PRESIDENT'S COMMISION ON THE ACCIDENT AT THREE MILE ISLAND

DEPOSITION of BURNS & ROE, INC. by

WARREN RICHARDSON COBEAN, held at Burns & Roe, Inc.,
633 Industrial Road, Paramus, New Jersey, on the
6th day of August 1979, commencing at 2:00 p.m.,
before Kathleen Russell, a Notary Public of the
State of New York.

## BENJAMIN REPORTING SERVICE

FIVE BEEKMAN STREET
NEW YORK, NEW YORK 10038

[212] 374-1138

8001180 640 T

1	2
2	APPEARANCES:
3	BURNS & ROE, INC.:
4	STEIN, MITCHELL & MEZINES, ESQS.,
5	Atrorneys for Burns & Roe, Inc. 1800 M Street, N.W.
6	Washington, D.C. 20036
7	BY: GLENN A. MITCHELL, ESQ. of Counsel
8	PRESIDENT'S COMMISSION ON THREE MILE ISLAND:
9	WINTHROP ROCKWELL, ESQ.
10	Associate Chief Counsel
11	MICHAEL R. HOLLIS, ESQ. Associate Chief Counsel
12	000
13	WARREN RICHARDSON COBEAN,
14	having been first duly sworn by Mr. Rockwell,
15	was examined and testified as follows:
16	DIRECT EXAMINATION
17	BY MR. ROCKWELL:
18	Q Would you state your full name?
19	A Warran Richardson Cobean, Jr.
20	Q Your current employer?

- Burns & Roe, Incorporated.
- Q Your current position with Burns & Roe?
- 23 A Vice president, Project Operations Division.
- 24 Q Your current business address?
- 25 550 Winters Avenue, Paramus, New Jersey.

BENJAMIN REPORTING SERVICE

4/5

- 2 into the operator training aspect of this business,
- 3 would that come to your attention as the vice-president
- of the company at this point?
- 5 A If this regards a company-wide policy, probably
- 6 yes. As regards a specific client, not unless he was
- 7 my client.

- 8 Q We will confirm for the record, Mr. Cobean,
- 9 that you will be available to explain plant modifications
- 10 at TMI 2 in lieu of covering them in detail today. If
- Il you recall, earlier this week during the first part
- 12 of your deposition, you said that you would be available
- 13 to do that. We simply at this time would like to con-
- 14 firm that for the record.
- MR. MITCHELL: For the record, we want to
- 16 cooperate in any way that we can to provide
- 17 information, but we want to avoid duplication
- 18 and repetition, and we hope that your requests
- for these witnesses would bear that in mind.
- 20 (The below described documents were marked
- 21 as Cobean Deposition Exhibits 109 and 110 for
- 22 identification, this date.)
- 23 Q Referring you to what has been marked as
- 24 Cobean Deposition Exhibit 109, do I correctly charac-
- 25 terize it as a February 24, 1978 letter from Mr. Barton

- 2 of GPU to Mr. Cady and the fact that you received a
- 3 copy of this letter?
- 4 A Yes.
- 5 Q Could you take just a second to look that
- 6 over?
- 7 (Discussion held off the record.)
- 8 Q Why is this limitation here in the first
- 9 paragraph of the letter, beginning with the first
- 10 sentence, it reads: "This is to confirm my request
- 11 made at the February Project Managers Meeting that
- 12 Burns & Roe concentrate their effort on meeting only
- 13 those work scope items that are essential to the
- 14 completion of design of TMI 2," and it goes on. I
- 15 want to know what's going on here.
- 16 A In essence, what Barton is trying to do is
- 17 to limit the amount of work under the umbrella of
- 18 the conservation contract, which is our work Order
- 19 No. 2555 and 3021, and not pay for some of the tasks
- 20 that Burns & Roe had been directed to proceed with
- 21 by Met Ed; in other words, to try to get Met Ed to
- 22 pay for those out of some other mechanism. That's
- 23 what I think this thing was the start of.
- 24 Subsequent to this memorandum, or maybe almost
- simultaneously, we negotiated a task-type contract

4.7

- 2 with Met Ed to do those kinds of things.
- 3 Q In other words, there was a concern here
- 4 merely to shift the financial responsibility from the
- 5 Service Corporation or GPU to one of its clients,
- 6 Met Ed?

- 7 A That is correct.
- 8 Q Who did you deal with as the primary
- 9 client on this job?
- 10 A GPU.
- 11 Q As a result of this request of Mr. Barton,
- 12 would it be customary that you would attempt to respond
- 13 to his request as it related to specific areas of
- 14 Burns & Roe's work, where Met Ed may have had a finan-
- 15 cial responsibility? Would you have customarily
- 16 shifted those billings of work in those ageas to Met Ed?
- MR. MITCHELL: Mr. Cobean personally?
- 18 Q The company.
- 19 A If we had a mechanism to bill Met Ed, we would
- 20 have, but we did not have a contract; we didn't have
- 21 the mechanism to bill.
- 22 Q Do you recall how this issue was resolved?
- 23 A Not specifically, but I know that sometime
- 24 later, on this issue, we had Work Order 2555, which
- 25 Work Order 2555 was the original construction contract.

=/8

2 Work Order 3555 was a work order with GPU for tasks

3 that were required for first refueling. Those tasks

4 were generally modifications to the plant required as

5 commitments by GPU to NRC to make that modification to

6 the system by the first refueling.

7 Subsequent and in addition to those two work

8 orders, was another work order with Met Ed for those

9 "plant betterment items" that were requested by the

10 plant operator.

Il Now, the elements that fell into the Work Order

12 3555 were orphans for a while in a financial sense,

13 in that GPU wanted Met Ed to pay for them, and Met

14 Ed wanted GPU to pay for them, and there was some sort

15 of an argument in that regard with them. But that did

16 not in any way influence our progress on the work. It

17 did influence how we billed for it, however, and we

18 kept asking how, where do we bill this, and that's

19 how we invented Wc % Order 3555 which we billed under

20 the same terms and conditions as Work Order 2555.

21 Q Mr. Cobean, during this period, and we

22 are talking about the period of 1978, referring back

23 to your previous answer, when you were talking about

24 GPU wanted Met Ed to pay for it, and Met Ed wanted

25 GPU to pay for it, the work under the scope of work

- needs. It may have been associated with financial
- 3 considerations, as well.
- 4 For example, it could very easily have been
- a result of a rate change of erection imposed by
- a financial need.
- 7 Q But this cutback, as it related to small
- 8 bore piping design, occurred during the period
- g which we are talking about, in these Board minutes,
- 10 that is, 1975 to the 1976 period?
- 11 A I think so.
- MR. MITCHELL: I am going to ask the
- 13 reporter to mark these exhibits, right after the
- 14 exhibit number, for identification purposes so
- 15 as to distinguish them from the other marking
- 16 and designations of other exhibits to which
- 17 there were no objections.
- 18 (Discussion off the record.)
- 19 (The below described documents were
- 20 marked as Cobean Deposition Exhibits 115 to 113,
- 21 for identification, as of this date.)
- 22 Mr. Cobean, referring you now to what has
- 23 been marked as Cobean Deposition Exhibat 115 do I
- 24 correctly identify it as a letter from A. S. Dam,
- 25 project manager to Mr. Barton of GPU Services, which

- 2 January of 1979.
- 3 .A This one looks like the entire report,
- 4 whereas, the rest of them only have one page.
- 5 MR. HOLLIS: The record will reflect
- 6 that Exhibit 118 is apparently the entire
- 7 monthly progress report that was transmitted
- 8 by Mr. Dam and directed to JPU of which
- 9 Mr. Cobean received a copy.
- 10 2 I want to direct your attention to the
- ll beginning of each of these monthly progress reports,
- 12 Mr. Cobean. For example, looking at Exhibit 115
- 13 under a heading which says, "Monthly Progress Report,"
- 14 listed as number 1 it says, "The status of Burns &
- 15 Roe work supports the planned plant commercial
- 16 operation date of September 30, 1978."
- 17 Number 116 has the same statement, that is,
- 18 "A planned plant commercial operation date of
- 19 September 30, 1978."
- 20 Now, referring to Exhibit 117, under the
- 21 same heading, number 1 it says, "The status of
- 22 Burns & Roe's work supports the planned plant
- 23 commercial date of October 31, 1978."
- 24 Then referring to the final exhibit, which is
- 25 number 118 under the name "Basic Heading," it says,

- 2 "BaR completed task required to support the planned
- 3 plant commercial operation date of 12/30/78."
- 4 My question specifically is what caused the
- 5 changes in the planned plant commercial operation
- 6 date during this period?
- 7 A I don't recall, but it is probably something
- 8 to do with the prediction of how long it would take
- 9 to do certain construction activities.
- 10 Q Who sets the planned plant commercial
- 11 operation date?

- 12 A The client.
- 13 Q Therefore, any targeted date would be
- 14 set by GPU?
- 15 A That is correct.
- 16 Q What is the practice by which GPU
- 17 arrives at that decision? How did they come to that
- 18 decision? -
- 19 A Principally, by analysis of the construction
- 20 schedule.
- 21 Q What is Burns & Roe's input or impact
- 22 into that decision and that analysis by GPU as
- 23 to what date commercial operation is to commence?
- 24 A Our input is usually involved with quantities.
- 25 As an example, we estimate that there is over

- 2 four million feet of cable to install in the plant.
- 3 The constructor says it takes him Y number of
- 4 man-hours to put in a cable, to install it and they
- 5 come out with a date. If installing cable happens
- 6 to be on the critical path he will arrive at a
- 7 date when he will be finished with the work.
- 8 That is the way Burns & Roe gets involved in it.
- 9 C. Are you requested by the client, in
- 10 this case GPU, to evaluate the status of the plant
- 11 or project and in turn submit to GPU your comments
- 12 regarding any planned plant operation date?
- 13 A No.
- 14 Q Do you make any recommendations or
- 15 suggestions to GPU as to when you believe that
- 16 the plant will be ready for commercial operation?
- 17 A No.
- 18 Q Did you in this case?
- 19 A No.
- 20 Were you ever involved in any discussions
- 21 with any GPU personnel as it related to any of
- 22 these planned plant commercial operation dates that
- 23 were scheduled?
- 24 A Yes, that was discussed or the elements of
- 25 it was discussed at every project manager's meeting.

- 2 What would be the gist of those
- 3 discussions?
- 4 A Well, the gist of the discussions would be
- 5 the plan to complete the plant as a critical path
- 6 that goes through, for example, the production of
- 7 cable pull slips and the pulling of the cable and
- 8 the terminating of the cable and the energization
- 9 of each of the individual wires.
- 10 In that process we would need to provide facts
- Il to the constructor who was responsible to provide a
- 12 schedule, that you will complete this work on
- 13 that date and you would include the number of
- 14 pull slips that he could expect to get, the dates
- 15 by which he could get them, the number of termination
- 16 slips he would get and when he would get those.
- 17 Q What is the first date that you can
- 18 recall that was set by GPU to begin plant commercial
- 19 operation?
- 20 A I don't try to remember those dates. You know,
- 21 just referring to these things I would say the first
- 22 date was September 1978, but I know there were
- 23 previous dates.
- 24 Q You are aware that there were previous
- 25 dates?

- 2 A Yes, but I don't remember the dates.
- 3 Q You mentioned earlier that this
- 4 would normally be discussed at the project manager's
- 5 meeting?
- 6 h The elements of the issue, the issue is always
- . to get the plant built and get it build safely
- 3 and on time within budget. We would only talk
- 9 about those tight places, those within the critical
- 10 areas at the project manager's meeting.
- 11 Q During your time as project manager,
- 12 having the coordination responsibilities for the
- 13 project, what was your understanding of when
- 14 commercial operation was to begin at this plant?
- 15 A As I recall, when I first joined Three Mile
- 16 Island and got my feet on the ground as to what
- 1. we were targeted at, I think it was the summer or
- 13 the fall of 1978, sometime in that area. That
- 19 was our targeted date for commercial operation.
- That seems to support this September 1978 date.
- I may be wrong, but that's just my recollection.
- In the summer or full, I believe the year was 1973,
- 3 but I am not certain of that.
- 2 . To make sure that I completel under-
- 25 stand where you were in the picture at this time,

BENJAMIN REPORTING SERVICE

- 2 what was your position and responsibility, say
- 3 beginning September of 1978, as it related to this
- 4 project?
- 5 A September 1978?
- 6 Q Yes.
- 7 A I was division director.
- 8 Q Of which TMI 2 was your project?
- 9 A One of the projects.
- 10 Q As division director you had primary
- ll responsibility, from Burns & Roe's viewpoint,
- 12 for the coordination and direction of this project,
- 13 is that correct?
- 14 A No, my project manager did. In this case
- 15 it was Mr. Dam, but he had that responsibility to me.
- 16 Q Mr. Dam reported directly to you?
- 17 A That is correct.
- 18 Q And to no one else?
- 19 A That is correct.
- 20 Q What discussions, if any, took place
- 21 in September of 1978 with GPU in the context of
- 22 meeting the September 30, 1978 planned plant operation
- 23 date?
- 24 A I don't know. I really don't know the answer
- 25 to that, because it is apparent that if wasn't in

- 2 September. It was sometime between July and August.
- 3 The commercial operation date was shifted from
- 4 September the 30th to October the 31st.
- 5 Q What is your understanding of the
- 6 reasons specifically for that shift?
- 7 A I don't have an understanding. As I said
- 8 before, I think I would get -- that is the result
- 9 of a new estimate to complete construction work.
- 10 Q Ead Burns & Roe's work been completed
- 11 by September of 1978?

- 12 A No. You can tell the work for commercial
- 13 operation might have been completed. Probably was,
- 14 but there was more work to do that would not have
- 15 interfered with commercial operation.
- 16 Q Did you receive, during the fall of 1978,
- 17 any memoranda, telecoms, or were you involved in any
- 18 meetings or conversations wherein the client
- 19 expressed a concern about the change in the planned
- 20 operation date from September through October and
- 21 from October through November?
- 22 A Yes. I don't recall. I am certain that it was
- 23 discussed. Whether I was there at the discussion or
- 24 not I am not positive of that either.
- 25 Q Let me make sure I understand precisely

BENJAMIN REPORTING SERVICE

- 2 for the record. During this period of time when
- 3 the client had set a September 30, 1978 date,
- 4 then later changed that to October 31st, then ...
- 5 changed it to November or December 30, 1978,
- 6 you had no discussions, you cannot recall any
- 7 discussions or meetings you held with the client,
- 8 wherein the client expressed its concern about the
- 9 constant changing of these dates? Is that your
- 10 understanding?
- Il A I don't recall any specific discussions. I am
- 12 certain that the fact that the dates were changed
- 13 was discussed and discussed probably at project
- 14 manager's meetings. In all likelihood I was not
- 15 there at the project manager's meetings, but I am
- 16 not certain.
- 17 Q would Mr. Dam have been there as your
- 18 representative?
- 19 A Yes.
- 20 Q Did Mr. Dam report to you during that
- 21 period --
- 22 A Yes.
- 23 Q -- any of the client's concern about
- 24 the constant changing of these dates?
- 25 A I am sure if the client expressed a concern

- 2 about it to Burns & Roe or to Mr. Dam, I am
- g certain he did.

- 4 Q Are you saying that you are not aware
- 5 of any concerns that were voiced by the client
- 6 regarding the changing of the planned plant
- 7 commercial operation date in the fall of 1978?
- 8 A I did not say that. I said I did not recall
- any specific concern in the context of these
- 10 specific date changes. The client was always
- 11 concerned and always expressed a concern about
- 12 meeting a commercial operation date. That was
- 13 his principal goal in life, to make that commercial
- 14 operation date in some way with this project component.
- In this stage of the game, as I recall,
- 16 the design as reported in these reports was
- 17 essentially complete. We were just doing little
- 18 tasks, little punchlist items.
- 19 Q Are you saying that during this period
- 20 that, although the clicat may have expressed some
- 21 specific concerns, you are not aware of them at this
- 22 time?
- 23 A I do not recall them.
- 24 Q You do not recall Mr. Dam having
- 25 expressed to you any concerns related to him by the

2 client?

- 3 A Not as a specific event.
- 4 Q Were any of your superiors or did any
- 5 of your superiors here at Burns & Roe at anytime
- 6 communicate with you either in writing or at a
- 7 meeting or a telephone conversation any specific
- 8 concern expressed by GPU of the changing of the
- 9 planned date of commercial operation?
- 10 A No.
- 11 Q Did you ever discuss this changing
- 12 of the targeted date with any of your superiors?
- 13 A Yes.
- 14 Q What was the extent or the gist of
- 15 those discussions?
- 16 A Objective was to keep Ken Roe personally
- 17 informed of what was going on. So, I would tell
- 18 him, keep him informed as to any significant
- 19 changes in the project status as he last understood
- 20 them.
- 21 Q Was this objective, that is, keeping
- 22 Mr. Roe -- I take it Mr. Roe is the president?
- 23 A And Chairman of the Board.
- 24 Q. Was this objective of keeping Mr. Roe
- 25 informed of the fulfillment of this objective at

- 2 Mr. Roe's request?
- 3 A I don't know. That is an understanding that
- 4 we had about keeping him informed.
- 5 Q Did you discuss this procedure of keeping
- 6 him informed with Mr. Roe?
- 7 A Yes, as to how he best wanted to have it happen.
- 3 He told me to use my judgment in letting him know
- 9 what was going on.
- 10 Q When did these discussions with Mr. Roe
- 11 take place?
- 12 A On a non-scheduled basis, whenever I thought it
- 13 was important or whenever he thought it was important
- 14 to get together.
- 15 Q Can you think a moment and give me some
- 16 specific times in which these discussions took place?
- MR. MITCHELL: The time frame, you mean?
- 18 Q les.
- 19 A No, I cannot answer that. I don't know how
- 20 to answer that.
- 21 Q Did you have any of these discussions
- 22 with Mr. loe in the fall of 1978?
- 23 A I am sure I did, I don't remember the specifically.
- 25 indicate to you that GPU was worried or concerned about

- 2 getting on-line commercially sometime that would
- 3 be before the year ended in 1978?
- 4 A I am not sure whether he informed me of that
- 5 or I informed him of that. But I know that it
- 6 was important to GPU and I know that I informed
- 7 him that it was important to GPU for accounting
- 8 reasons, if for no other reason, to try to get the
- 9 plant co-line commercially before the end of 1978.
- 10 Q From what source or from where did
- 11 you derive, assuming you informed Mr. Roe, for example,
- 12 where did you derive your knowledge of GPU's
- 13 concern, as you stated for accounting purposes or
- 14 whatever purposes, of commencing operation before
- 15 the end of 1978?
- 16 A Well, I was in contact with various members of
- 17 GPU on essentially a constant basis, unstructured
- 18 and furthermore, my project managers kept me informed
- 19 of the results of meetings that they had had.
- 20 I read all the meetings' notes, all the
- 21 telecoms, of all the project manager's meetings
- 22 that I did not attend. I kept myself appraised
- 23 of what was important and I had personal contacts
- 24 within GPU that I talked to on a non-structured
- 25 but relatively consistent repetitive basis. I had

157-A

- 2 Referring to this unstructured, and
- you have characterized it, or as needed discussions
- 4 with your contacts in GPU, we are referring to this
- 5 issue of GPU's concern to commence operation by the
- 6 end of 1978, is that correct?
- 7 A Yes. They made it very clear to all project
- g participants that this objective should be made,
- q if at all possible.
- 10 Q What did you understand that request
- 11 by GPU to mean, if at all possible?
- 12 A We ought to not spare any effort in trying to
- 13 make sure that we get it. Find out the problems of
- 14 making those dates now so that we had an opportunity
- 15 to try and solve the problem before it became a
- 16 prohibition to make the commercial operation date.
- 17 Q Can you recall whether there were any
- 18 meetings with the vice president of Generation of
- 19 GPU that you referred to, wherein, this issue was
- 20 discussed, that is, the meeting that you attended or
- 21 Mr. Dam attended?
- 22 A With the vice president of Generation?
- 23 Q Yes.
- 24 A I don't remember any specific meeting, no.
- 25 Q Was the vice president of Generation at

- 2 GPU the person who was primarily responsible for
- 3 the decision on this date, for the commercial
- 4 operation date?
- 5 A I would guess --
- 6 MR. MITCHELL: Don't guess.
- 7 A I would think that his project manager would
- 8 be the guy to put it together.
- 9 MR. MITCHELL: Mr. Cobean, answer these
- 10 questions as to what you know. Not guess, think,
- 11 suppositions and speculations.
- 12 Mr. Hollis is not interested in that. I
- 13 know the Commission is not.
- 14 Q Who was the vice president of Generation?
- 15 A Mr. Arnold.
- 16 Q Why would you have been contacting
- 17 Mr. Arnold instead of someone else?
- 18 A Because he is my contact.
- 19 Q Was he your counterpart, so to speak, at
- 20 GPU?
- 21 A Yes.
- 22 og So, as a result of the contacts and
- 23 the conversations you had with GPU personnel,
- 24 Mr. Argold among others, did you have the distinct
- 25 impression or understanding that GPU wanted to

24

25

2	start	ор	era	ti	ng	th	is	p	1	an	=	ď	e f	0:	re	•	h	e	e	n	d	0	=	1	9	78	?	
3	A	Ι£	at	a	11	po	ss	ib	:	e,	3	re.	s.															
4		2		Y	ou	me	nt	io	n	ed	e	a	rl	1	er	1	n	4	3	r	es	p	or	15	e	_ t	0	
5	my que	st.	ion	al	000	ıt	so	me		o f		h	e	re	e a	sc	n	s	t	h	a t		ma	ıy		na	ve	
6	been r	el	ate	d	to	yo	u	in		th	e	C	ou	rs	s e	0	=		:h	o:	se	E.,	di	s	CI	ıs	sio	ns
7	as to	why	y G	PU	wa	nt	ed	t	0	c	on	m	en	C	9	o p	e	ra	1=	i	חכ		be		0	re	th	e
8	end of	τ)	ne.	ye	ar,	у	ou		ie:	n t	io	n	ed		h	e	12	ac	: t		fo	-						
9	accoun	: ÷:	ng	pu:	rpo	se	5	at		a	mi	n	im	ur	1	GF	Ü	0	va.	n	te	d		.0				
10	commen	ce	op	er	ati	on	,	is		th	at		00	r	e	ct	.?											
11	A	I (	aid	n'	: 5	ay	t	ha				I	s	ai	d	a		00	u			л	c	n	u:		ose	s
12	or for																											
13		J.																										
						но								УC	u	-	-	nc	1	=:	n a	t	a	n	SV	e:	-	
14		and	i r	ead	1 1	t	sď	ck		to	I	le	?															
15				Ī	wa	n t	t	0	ma	ak	e	S	ur	9	w	h a	t	b	1=		C	0	be	a	n	i	s	
16		say	/in	g i	ner	e.																						
17				( ?	The	r	ec	or	2	w	as		re	ad	1	ъy		th	e		. 0	D,	or	:=	e :		)	
18				м	R.	но	LL	IS	:		Le	t	t	<b>∴</b> ∈	2	re	c	0:	d		re	:	1e		=	=:	nat	
19		we	to	ok	ti	ne		0	g	0	ъď	c	k	a:	ıd	4	1	nd		e:	xa	C	t1	. 7				
20		wha	12	Mr		do:	ea	n	ha	ad	s	a	id	,	a	nd		ir		<b>t</b> :	a							
21		cor	ite	xt	0 5	d	is	cu	S	si	ng		wh	a:	e	ve	-		e	as	50	n	s	-	h	9 7	2	
22		we																										
23																												
-0		OF	an	À ¢	יבח	EI	5	ou	= :	e e	,	=:	na	=	.X	Ξ.		C	0	e	חב		St	: 3	26	₽d		

for accounting reasons, if for no other reason."

and I quote: "They were important to GPU

- 2 Going back to my earlier question,
- 3 Mr. Cobean, what did you mean earlier when you
- 4 said that the commencing of commercial operation
- 5 before the end of 1978 was important to GPU for
- 6 accounting reasons, if for no other reason?
- 7 A That's very simple and very apparent to anyone
- 8 that knows the Reading structure and electric public
- 9 Utilities.
- 10 Q Could you explain that?
- 11 A The costs incurred on the construction of
- 12 power plants enters the rate base only when the
- 13 plant has commenced commercial operations and the
- 14 rate base then allows the public utility to start
- 15 obtaining money from the customer, from their
- 16 customers for the investment made in building that
- 17 power plant.
- 18 Until that time, the funds generated to
- 19 provide the design and the construction efforts
- 20 almost all come from internal working capital
- 21 irrespective of this investment or from money
- 22 that is borrowed.
- 23 One thing that is important to understand
- 24 is that at no time during the period that I was
  - 25 associated with Three Mile Island did GPU take

- 2 what I consider even in retrospect to be unsafe or
- 3 unwise steps in the process of getting the project
- 4 completed so that the plant could be declared
- 5 commercial in order to take advantage of the
- 6 accounting system as I just described toyou.
- 7 They had a certain number of construction activities
- 8 that they had to complete.
- 9 They had all of the Testing Program to
- 10 satisfactorily perform, plus they had to comply
- 11 with all of the licensing activites demanded by
- 12 the NRC. They did that and they did it religiously
- 13 and they did it well.
- 14 The construction, the design, the construction
- 15 and the testing of the power plant at no time,
- 16 did I think, got shortchanged.
- 17 Q During this period, the fall of 1978
- 18 or before then, did you have conversations with
- 19 Mr. Arnold or any other GPU personnel in reference
- 20 to this accounting concern, as you have described it?
- 21 A Nothing directly about that, just about
- 22 getting the plant completed.
- 23 Q During the fall of 1978, in your position
- 24 as vic. president with TMI 2 being one of the projects
- 25 under youre responsibility, did you make any trips

- 2 down to TMI?
- 3 A During when?
- 4 MR. MITCHELL: The fall of 1978 when
- 5 you were vice president.
- 6 A I don't recall, probably.
- 7 Q During this period, that is, 1978,
- 8 what was the policy regarding overtime work on this
- 9 project that you were aware of?
- 10 A Construction overtime?
- 11 Q Construction or whatever. Let's just take
- 12 construction overtime.
- 13 A I don't recall. It varied from time to time.
- 14 Sometimes there was limited overtime on specific
- 15 authorized activites by the client and those obviously
- 16 were the ones that were on the critical path.
- 17 And that was true for either Engineering or
- 13 Construction.
- 19 Q Taking Engineering as the focus,
- 20 what was the policy in 1978 from the engineering
- 21 viewpoint or at Burns & Roe's point of view as
- 22 it related to this project?
- 23 A To minimize overtime.
- 24 C. Was that policy in effect during the
- 25 fall of 1978?

- 2 A I believe so, but I think that has been our
- 3 policy right along. We have not had a policy since
- 4 I have been associated with Three Mile Island to
- 5 try to maximize overtime.
- 6 Q Who made that policy decision? Is that
- 7 a Burns & Roe decision?
- 8 A Yes, that is a general policy decision on the
- 9 part of Burns & Roe right now.
- 10 Q Has the client, GPU ever expressed,
- Il during the 1978 period, any concern about overtime
- 12 to you?
- 13 A I don't recall any such discussion, but it
- 14 could have happened.
- 15 Q Were you aware of any discussions that
- 16 GPU may have had or comments GPU made in reference
- 17 to overtime by the constructors or others involved
- 18 in the project, besides Burns & Roe?
- 19 A No.
- 20 Q During the fall of 1978 and I am talking
- 21 about September to December, from your vantage
- 22 point as the vice president having TMI 2 as one
- 23 of your projects, was there a lot of overtime work
- 24 performed by Burns & Roe personnel?
- 25 A I don't remember, but I don't think so. There

- 2 may have been specific overtime, say in stress
- 3 in order to get some stress report completed,
- 4 but I don't recall anything as a generalized
- 5 thing. I am positive that there was some generally
- 6 within the project.
- 7 Q What about as it related to the construction
- 8 of the plant?
- 9 A The overtime by the constructor?
- 10 Q Right.
- 11 A I am not aware, I wouldn't be.
- 12 Q You never had any discussions or heard
- 13 of any discussions regarding overtime during that
- 14 period on the part of the constructors of the project?
- 15 A I don't recall.
- 16 (The below described document was marked
- 17 Cobean Deposition Exhibit 119 for identification,
- 13 as of this date.)

---

- 19 Q Referring to what has been marked as
- 20 Cobean Deposition Exhibit 110, do I correctly
- 21 characterize it as a memo from Mr. Herbein to
- 22 Mr. Klingaman, among others, regarding the TMI 2
- 23 Burns & Roe proposed Plant Description Manual of
- 24 which you received a copy of, is that correct?
- 25 A Yes.