Colitz in the area of 3175, there is 3178, particularly
16 on the bottom of 3177, the top of 3178, Mr. Colitz indicated
17 that when these filters reached a high differential
18 pressure, we should cut in the spare over a period of months.

19 Later on, at Page 3178, he mentioned that as long
20 as he answered affirmative to the question, as long as the
21 other filter is operational, there is no indication there is
22 a problem with the other filter. Having one filter down,
23 there is no impact on plant operation.

24 My problem is, I don't think the basis has been
25 laid thus far that shows that this work request establishes

1 a problem which falls outside those parameters and thus
2 would show a follow-up of maintenance procedures. Again, I
3 can't say that that couldn't be established. I just don't
4 think that basis has been laid yet, so I think we have a
5 case where we don't have enough information to say it is
6 material. And on that basis, I think we would object, that,
7 plus, of course, the tick-off on the first page. It does
8 not have an effect on nuclear safety.

9 MR. SELKOWITZ: Mr. Smith, maybe I could point out
10 to staff counsel that it is both filters. If you go through
11 this form, it is both that must be replaced, and there is no
12 one to which the system can be replaced that is also not in
13 need of replacement.

14 CHAIRMAN SMITH: Is that correct? How do you --

15 MR. SELKOWITZ: I am looking at the third page.
16 It says, "Purpose of this maintenance procedure format and
17 approval." It is handwritten. It says, "replaced filter
18 element MUF 1A/B.

19 CHAIRMAN SMITH: I see. It is singular.

20 MR. SWANSON: The problem is, under Described
21 Malfunction, I really can't read if the problem describes
22 the malfunction of both filters or what.

23 CHAIRMAN SMITH: Well, the decision has to be made.

24 (Pause.)

25 CHAIRMAN SMITH: The Board simply, based upon the

1 record before us, cannot decide, and so it has not been
2 established that it is reliable evidence. However, we think
3 that it meets the test, and we think that the record should
4 explain it a little bit better. So, for that reason we are
5 going to receive it. But we cannot make any decision as to
6 the quality of this as far as a direct exhibit.

7 MR. ROBERT ADLER: Mr. Smith?

8 CHAIRMAN SMITH: Yes, sir, Mr. Adler.

9 MR. THEODORE ADLER: If this is of any help, if
10 you go into the succeeding pages in the document, the
11 writing is clearer, and it becomes more apparent that it is
12 both the A and B filters.

13 CHAIRMAN SMITH: A and B, but you see, there are
14 two systems.

15 MR. DORNSIFE: No.

16 CHAIRMAN SMITH: You say no? That is what we
17 don't know.

18 DR. JORDAN: Are you saying that 1A and 1B are
19 quite different from 2A and 2B?

20 MR. DORNSIFE: No, I am not saying that.

21 DR. JORDAN: They are two different sets.

22 MR. DORNSIFE: They are different sets of filters,
23 Yes.

24 DR. JORDAN: 2A and 2B is a different set than 1A
25 and 1B?

1 MR. DORNSIFE: Right.

2 DR. JORDAN: But they are both in the makeup
3 system?

4 MR. DORNSIFE: Yes.

5 DR. JORDAN: Therefore, they are both in the
6 system that feeds water to the primary.

7 MR. DORNSIFE: Two is in the letdown system. The
8 two filters are in the letdown system. They are letdown
9 filters.

10 DR. JORDAN: I see, one is in the letdown system.
11 The other is in the injection system, the makeup system.

12 CHAIRMAN SMITH: So these are in line?

13 MR. DORNSIFE: No, the A filter or the B filter
14 can either one be on service. They are parallel filters.
15 But one is in the injection part of the system, the other is
16 in the letdown part of the system.

17 DR. JORDAN: So we are in the injection part, and
18 A and B are redundant systems in the injection system?

19 MR. DORNSIFE: That is correct.

20 DR. JORDAN: Then they are in the system important
21 to safety. I don't think there is any question about that.

22 MR. DORNSIFE: Not under normal operations, no.
23 They are not in service during the injection for high
24 pressure injection, only for normal makeup.

25 DR. JORDAN: But they don't form part of the

1 primary boundary.

2 MR. DORNSIFE: No.

3 DR. JORDAN: That part is right. But they form an
4 important operational function in supplying water.

5 MR. DORNSIFE: During normal operations.

6 DR. JORDAN: These injection systems, in addition
7 to supplying high pressure water to the system in normal
8 operation, also come in during emergency operation in the
9 event of the loss of coolant. I think they have been -- as
10 high pressure injection pumps.

11 MR. DORNSIFE: But they go through a different
12 path, not through the filters.

13 DR. JORDAN: Not through the filters in that case.

14 MR. DORNSIFE: Right.

15 DR. JORDAN: Yes, I see your point. It is close
16 then. I must say, you see, we have gone beyond the evidence
17 in many cases, as you well realize, and substituted our
18 judgment for the witness's in a few cases. This time we are
19 going to have to rely chiefly on the record, and if the
20 record establishes it is safety, fine. If it doesn't, I
21 don't know how to go beyond it.

22 MR. SELKOWITZ: Mr. Chairman and the Board,
23 perhaps this is a request just for record purposes, but I
24 mean it sincerely for practical purposes. You can see the
25 difficulty that we have, we, this particular intervenor. We

1 recognize the difficulty the Board has with the deficiencies
2 in the way we are trying to present this material. I
3 therefore request that the staff provide us with assistance
4 in trying to determine what complete information the Board
5 could use in relation to these work requests, as I think
6 that is the staff's statutory obligation in such a
7 proceeding is.

8 Therefore, I make the request -- I address the
9 Chair, but I realize I am addressing the gentleman to my
10 right -- that they provide that kind of assistance at a
11 point in time where we can either make some of this stuff
12 meaningful to you or not, and not have it thrown out because
13 you don't have enough -- and I can recognize when you don't
14 have enough -- but that as was stated by Mr. Swanson, you
15 might be able to make out the showing you just didn't think
16 was there now.

17 So, I am going to put that on the record.

18 MR. BLAKE: Mr. Smith, this is a particularly
19 interesting comment from an intervenor who tried very hard
20 to block our ability to talk specifically so that the Board
21 would have this record. That is precisely what we tried to
22 do.

23 CHAIRMAN SMITH: Well, there is a tendency to
24 oversimplify the whole problem, and I certainly cannot
25 reduce it to a few eloquent statements, but as you observed,

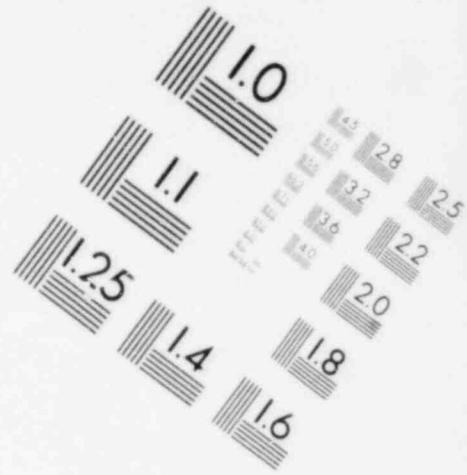
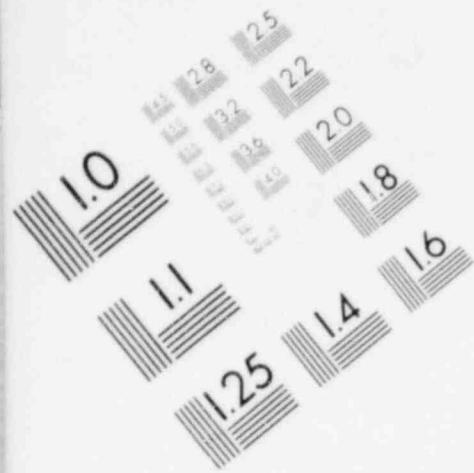
1 you were making that request of the staff. We simply don't
2 have the authority to do it.

3 But we do have this observation. We have been
4 talking about this now for ten or fifteen minutes. I assume
5 that Met Ed figures that they are going to win this case,
6 and they plan to operate that plant eventually. Maybe if
7 Mr. Colitz had been here, we could have bounced a couple of
8 questions against him and moved right along. I don't know
9 what his problems are.

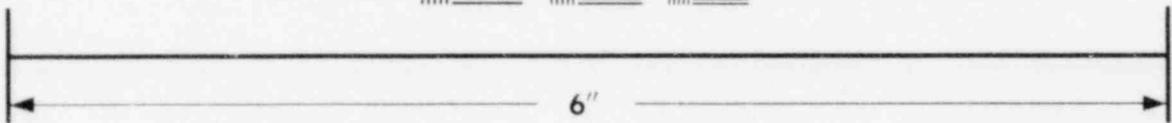
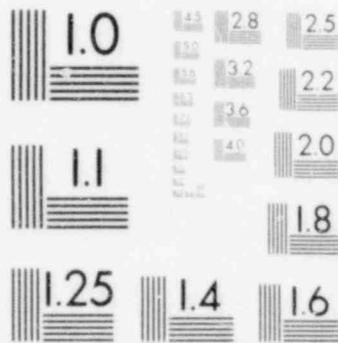
10 From the point of view of time alone, perhaps
11 maybe you should have him here during this phase, because I
12 think it would be too much for Mr. Selkowitz to ask him all
13 the questions that might occur to the Board in advance for
14 foundation. I realize it is not the most structured
15 approach, but it seems to have some practical appeal.

16 However, I don't think that we should direct his
17 attendance at all. I am just pointing out the practical
18 aspects of it. You know, we are talking now -- let's bear
19 in mind when you are talking here about how many work
20 requests are going to end up, and then we are going to sit
21 back and we are going to say, does this show a pattern or
22 doesn't it, and then it is going to have to fit into the
23 overall picture.

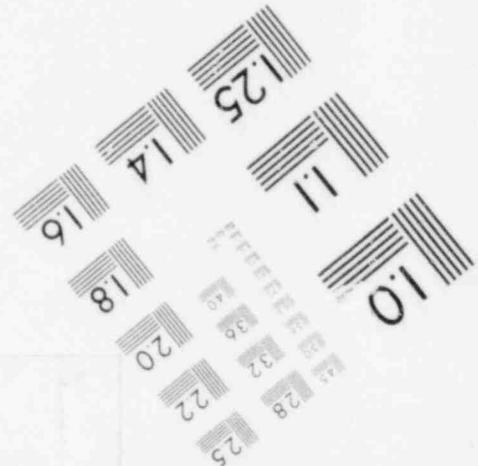
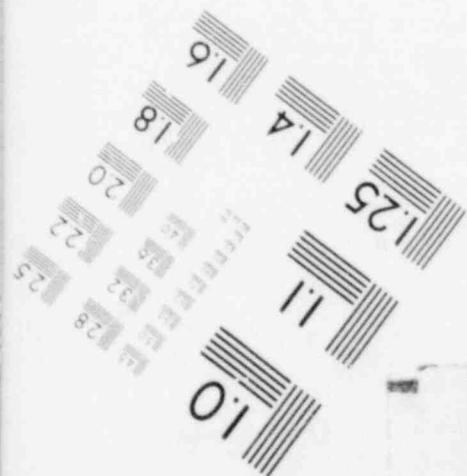
24 If you win some, you lose some, I don't see how it
25 is going to make a big difference, but the time involved and

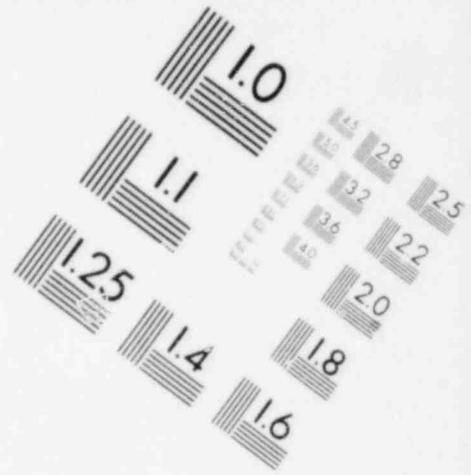
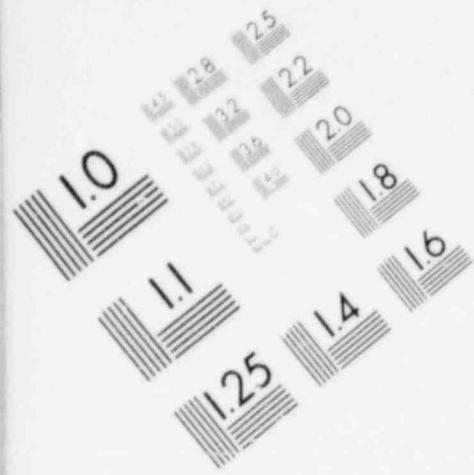


**IMAGE EVALUATION
TEST TARGET (MT-3)**

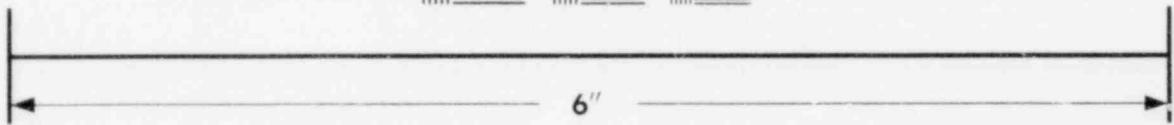
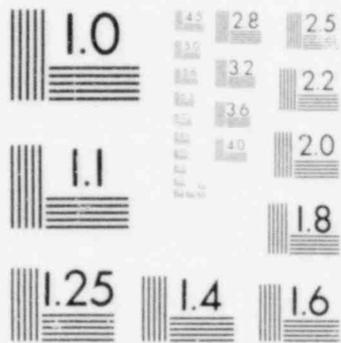


MICROCOPY RESOLUTION TEST CHART

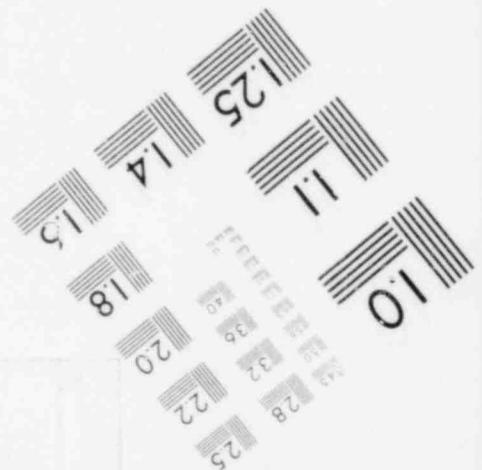
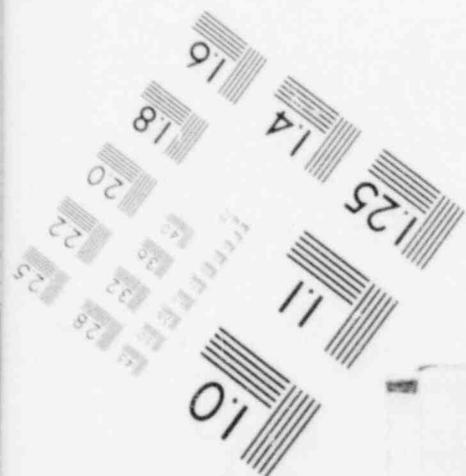




**IMAGE EVALUATION
TEST TARGET (MT-3)**



MICROCOPY RESOLUTION TEST CHART



1 the fairness of the record at the time itself becomes
2 important.

3 MR. BLAKE: We regard as quite important the
4 number of these the Board sees, because I think that is in
5 the end going to play a role in determining whether or not
6 there is -- we therefore try very hard to put this on the
7 record so the Board can make a determination. I must have
8 said a half a dozen times that when we come to these
9 exhibits, Mr. Chairman, we need something in the record to
10 do it, and apparently in this one, II, they overlooked the
11 specific components and did not ask him a question, or in
12 any event I did not see it in the exhibit. I saw one on the
13 2's, but not on the 1's. And so I was not able to give the
14 Board the information here today.

15 I agree with you, and I will try to find out if
16 Mr. Colitz can be here, in order to avoid the time
17 constraints. If he could clear one of these things up with
18 a couple of sentences, that might be a very efficient way,
19 and I will try to get ahold of him so that he will be here
20 while we talk about it.

21 CHAIRMAN SMITH: We could even come with a more
22 expedited method. I will call the man up on the Board
23 telephone if I have to, but it is pointless for us to sit
24 around and speculate when there is somebody who knows the
25 answer and he may be available.

1 MR. DORNSIFE: Mr. Chairman, I would like to
2 correct the record if I could. On further review of the
3 flow diagram, my conclusion is basically the same, but the
4 Series 1 filters and the Series 2 filters are both in the
5 letdown line. The 2 is not in the makeup, the injection
6 portion. They are both in the letdown prior to the section
7 of the pump on the recirculation mode. So, the conclusion
8 is still the same. They are not used during the injection
9 phase for high-pressure reactor.

10 DR. JORDAN: But 1A and 1B are both -- and 2A and
11 2B --

12 MR. DORNSIFE: Both the 1 series and the 2 series
13 are both in the letdown line.

14 DR. JORDAN: They are both in the letdown.

15 MR. DORNSIFE: Yes.

16 CHAIRMAN SMITH: I think we should make it clear
17 what I had in mind when I said I assumed that Met Ed plans
18 on winning the case and hopes to restart. That has yet to
19 be determined, but if you think you are going to win, I
20 would expect you to want to win as efficiently as possible.

21 MR. BLAKE: Yes, sir. Time is very important to
22 us. Consistent with a complete record for you to make your
23 determination, getting that plant back on line is very
24 important. And I mean by that to do whatever the Board
25 requests of us or directs us to do in order to achieve that.

1 identification as TMIA
2 Exhibit Number 28, was
3 received in evidence.)

4 CHAIRMAN SMITH: It remains in evidence.

5 MR. SELKOWITZ: There is a series of work requests
6 next. They begin with 25107, 20717, 21187, and 24319, and
7 those were all in a group for Mr. Leakway and were
8 originally distributed. They were the last ones under his
9 name.

10 The licensee has been able to provide a legible
11 copy of 24319, and we have distributed it to everyone but
12 the Board and possibly the witness, so Mr. Murdoch is
13 bringing some of those up now.

14 I am going to have no more questions for this
15 witness. I am going to move this one in in the same manner
16 as the last, and if the Board wants to excuse me as there
17 are no other questions, we could do that.

18 CHAIRMAN SMITH: Are there any other questions of
19 Mr. Leakway?

20 MR. SWANSON: If we could have just a moment to
21 look over these documents.

22 CHAIRMAN SMITH: Did you say you have no more?
23 They do not intend to use Mr. Leakway for any more documents.

24 MR. SWANSON: You are not going to ask him about
25 the documents just mentioned?

1 MR. SELKOWITZ: No, sir, because the information
2 important to us is on the face of the document. There is no
3 sense in his reading it to the Board. I can point it out.

4 CHAIRMAN SMITH: All right. Any questions of Mr.
5 Leakway before he is excused? The Commonwealth has none.
6 The licensee has none.

7 Mr. Swanson, did you indicate whether you had
8 questions of Mr. Leakway?

9 MR. SWANSON: If we can have just a moment to look
10 over the documents, because I can't right this second
11 preclude the possibility that Mr. Leakway might be able to
12 help explain them.

13 (Pause.)

14 MR. SWANSON: Staff has no questions.

15 CHAIRMAN SMITH: No questions? All right, Mr.
16 Leakway, thank you very much for appearing. You are excused.

17 (Witness excused.)

18 CHAIRMAN SMITH: Would this be a good time to take
19 a mid-afternoon break?

20 MR. SELKOWITZ: That is fine with me.

21 (Whereupon, a brief recess was taken.)

22 CHAIRMAN SMITH: During the recess, the Board was
23 talking about what can be done to make the process a little
24 bit smoother and more reliable. We thought that we might
25 request the staff to present somebody that could do

1 something similar to what Mr. Colitz was doing, and decided
2 that we should not make it as strong as a request.

3 However, if the staff wishes to have somebody in
4 attendance who could not only advise staff counsel but
5 actually on an as needed basis sit there and testify on a
6 spot basis, he would be welcome to do it, and the
7 Commonwealth has offered to make Dr. Dornsife's expert
8 testimony available, too, as we progress, as needed.

9 Also, the Board wants to have the schematics. We
10 have some discontent with the way the process is proceeding,
11 and we are trying to explore ways to make it a little more
12 schooly. What is your feeling, Mr. Swanson?

13 You don't have to -- Well, if you can discuss it
14 and consider it now, it would be very helpful. Would there
15 be any objections to that procedure?

16 MR. BLAKE: I don't have any objection. This is
17 what we really wanted to try to do. Even in the first
18 couple of days, I saw this coming. I don't have any
19 objection to getting as much information before the Board so
20 they can make these determinations as possible.

21 CHAIRMAN SMITH: I envision a rather unstructured
22 roundtable approach. We get stuck, we ask the expert, and
23 then we go on from there.

24 MR. BLAKE: Fair enough. We will try and get in
25 touch with Mr. Colitz, too, to see if he can be available.

1 CHAIRMAN SMITH: Okay.

2 MR. SWANSON: I think this is a matter that is
3 probably going to require some thought on our part.
4 However, if Mr. Colitz is going to be available, that might
5 alleviate the problem. There are a number of
6 considerations. For example, having any one person here may
7 not do the job on behalf of the staff. There are certainly
8 various fields of specialization involved when you have
9 investigations, et cetera.

10 CHAIRMAN SMITH: I realize that. Of course,
11 whoever you have just might have that problem. I don't
12 know. But the thought was, it would be a roundtable
13 approach. If one of the experts of the various parties
14 happened to know the answer, they come up with it, rather
15 than the Board speculating and treading water, as we have
16 been doing.

17 MR. SWANSON: Well, I guess it is pretty obvious.
18 I guess I do have assistants with me during this phase of
19 the proceeding. If we get to a point where some further
20 explanation is necessary, perhaps we could provide that.
21 For example if we get bogged down on a specific point, and
22 we could render assistance by providing some expert
23 testimony, perhaps we could do that.

24 CHAIRMAN SMITH: Well, let's keep that possibility
25 in mind, and if we continue to get bogged down again, we

1 will just see if that approach might work a little bit
2 better than what we are doing now. All right.

3 MR. SELKOWITZ: We led off, Mr. Chairman, with a
4 request for the parties to gather in front of them four work
5 requests, which I would now like mark for
6 identification. It would be TMIA Exhibit 29A, B, C, and D,
7 in this order: 20717 --

8 CHAIRMAN SMITH: All right, A through D, 20717.

9 MR. SELKOWITZ: That would be A, 29A; 21187 would
10 be 29B; 25107 is C; and --

11 DR. JORDAN: The first number again? 25107?

12 MR. SELKOWITZ: The first exhibit, 20717. And the
13 last would be 24319, which would be 29D.

14 (The documents referred to were
15 marked for identification as
16 TMIA Exhibits Number 29A, 29B,
17 29C, and 29D.)

18 MR. SELKOWITZ: I would point out to the Board
19 that this is a series of ones, that A, B, and C were
20 cancelled in favor of D, that the total time that elapsed
21 from origination --

22 CHAIRMAN SMITH: Wait a minute. We don't have
23 these.

24 (Pause.)

25 CHAIRMAN SMITH: Part of our problem is, Mr.

1 Selkowitz, I have some work orders that seem to be dangling
2 here from the last witness. Don't you intend to offer
3 them? We got them prepared for him.

4 MR. SELKOWITZ: These are still from the last
5 witness. You know, the last witness, I mean, Mr. Leakway.
6 Is that what you mean?

7 CHAIRMAN SMITH: That's right.

8 MR. SELKOWITZ: These were originally identified
9 for Mr. Leakway. These are his, and there may be still some
10 that will be remaining, because I have attempted to taper
11 this consistent with my view of what I need on this record
12 and the Board can use to make a decision so we don't have
13 redundant problems brought to the Board's attention.

14 CHAIRMAN SMITH: What is the status, if you
15 recall, of Work Request 20825 and M1046, and 21532. What is
16 the status of those? Those seem to be dangling. Or are you
17 taking those up next?

18 MR. SELKOWITZ: 20825 and 21532, I still have them
19 here in this folder, but have decided that they would be
20 redundant, and I am not going to pursue them.

21 CHAIRMAN SMITH: All right. Can I either return
22 them or throw them away, and get them off of my desk?

23 MR. SELKOWITZ: Sure.

24 Now, our reason for offering these Exhibit 29,
25 Parts A through D, into evidence is as follows. First of

1 all, we consider this to be an unduly long period of time
2 based on the origination dates where the problem was first
3 determined, which is 7/17/77 as shown on 29A. The work was
4 completed pursuant to 29D on September 14th, 1978, which is
5 a year and two months, roughly.

6 CHAIRMAN SMITH: And how do we know that?

7 MR. SELKOWITZ: Each of these work requests, A, B,
8 and C, were cancelled as per Exhibit D, and the work
9 therefore done on Exhibit D in a process that has been
10 described by several of the witnesses -- If you will note,
11 at the top of each one it says "Cancelled. See Work Request
12 24319."

13 CHAIRMAN SMITH: My copy of 29D, TMIA 29D, is
14 illegible. That is all right. I will share. Oh, I see Dr.
15 Little's is quite clear. It just happened to be mine. So,
16 if you have an extra one --

17 MR. SELKOWITZ: We do.

18 (Pause.)

19 CHAIRMAN SMITH: Yes.

20 MR. SELKOWITZ: That establishes the time period
21 that it took to have this work done, which we feel was
22 unduly long, even for a Priority 2, although I note that on
23 29C it was denoted as a Priority 1.

24 As to its safety relatedness, we have the
25 testimony of Mr. Colitz describing its function, found on

1 Page 2891, at least, of the transcript, and there may be a
2 later reference to it during Mr. Blake's examination.

3 It is our opinion, sir, that this valve, CAV-2,
4 which is the valve through which several sampling lines run
5 from within the containment building to various types of
6 equipment and forms part of the containment boundary, was
7 during this period incapable of manual operation.

8 Also, they could not tell whether it was open
9 because the valve did not indicate whether it was open.
10 That portion was apparently broken, as indicated on Exhibit
11 29C, Paragraph 3. In the failure of the electronics
12 signalling to close it when necessary, they would have had
13 great difficulty telling what position it was in, would not
14 necessarily have been able to isolate the containment
15 through this valve, which is necessary, and therefore we
16 think it bears some relationship to safe operation.

17 CHAIRMAN SMITH: Mr. Blake?

18 MR. BLAKE: Mr. Smith, licensee opposes the
19 introduction of these into evidence, citing the same
20 testimony as Mr. Selkowitz by Mr. Colitz. This valve was
21 discussed in some detail by Mr. Colitz. It is a valve on a
22 three-eighths inch sampling line, which he described as
23 normally being closed. It is opened periodically through
24 the week. Its important function is to ensure its closure
25 automatically upon containment isolation.

1 And there is, on the face of all of these
2 documents, there is no indication that the automatic
3 functioning was any problem, and as Mr. Selkowitz correctly
4 observed, its manual operation, because of a broken hand
5 wheel, that presumably was the reason why it was given a
6 Priority 1, and there is no safety significance based on Mr.
7 Collier record evidence in this case.

8 I oppose its admission.

9 MR. SWANSON: The staff would also object to these
10 documents. This appears to be one of those areas, again,
11 where Mr. Selkowitz in his questioning did not get to that
12 ultimate question as to its safety significance, nuclear
13 safety significance. Granted, we have a description of the
14 importance, but as I understand it, we have a pneumatic
15 valve. These work requests, however, go to the repair of a
16 manual hand wheel. I guess to go into any more description
17 of that would require a discussion of matters that are not
18 in evidence, but on the basis of the record, there is no
19 indication that this is safety related, and I seriously
20 doubt that if we were to go into a detailed probe of this
21 matter, that we would elicit testimony that it is.

22 On the face of it, these documents have checked
23 off No. The work does not have an effect on nuclear
24 safety. So, the staff is of the position that they are not
25 relevant to the contention.

1 MR. BLAKE: I neglected to cite the pages of Mr.
2 Colitz's testimony where the detailed discussion took
3 place. That was 3167 through 3171.

4 CHAIRMAN SMITH: The exhibit is rejected.
5 (The documents referred to,
6 previously marked for
7 identification as TMIA
8 Exhibits Number 29A, B, C,
9 and D, were rejected.)

10 MR. ROBERT ADLER: Mr. Chairman, I am sorry, we
11 had one point to make on that. As Mr. Blake pointed out, it
12 is the pneumatic control that would indicate being
13 indicative of the safety significance of this. However, in
14 Work Order 25107, as Mr. Selkowitz pointed out, the valve
15 did not indicate open.

16 Now, it appears as if that situation was remedied
17 a few days later, and that would be fine. In the first two
18 work orders, however, there is no indication of whether the
19 valve indicated open or not open, so to that extent, there
20 is an ambiguity.

21 CHAIRMAN SMITH: There is a void of information on
22 the other work orders.

23 MR. ROBERT ADLER: We would also note that the
24 position of the valve is important for the sampling of the
25 primary system from a safety standpoint.

1 CHAIRMAN SMITH: As I understand your point, there
2 was a time when the valve indicator, position indicator was
3 not functioning. That was corrected.

4 MR. ROBERT ADLER: That was 9/4/78.

5 CHAIRMAN SMITH: What exhibit do you see that in?

6 MR. ROBERT ADLER: In 29C.

7 CHAIRMAN SMITH: But you see no indication -- or
8 you think that could have been a continuing problem from
9 other dates?

10 MR. ROBERT ADLER: We don't know.

11 CHAIRMAN SMITH: That's a void. Okay.

12 The ruling remains the same. We reject the
13 exhibit.

14 MR. BLAKE: Mr. Smith, Mr. Trowbridge has some
15 business he wanted to discuss, if this is a convenient
16 breaking point. I think we are about to go to the next
17 business. It might take just a moment.

18 CHAIRMAN SMITH: Okay.

19 MR. TROWBRIDGE: I am sorry to interrupt with a
20 schedule problem, but I have been talking to Mr.
21 Tourtellotte and Ellyn Wiess both, and we find we have a
22 problem with the schedule on filing cross examination plans
23 with respect only to testimony in response to Board
24 questions.

25 The Board will recall that we agreed to file -- or

1it was agreed that cross-examination plans on the first
2three issues to be heard in the proceeding will be filed on
3October 28. That arrangement was made at a time when we
4knew but overlooked the fact that we were not proposing to
5file answers to Board questions, though we have filed
6testimony, but answers to Board questions relating to the
7emergency feedwater and to LOCA analyses until October 28
8ourselves.

9 Under these circumstances, what I am suggesting
10is, and I think this is agreeable to Mr. Tourtellotte, and I
11represent that it is agreeable to Ellyn Weiss, that they
12will file cross examination plans on the material they now
13have, but will file any cross examination time they may have
14on our answers to the Board questions with the beginning of
15the hearing, and we think this is likely to be November 4,
16the beginning of the hearing session dealing with the Group
17A items.

18 Now, there is a second problem not quite so easily
19resolved. The staff has committed to file its answer to the
20Board question on UCS 8 LOCA analyses by October 31. Ms.
21Weiss does not feel that that gives her enough time to
22prepare a cross examination plan or even to be sure that if
23we get over Contentions 1 and 2, UCS Contentions 1 and 2,
24that she would necessarily be ready to do her cross
25examination.

1 On that basis, I would recommend to the Board that
2with respect only to the cross examination on testimony in
3response to the Board questions on UCS 8, that the Board
4waive the requirement for that cross examination plan on
5that piece of testimony, and that Ms. Weiss, who by November
64 will have seen what the staff response to the Board
7question is, will be in a position to advise the Board
8whether she will be able to take up that in regular order or
9not.

10 CHAIRMAN SMITH: One of the purposes of the cross
11examination plan was to control cross examination plans by
12intervenor who were not pursuing a contention. That was
13only one of the purposes. That doesn't seem to develop into
14any type of problem in this case. I feel that it is not
15likely to be a problem.

16 MR. TROWBRIDGE: It is obviously no problem to
17us. We are agreeable to this suggestion.

18 CHAIRMAN SMITH: Could you give us seriatim now --

19 MR. TROWBRIDGE: Let me give it to you seriatim.

20 CHAIRMAN SMITH: Stop when we are supposed to rule.

21 MR. TROWBRIDGE: I will start with our responses
22to Board questions. The Board had a series of questions on
23emergency feedwater. They were labeled Board Questions 6A
24through K. We have already filed a portion of our response
25to that, namely, 6A through C and 6G through 6K. We still

1 owe the Board responses to 6D, E, and F, and we will be
2 ready to file that response by October 28th.

3 The suggestion is that the staff and Ms. Weiss
4 both be given until November 4 or the start of the session
5 on Group A items, whichever is later, to file with the Board
6 the cross examination plans, if any.

7 Now, I am stopping for one ruling there.

8 CHAIRMAN SMITH: I beg your pardon?

9 MR. TROWBRIDGE: I am stopping for a ruling.

10 CHAIRMAN SMITH: Okay. That is granted.

11 MR. TROWBRIDGE: The second had to do with the
12 staff response to the Board question on UCS 8, which staff
13 has promised on October 31. My proposal is that both we and
14 UCS not be required to file cross examination plans with
15 respect to the staff's answer, and that as for ourselves, we
16 will be prepared to address that staff answer in the normal
17 course of the proceedings. UCS will advise the Board on
18 November 4 whether or not they will have to take that in
19 some different order.

20 CHAIRMAN SMITH: I don't understand what it is
21 that UCS wants.

22 MR. TROWBRIDGE: UCS wants, because they will not
23 see this staff response until October 31, or they have no
24 guarantee they will see it before October 31, they wish, A,
25 to be relieved of the obligation to file a cross examination

1 plan.

2 CHAIRMAN SMITH: All right.

3 MR. TROWBRIDGE: And B, they are not sure, not
4 having seen the October 31 response, that they will be
5 prepared to conduct their cross examination when we get to
6 that item on the agenda. But they will be prepared to
7 advise the Board on November 4 whether or not they can be
8 prepared.

9 CHAIRMAN SMITH: Assuming we waive the filing of
10 the written cross examination plan, they certainly will be
11 prepared to state orally what they intend to achieve by
12 cross examination if called upon by the Board.

13 MR. TROWBRIDGE: I did not cover that with Ms.
14 Weiss.

15 CHAIRMAN SMITH: Well, as far as -- we can waive
16 that, but all parties should always be aware that they would
17 be called upon to explain what cross examination is leading
18 to in each instance, but they don't have to follow a written
19 cross examination plan.

20 On the other, I don't know of any ruling that we
21 can make.

22 MR. TPOWBRIDGE: I don't think there is an
23 occasion for a Board ruling at the moment. It is just to
24 alert the Board that UCS may or may not come up ready when
25 the time comes.

1 CHAIRMAN SMITH: Okay.

2 MR. TROWBRIDGE: Mr. Chairman, there is one other
3 scheduling matter which I thought the Board was going to
4 take up, and that is the question of when we get to
5 discussing the hydrogen control issue. Mr. Sholly is not
6 here today. He was yesterday. I would like to inform the
7 Board that as far as Ms. Weiss is concerned, she would like
8 it to be on November 4. Otherwise, she is going to have to
9 make a special trip to Harrisburg for the discussion.

10 CHAIRMAN SMITH: I was Ms. Weiss's wrong number
11 yesterday. I regret I didn't take the opportunity to get
12 her opinion.

13 MR. TROWBRIDGE: She does want to be here for that
14 item.

15 CHAIRMAN SMITH: Well, November 4 is going to be a
16 half-day.

17 (Pause.)

18 CHAIRMAN SMITH: Dr. Jordan has observed that we
19 have not had Mr. Sholly's input, but I think that we should
20 schedule it as the first item of business for November the
21 4th. If Mr. Sholly for some reason objects to that, I
22 suppose he can make his objection.

23 MR. TROWBRIDGE: I have reason to believe from a
24 very brief discussion with Mr. Sholly and from my discussion
25 with Ms. Weiss that almost any day will be agreeable to Mr.

1 Sholly.

2 CHAIRMAN SMITH: Yes, he has usually been very
3 much available.

4 All right. We will schedule for November 4th
5 consideration of hydrogen control litigation. Are you going
6 to communicate this to Ms. Weiss?

7 DR. JORDAN: And Mr. Sholly?

8 MR. TROWBRIDGE: I shall right now, and Mr. Sholly
9 (Pause.).

10 MR. SELKOWITZ: We are prepared to call Mr. Earl
11 Meck.

12 CHAIRMAN SMITH: Do you swear to tell the truth,
13 the whole truth, and nothing but the truth, so help you God?

14 MR. MECK: I do.

15 MR. SELKOWITZ: So the Board can prepare for this,
16 I can give you a list right now of all the ones we are going
17 to ask Mr. Meck, and then you will have them.

18 CHAIRMAN SMITH: All right. We have before us the
19 list associated with his name.

20 MR. SELKOWITZ: Okay. We are going to ask him
21 concerning the first one on that list, 23687, and the third
22 grouping, which is a group of five.

23 CHAIRMAN SMITH: The third grouping, which is what?

24 MR. SELKOWITZ: Five work orders, 22571, and then
25 across the line.

1 CHAIRMAN SMITH: I've got it.

2 MR. SELKOWITZ: And CO178.

3 CHAIRMAN SMITH: And not the others?

4 MR. SELKOWITZ: That is correct.

5 CHAIRMAN SMITH: I can cross a line through those?

6 MR. SELKOWITZ: Yes, sir.

7 (Pause.)

8 CHAIRMAN SMITH: Proceed.

9Whereupon,

10 EARL MECK

11was called as a witness, and having been first duly sworn,

12took the stand, was examined, and testified as follows:

13 DIRECT (AS ON CROSS) EXAMINATION

14 BY MR. SELKOWITZ:

15 Q Mr. Meck, would you tell us your position with
16Metropolitan Edison?

17 A I am a mechanical maintenance foreman in the PM
18Department.

19 CHAIRMAN SMITH: I neglected to ask, would you
20state your full name, your occupation, and your business
21address?

22 THE WITNESS: I am Earl A. Meck. I am mechanical
23maintenance foreman in the PM Department at the Metropolitan
24Edison Company, at Three Mile Island.

25 CHAIRMAN SMITH: What is PM Department?

1 THE WITNESS: Preventive maintenance.

2 BY MR. SELKOWITZ: (Resuming)

3 Q Mr. Meck, the PM Department is a new job for you.

4 Is that correct?

5 A Yes, sir.

6 Q When did you assume that position?

7 A At the end of last January.

8 Q January of?

9 A Eighty.

10 Q Eighty. And prior to that, sir, what was your
11 responsibility at Three Mile Island?

12 A Corrective maintenance foreman.

13 Q And how long did you have that job, sir?

14 A Since July of 1976.

15 Q And I take it, sir, you are familiar with the work
16 request approval system that was in effect during that time
17 period.

18 A Yes, sir.

19 Q And you had occasion to originate work requests?

20 A Yes.

21 Q And did you have occasion to sign as an originator
22 supervisor?

23 A I may have, but I don't recall any right at the
24 moment.

25 Q Are you familiar, sir, with the fact that there

1 was a priority system in place during your stay at the
2 Island?

3 A Yes.

4 Q Could you tell us, sir, what your understanding of
5 a Priority 1 is? Or, excuse me. Let me rephrase that.

6 What was your understanding of a Priority 1 prior
7 to assuming your job as a preventive maintenance foreman?

8 A Do the job as soon as possible.

9 Q And when you saw that, sir, was it in the context
10 of, here is a work request that has been approved and now
11 please get the work done?

12 A Yes.

13 Q And was your understanding at that time, having
14 been given a 1 priority, that it meant do the job as soon as
15 possible?

16 A Yes.

17 Q When you originated work tickets and put a
18 recommended priority on them, did you ever put a 1 priority
19 on any of those? Let me back up, because I may have asked
20 the question out of turn.

21 Did you ever put a recommended priority on a work
22 ticket that you originated?

23 A I don't remember.

24 No, I can't remember.

25 Q I want to draw your attention, sir, to a group of

1 work orders which I would ask to be marked as follows:

2 222571 as TMIA Exhibit 30A; 22572 as 30B; 22574 as 30C; 22575
3 as 30D; and 22576 as 30E.

4 (The documents referred to were
5 marked for identification as
6 TMIA Exhibits Number 30A, 30B,
7 30C, 30D, and 30E.)

8 BY MR. SELKOWITZ: (Resuming)

9 Q Take a moment if you would, sir, and review the
10 originator's signature on each of those.

11 A Those are my own signature.

12 Q Do you happen to recall originating this
13 collection of work tickets, sir?

14 A Yes.

15 Q I note at the top of all of them it says
16 "Cancelled by Originator."

17 A Yes.

18 Q Did you affix that to it?

19 A Yes.

20 Q And do you recall when you did that?

21 A Yes.

22 Q When was that, sir?

23 A Before the refueling.

24 Q Can you give me a month for that?

25 A Not really.

1 Q When you say before the refueling, you mean before
2 the 1978 refueling?

3 A Yes.

4 Q I see. So all we have to do is get that date
5 independently, and that would be correct for purposes of the
6 record. We just have to find out when that refueling was
7 and we will know when you did this?

8 A I have dated them 11/16/77.

9 Q Okay. Now, 11/16/77 is the date you originated
10 these. Is that correct?

11 A Yes.

12 Q Is that also the date you cancelled them?

13 A Now, this, I am not sure.

14 Q I guess that is my question, if we want to
15 understand each other. Do you recall when you cancelled
16 them and you said before the refueling?

17 A Yes.

18 Q Is that what you meant to say, sir?

19 A Yes.

20 Q Okay. I notice that in every case on the second
21 page, on January 24th of 1978, there was approval to
22 commence work given by Mr. Trotman, I believe it is.

23 A Yes, Richard Trotman.

24 Q Who is he, sir?

25 A He is -- in fact, I don't even know what his

1 position was.

2 Q Was he someone to whom you reported?

3 A I think he was a coordinator for the maintenance
4 department.

5 Q Because I am not familiar with that, sir but does
6 that mean he would be someone to whom you reported?

7 A Not me directly, no.

8 Q Would a supervisor of yours report to him?

9 A Probably.

10 Q I am trying to put him in the chain of information
11 here. Now, I notice, sir, that these were all 1D
12 priorities, to be done during the shutdown, and the
13 information on them is identical otherwise, and I just want
14 to ask if you can recall why it was that you cancelled them.

15 A I wrote them originally because my supervisor
16 asked me to.

17 Q Who was that, sir?

18 A Mr. McGarry. And later, it was found that we had
19 no need for them, because we were not going to work these
20 jobs under work requests. We were going to work them under
21 a procedure for refueling.

22 Q Now, were you here earlier today during a
23 discussion by Dr. Jordan and one of the witnesses about
24 procedures for refueling? I think it was Mr. Shovlin. Were
25 you present then, sir?

1 A I am not sure.

2 Q There was a discussion concerning whether there
3 were some standing types of maintenance that might be done
4 during a refuelings that were not done on work requests,
5 that they were done through another system.

6 A Through a procedure, yes.

7 Q And just as I understand that these were cancelled
8 because they represented work that was to be done through
9 the other procedure.

10 A Yes, sir.

11 Q Did someone instruct you to cancel them, sir?

12 A Yes, sir.

13 Q Who was that?

14 A I think it was another foreman, Neil Hanizer.

15 Q Do you know, sir, whether the work here was done
16 via the other procedure?

17 A Yes, it was.

18 MR. SELKOWITZ: I am not going to move those into
19 evidence, sir.

20 I would like to turn the Board's attention and
21 yours, Mr. Meck, to Work Order CO178 and ask that to be
22 marked as TMIA Exhibit 31.

23 CHAIRMAN SMITH: Did you just offer --

24 MR. SELKOWITZ: No, I said I am not offering them.

25 CHAIRMAN SMITH: You are withdrawing them?

1 MR. SELKOWITZ: I never had offered them, so I
2 guess technically I am not going to.

3 CHAIRMAN SMITH: You do not intend to offer them?

4 MR. SELKOWITZ: That is correct, sir. The
5 explanation given by this witness is sufficient, sir, that
6 we need not offer them into evidence as they would not be of
7 any probative value as I see it.

8 (The documents referred to,
9 previously marked for
10 identification as TMIA
11 Exhibits Number 30A, 30B, 30C,
12 30D, and 30E, were withdrawn.)

13 MR. SELKOWITZ: I would like to have the next work
14 request, COL78, which is a computerized form on the first
15 page marked as TMIA Exhibit 31.

16 (The document referred to was
17 marked for identification as
18 TMIA Exhibit Number 31.)

19 MR. SELKOWITZ: Mr. Chairman, earlier the Board
20 received some copies of blank work requests, a computerized
21 form, and it might be appropriate at this time to point out
22 that TMIA Exhibit 31 is a copy of the work request
23 instituted on that new computerized format.

24 (Pause.)

25 BY MR. SELKOWITZ: (Resuming)

1 Q Mr. Meck, did you ever initiate work requests on
2 this form?

3 A Yes.

4 Q And when using this form, do you insert a
5 recommended priority?

6 A No.

7 MR. SELKOWITZ: I have no further questions of
8 this witness on this work order or the next one, both of
9 which I can ask be marked and received based on the document
10 itself.

11 I would for purposes of TMIA Exhibit 31 direct the
12 Board's attention to Page 2, in which it is indicated that
13 this is -- in Line 3B, the work does have an effect on
14 nuclear safety. I note that it was originated on 1/7/79.
15 The work itself was done, as is seen on the last page, on
16 1/9/79, only two days later, but that it took some seven
17 months for the testing to be done and the component released
18 for normal use. At least that is the indication I would
19 infer from lines 15 and 16.

20 We therefore feel that that is the nexus to our
21 contention of faulty maintenance practices that affect
22 safety, in that, as I argued earlier today, one must be sure
23 in a quality control component such as this that it has in
24 fact been done correctly, and at least on the face of this
25 document there is no showing that it was accomplished in a

1 timely fashion.

2 CHAIRMAN SMITH: Is it your view that because of
3 the unit sealed by the door, which is apparently the fuel
4 handling building, or the fuel storage pool building, that
5 the status of operation is irrelevant? Plant operation, I
6 mean?

7 MR. SELKOWITZ: For purposes of determining
8 whether the door is sealed, the status of the plant would be
9 irrelevant. I think that test should be done sooner than
10 seven months.

11 CHAIRMAN SMITH: With the plant shut down the next
12 month, what difference would it make?

13 MR. SELKOWITZ: Because that, sir, is precisely
14 when they are handling the fuel elements, precisely when the
15 door must be sealed.

16 CHAIRMAN SMITH: Where do we find the work
17 completed on this?

18 MR. SELKOWITZ: It is on the last page, Line 13.

19 CHAIRMAN SMITH: Don't you read the signatures
20 there? At the best, this is an ambiguous document. The
21 work procedure itself calls for testing, 6.5, flight seal,
22 which I guess was the purpose. They retest Met Ed substance
23 criterias in the box, which is signed off on .979. Well,
24 that is just one of the observations I make.

25 So, I guess the only complaint you have is that --

1 Well, I don't know for sure what.

2 MR. SELKOWITZ: My complaint, sir, is, as I said
3 earlier today, the people doing the work sign off on Line
4 13, and they take care of Line 12. Let me ask Mr. Meck.

5 BY MR. SELKOWITZ: (Resuming)

6 Q Is it your understanding, sir, that the people
7 doing the work are the ones that would check off Line 12 on
8 the document that has been identified as Exhibit 31?

9 A True.

10 MR. SELKOWITZ: Then, Mr. Chairman, my position is
11 that it has been determined by others in this company that
12 this is a quality control item, and perhaps by the NRC
13 itself -- I don't know the answer to that -- which requires
14 someone who did not do the work to do the checking.

15 CHAIRMAN SMITH: Mr. Blake?

16 MR. BLAKE: Mr. Chairman, Mr. Colitz spoke
17 directly to the importance he attached to the seal around
18 the fuel handling door, and he said that it was an important
19 item on that basis alone. I have no objection.

20 CHAIRMAN SMITH: Where did he talk about it?

21 MR. BLAKE: I can give you the pages: 3155
22 through 3158. I also would offer, I think, for the Board's
23 explanation that when I look at those dates at the bottom of
24 that procedure, I think those are the approval dates to okay
25 that procedure. Those look to me like the PORC and unit

1superintendent.

2 CHAIRMAN SMITH: I can't hear you.

3 MR. BLAKE: The approval, those 1/9 dates at the
4bottom, are not necessarily signing off as to the tests
5having been done. I think those are okays as to the
6procedures to follow, that it is a PORC approved procedure,
7which is required by virtue of the answers to 3A and B.

8 MR. BLAKE: Mr. Smith, to try to point out
9something that may be helpful to the Board, it appears to me
10that in fact the same initials appear up in retest Met Ed
11Acceptance Criteria, up here at the top, above the date
121/9/79, on the last page of this exhibit. The same initials
13as the man's name who appears on Line 15. It looks to me
14like a D. J., similar to a D. James, it appears, but I can't
15explain further.

16 DR. LITTLE: The question is, when were the
17initials entered in Line 12? I don't know how to figure
18that out for sure.

19 MR. BLAKE: Fair enough. All I can indicate is
20that they are above the date 1/9/79, but I do not know
21without talking to this individual.

22 MR. SELKOWITZ: I do want to point out to the
23Board that there was another transcript page where this was
24discussed, and that is 2886, and further, that the quality
25control line is Line 16, and that also indicates that there

1 are people whose job it is to do a review of work and
2 testing but not sign off until 8/879, which is really the
3 seven months that I am talking about.

4 MR. BLAKE: Do I understand now, Mr. Selkowitz,
5 that you are offering it for a different purpose?

6 MR. SELKOWITZ: I thought I said that quality
7 control had not reviewed it before seven months. If I
8 hadn't, that is what I intended to say.

9 MR. BLAKE: That is the purpose of this?

10 MR. SELKOWITZ: We do not dispute that the
11 document indicates the work was done in two days. The
12 question is whether that ends the discussion of whether that
13 is the proper maintenance procedure, just because they did
14 the work. We think that it is not the end of the question.

15 CHAIRMAN SMITH: This is the area the Board has
16 observed as one that is dangling. We have never learned
17 what quality control means, although I cannot envision it
18 meaning anything related to production. It certainly must
19 either be personnel safety or nuclear safety in this case.

20 I hope that when you have completed, that you will
21 categorize your quality control allegations, and formulate a
22 single argument on just what you mean should be some
23 standards that you think were not met.

24 MR. SELKOWITZ: I think we will endeavor to do
25 that. We are waiting Mr. Blake's own receipt of a completed

1 copy of Procedure 1008, which I think we are going to need,
2 and the Board has requested that. In fact, I was going to
3 raise at this time whether once we have received that, if we
4 might not have an opportunity to present by way of a company
5 witness some testimony or someone presenting the testimony.

6 CHAIRMAN SMITH: Well, we have asked for the
7 testimony.

8 MR. SELKOWITZ: I understand. I wasn't quite sure
9 who it was that was going to present it. As we view it, it
10 seems to be an important part of a portion of that
11 contention, and we might want to be in a position to call
12 that witness. I am just making that statement now. If it
13 needs to be, then the Board is aware that we might request
14 it.

15 CHAIRMAN SMITH: Okay. So the only thing the
16 Board could possibly find from this document -- we couldn't
17 possibly find, if this document is accepted to portray the
18 events reported on it, that there was ever a question of
19 safety at all.

20 MR. SELKOWITZ: I am sorry, sir?

21 CHAIRMAN SMITH: Because not only did they do the
22 work, replace the gasket, but they increased the pressure
23 and tested the seal, and all that. Your complaint is that
24 the quality control people didn't get around until several
25 months later to confirming that the work had been done

1 correctly?

2 MR. SELKOWITZ: I don't say to confirm, sir. I
3 say to determine if the work had been done correctly,
4 because those are the people that are supposed to do that,
5 not the workers. Otherwise --

6 CHAIRMAN SMITH: No, the workers are required to
7 determine that the work has been done, and one of the steps
8 of the work was to test the seal with the pressure test, and
9 that was signed off.

10 MR. SELKOWITZ: I understand that.

11 CHAIRMAN SMITH: And if we accept the document as
12 being a reliable document, as we must, it is solely a
13 quality control problem.

14 MR. SELKOWITZ: Yes, that is correct.

15 CHAIRMAN SMITH: So we are going to have a group
16 of them that go to the same point, and I want to see those
17 isolated some time in the proceeding.

18 MR. SELKOWITZ: I am trying to identify them as we
19 go, and then we will make one argument about them, and then
20 tell you about those numbers at that point in the argument,
21 the exhibit number at that time. Is that all right?

22 CHAIRMAN SMITH: Okay. That will be fine.

23 Mr. Swanson?

24 MR. SWANSON: We have no objection.

25 CHAIRMAN SMITH: Mr. Blake?

1 of Mr. Meck before he is excused?

2 (Pause.)

3 MR. SWANSON: Staff does not have any questions.

4 CHAIRMAN SMITH: Thank you, Mr. Meck. You are
5 excused.

6 (Witness excused.)

7 MR. SELKOWITZ: I would like to ask that Work
8 Order 23687 be identified as TMIA Exhibit 32. 23687 was the
9 first one identified for Mr. Meck.

10 CHAIRMAN SMITH: Okay. Fine.

11 (The document referred to was
12 marked for identification as
13 TMIA Exhibit Number 32.)

14 MR. SELKOWITZ: I am going to ask that it be
15 received in evidence based on the following: that it is a
16 1A priority; that it took over 13 months to complete the
17 work for a 1A priority; and its relevance to our safety
18 question is that at the same point in time, three of six of
19 these main steam bypass valves were "blowing steam."

20 Mr. Colitz testified at Pages 2896 and 2898 that
21 they were required at all times to have four of them in
22 operation or they would have to shut down. Here is a case
23 where three of them were apparently in need of maintenance
24 urgently by the priority number. We think that this is
25 evidence of their having ignored that need in order to keep

1 the plant going, which we think is an improper maintenance
2 practice, and that the plant needed to be shut down, or some
3 of these bypass valves repaired, neither of which occurred.

4 CHAIRMAN SMITH: What are your transcript
5 reference

6 MR. SELKOWITZ: 2896 and 2898. Specifically,
7 2898, Line 5, 6, 7.

8 CHAIRMAN SMITH: Mr. Blake?

9 MR. BLAKE: Mr. Smith, I think the portion of the
10 transcript that Mr. Selkowitz has referred to is where he
11 did the questioning of Mr. Colitz, I, too, covered
12 specifically these valves and Mr. Colitz's views of the
13 importance of these valves. That appears at Transcript
14 Pages 3172 through 3175.

15 My reading of Mr. Colitz's -- First of all, to
16 refresh the Board's memory, the four out of six were the
17 four out of six chains, and these particular valves, these
18 D, E, and F, 11D, E, and F valves were the manual
19 maintenance isolation valves for each of the important
20 valves in those six chains.

21 Mr. Colitz specifically talked about the
22 importance which he would attach to the fact that these
23 manual maintenance isolation valves leaked, and it was not
24 in his view an important safety item.

25 I oppose the admission of these.

1 MR. SELKOWITZ: Mr. Chairman, if I misstated -- I
2 think I did. I think I indicated they were required to have
3 X number of valves. What I meant to say was, they were
4 required to have X number of lines to which these particular
5 valves are associated, and their function is as Mr. Blake
6 has represented.

7 It is our point that these lines would not have
8 been available had they done this maintenance. They should
9 have taken each of these lines and done this maintenance.
10 Three of those lines needed this maintenance all at the same
11 time. The work was ignored for over a year.

12 Now, if we are going to say that this particular
13 valve itself didn't mean anything to safety, that may very
14 well be the case. The point is, you have to look at the
15 picture here, and what is this associated with, and what is
16 the consequence of not doing it?

17 CHAIRMAN SMITH: Not doing the maintenance?

18 MR. SELKOWITZ: Not doing the maintenance. Or
19 deferring the maintenance. Here the consequence was running
20 the risk of three of these lines going out all together at
21 the same time. You are only entitled to have two of them
22 before they shut down.

23 You can see a graphic depiction of this on Diagram
24 302-011.

25 CHAIRMAN SMITH: We are concerned about what Mr.

1 Colitz meant on Page 3175, beginning with Line 5, where he
2 is talking about -- well, we don't know what he is talking
3 about. If for some reason, and I am quoting Mr. Colitz, for
4 some reason, I guess, to try to answer your question, for
5 some reason three of these six valves were inoperable, the
6 tech specs would require you to shut down. If you need four
7 to heat up.

8 DR. JORDAN: Based on what he said previously, I
9 think he was referring to the main valves, not the valves
10 that were manually operated and used for testing, and the
11 valves which are being referred to in this. Is that right?

12 MR. SELKOWITZ: Well, sir, I would suggest if you
13 look at Lines 11 and 12, he seems to be saying - but again,
14 we are talking manual valves that normally sit there open.
15 I guess it is ambiguous. I would subscribe to asking Mr.
16 Colitz to further explain it.

17 CHAIRMAN SMITH: He says he can't ever remember
18 havin more than one out at a time, and of course you say
19 there are three of them that required maintenance, and they
20 need wo of them. He could have maintained, if he felt that
21 maintenance was needed.

22 MR. SELKOWITZ: Mr. Chairman, that is precisely
23 the point of this exhibit. If they wanted to, they could
24 have done some maintenance on two of them. The point is
25 that for 13 or 14 months, they didn't do anything. We think

1 that is improper deferral of maintenance.

2 MR. BLAKE: That begs the question.

3 CHAIRMAN SMITH: I beg your pardon?

4 MR. BLAKE: That begs the question.

5 MR. SELKOWITZ: In other words, as long as nothing
6 goes wrong, in the meantime, there is no problem, and they
7 would be allowed to continue to defer things that they
8 realize by a 1A that they should be doing, so they got lucky
9 and nothing happened in 15 months, and then they fixed them.

10 The point is, this stuff was associated with three
11 lines, three separate lines. At no time were they allowed
12 to have more than two of them out at the same time. So,
13 they are gambling essentially that they can let three of
14 these remain with packings that are blowing steam and
15 continue to operate the plant. That is part of the essence
16 of our contention precisely. They got lucky and nothing
17 happened, but what if it didn't?

18 CHAIRMAN SMITH: Mr. Swanson?

19 MR. SWANSON: The staff objects to the
20 introduction of this document. There is no basis that it is
21 relevant to the contention. It is not safety-related.

22 CHAIRMAN SMITH: The Commonwealth?

23 MR. ROBERT ADLER: No comment.

24 CHAIRMAN SMITH: No comment?

25 Rejected.

1 (The document referred to,
2 previously marked for
3 identification as TMIA
4 Exhibit Number 32, was
5 rejected.)

6 MR. SELKOWITZ: I have no other work orders for
7 Mr. Meck. In fact, I had intended to conclude with Mr. Meck
8 today at the end of our presentation for this day, and then
9 take up again in the morning with the balance of them. I
10 don't know even if the next witness is present. He may well
11 be.

12 MR. BLAKE: Mr. Eisenhower is here and ready.

13 CHAIRMAN SMITH: I think we ought to proceed.

14 MR. BLAKE: I wonder, Mr. Smith, if we could just
15 take a couple of minute break, so I could get again the list
16 of items which he is going to take up with Mr. Eisenhower.
17 That works pretty smoothly. Then I can get my ducks in a
18 row.

19 CHAIRMAN SMITH: All right. We need that.

20 Do you have any additional other than the ones
21 associated with Mr. Eisenhower's name? Do you want all of
22 those?

23 MR. SELKOWITZ: Those are really just two sets.
24 Each set relates to exactly the same problem.

25 CHAIRMAN SMITH: So you do want all of them?

1 MR. SELKOWITZ: Yes, sir, and even though there is
2 a great number of them, I don't think the questioning will
3 take very long.

4 (Whereupon, a brief recess was taken.)

5 CHAIRMAN SMITH: Are we ready?

6 Mr. Eisenhower, would you take that seat, please?
7 Would you raise your right hand, sir?

8 Do you swear to tell the truth, the whole truth,
9 and nothing but the truth in this hearing, so help you God?

10 MR. EISENHOUR: Yes, sir.

11 CHAIRMAN SMITH: Mr. Eisenhower, would you state
12 your full name, your occupation, and your business address,
13 please?

14 THE WITNESS: Elmer B. Eisenhower, Metropolitan
15 Edison Company, TMI, Post Office Box 480, Middletown.

16 CHAIRMAN SMITH: You have to keep your microphone
17 very close to you mouth. If it gets more than a few inches
18 from your mouth, we can't hear you.

19 THE WITNESS: E. B. Eisenhower, Metropolitan Edison
20 Company, utility supervisor, post office address, P. O. Box
21 480, Middletown.

22 CHAIRMAN SMITH: You are utility supervisor?

23 THE WITNESS: Yes.

24 Whereupon,

25 ELMER B. EISENHOUR

1 was called as a witness, and having been first duly sworn,
2 took the stand, was examined, and testified as follows:

3 DIRECT (AS ON CROSS) EXAMINATION

4 BY MR. SELKOWITZ:

5 Q Mr. Eisenhour, my name is Larry Selkowitz. I
6 represent one of the intervenors, TMIA, in this proceeding.

7 Sir, am I correct that one of the functions of the
8 Utility Division is to do the work of changing the filters
9 in the air handling system?

10 A That is correct.

11 Q And how long, sir, have you been in your current
12 position?

13 A I started my duties at TMI Tuesday following Labor
14 Day, 1977.

15 Q So that would be approximately September 3rd, 4th,
16 or 5th, somewhere in there?

17 A Yes, that is correct.

18 Q And are you familiar, sir, with the work request
19 approval forms that have been in use at the Island?

20 A Yes.

21 Q And is the work that is given to your department
22 generally prescribed by those work request forms?

23 A Generally, yes.

24 I might add about -- approximately 25 percent of
25 our work would be indicated by work requests. The balance

1 is by verbal.

2 Q And the work that is not by work request, I
3 believe, was described by Mr. Shovlin as the type that could
4 be done by someone calling up your division and saying this
5 particular piece of housekeeping work needs to be
6 accomplished, something of that nature?

7 A Yes. Either by phone or by note.

8 Q You are familiar, sir, and aware that various work
9 orders are given different priority numbers?

10 A Yes.

11 Q And when you are given a work order, sir, with a
12 Priority 1 on it, what is your understanding of when that is
13 supposed to be done?

14 A Priority 1 work orders should be done as soon as
15 practical.

16 Q And do you ever originate work requests, sir?

17 A I have not.

18 Q Does anyone under your supervision initiate work
19 orders that you can recall?

20 A Not to the best of my knowledge.

21 Q Do you yourself participate in some of the actual
22 work of changing out filters?

23 A No.

24 Q Do you supervise people in your department who go
25 out and change the filters and report back to you?

1 A I have done some of that. Generally it is done by
2my foreman.

3 Q By your foreman? I didn't hear you.

4 A By my foreman under me.

5 Q Who is it, sir, in your understanding, that
6assigns the priority to a work request that comes down to
7you?

8 A The suggested priority would be put on by the
9originator and the supervisor of maintenance would fill in
10the real priority.

11 Q When you say that, sir, are you referring to the
12system that is currently in place that has the computer form
13on it?

14 A Correct.

15 Q Do you recall, sir, the forms before it was turned
16into the computerized version?

17 A Yes.

18 Q Now, on there, we have had testimony there is no
19space for a separate indication of a recommended priority.
20There is one space in it simply marked Priority. Now, when
21that form was being used, in your knowledge, sir, who was it
22that filled in that blank that was marked Priority?

23 A I think the originator would have filled that in
24and it again would have been reviewed by the maintenance
25supervisor before the work request would have come to my

1 department.

2 Q Thank you, sir.

3 MR. SELKOWITZ: I am going to ask that a series of
4 work requests be marked as TMIA Exhibits 33A and then
5 subsequent letters as follows.

6 CHAIRMAN SMITH: What will be the total reach of
7 the letters? This will be 33A through what? That is all
8 right. Go ahead.

9 MR. SELKOWITZ: I would ask that Work Request
10 Number 20000 be marked as TMIA Exhibit 33A.

11 CHAIRMAN SMITH: Wait a minute.

12 MR. SELKOWITZ: I am going to identify the rest of
13 this group in what I hope is chronological order. I would
14 like Work Request Number 20183 to be TMIA --

15 CHAIRMAN SMITH: Just take them one at a time.
16 20000 is about two-thirds of the way down in your pack, so
17 it took us a while to get it.

18 MR. SELKOWITZ: I am sorry, sir.

19 CHAIRMAN SMITH: Now, what is the next one?

20 MR. SELKOWITZ: 20183.

21 CHAIRMAN SMITH: You skipped one, intentionally?

22 MR. BLAKE: I didn't get that number.

23 MR. SELKOWITZ: 20183.

24 MR. BLAKE: Thank you.

25 MR. SELKOWITZ: I am going to try to put them,

1sir, in a chronological order by date of origination, so
2that is the same in the sequence in which they are marked.

3 CHAIRMAN SMITH: Okay.

4 MR. SELKOWITZ: That should be marked 33B. 20332
5should be 33C.

6 CHAIRMAN SMITH: Now, wait a minute. So you are
7not reading them in the order in which we listed them. What
8was C?

9 MR. SELKOWITZ: 20332.

10 CHAIRMAN SMITH: Okay.

11 MR. SELKOWITZ: That one is C.

12 CHAIRMAN SMITH: All right.

13 MR. SELKOWITZ: 20974. Does the Board have that
14one?

15 CHAIRMAN SMITH: Yes.

16 MR. SELKOWITZ: Should be D. 21165 is E.

17 CHAIRMAN SMITH: All right. Go ahead.

18 MR. SELKOWITZ: 21587 is F.

19 CHAIRMAN SMITH: All right.

20 MR. SELKOWITZ: 21794 is G.

21 CHAIRMAN SMITH: Do you have any idea how many
22there are going to be in this series?

23 MR. SELKOWITZ: Through the letter M as in Mike.

24 CHAIRMAN SMITH: Go ahead and name them. Then we
25will have to take a break while I marshal my papers.

1 MR. SELKOWITZ: 22043 is H. 21769 is I. 22905 is
2 J.

3 CHAIRMAN SMITH: 22905?

4 MR. SELKOWITZ: Correct, sir. 23042 is 33K.

5 CHAIRMAN SMITH: What happened to H? What was H?

6 MR. SELKOWITZ: 22043.

7 CHAIRMAN SMITH: 23042 is K.

8 MR. SELKOWITZ: And then 25149 is L. And C1055,
9 the only with a computer form, is 33M.

10 (Pause.)

11 (The documents referred to
12 were marked for identification
13 as TMIA Exhibits Number 33A
14 through 33M inclusive.)

15 MR. SELKOWITZ: If the Board please, I am not
16 going to have any more questions of Mr. Eisenhower. The two
17 work request series that I have to offer into evidence are
18 evident on the face of the documents, and I would not have
19 any more questions of him. He could be excused, as far as I
20 am concerned.

21 CHAIRMAN SMITH: Would you summarize Mr.
22 Eisenhower's testimony?

23 MR. SELKOWITZ: We were trying to have for the
24 record Mr. Eisenhower's understanding of how the priority
25 systems worked and what was meant by a given number, in this

1 case a 1. I also wanted to find out some of the process for
2 the record of how these came down to the utility division,
3 and that his division did the air handling filter changeouts
4 as a general rule. All of these work requests deal
5 precisely with the air handling filter changeouts.

6 CHAIRMAN SMITH: Okay. Does anybody have any
7 questions of Mr. Eisenhower before he is excused?

8 Mr. Eisenhower, would you mind hanging around for
9 another 20 minutes or so before you leave? Other than that,
10 if we don't call upon you again, you are excused. Thank you
11 very much for coming.

12 (Witness excused.)

13 MR. SELKOWITZ: We offer TMIA Exhibits 33A through
14 M, based on the following: This is a series, as we have
15 seen before, of work orders that accumulated over time which
16 were cancelled in favor of a work order numbered C1055,
17 which has been identified as Exhibit 33M. If the Board has
18 the opportunity, it can review these, and I would ask them
19 to take specific note of the following.

20 The priority numbers on each of these work
21 requests -- I shouldn't say on each, but the priority
22 numbers are generally speaking 2A's until we get to Exhibit
23 K, when it is a 1A, and it remains a 1A on L and on M. I
24 would ask the Board also to note that it is a series of
25 filter changeouts on both redundant AHF 6's, that is air

1 handling filters 6A and 6B needing to be replaced
2 simultaneously throughout this period, and that the total
3 period involved from May 16th, 1977, which is the
4 origination date of 33A, through the work completion date,
5 which is on Page 3 of Exhibit 33M, which has a 7/3/79, is in
6 excess of two years, and very importantly, if we look on
7 Page 2 of C1055, which is 33M, we note that when the work
8 was finally done, it was determined by the company at least
9 as to Line 3B to have an effect on nuclear safety.

10 CHAIRMAN SMITH: Where do we find that? That
11 was --

12 MR. SELKOWITZ: Page 2 of Exhibit 33M.

13 CHAIRMAN SMITH: Mr. Blake?

14 MR. BLAKE: Mr. Chairman, Mr. Colitz discussed the
15 filters in this air handling system at some length. His
16 discussion appears during my questioning at Transcript Pages
17 3183 through 3189. Mr. Colitz by and large spent his time
18 on the 4A and B filters, which I am sure will be the next
19 series and we will discuss next as proposed exhibits. He
20 also discussed 6A and B, and generally his testimony was
21 that these are 100 percent capability alternate path
22 filters. None of these filters are used. Either of them
23 can be used in the case of emergency handling. In the case
24 of any accident situation, the air handling would not even
25 go through these filters. In fact, the control tower has a

1 separate circuit in which these filters are not present.

2 It was Mr. Colitz's judgment that these filters
3 and their need for replacement was not a significant safety
4 consideration. It had no safety significance involved with
5 these filters. And on the basis of that being the status of
6 the record here, I object to the admission into evidence of
7 this series.

8 CHAIRMAN SMITH: Mr. Swanson?

9 MR. SWANSON: The staff would also object. The
10 only testimony we have thus far as to their safety
11 significance is the testimony of Mr. Colitz on the pages
12 just decided and the checkoffs of Item Number 9 on these
13 work requests. The testimony thus far all seems to indicate
14 it is not safety related, and we would object on the basis
15 of a lack of relevancy to the contention.

16 MR. SELKOWITZ: Perhaps Mr. Swanson doesn't
17 realize that his position, Mr. Chairman, is inconsistent
18 with that that he has taken on every other items which has
19 had the nuclear safety block checked, and by that I would
20 bring to his attention that the work order by which all of
21 this work was done indicated that it did have an effect on
22 nuclear safety on that line.

23 MR. SWANSON: Perhaps you could clarify for me
24 what you are referring to. I was referring to Item 9, does
25 work have an effect on nuclear safety.

1 MR. SELKOWITZ: On Exhibit M, 33M, which is the
2 document to which all of these cancelled ones were
3 referred.

4 CHAIRMAN SMITH: The numbering changed on the
5 computer. It is 3B. Look at 3B on the computer work
6 request, 33M.

7 MR. SWANSON: I stand corrected on that one. Now,
8 just a moment.

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 MR. SWANSON: I stand corrected on that one.

2 Just a moment.

3 MR. ROBERT ADLER: Mr. Chairman, while we're
4 waiting for Mr. Swanson, we agree that the equipment here is
5 not safety related. However, we feel that the point raised
6 by the fact that in most of the work orders it is checked
7 off as not safety-related and in the last, on the computer
8 form, it is checked off as being safety-related points out a
9 deficiency in the manner in which licensee determines
10 whether an item of maintenance is safety-related. And we
11 feel that that in itself is an issue.

12 CHAIRMAN SMITH: And that also, then, would go to
13 the adequacy of the records too.

14 MR. ROBERT ADLER: That is correct.

15 MR. SWANSON: Mr. Chairman, we are ready to state
16 our position.

17 CHAIRMAN SMITH: I beg your pardon?

18 MR. SWANSON: We are ready to state our position.

19 CHAIRMAN SMITH: I thought you had.

20 MR. SWANSON: I'm sorry. Mr. Selkowitz was
21 correct. I had incorrectly characterized the last document
22 as checking off no. However, our position does remain the
23 same, the reason being that we believe quite strongly that a
24 case has been made that this is not safety-related and the
25 staff position is that it is not safety-related. And,

1 contrary to the Commonwealth's opinion, if indeed the matter
2 is not safety-related, the NRC has no jurisdiction over
3 whether its recordkeeping system is adequate or inadequate.

4 CHAIRMAN SMITH: Okay. I understand that. And
5 here the Board has thought about that problem too. They
6 don't have to keep records on non-safety-rela . . . , so if we
7 find that, then it's not violation.

8 But if they have a pool of records, some including
9 safety and some including non-safety, and you can't tell
10 which is which, then the fact that some of those that you
11 cannot tell which is which happen to be non-safety would at
12 least have relevance upon their requirement to keep records
13 which pertain to safety.

14 So it is on that basis and the fact that although
15 the Board itself cannot see any substantive reason -- any
16 reason -- on the record transcript why nuclear safety was
17 involved and in fact it is our inclination that it probably
18 is not, we cannot disregard the fact that it was marked
19 nuclear safety on the exhibit. We have to give that some
20 weight.

21 Also, we are going to accept it into evidence as
22 it relates to the adequacy of the recordkeeping. We don't
23 think that by putting non-safety things into safety records
24 meets the Appendix B requirements any more than putting
25 safety in non-safety, although that's a pretty strong

1 CHAIRMAN SMITH: Which one is that?

2 MR. SELKOWITZ: This is the other group that was
3 identified for Mr. Eisenhower, slightly shorter than the
4 last. I believe it will go 34 A through K.

5 CHAIRMAN SMITH: Now for my purposes, I would just
6 as soon go ahead and rapidly identify which is which and
7 then the parties will take time to go back and actually mark
8 the documents. But if anybody objects to them -- it just
9 works out easier for me that way, but if anybody has a
10 strong desire to go the other way, we will.

11 MR. SELKOWITZ: That's fine with me. I was
12 looking for a way to speed it up for you.

13 I would ask that exhibit -- excuse me, Work
14 Request number 20070 be marked as 34 A.

15 (The document referred to was
16 marked TMIA Exhibit No. 34 A
17 for identification.)

18 MR. SELKOWITZ: That 20139 be 34 B.

19 (The document referred to was
20 marked TMIA Exhibit No. 34 B
21 for identification.)

22 MR. SELKOWITZ: That 20254 be 34 C.

23 (The document referred to was
24 marked TMIA Exhibit No. 34 C
25 for identification.)

1 MR. SELKOWITZ: That 20545 be 34 D.

2 (The document referred to was
3 marked TMIA Exhibit No. 34 D
4 for identification.)

5 MR. SELKOWITZ: That 20673 be 34 E.

6 (The document referred to was
7 marked TMIA Exhibit No. 34 E
8 for identification.)

9 MR. SELKOWITZ: 21000 be 34 F.

10 (The document referred to was
11 marked TMIA Exhibit No. 34 F
12 for identification.)

13 MR. SELKOWITZ: 21534 be 34 G.

14 (The document referred to was
15 marked TMIA Exhibit No. 34 G
16 for identification.)

17 MR. SELKOWITZ: A one-page indicator of a lack of
18 paperwork for job ticket 21674 be 34 H.

19 (The document referred to was
20 marked TMIA Exhibit No. 34 H
21 for identification.)

22 MR. SELKOWITZ: 22064 be marked 34 I.

23 (The document referred to was
24 marked TMIA Exhibit No. 34 I
25 for identification.)

1 MR. SELKOWITZ: 21982 be 34 J.

2 (The document referred to was
3 marked TMIA Exhibit No. 34 J
4 for identification.)

5 MR. SELKOWITZ: And the final one, C-0689, be
6 marked 34 K.

7 (The document referred to was
8 marked TMIA Exhibit No. 34 K
9 for identification.)

10 MR. SELKOWITZ: And I ask, sir, that they be moved
11 and accepted into evidence on the following basis.

12 These, again, refer to a redundant set of filters
13 that were to have been used one at a time, and if one became
14 filled, so to speak, and you switched to the others so you
15 could change the first.

16 As you go through this series you'll see that each
17 of them, which was first being identified on May 22 of 1977
18 and proceeding up through 34 K, which was instituted on
19 March 12 of 1979 and completed on June 22, '79 -- a space of
20 more than two years since the first recognition of the
21 change on the first work request indicates, of course, that
22 they deferred maintenance. The safety-related aspect is
23 that during the normal operation of the plant these filters
24 are those that filter the air to the -- I believe the main
25 control room and its related spaces.

1 Therefore, it has that amount of
2 safety-relatedness in that they should have had one of these
3 filters available and did not.

4 Secondly, as you go through them you will see a
5 faulty record maintenance and procedure itself in that
6 occasionally it is identified as a QC component,
7 occasionally it is not identified -- it is identified as not
8 a QC component.

9 On those bases, we ask that they be accepted into
10 evidence.

11 I might add, on the ticket on which they were
12 finally completed they were indeed identified as a QC
13 component.

14 CHAIRMAN SMITH: Mr. Blake?

15 MR. BLAKE: Mr. Smith, Mr. Colitz's argument is to
16 the same pages here. I think it is mischaracterization of
17 both these documents and Mr. Colitz's testimony for Mr.
18 Selkowitz to observe that these filters were out of
19 commission for this period of time. There is no testimony
20 to support that. That is not what Mr. Colitz has said.

21 Nor do these indicate so on their face. The fact
22 that these filters need to be replaced. Even if there is a
23 continuous chain, and I don't know that for sure. I do not
24 suggest that these filters were not still operating even at
25 an increased differential pressure. So say that they were

1 out or that these chains weren't available, that they were
2 going direct. That is just plain not an accurate
3 representation of the record that we have on them to date.

4 And the record is that these filters are not
5 regarded by Mr. Colitz as important, having nuclear
6 significance, and each of the documents reflects that on its
7 face.

8 MR. SELKOWITZ: If I could direct you to page 3184
9 of the transcript I think we have an indication. I just
10 point this out to the Board. This indicates what systems
11 are ventilated through these filters, as I read it. If I
12 said that they were out of commission, that is perhaps a
13 characterization of my own. I think the evidence supports
14 that they are in need of being changed and were not.

15 Beyond that, of course, we have certain delta ps
16 represented in the body of the various work orders, and
17 different measured levels, all of which seemed to indicate
18 to the people at the time that they needed to be changed.
19 Therefore, they were not operating as intended.

20 DR. LITTLE: Mr. Blake, I have a question that's
21 arisen in my mind several times today, and this is good time
22 to raise it.

23 It appears that people are asking for something to
24 be done -- sometimes week after week and month after month.
25 And it just goes on and on and on and nothing happens. So

1 the fact that you have all these requests originated by
2 different people month after month indicates that a whole
3 bunch of people consider this a problem of some sort and I
4 just wonder why it goes on for such a long time before any
5 action was taken apparently. That is what this series of
6 work requests seems to indicate. I don't know who can
7 answer this question.

8 MR. BLAKE: I cannot, Dr. Little. For one thing I
9 don't know whether this is a correct association of these
10 various work requests. It sure appears like that -- that
11 there is a connection. But I don't know the answer to your
12 question.

13 CHAIRMAN SMITH: Well, these are utility
14 requests. Maybe Mr. Eisenhower can explain. Mr.
15 Eisenhower, could you answer Dr. Little's question? We'll
16 let you look at these work requests and I wonder if you
17 could explain just how it happens that regardless of the
18 safety importance how it happens that for so long the same
19 request is made over and over again and it just seems to
20 take a computer to get it done.

21 You have your's organized. Why don't you let Mr.
22 Eisenhower see those.

23 MR. BLAKE: He has a set.

24 MR. EISENHOWER: Looking at all those work request
25 numbers they deal primarily with two systems. As I told

1you, I first reported to TMI in September of '77. If you
2examine those dates you'll find that those filters, both
3sets, by the dates on those work requests indicate they were
4changed in either October or November of '77, because there
5were no work requests written on that particular item -- on
6both of those sets -- until the following spring. And it is
7my belief that the foreman who performed that filter change
8did not submit the completed work request.

9 And as you follow those dates again, they are
10again completed in '79. Both of those sets of filters are
11good for approximately a year.

12 CHAIRMAN SMITH: Would it be your view, then, that
13if that was not the case -- if the foreman couldn't get them
14changed -- the foreman requesting the change is not likely
15to complain about the work not being certified as complete,
16but do you think something would have happened if they
17hadn't have been changed? It would have gone out of the
18normal channel of paperwork?

19 MR. EISENHOWER: We probably would have continued
20to get work requests on a monthly basis. The other thing
21would have been a possible mechanical failure of the fans
22through motor overloads.

23 DR. LITTLE: Thank you very much. Now that you've
24indicated that I note that the work request number 21534,
25which is indicated as being cancelled, nevertheless, on the

1second page of that there is a notation under 13 that the
2filters were replaced and it was signed -- no, it's not
3signed off.

4 MR. BLAKE: No, that would be --

5 DR. LITTLE: Is that not what that means?

6 MR. BLAKE: That is the test to be used ultimately.

7 CHAIRMAN SMITH: That is that unusual language
8that they used.

9 DR. LITTLE: I withdraw that, then.

10 So there is no way of knowing that it was in fact
11accomplished?

12 MR. EISENHOWER: I could not verify them in any
13other manner other than what I stated.

14 DR. LITTLE: Thank you.

15 CHAIRMAN SMITH: The language on 13 is they state
16the condition which should prevail after the requested work
17is completed.

18 (Pause.)

19 DR. LITTLE: There is one other slight problem
20that we have which, on the computer printout sheet, C-0689
21-- that work request -- and that is on 3-B that was
22initially checked off as having an effect on nuclear
23safety. Then that was crossed out and initialed by what
24appears to be KCD and checked in "no".

25 CHAIRMAN SMITH: Does 34 A through K differ in

1 concept from 33 A through M? It is a different problem?

2 MR. DORNSIFE: It differs for your reason for
3 accepting it, because some of those were marked nuclear
4 safety. None of these are marked nuclear safety.

5 CHAIRMAN SMITH: Except the one that was --

6 MR. DORNSIFE: But that was crossed off. Some of
7 them are QC, though others are now.

8 CHAIRMAN SMITH: I see. All right.

9 MR. DORNSIFE: But they are different in that
10 respect.

11 CHAIRMAN SMITH: Has everybody argued this? I'm
12 having a little bit of trouble.

13 MR. SWANSON: The staff has not stated its
14 position. We do object, for the same reasons argued before
15 -- the inconsistency on QC, again, is irrelevant -- and we
16 are talking about matters outside the jurisdiction of the
17 NRC.

18 CHAIRMAN SMITH: The Board is not going to accept
19 the exhibit and we're hard put, really, to explain why. But
20 there has to be a couple of points somewhat subjective and
21 somewhat arbitrary. We think it just gets too remote from
22 nuclear safety.

23 As the Commonwealth pointed out the last time, we
24 felt that we could not overlook the fact that the utility
25 itself had identified the matter as nuclear safety, but in

1 this instance they haven't and the Board just feels that
2 this is a place where we can draw the line and not accept it.

3

4

(The documents referred to,
5 previously marked for identi-
6 fication as TMIA Exhibit No.
7 34 A through K were received
8 in evidence.)

5

6

7

8

9 MR. ROBERT ADLER: Mr. Chairman, I probably should
10 have said this before, but my only comment in that regard is
11 that if the question on QC is somehow erroneously checked
12 off no, then according to this form you never get to the
13 question of nuclear safety. So we would see that as a
14 problem.

15

16 MR. SELKOWITZ: We have had testimony by which Mr.
17 Adler, I think, draws that conclusion as well as the form
18 from several witnesses yesterday, which, if you don't say
19 yes to QC you don't answer the nuclear safety question.
20 And, therefore, if you are wrong on the QC you stand the
21 possibility of being wrong on the next one.

21

22 CHAIRMAN SMITH: We had not discussed that point,
23 and some are marked QC and some aren't.

23

24 MR. SELKOWITZ: The one by which the work was done
25 is marked QC.

25

CHAIRMAN SMITH: But how do we know that has

1embodied any more thought than not?

2 MR. SELKOWITZ: I understand that. I agree with
3Mr. Adler. That is the problem that these things raise. If
4they don't do them consistently we do not know what the
5requirement is.

6 CHAIRMAN SMITH: My view is that, having had it
7pointed out, we ought to at least receive it into evidence
8for that purpose. Traditionally, I don't really like to
9receive evidence in for very limited purposes. You see them
10come back to haunt you for -- cited for things you never
11intended.

12 But I have high hopes that that won't happen in
13the case, because the entire purpose of this chain of events
14is pretty discrete.

15 MR. SELKOWITZ: We will do everything humanly
16possible to make sure that we don't write any proposals or
17put anything in the brief that sticks strictly to the
18rulings of the Board.

19 MR. SWANSON: Mr. Chairman?

20 CHAIRMAN SMITH: Mr. Swanson.

21 MR. SWANSON: I am afraid that we are confusing
22somewhat the rules of evidence. Before a document can be
23admitted there is not a presumption that it is relevant. A
24certain basis has to be shown. As to this last batch of
25documents I believe the only one that has a signature which

1 is related to the checkmark for nuclear safety is the last
2 one, and that one does, in fact, have the checkmark no.

3 The only other evidence we have on whether it is
4 related to nuclear safety is Mr. Colitz's testimony, which
5 is consistent. I don't see where there's any basis for
6 showing that it is related.

7 CHAIRMAN SMITH: How do you address that point
8 about you never get to nuclear safety unless you have
9 correctly checked the quality control block?

10 MR. SWANSON: Part of the problem is we don't have
11 a signature for any of these documents where that was
12 checked no. I'm not sure what evidence a document is where,
13 you know, that checkmark is not attested to.

14 CHAIRMAN SMITH: We would not, of course, accept
15 this exhibit as direct, reliable, probative evidence that
16 the filters were or were not changed. And I quite agree
17 with you. I would hate to have my fortunes judged on the
18 validity of this document as to whatever happened --
19 happened the way it's been argued.

20 The one impression we are getting from this whole
21 series is that on review you can't really tell, and one of
22 the requirements of Appendix B is that quality control --
23 quality assurance -- records be maintained so that they can
24 be reviewed. And this is what is coming to the Board to
25 stand out as being a problem.

1 We see this. We see no safety significance in
2 this series of exhibits, but we do see a quality
3 assurance-quality control record problem.

4 MR. SWANSON: Mr. Chairman, just one other
5 observation. I note that, regardless of what it says on the
6 form, when the prior question on quality control is checked
7 no, they went on and checked no for nuclear safety anyway.
8 Just an observation. Regardless of the instructions on the
9 form. I think whatever presumption might be -- that the
10 Commonwealth might be trying to draw from the checking of no
11 on quality control just does not adhere in this set of
12 exhibits.

13 They went ahead and checked no on nuclear safety.

14 CHAIRMAN SMITH: Well, these particular people
15 did, I guess.

16 We're going to get that GP-1008 aren't we?

17 MR. BLAKE: Yes, sir. I think there is a copy
18 coming from the Island, or one that is complete. It may be
19 here by now. As soon as I get back I'll check.

20 CHAIRMAN SMITH: It is possible that when we are
21 approaching a series of things like this, when we had a
22 prankster among us who put these very same work requests in
23 three days from now, we may come up with another ruling.
24 But sooner or later you've got to rule and you've got to go
25 on with the case. And so we ruled and we're going to go on.

1 There are no standards that have been presented to
2us that we can reliably look to to see what the standard is
3to receive this into evidence. So this is our ruling and it
4could very well be wrong. And we are not going to defend it
5any more. And we're going to go home pretty soon.

6 MR. SELKOWITZ: I have no other questions for this
7phase of today, or this witness.

8 CHAIRMAN SMITH: Okay. You are excused, Mr.
9Eisenhower, unless there are any questions for Mr.
10Eisenhower.

11 MR. SWANSON: Could I just clear up the last
12ruling of the Board is that they were received?

13 CHAIRMAN SMITH: Yes. We are receiving them.

14 Is there any other business, then, this evening
15before we adjourn?

16 No? All right. We will meet tomorrow at 9 a.m.

17 (Thereupon, at 5:32 p.m., the hearing in the
18above-entitled matter was recessed, to reconvene at 9:00
19a.m. on Friday, October 24, 1980.)

20

21

22

23

24

25

POOR ORIGINAL

This is to certify that the attached proceedings before the
NUCLEAR REGULATORY COMMISSION

in the matter of: METROPOLITAN EDISON COMPANY(Three Mile Island Unit 1)

- Date of Proceeding: October 23, 1980

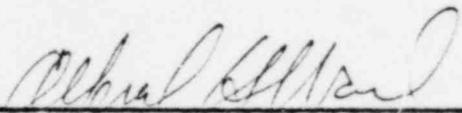
Docket Number: 50-289

Place of Proceeding: Harrisburg, Pa.

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

Alfred H. Ward

Official Reporter (Typed)



Official Reporter (Signature)