

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of:

CINCINNATI GAS & ELECTRIC COMPANY

(William H. Zimmer Plant)

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: DOCKET NO. 50-358-OL

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U.S. Post Office and  
Courthouse, Room 822  
5th & Walnut Streets,  
Cincinnati, Ohio

March 3, 1981

The above-entitled procedure came on for hearing at  
9:30 a. m., pursuant to notice.

BEFORE:

Charles Bechhoefer, Chairman  
Atomic Safety & Licensing Board

Glenn O. Bright, Member

Frank F. Hooper, Member

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4 APPEARANCES:

5 On behalf of the NRC Staff:

6 MYRON KARMAN  
7 MICHAEL KAROWITZ8 On behalf of the Applicant, Cincinnati Gas and  
9 Electric Company:10 TROY B. CONNER  
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12 WILLIAM J. MORAN  
13 DANIEL W. KEMP  
14 JEROME A. VENNEMAN

15 On behalf of the Intervenors:

16 ANDREW DENNISON  
17 WILLIAM PETER HEILE  
18 DONALD REDER  
19 JAMES H. FELDMAN, JR.  
20 THOMAS CARPENTER  
21 DAVID FANKHAUSER  
22 LAWRENCE FISSE

## 23 SWORN WITNESSES:

24 PAUL R. ANDERSON  
25 JOHN EMERY  
JACK RANDOLPH  
WILLIAM H. ZIMMER, JR.  
KRISHAN CHITKARA  
MR. BORGMANN



C O N T E N T S

CROSS ON

WITNESSES:DIRECT CROSS REDIRECT RECROSS BOARD BOARD

Paul R. Anderson  
 John Emery  
 Jack Randloph  
 William H. Zimmer, Jr., and  
 Mr. Borgman

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P R O C E E D I N G S

JUDGE BECHHOEFER: Good morning, ladies and gentlemen. We are on the record now.

As a preliminary matter, I would like to note that there is an error in the numbering in the transcript from yesterday. There are three hundred numbers missing. It goes from page 3600 to page 4000. Anything in between doesn't exist.

I don't think we will have to have it redone. I was going to ask for other preliminary matters.

MR. CONNER: We also were informed by the reporter that they stopped -- strike that.

We were informed that they quit reproducing what they had taken after 5:00. So, contrary to what this indicates, that this is a complete set for yesterday, it only goes to about 5:00 p.m. and the balance will have to be furnished later.

JUDGE BECHHOEFER: I understand that. That's part of the Commission's contract, and we can't do much about that.

Are there any other preliminary matters?

Did Dr. Fankhauser or Mr. Woliver request the Applicant outline the areas he wants to continue with in testimony?

MR. WETTERHAHN: Yes, Mr. Woliver called

1 me about 10:30 last night and outlined rather specific  
2 and limited subjects for cross examination today.

3 JUDGE BECHHOEFER: Could either you or Dr.  
4 Fankhauser tell us what they are?

5 MR. WETTERHAHN: Certainly, certainly.

6 The first item was a discussion of AFUC  
7 by the three companies.

8 The second related to a question on bond  
9 rating for the companies other than Columbus and  
10 Southern Ohio Electric. I believe Columbus and  
11 Southern answered that question yesterday.

12 The third item involved the earnings  
13 to get interest ratios, and those are Mr. Woliver's  
14 words.

15 The fourth item was other plants -- that is  
16 fossil plants -- that have been delayed by these  
17 Applicants for the 1980's.

18 The fifth area as I have taken it down re-  
19 lates to nuclear plants that have been delayed once  
20 construction work has been started on them.

21 Those are the five areas indicated by Mr.  
22 Woliver last night.

23 JUDGE BECHHOEFER: Mr. Woliver, are you  
24 prepared to proceed?

25 MR. CONNER: If the Board please, we object

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1 for the reasons stated yesterday -- having two inter-  
2 rogators for a single intervenor.

3 We would also note that the areas indicated  
4 by Mr. Woliver to Mr. Wetterhahn were matters that  
5 could have easily been raised yesterday.

6 MR. FANKHAUSER: Does that warrant a response?

7 JUDGE BECHHOEFER: The objection is noted.

8 Dr. Fankhauser, referring to any specific  
9 portions of this six inches, please let us know --  
10 give us enough time to find it.

11 MR. FANKHAUSER: Some of my questions at the  
12 beginning may be answerable by reference to this tome.  
13 I think it may be understandable that I haven't read  
14 it page for page, and perhaps the gentlemen can refer  
15 me to some particular page where I can find it.

16 I would like first to refer to a line of  
17 questioning that was begun yesterday, apparently  
18 with Columbus and Southern Ohio, and I am curious  
19 about the transit bond rating in the utility industry  
20 as a whole, and particularly in the three companies  
21 that constitute the Applicant, and I would like to  
22 first direct my question to the representative of  
23 Dayton Power and Light, and I believe that is Mr.  
24 Anderson, is that correct?

25 MR. ANDERSON: Yes.

1 MR. FANKHAUSER: Could you give us an overview  
2 of the bond ratings -- Standard and Poor's bond  
3 ratings of Dayton Power and Light over the last five  
4 years?

5 Do you have that information?

6 MR. CONNER: We would object to this. It  
7 does not relate to the specific issue -- financial  
8 issues to operate the facility. The same objection  
9 we made yesterday.

10 JUDGE BECHHOEFER: We will overrule that.

11 MR. ANDERSON: Our bond rating from Standard  
12 and Poor was "A" from 1975 through mid-1980, and at  
13 that time we were rated triple B plus, which is our  
14 rating from Standard and Poor today.

15 MR. FANKHAUSER: And during that same period  
16 has the utility industry as a whole undergone this  
17 same kind of decline in rating, or is this a unique thing  
18 to Dayton?

19 MR. CONNER: Objection, that is irrelevant.

20 JUDGE BECHHOEFER: I think that's relevant.  
21 That can be answered.

22 MR. ANDERSON: In my opinion the bond ratings  
23 for the utility industry as a whole have declined over  
24 that same period.

25 MR. FANKHAUSER: Would you care to speculate



1 on the reasons for that decline?

2 MR. CONNER: If the Board please, now we do  
3 object to this. This is wandering in economics, and  
4 some of this was gone into yesterday. There is  
5 no reason to rehash and go into speculation -- re-  
6 quested speculation -- in the answer to talk about what  
7 economic conditions might be.

8 The plant has been basically built and paid  
9 for. We are talking only about operating costs, and  
10 I think it should be limited to that.

11 JUDGE BECHHOEFER: I think we will overrule  
12 the objection to the extent the witness knows --  
13 the industry as a whole --

14 MR. FANKHAUSER: Certainly I wouldn't ask  
15 him to give information he doesn't know.

16 MR. ANDERSON: Well, I think the question  
17 was for my opinion. In my opinion the reason for that  
18 is the impact of inflation on a very capital-intensive  
19 industry such as a public utility industry.

20 MR. FANKHAUSER: Do you foresee any alteration  
21 in this decline in bond rating for D. P. & L.?

22 MR. ANDERSON: Yes.

23 MR. FANKHAUSER: What reasons would you cite  
24 for that upturn?

25 MR. ANDERSON: Well, in our case the reasons

1 that were given for the down rating from "A" to "Triple  
2 B+" were primarily the size of our construction program  
3 and the amount of that program which needs to be raised  
4 in the capital markets.

5 We anticipate that our construction program  
6 in the next five years will decline substantially  
7 from the levels it is today. On that basis we will not  
8 have the need to raise large amounts of funds in the  
9 capital markets. As a result, once the plants go in  
10 service and become operational, and we will be provided  
11 rates to improve the amount of the cash that we  
12 generate internally, as a result this would be looked  
13 at favorably by the rating services and our ratings  
14 would improve.

15 MR. FANKHAUSER: In other words, the ratings  
16 felt that perhaps D. P. & L. had over-committed their  
17 resources to construction?

18 MR. ANDERSON: I didn't say that.

19 MR. FANKHAUSER: Is that a fair statement --  
20 is that a paraphrase of what you are saying?

21 MR. ANDERSON: No.

22 MR. FANKHAUSER: Perhaps they can explain  
23 a little more about the relationship between the amount  
24 of construction that has been committed to by D. P. & L.  
25 and how that relates to the decline in bond ratings.

1 MR. ANDERSON: Well, I thought I just did that.  
2 The rating services look at the size of the construction  
3 program in our case, and said that in view of its size  
4 and the amount of funds which we were generating inter-  
5 nally, that we could not be supported as a single "A"  
6 rating.

7 As a result of that, we were given a "Triple B+"  
8 rating, which is still a good rating, but simply a lower  
9 rate, and as I indicated that our construction program  
10 is forecasted to decline we will anticipate that  
11 rating improving.

12 I should also point out another rating service,  
13 Moody's, we are still rated single "A".

14 MR. FINKHAUSER: In the Moody rating has  
15 D. P. & L. undergone any changes in the last five years?

16 MR. ANDERSON: No.

17 JUDGE BECHHOEFER: Pardon me, "Triple B+" is  
18 Standard and Poor's?

19 MR. ANDERSON: Yes.

20 MR. FINKHAUSER: Perhaps for the information  
21 of the Board and the rest of the parties, you could  
22 just tell us roughly what those various stages of  
23 ratings are so we could --

24 MR. CONNER: Objection. Your Honor, this is  
25 a matter of public record, and certainly has nothing

1 to do with the issues. It is not a educational process  
2 which I find myself inevitably saying when Dr. Fankhauser  
3 is asking questions.

4 JUDGE BECHHOEFER: That one we will sustain.  
5 I think they are a matter of public record.

6 MR. FANKHAUSER: Mr. Anderson, it is your  
7 opinion that perhaps D. P. & L. May have committed somewhat  
8 more of its resources to construction than the power  
9 demands would have borne out in the past five or ten  
10 years?

11 MR. CONNER: Objection. Your Honor, this is  
12 another need for power question, not pertaining to  
13 the issue. It is also irrelevant to the cost of operating  
14 the plant.

15 MR. FANKHAUSER: If the Board please, I  
16 believe that we are looking to the financial qualifi-  
17 cations of these plants -- of these utilities -- to  
18 operate this plant, and I believe that the financial  
19 health is directly related to the questions that I  
20 am asking.

21 JUDGE BECHHOEFER: That objection we will  
22 overrule. You may answer.

23 MR. ANDERSON: No.

24 MR. FANKHAUSER: Finally, Mr. Anderson, how  
25 crucial do you feel the opening and the operation of



1 Zimmer will be in order to meet the demands of your  
2 constituents as it were --

3 MR. CONNER: Objection.

4 MR. FANKHAUSER: In the next ten years.

5 MR. CONNER: Objection.

6 JUDGE BECHHOEFER: I think that one we  
7 will sustain. That is a need for power question.

8 MR. FANKHAUSER: Let me rephrase the question  
9 then, Mr. Anderson. To what extent do you feel that  
10 the financial health of your company is dependent upon  
11 the opening and operations of the Zimmer station?

12 MR. ANDERSON: I believe that the financial  
13 health of our company will be improved immeasurably once  
14 the Zimmer plant goes in service and is allowed in the  
15 rate-making process by the Ohio Public Utilities Commission.

16 MR. FANKHAUSER: And if it were not granted an  
17 operating license, what impact would that have upon  
18 the financial health of your company?

19 MR. CONNER: Objection. This was gone into  
20 several different ways yesterday by Mr. Woliver when  
21 Dr. Fankhauser wasn't here as to the ability of the  
22 company to withstand various problems, and this is  
23 one problem of those questions, and I don't think it's  
24 proper since it has already been covered generally.

25 JUDGE BECHHOEFER: Dr. Fankhauser, could you



1 explain what the purpose of this is? In theory at  
2 least, we are looking at the ability of the company  
3 to finance the operation and decommissioning the  
4 plant, at least this is the theory. If we don't grant  
5 a license we don't have to worry about that.

6 MR. FANKHAUSER: If I am not mistaken, the  
7 non-granting of a license at this point would not  
8 necessarily preclude the granting of a license in five  
9 years after additional modifications of the plant may  
10 have been made to satisfy the Board, and I am trying  
11 to explore the possibility of extended postponement of  
12 the opening of the plant on financial health of the  
13 company.

14 MR. CONNER: Your Honor, that is wholly  
15 objectionable. That would be a wholly separate pro-  
16 ceeding from this one, and would have nothing to do  
17 with this one.

18 So, that kind of speculation is clearly  
19 outside the jurisdiction of this Board.

20 JUDGE BECHHOEFER: I think -- you have to  
21 keep it within the license that is being granted now.  
22 If we don't grant the license, we theoretically don't  
23 have to worry about financial health. So, we will  
24 sustain that last objection.

25 MR. FANKHAUSER: All right. Mr. Anderson, let

1 me just clarify one point as it related specifically to  
2 the bond rating. You stated that in '75 you had a  
3 rating of "A", and that it's currently a rating of  
4 "Triple B+." Could you tell me at what time it was  
5 lowered from "A" to "Triple B+"?

6 MR. CONNER: Objection. Asked and answered.

7 JUDGE BECHHOEFER: He answered that.

8 MR. FANKHAUSER: Well, my notes indicate that  
9 for that period it was "A" and it is currently at  
10 "Triple B+."

11 MR. CONNER: If the Board please, I ask that  
12 the interrogator be instructed that until the Board  
13 rules he not be allowed to continue to argue.

14 JUDGE BECHHOEFER: Mr. Fankhauser, my notes  
15 have a date. We have 1980. That's what I think he  
16 said, but he has answered the question.

17 MR. FANKHAUSER: Thank you.

18 Mr. Zimmer, are you the individual that  
19 would have the information on the bond ratings for  
20 Cincinnati Gas and Electric Company?

21 MR. ZIMMER: Yes, sir.

22 DR. FANKHAUSER: Could you tell me the  
23 changes that C. G. & E.'s rating -- bond rating -- may  
24 have undergone in the last five years?

25 MR. ZIMMER: In the last five years we have

1 been rated "Double A" by Moody's, likewise Standard and  
2 Poor's rated our bonds "Double A" until 1979, at which  
3 time they put a minus on it. Standard and Poor's  
4 explains it's still "Double A," but at the lower  
5 end of that rating.

6 JUDGE BECHHOEFER: When was that changed?

7 MR. ZIMMER: That changed in 1979 -- that's  
8 not a change in rating, it's just an indication of  
9 a weakening position in the Double A.

10 MR. FANKHAUSER: And to what do you attribute  
11 that weakening position in the rate?

12 MR. ZIMMER: I would have to attribute it to  
13 the delay in the Zimmer plant.

14 MR. FANKHAUSER: Do you feel it has any  
15 relation to a possible over commitment of funds to  
16 construction?

17 MR. ZIMMER: No.

18 MR. FANKHAUSER: Do you think it has any  
19 over commitment of funds particularly in reference to  
20 an over estimation of necessary capacity?

21 MR. ZIMMER: In my opinion, no.

22 MR. FANKHAUSER: Do you feel that inflation  
23 has played a role in that?

24 MR. ZIMMER: I think in the earlier years,  
25 certainly it did, but the Public Utilities Commission

1 is beginning to catch up with the inflation impact now,  
2 and we will see that reversing.

3 MR. FANKHAUSER: Do you feel that the in-  
4 dustry as a whole -- the health of the industry as a  
5 whole has declined in the past five years economically?

6 MR. ZIMMER: The decline in the industry in  
7 my opinion occurred earlier than that, as the inflation  
8 rate began to accelerate. Subsequent to that, as  
9 the Commission's responded to the impact of inflation,  
10 they have begun to catch up with the rate increases, and  
11 I think the health of the industry generally is im-  
12 proving from what it was five years ago.

13 MR. FANKHAUSER: Did I understand you to say  
14 that you feel that the health of the industry declined  
15 previously to five years ago?

16 MR. ZIMMER: Yes, in the early stages of the  
17 accelerated inflation rate, but now the Commission has  
18 responded to that, and are beginning to come along with  
19 the rate increases that are needed to bring the financial  
20 health of the industry back.

21 MR. FANKHAUSER: Mr. Emery, there was some  
22 discussion about the decline in ratings of Columbus  
23 Southern Ohio. To what would you attribute your  
24 company's decline?

25 MR. EMERY: I think the very same factors



1 that both Mr. Zimmer and Mr. Anderson have pointed out.

2 MR. FANKHAUSER: Do you feel that over  
3 commitment of funds to construction may have played a  
4 role in that decline?

5 MR. EMERY: No.

6 MR. FANKHAUSER: There are analysts in  
7 your industry that feel that that may be the case, though.  
8 Would you agree?

9 MR. EMERY: There could be. They are entitled  
10 to their opinion.

11 MR. FANKHAUSER: You are an expert in this  
12 area, are you not?

13 MR. CONNER: We will stipulate to that.

14 MR. FANKHAUSER: So that if there were  
15 experts in your field that felt that there had  
16 been a massive over output of funds for construction,  
17 you would know about that? Would that be the case?

18 MR. EMERY: I might, and I might not. I  
19 don't read all the experts -- so-called experts -- who  
20 publish their materials.

21 MR. FANKHAUSER: Mr. Emery, has your company  
22 postponed or cancelled plans for construction of  
23 additional generating capacity over the past five years?

24 MR. CONNER: Objection. This line of ques-  
25 tioning has nothing to do with the financial qualifi-



1 cations to operate the Zimmer station, and moreover,  
2 there is no foundation for any financial points  
3 relating to Zimmer operating cost.

4 MR. FANKHAUSER: Before the Board rules,  
5 and Mr. Conner is a strict teacher of learning, but before  
6 the Board rules, I would like to explain that line of  
7 questioning.

8 JUDGE BECHHOEFER: All right.

9 MR. FANKHAUSER: It is my understanding that  
10 the continued economic health of these companies is  
11 going to be of great importance to their ability to  
12 operate the Zimmer station, and I believe that in  
13 examining their track record over the past five years  
14 or so will clearly indicate whether or not they can be  
15 expected to have the resources to handle that, and I  
16 think that particularly if there are indications that  
17 they have made incorrect calculations as it relates  
18 to the necessary capacity, that we may then draw in-  
19 ferences that perhaps the mechanisms of managerial  
20 decision making have not been as precise as they  
21 should have been in the past, and this would bear  
22 directly on what we may expect in the future.

23 MR. CONNER: Obviously this makes it relate  
24 to the need for power contention.

25 MR. FANKHAUSER: I think we all would agree

1 that there is an interrelationship between the need  
2 for power and the economic health of the utilities,  
3 and I think that these cannot be dissected apart  
4 entirely.

5 JUDGE BECHHOEFER: Well, in this particular  
6 contention we are allowing examination of just the  
7 financial effect -- not the need for power -- not  
8 whether they need it or not, but in addition, we are  
9 allow this line of questioning, but I must say, you  
10 do have to set a foundation better.

11 Ask the witness whether there has been a  
12 need for construction. Some of them testified to  
13 that yesterday.

14 MR. FANKHAUSER: I believe I tried to ask  
15 that question -- if there had been construction  
16 delays or delays for the past five years, and Mr.  
17 Conner objected and I never got an answer to that  
18 question.

19 Perhaps I can reask that question.

20 JUDGE BECHHOEFER: As a foundation for  
21 this other line only.

22 MR. FANKHAUSER: Mr. Emery, as a foundation  
23 to get some feeling for the economic strength of your  
24 company and the acuity of its decision making process,  
25 could you tell us whether there have been any plants

1 cancelled or delayed in the last five years?

2 MR. EMERY: We have had continuing delays at  
3 Zimmer for one, and we have had delays in other plants,  
4 and as I pointed out yesterday, as of last May, we  
5 were acquired by American Electric Power Company --  
6 it's one of the two or three largest power companies  
7 in the country in the size and type of generating units  
8 that best fit into the scheme of things in planning  
9 a big system like that, and they are different  
10 than a system of our kind. Now, we have pretty much  
11 decided to cancel two units that we were going to  
12 build because they were too small relative to the  
13 size of the system.

14 MR. FANKHAUSER: Could you give us the  
15 generating capacity of those?

16 MR. EMERY: They were at least 375 megawatts.

17 JUDGE HOOPER: Could I ask a question here?  
18 In relation to your last answer, does the new company  
19 actually feed power to your utility?

20 In other words, what you said was, as I  
21 understood it, was that you changed the size of the  
22 generating unit because you needed larger ones because  
23 you were part of a larger utility system. Does that  
24 mean you are going to furnish power to the rest of  
25 the system?

1 MR. EMERY: We are part of the power pool. I  
2 think Mr. Borgmann could probably speak to this better  
3 than I could. We are part of the pool. We both  
4 take energy in and take energy out.

5 JUDGE HOOPER: But that relationship didn't  
6 exist before you acquired this new facility, is that  
7 correct?

8 MR. EMERY: Right, we were interconnected,  
9 but we were not a part of that power pool, and the  
10 dispatching of all the power from the entire system  
11 was centralized in Canton, Ohio.

12 JUDGE HOOPER: So, this change made it  
13 necessary for you to now furnish power?

14 MR. BORGMANN: Perhaps I could help a little.  
15 American Electric Power, being a larger system, can  
16 tolerate larger units on this system. They have a  
17 number of generating companies, and they decide in which  
18 company they place the large unit.

19 So, what Mr. Emery is saying is they are  
20 putting units of the size of 1500 megawatts, and they  
21 may or may not put that unit in Columbus's territory.  
22 They may put it in Indiana, Michigan, or some other  
23 company, and then the grid feeds the pond into each  
24 area and then they account for it to the parent  
25 company.



1           So, the units may or may not be put into  
2 Columbus's territory.

3           JUDGE HOOPER: Assuming there was a large  
4 unit put into Columbus's territory, then you would be  
5 exporting out of the area, is that correct?

6           MR. BORGMANN: That's correct.

7           JUDGE HOOPER: All right, thank you.

8           MR. FANKHAUSER: Mr. Emery, could we get a  
9 better feeling for these delays? Could you tell us  
10 what the generating capacity was planned for construction  
11 five years ago, and how much -- what percent of that  
12 has been delayed or cancelled?

13           MR. EMERY: The only delays or cancellations  
14 have been the delay in Zimmer -- our share of which is  
15 226 megawatts, which is about eight percent of our  
16 generating capacity; the two 375 megawatt units that  
17 I mentioned.

18           We were also considering a peaking unit of  
19 about 250 as I recall, megawatts, but this is again --  
20 now that we are a part of the much larger system, it's  
21 been cancelled.

22           MR. FANKHAUSER: So, there has been no  
23 addition to your generating plant in the last five years?

24           MR. EMERY: Yes, I forget when the last  
25 unit came on. I think the last unit was the last



1 Stewart unit, wasn't it? I believe that was the last  
2 unit that came in the system. Yes, it was.

3 MR. BORGMANN: In '74.

4 MR. EMERY: '74, yes. So, we really haven't  
5 any additions.

6 MR. FANKHAUSER: So, that's about, by my rough  
7 calculations a total of about a thousand megawatts that  
8 you were initially planning about five years ago that  
9 you have decided not to go ahead and build?

10 MR. CONNER: Objection, Your Honor. The  
11 record speaks for itself. That question mistates the  
12 record.

13 MR. EMERY: I wanted to correct my answer --  
14 I wanted to check my figures here. The Stewart  
15 unit is not the last. We did add two units at our Cones-  
16 ville station in 1976,, and 1978. They were each  
17 370 megawatt units.

18 JUDGE BECHHOEFER: I think on the last  
19 objection we have all the megawatt figures except for  
20 that figure for the peaking. If we had that, we  
21 could add them up. Maybe you could fill that one in.

22 MR. EMERY: As I said, that was my recollection  
23 that that plant was planned to be a 240 or 250 megawatt  
24 plant, so if you had two 375's and 250 I guess that adds  
25 up to a thousand megawatts.

1 MR. FANKHAUSER: Thank you.

2 Mr. Anderson, I would like to pursue  
3 somewhat of the same line of questioning with you.

4 Has your company in the past five years can-  
5 celled or delayed construction of additional generating  
6 capacity?

7 MR. CONNER: I would like to renew the ob-  
8 jection on the grounds that the demonstrated scope of  
9 this line of questioning is irrelevant to the issues  
10 whether or not some units may or may not have been  
11 planned, or may or may not have been delayed.

12 This has no relevancy to the issue, which is  
13 money to operate the plant.

14 JUDGE BECHHOEFER: We will keep to our earlier  
15 ruling. This does relate to the financial health of  
16 the company, so the question may be answered.

17 MR. ANDERSON: The units that we were con-  
18 structing were done in conjunction with the Cincinnati  
19 company, and perhaps Mr. Borgmann could give you a  
20 better answer than I could, if you don't mind.

21 MR. FANKHAUSER: So, there were no units  
22 that were planned that were outside of the joint  
23 venture of C. G. & E?

24 MR. ANDERSON: That is correct.

25 MR. BORGMANN: That's correct.

1 MR. FANKHAUSER: Mr. Zimmer, perhaps --  
2 would you like me to repeat the question, or --

3 MR. ZIMMER: Mr. Borgmann will answer.

4 MR. FANKHAUSER: All right.

5 MR. BORGMANN: Within the last five years we  
6 have delayed two 600 megawatt units by one year each.  
7 We have delayed a second 600 megawatt unit by three years,  
8 and we've cancelled a 600 megawatt unit.

9 That's joint. Now, that's a total of 600  
10 for the two companies -- each unit.

11 MR. FANKHAUSER. What was the total number  
12 of megawatts generating capacity that you added during  
13 the last five years?

14 MR. BORGMANN: In the last five years, we  
15 put a 500 megawatt unit on in 1978, and we are putting  
16 on the line right at this moment a 700 megawatt unit.

17 MR. FANKHAUSER: Is this a usual -- I mean  
18 is this phenomenon observed in the industry as a  
19 whole at this time in our history, or is this unique?

20 MR. BORGMANN: You mean good planning? Yes.

21 MR. FANKHAUSER: I am not -- I presume it would  
22 be better if you call that good planning to cancel  
23 plans for additional generating capacity?

24 MR. BORGMANN: We continually try to optimize.  
25 We have an obligation to serve the public as we see

1 it, and we are in a region now where even to build a  
2 fossil plant, it takes seven or eight years of leadtime.

3 So, we do forecasting as accurately as we  
4 can, and as conditions change, we adjust accordingly.

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1 DR. FANKHAUSER: Are you aware of any members of the  
2 utility community that have canceled or intentionally delayed  
3 a nuclear power plant in the last five years?

4 MR. CONNER: Objection, Your Honor. This is truly  
5 outside the scope. Look it up in the book and find out the  
6 regulatory rule, because there is delays in all nuclear plants,  
7 but it has nothing to do with the issue before us here.

8 DR. FANKHAUSER: If Mr. Conner were listening to the  
9 question, I think he would have heard that I asked if there were  
10 any intentional delays or cancellations, to their knowledge,  
11 within the industry.

12 CHAIRMAN BECHHOEFER: How does the relation of the  
13 financial health of Cincinnati Gas and Electric apply?

14 DR. FANKHAUSER: To the extent that the health of the  
15 Cincinnati Gas and Electric Company and their co-applicants,  
16 that I believe it will show perhaps that there is -- that the  
17 entire industry, itself, is beginning not to have -- it's  
18 beginning to have second thoughts about being able to construct  
19 and operate nuclear power plants in the event that we do see this  
20 shrinkage or this drawing back from additional capacity of  
21 specifically nuclear capacity.

22 CHAIRMAN BECHHOEFER: This is not planning and new  
23 plants now, this is their financial health to run this plant  
24 and have it prepared for decommissioning? How would that relate  
25 to that scope? How would that fall within that scope?

2

1 MR. FANKHAUSER: If there is experience that other  
2 utilities have had in the planning of their capacity and  
3 particularly as it relates to nuclear power and if there are  
4 utilities that have canceled plans for nuclear plants or have  
5 halted construction because of a lack of health of their  
6 financial status, I think that that would shine a direct  
7 implication on these hearings.

8 MR. KARMEN: Mr. Chairman, before you rule, Judge  
9 Bechhoefer, I know that the Board is making every possible step  
10 to understand that Dr. Fankhauser, being a lay interrogator, may  
11 not be conversant with some of the legal niceties in considera-  
12 tion, and I am sure the Board is doing everything possible to  
13 see that his examination is conducted in a manner befitting what  
14 we are encountering here. However, I feel we are going beyond  
15 the very basic precept which brought us to this hearing, that we  
16 are to interrogate as to the financial health of the applicants  
17 to operate and decommission the Zimmer plant. I think we are  
18 going far afield when we start asking questions about all of the  
19 other nuclear plants which may or may not have been canceled or  
20 proposed. I think the Board at this time has to insist that  
21 Dr. Fankhauser stay within the confines of what we are here to do,  
22 otherwise this can go on interminably.

23 CHAIRMAN BECHHOEFER: The Board had already decided  
24 that we would allow that objection. That is going beyond the  
25 scope of this proceeding. Whatever the other companies have done

3  
1 with nuclear plants is not really relevant to whether this  
2 company can technically operate a decommission. So that  
3 objection is sustained.

4 DR. FANKHAUSER: All right. Mr. Anderson, could you  
5 give us an idea of what the earnings-to-debt interest ratio of  
6 the Dayton Power and Light was five years ago and what it is at  
7 this particular point?

8 MR. CONNER: We would make the same objection, since it  
9 is not related to the specific issue.

10 DR. FANKHAUSER: I believe that the earnings-to-debt  
11 ratio is one that is a commonly used indices of economic health  
12 in this industry, and I think it is particularly germane to this  
13 question.

14 CHAIRMAN BECHHOEFER: That objection is overruled. You  
15 may answer.

16 You better make sure they understand, that you and the  
17 witnesses are on the same wavelength when you talk earnings-to-  
18 debt interest ratios.

19 DR. FANKHAUSER: The economic health of any corporation  
20 is measured, in part, by how much money they are taking in and how  
21 much they are having to pay out in interest for what they have  
22 borrowed.

23 CHAIRMAN BECHHOEFER: Now, make sure the witness  
24 understands what you mean by that ratio when you ask the question.

25 DR. FANKHAUSER: All right, Mr. Anderson, do you

4           1     understand what I mean by "ratio of earnings-to-debt interest"?

2                     MR. ANDERSON: Yes.

3                     DR. FANKHAUSER: Is that an index that is often used  
4     to judge the health of a corporation -- may that be used as an  
5     index of health of a corporation?

6                     MR. ANDERSON: I wouldn't use it in that broad a sense,  
7     but it is an index that is commonly used, I will give you that  
8     much.

9                     DR. FANKHAUSER: All right. Could you give us the  
10    information, then, about what that ratio -- and if I may, I will  
11    refer to it as a ratio and not spell it out every time -- what  
12    that ratio was for your company five years ago and what it is  
13    today?

14                    MR. ANDERSON: There are several ways it can be  
15    computed. If you have a particular way in mind --

16                    DR. FANKHAUSER: I am certain that there are -- I am  
17    interested in the one that is most commonly used in evaluating  
18    the economic health of industry.

19                    MR. ANDERSON: I am not sure which one -- each rating  
20    service, each investment advisory firm has their own ways of  
21    doing it. I am not sure that anyone necessarily any better than  
22    the others, except through the eyes of the one who is doing it.

23                    DR. FANKHAUSER: Well, how about the one that may be  
24    used by the Edison Electric Institute?

25                    MR. ANDERSON: If you can tell me -- I don't know



5 1 exactly which way that Edison Electric Institute uses it.

2 DR. FANKHAUSER: Mr. Anderson, what was the total  
3 interest that was paid in 1975 on the debt for your company?  
4 I am after the earnings-to-debt-interest ratio. If you want to  
5 give it to me straight, you can just do the calculations.

6 MR. ANDERSON: \$28,000,000.

7 DR. FANKHAUSER: And what were the earnings for your  
8 company in that year?

9 MR. ANDERSON: Net income?

10 DR. FANKHAUSER: Yes.

11 MR. ANDERSON: \$41,000,000.

12 DR. FANKHAUSER: And in 1980, do you have the  
13 corresponding figures?

14 MR. ANDERSON: Can I give you 1979's?

15 DR. FANKHAUSER: All right.

16 MR. ANDERSON: \$46,000,000 for interest, \$61,000,000  
17 for net income.

18 DR. FANKHAUSER: 46 to 61?

19 MR. ANDERSON: Yes.

20 DR. FANKHAUSER: Would you care, from your expertise,  
21 to tell us what you think a desirable or healthy earnings-to-  
22 debt-interest ratio would be for use at this time?

23 MR. ANDERSON: In general? Any utility?

24 DR. FANKHAUSER: Yeah.

25 MR. ANDERSON: No, because I can't generalize it. If

6

1 a company has, for example, no construction program or no need to  
2 borrow significant amounts of debt, maybe it's not relevant what  
3 their interest ratio is if they don't need to go out and borrow  
4 additional money.

5 DR. FANKHAUSER: Could you give us a threshold, then,  
6 below which you would deem it unwise for a company of your type  
7 to descend?

8 MR. ANDERSON: How do you mean "unwise"?

9 DR. FANKHAUSER: (Laughing.) Let me ask you this,  
10 then. Do you think that a company might be on thin economic ice  
11 if it were earning only twice what it took in as what it was  
12 paying out as interest on its debt, in other words, the ratio of  
13 two?

14 MR. ANDERSON: What that would mean, if that company  
15 had an indenture such as ours would be that it could not issue  
16 additional first-mortgage bonds. However, other forms of debt  
17 could be available to it.

18 DR. FANKHAUSER: Mr. Emery, do you have the figures for  
19 earnings-to-debt-interest ratio for the year 1975 for your  
20 company?

21 MR. EMERY: Depends on how you compute it. Which way  
22 do you want this computed?

23 DR. FANKHAUSER: I'd like to divide the earnings for  
24 the year by the interest.

25 MR. EMERY: Which earnings? How would you define

7 1 "earnings"?

2 DR. FANKHAUSER: How would you define "earnings"?

3 MR. EMERY: I can't answer your question unless you tell  
4 me how you define "earnings," because there are many ways of  
5 doing it.

6 DR. FANKHAUSER: What was the net income for your  
7 company in 1975?

8 MR. EMERY: In 1975? Net income for our company was  
9 \$42,422,000.

10 DR. FANKHAUSER: And how much interest was paid in that  
11 year on that?

12 MR. EMERY: \$35,334,000.

13 DR. FANKHAUSER: And do you have the figures for 1980?

14 MR. EMERY: Yes, I think I do. The net income in 1980  
15 was \$68,952,000.

16 DR. FANKHAUSER: And do you have the amount of interest  
17 that was paid?

18 MR. EMERY: We paid, in that year, \$73,692,000.

19 DR. FANKHAUSER: It's not a very big margin, is it,  
20 above the --

21 MR. CONNER: Objection. Argument.

22 DR. FANKHAUSER: I am asking the opinion of the expert  
23 witness of whether that was --

24 MR. EMERY: The relationship of those two figures is  
25 totally irrelevant from a financial analyst's standpoint.

8

1 DR. FANKHAUSER: There are experts in your field that  
2 would think that those are highly significant figures. Would you  
3 agree?

4 MR. EMERY: I don't think you would find any expert  
5 that I know in the field of finance that would relate those two  
6 figures.

7 DR. FANKHAUSER: Mr. Zimmer --

8 CHAIRMAN BECHHOEFER: Could you, by any chance, ask him  
9 the '79 figures, as well as the '81s?

10 DR. FANKHAUSER: Certainly.

11 CHAIRMAN BECHHOEFER: So we could get consistency  
12 between the three numbers.

13 DR. FANKHAUSER: Mr. Emery, you gave me the 1980 --

14 MR. EMERY: The 1979 figures for net income was  
15 \$59,977,000, and the interest charge was \$60,134,000.

16 DR. FANKHAUSER: Mr. Zimmer, could you tell us about  
17 what the Cincinnati Gas and Electric Company's earnings-to-debt-  
18 interest ratio were for the year 19 --

19 MR. ZIMMER: I'd have to repeat the question back to  
20 you, Dr. Fankhauser. These are computed earnings to debenture  
21 interest. And I would ask you to define "earnings" and define  
22 "interest." Each method has a different technique.

23 DR. FANKHAUSER: Is there a standard approach that is  
24 more commonly used than others for calculating this?

25 MR. ZIMMER: No, not necessarily. Each rating agency,



9 1 each regulatory agency computes it in its own manner. I could  
2 give you comparable figures to what you have already got.

3 CHAIRMAN BECHHOEFER: Mr. Zimmer, could you give the  
4 figures, using the same criteria for the figures as the other  
5 two witnesses had?

6 MR. ZIMMER: I can, but, as Mr. Emery points out, there  
7 is absolutely no financial relationship between those two  
8 figures. Those are not the two figures, in any case, that are  
9 ever used to compute this ratio.

10 DR. FANKHAUSER: If I am not mistaken, I asked for that  
11 ratio, and I am led to believe I haven't been given a correct  
12 answer.

13 MR. ZIMMER: You said specifically what net income and  
14 total interest charge.

15 MR. EMERY: That is right, you do. We answered the  
16 question exactly as you asked it.

17 MR. ZIMMER: I will be glad to give you those figures,  
18 but they are a meaningless relationship, sir.

19 CHAIRMAN BECHHOEFER: Just to complete the record,  
20 maybe then, we could -- if you could --

21 MR. ZIMMER: We had two elements of interest in 1975,  
22 both long-term debt and other interest. Long-term debt was  
23 \$38,320,000; other interest was \$1,887,000.

24 And now do you want net income before preferred  
25 dividends or income earnings on common shares?

10

1 CHAIRMAN BECHHOEFER: Whatever the other two gave.

2 MR. ZIMMER: I don't know. I used net income before  
3 preferred. That is how we defined "net income."

4 MR. ZIMMER: In that case it was \$49,738,000 in 1975.  
5 In 1979 interest on long-term debt was \$61,052,000. Other  
6 interest charges, \$2,977,000, and net income before preferred  
7 dividends was \$85,748,000.

8 DR. FANKHAUSER: You say that these two figures have  
9 no relationship to each other in terms of analyzing financial  
10 health in the industry?

11 MR. ZIMMER: No, sir.

12 DR. FANKHAUSER: Would you say that the electric  
13 utilities began this decade earning three times what it had  
14 owed in interest?

15 MR. ZIMMER: Not in the context of those figures, no,  
16 sir.

17 DR. FANKHAUSER: Do you think that the ratio of  
18 earnings to what is owed in interest has declined over the past  
19 decade?

20 MR. ZIMMER: I can't tell you in relation to those  
21 figures. Those are meaningless relationships. I don't have any  
22 idea what they did in the industry.

23 DR. FANKHAUSER: You would agree that the health of an  
24 industry does depend pretty much upon the earnings, a somewhat  
25 higher -- some given ratio above what it pays out in interest?

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1 Would you agree with that?

2 MR. ZIMMER: Again, it depends on your designation.  
3 Earnings are defined in different ways by different agencies,  
4 different regulatory bodies. Likewise, the interest components  
5 which goes into the ratio are defined in different manners by  
6 different groups.

7 CHAIRMAN BECHHOEFER: What application -- is anyone  
8 on the panel familiar with how the Gas and Electric Institute  
9 computes its ratio?

10 MR. ZIMMER: I don't know that the Edison Institute  
11 computes theirs.

12 MR. EMERY: I don't think they do. They take ratios  
13 that are furnished them and published statistics, but they don't  
14 do ratios.

15 CHAIRMAN BECHHOEFER: There was some reference to that  
16 earlier, and I judge --

17 MR. ZIMMER: Dr. Fankhauser referred to that, and I am  
18 not familiar with any ratio they compute like that.

19 DR. FANKHAUSER: I could give the Board a reference from  
20 January 30th, 1981, issue of Science Magazine, article called,  
21 "Utilities Lose Power On Wall Street," and that is Page 461  
22 through 464. And this article specifically refers to figures  
23 recently calculated by the Edison Electric Institute, and  
24 perhaps these experts are not aware of this.

25 MR. CONNER: If the Board please, we object. If he

12

1 wants to display an exhibit to the witnesses and ask them about  
2 it, then he should do that, and not simply say something out of  
3 thin air. There is no foundation that has anything to do with  
4 the EEI.

5 CHAIRMAN BECHHOEFER: If you want to show it to  
6 counsel --

7 DR. FANKHAUSER: Here (handing to Chairman  
8 Bechhoefer). I have an extra copy.

9 CHAIRMAN BECHHOEFER: Show it to counsel.

10 DR. FANKHAUSER: Perhaps Mr. Emery could keep that, so  
11 we can -- Mr. Emery, for the record, on Page 462, this is from  
12 the Science article that I just referenced -- could you read that  
13 last paragraph on the left-hand column, starting with, "Many  
14 companies ignored ...

15 MR. EMERY: "Many companies ignored the public's  
16 attitude in the 1970's. They tried to finance growth as usual  
17 by borrowing money and using new accounting techniques to give  
18 balance sheets a healthier look. The results are reflected in  
19 two figures recently calculated by EEI, one dealing with debt and  
20 the other with economy. The healthy company, obviously, takes  
21 in more income than it pays out in interest, and as a rule, a  
22 company selling long-term bonds must earn at least what it pays  
23 in interest. The electric utility industry began the decade  
24 earning three times what it owed in interest. Now the industry  
25 is slipping again toward the low point hit in the Recession of



13 1 of 1974 when it earned only 2.4 times what was owed."

2 DR. FANKHAUSER: Mr. Emery, did you understand that  
3 paragraph?

4 MR. EMERY: I don't understand which method of  
5 calculation they are using, because the paragraph is totally  
6 silent on that. And I also don't agree with what they say.  
7 There is no indication as to who wrote this or what the  
8 authority was, and this is as far as I can determine, and when  
9 they say, "EEI calculates," I don't believe that it true.

10 DR. FANKHAUSER: Perhaps what you could do for us,  
11 then, is calculate that ratio in all of the different ways that  
12 you know that financial evaluating companies do those calcula-  
13 tions, if there is some problem with which ones you think are  
14 appropriate.

15 MR. CONNER: If the Board please, we move that the  
16 most recent colloquy that relates to this be stricken from the  
17 record as totally of no probative value. As indicated, there is  
18 no showing that the EEI calculated anything relating to  
19 Dr. Fankhauser's alleged relationship of ratio as he called this.  
20 There is nothing in that article that demonstrates the EEI method.  
21 In fact, there is nothing in there to reflect other than the  
22 author's pen, what is stated, so we think this absolutely has  
23 no probative value, and we ask that the whole matter be stricken  
24 so we can get on, hopefully, to other matters.

25 CHAIRMAN BECHHOEFER: I have overruled him now. It is

14 1 relevant to the financial health of the companies, or maybe  
2 relevant, I should say.

3 MR. KARMEN: I think -- pardon me, sir. This article --

4 CHAIRMAN BECHHOEFER: Well, as a basis for --

5 MR. KARMEN: What is the foundation for this article?

6 CHAIRMAN BECHHOEFER: Well, we are not introducing the  
7 article, but the article isn't to be introduced, the article is  
8 to be used as a basis for cross-examination.

9 CHAIRMAN BECHHOEFER: And the witnesses' -- while we  
10 are on it, only witnesses' opinion of that opinion of that  
11 article may stay in the record.

12 MR. KARMEN: Do we have that objection, or has that  
13 been overruled?

14 CHAIRMAN BECHHOEFER: I overruled the objection.

15 MR. CONNER: If the Board please, there is no pending  
16 question that I am aware of.

17 CHAIRMAN BECHHOEFER: Oh, I see. Well, what I did is  
18 overruled your request to have the last question and answer  
19 stricken.

20 MR. CONNER: I understand, and I think that is in  
21 error, but if that is, so be it.

22 DR. FANKHAUSER: Would you instruct Mr. Conner not to  
23 argue with the decision of the Board once it's been issued?

24 MR. CONNER: When you do, I hope you will.

25 CHAIRMAN BECHHOEFER: You may proceed. Repeat the

15

1 question.

2 DR. FANKHAUSER: The question relates to -- what  
3 Mr. Emery has said, apparently there are several different ways  
4 in which this ratio which would denote the economic health of the  
5 utility could be calculated, and I have asked him, since he was  
6 uncertain about which way to do that calculation, that perhaps  
7 he could give us the number of different calculations that is  
8 usually used for calculating.

9 MR. CONNER: Now, Your Honor, we object to this. Sir,  
10 again, the time for discovery is over. If the intervenor had  
11 wanted to get into this issue, they should have done this a long  
12 time ago. But to sit here now and say that something the  
13 witnesses have already said are not necessarily meaningful, the  
14 way Dr. Fankhauser is using them, and now wanting us to indulge  
15 in an arithmetical exercise on an undefined basis, we think it  
16 is the worst kind of floundering in this type of an issue and  
17 that this whole line should be terminated so that we can get on  
18 to more important matters. We certainly object to that kind of  
19 question.

20 DR. FANKHAUSER: I was my understanding that it was  
21 in cross-examination that these types of questions are  
22 appropriate.

23 CHAIRMAN BECHHOEFFER: I think your current question is  
24 too broad. I don't think they should have to come up with  
25 every calculation.

16

1 DR. FANKHAUSER: The question was not to come up with  
2 every calculation, but apparently Mr. Emery is aware of several  
3 ways of calculating this ratio, and I asked for the ones --  
4 asked him to do those calculations to produce ratios that are  
5 commonly used in the evaluation of the health of the corporation.

6 CHAIRMAN BECHHOEFER: I think they testified that  
7 there wasn't any ratio that was commonly used. Can you pick a  
8 specific ratio to ask him about, or at least ask him to use one  
9 of the ways that -- if they know. If they know.

10 DR. FANKHAUSER: Yes, perhaps, Mr. Emery, you could  
11 calculate that way that is most commonly used in your industry  
12 for calculating these ratios.

13 MR. CONNER: Objection. The witness has already stated  
14 that there is many different ways of doing it, and there is no  
15 "commonly" way of doing it. That question has been asked and  
16 answered.

17 CHAIRMAN BECHHOEFER: I will sustain that. Why don't  
18 you ask him to do a usual method or a method that is used,  
19 something along that line, some specific method.

20 DR. FANKHAUSER: Mr. Emery, would you do this --  
21 construct this ratio in a method that is usually performed or  
22 is --

23 MR. EMERY: I think I said before that there are a  
24 number of ways, and I don't know which one you want, that you  
25 say "usual," because each one of them has a different connotation

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1 and a different meaning and usually is done for a different  
2 purpose.

3 DR. FANKHAUSER: If you were evaluating -- if you were  
4 interested in buying some bonds and you were evaluating a utility  
5 as to whether or not it was a healthy utility and you were  
6 looking at a ratio of their earnings to their -- what they paid  
7 in debt, what ratio would you look to?

8 MR. EMERY: I am not sure I would pay a great deal of  
9 attention to that figure. Wherever I might find it published, I  
10 might look at it.

11 DR. FANKHAUSER: How would you find what published?

12 MR. EMERY: That ratio or any ratio, depending on which  
13 way a particular -- the investment house that I was dealing with  
14 had a release. They may have calculated it one way, and I would  
15 probably look at it the way they had calculated it at that time,  
16 and I probably wouldn't even know, because different analysts  
17 think different things are important, and they add, or in  
18 determination of the two elements, interest in earnings, they --  
19 some conclude certain things and some don't, and unless you know  
20 the two elements, you can, with a sound ratio.

21 DR. FANKHAUSER: And you would look at this information  
22 and not know how it was calculated, and that would tell you  
23 something about the health of the company?

24 MR. EMERY: I would assume, if I were dealing with a  
25 reputable financial institution, that the professionals in that

18

1 institution had a sound and consistent way of calculating it.  
2 But I might be dealing with two different institutions, and each  
3 one would have calculated it a different way. Probably the  
4 differences would be fairly small, but I would probably accept  
5 the calculations of the one with which I was dealing.

6 DR. FANKHAUSER: But you would not pursue how that  
7 ratio was calculated?

8 MR. EMERY: I might not even be able to. I might ask  
9 the question how it was calculated, yes, if I thought it was that  
10 important.

11 DR. FANKHAUSER: Do you have any idea how Standard &  
12 Poor might calculate that?

13 MR. EMERY: I'd have to go look at Standard & Poor's  
14 manual, because they have detailed descriptions and methods, and  
15 I'd have to look at Moody's and might even probably discuss it  
16 with Fitch's.

17 DR. FANKHAUSER: And you have not calculated these  
18 ratios, yourself?

19 MR. EMERY: I have calculated many ratios.

20 DR. FANKHAUSER: Perhaps you could show us how you could  
21 calculate ratios.

22 MR. EMERY: We calculate several, and my question to you  
23 is, which one do you want?

24 DR. FANKHAUSER: I'd like to know what the several ones  
25 are that you do calculate, and we will --

19

1 MR. EMERY: Do you want it before taxes or after taxes?

2 DR. FANKHAUSER: Both.

3 MR. EMERY: Well, we publish -- we publish ratios,  
4 statistical reports. We come out in prospectuses, and if you  
5 look at them, they differ by small amounts. I suppose the one  
6 which I don't really like is the one that the SEC requires, and  
7 I could not calculate that for you if I had all day, because I'd  
8 have to go back to Columbus to get a lot of detailed pictures,  
9 because they do it differently than anybody else does.

10 In the --

11 DR. FANKHAUSER: Would you tell us where you are  
12 looking?

13 MR. EMERY: I am looking at the prospectus dated  
14 October 1, 1980, for the sale of \$80,000,000 of Columbus and  
15 Southern Ohio Electric Company first-mortgage bonds, 13-58  
16 percent, series due 1990.

17 DR. FANKHAUSER: About how many inches are you there?

18 MR. EMERY: And I look on Page -- let's look at the  
19 second prospectus, the 345 series preferred stock, \$25 par value,  
20 and on Page 10 you will see at the bottom of that page --

21 DR. FANKHAUSER: Is this the page that is titled,  
22 "Columbus and Southern Ohio Electric and Subsidiary Companies'  
23 Consolidated Statement of Interest"?

24 MR. EMERY: Yes, sir.

25 DR. FANKHAUSER: Thank you.

20

1 MR. EMERY: You will see on the bottom of this page it  
2 goes back to 1975, and the ratio was 2.46 ratio of earnings to  
3 fixed charges, 2.44, 2.29, 1.70, 1.29 and 2.22. And that's the  
4 SEC method of calculation.

5 DR. FANKHAUSER: Thank you, Mr. Emery.

6 Mr. Anderson, you have just seen -- you have just heard  
7 these ratios for Columbus and Southern Ohio. Could you give us  
8 the similar ratios for Dayton Power and Light?

9 MR. ANDERSON: 2.7.

10 DR. FANKHAUSER: And if you could, tell us where you  
11 are reading from so that we can read with you.

12 MR. ANDERSON: Looking in our 1979 Annual Report to  
13 Shareholders, on Page 14 --

14 DR. FANKHAUSER: 1979 Annual Report, is that?

15 MR. ANDERSON: Yes.

16 DR. FANKHAUSER: Page 9?

17 MR. ANDERSON: Page 14.

18 DR. FANKHAUSER: 14. "Summary of Operations and  
19 Financial Statistics"?

20 MR. ANDERSON: Yes.

21 DR. FANKHAUSER: Thank you.

22 MR. ANDERSON: Section at the bottom of that called  
23 "Coverage Ratio," second item in that section is entitled  
24 "The SEC Method Ratios from 1975 to 1979," 2.88, 2.78, 2.22, 2.49,  
25 2.58.



21

1 CHAIRMAN BECHHOEFER: Mr. Anderson, would you happen  
2 to know what the difference is in methods of computation of the  
3 SEC indenture method --

4 MR. ANDERSON: Yes.

5 CHAIRMAN BECHHOEFER: -- which appears on the line  
6 above the SEC method which you just read off?

7 MR. ANDERSON: I will give it to you in general.

8 CHAIRMAN BECHHOEFER: That's how I want it.

9 MR. ANDERSON: The SEC method includes all interest  
10 and some components for rents and other types of fixed charges  
11 as the denominator, and the numerator essentially includes all  
12 earnings before taxes and before the fixed charges.

13 Our indenture computations, which comes out of our  
14 mortgage, includes only first-mortgage bond interest, and earnings  
15 is as defined in the mortgage and, in general, is a before-tax  
16 earnings number, but includes only a portion of nonoperating  
17 income, instead of the full amount of nonoperating income as is  
18 included in the SEC computation, and that is generally why the  
19 ratio is lower, because not all the income is included.

20 DR. FANKHAUSER: We see a decline in that ratio. Would  
21 you care to tell us what that decline may be due to?

22 MR. ANDERSON: It's due to earnings. -- excuse me.  
23 Which ratio are you referring to?

24 DR. FANKHAUSER: Well, both of them decline. The  
25 indenture is the one that perhaps -- it goes from 2.79 in '75 to

22

1 2.06 in 1979.

2 MR. ANDERSON: Yes, the primary reason for that  
3 decline is two-fold. One, we sold a large first-mortgage bond  
4 issue in December, 1979, and as a result, all of the interest on  
5 that issue is included in the ratio, and the ratio takes sort of  
6 a stair-step effect. When you sell bonds, of course, it drops  
7 considerably, and as earnings come in, it builds back up until  
8 you sell another bond issue. It's sort of a saw-tooth approach.  
9 So in '79 it was low, because we had just sold \$65,000,000 bond  
10 issue. Other than that, of course, another reason for the  
11 decline would be that the numerator is increasing at a slower  
12 rate than the denominator over this time period.

13 DR. FANKHAUSER: I would say that is probably my  
14 definition.

15 Mr. Zimmer, would you provide the comparable figures  
16 for Cincinnati Gas and Electric Company?

17 MR. ZIMMER: It also is in the record, Dr. Fankhauser,  
18 in the prospectus of Cincinnati Gas and Electric, dated May 29,  
19 1980.

20 DR. FANKHAUSER: All right, and what page?

21 MR. ZIMMER: Page 3.

22 DR. FANKHAUSER: That is about one-third of an inch  
23 into the book. Page 3.

24 MR. ZIMMER: Page 3 under the Summary Information.  
25 Beginning with the year 1975 and reading through '79, the actual

23

1 computation was 2.52, 2.60, 3.34, 3.09, 2.65.

2 DR. FANKHAUSER: What does that pro forma 2.08, what  
3 does that --

4 MR. ZIMMER: That is the full impact of the \$100,000,000  
5 of bonds at the 12 percent interest rate on that earnings level.  
6 As explained before on a pro forma basis, you are always going to  
7 show a lower rate until such time as the earnings coverage begin  
8 to come in on it.

9 DR. FANKHAUSER: So it is 2.74 before the offering of  
10 these bonds, 2.08 after?

11 MR. ZIMMER: That is the stub period for March, 1980,  
12 not '79. The actual for '79 was 2.65.

13 DR. FANKHAUSER: Would you say that the health of your  
14 affiliates may be reflected -- that ill health may be reflected  
15 in a decline of that ratio?

16 MR. ZIMMER: No, I wouldn't say that. That's only one  
17 of many factors involved. That is one indicator of several.

18 DR. FANKHAUSER: But if all other aspects were relatively  
19 the same, that would reflect less strong financial standing?

20 MR. CONNER: Objection. That hypothetical question  
21 leaves out the other. Dr. Fankhauser should identify what he  
22 means by "all of the other," what he is talking about.

23 CHAIRMAN BECHHOEFER: Why don't you rephrase the  
24 question?

25 DR. FANKHAUSER: If you were looking over these data

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24

1 that we just looked at, based upon these data and you see a  
2 relatively steady decline in this ratio, would you interpret that  
3 as being an eroding of the financial strength of a company?

4 MR. ZIMMER: It would be an indicator to me to look at  
5 some other elements of their financial health. That's only one.  
6 I can't take that in one set of context with everything else.

7 DR. FANKHAUSER: Mr. Zimmer, I am looking at responses  
8 to the three questions raised by the staff on December 19th,  
9 1980, and this is -- actually, it's signed by Mr. Borgman. He is  
10 perhaps the individual I should address this question to.

11 MR. ZIMMER: What date was that, Dr. Fankhauser?

12 DR. FANKHAUSER: These are responses to questions  
13 raised by the staff in the enclosure to the December 19th, 1980,  
14 letter from Mr. R. L. Tedesco. And the date on the cover letter  
15 from Borgman says January 2, 1981.

16 MR. CONNER: This is applicant's Exhibit 3.

17 DR. FANKHAUSER: Thank you.

18 On Page -- ha ha, no page numbers. Item 2, and the  
19 middle of the page, "Costs identified," and "Item No. 1 represents  
20 expenditures of exclusive allowance for funds used during the  
21 construction, AFUDC will be shared in the same ratio as the  
22 applicant's ownership in potential of Zimmer."

23 Will you explain to us what AFUDC, what does that  
24 involve?

25 MR. CONNER: If the Court please, we will object to



25

1 this. It is a proper matter for discovery. It is a matter  
2 already identified, and it is in the record, and it is not time  
3 now to start a fundamental course in economics.

4 CHAIRMAN BECHHOEFER: We will overrule that one.

5 By the way, there is an Appeal Board decision that  
6 says just because you didn't ask something on discovery doesn't  
7 mean you can't ask it on cross-examination. I believe that was  
8 a Clinton decision several years ago.

9 MR. CONNER: I think that is a matter, though, for the  
10 Board's discretion. That discovery process has not been followed.  
11 It shouldn't be allowed to prolong decisions. We have spent half  
12 the morning already getting three lines that are already in the  
13 record.

14 DR. FANKHAUSER: Perhaps Mr. Emery could pass the same  
15 science article over to Mr. Zimmer. There is a reference to the  
16 use of allowance for equity funds used during construction, and,  
17 Mr. Zimmer, starting at the bottom of Page 462, with, "Meanwhile,  
18 an accounting gimmick" -- perhaps you could read that paragraph  
19 into the record, and that will provide the foundation from which  
20 we can --

21 MR. CONNER: If the Court please, we think the  
22 appropriate thing would be, rather than to force the witness to  
23 read it, to let the interrogator read it so the witness could be  
24 free to answer, not be associated with this article for which  
25 there is no foundation, indeed, not even a name connected with it.

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1 DR. FANKHAUSER: Oh, yes, there is a name, sir. That  
2 is incorrect. If you will look at the end of the article, it's  
3 by Elliott Marshal.

4 JUDGE HOOPER: Would you please give us the author, his  
5 name, his title and affiliation?

6 DR. FANKHAUSER: Yes. This is an article by Elliott  
7 Marshal, and he is a reporter with Science Magazine and it is the  
8 article that was previously referenced.

9 I would be willing to read it. I thought that perhaps  
10 comprehension would be increased if Mr. Zimmer read it.

11 MR. ZIMMER: My comprehension ended when they referred  
12 to it as a "gimmick", because this is not a gimmick.

13 Am I to read it, sir, or Dr. Fankhauser?

14 CHAIRMAN BECHHOEFER: Dr. Fankhauser, why don't you  
15 read it, so that the record will reflect what that "gimmick" is.

16 DR. FANKHAUSER: "Meanwhile, an accounting gimmick  
17 called 'allowance for equity funds during construction,' AFUDC  
18 has become enormously popular. It allows a company to count as  
19 current income cash which will not be available until later when  
20 a plant has been completed and begins producing a marketable  
21 product. AFUDC is a bookkeeping fiction, 'funny money' as one  
22 industry critic calls it. It is safe to use the gimmick,  
23 provided the equipment it paid for has been built and brings in the  
24 promised cash. It is not safe if the plant is canceled, for then  
25 the utility must pay off its construction debts, without being

27

1 able to use the new plant as an income producer. According to  
2 EEI" -- and that is Edison Electric Institute -- "the volume  
3 of AFUDC funds in industry accounts has doubled since 1970. In  
4 fact, more than half of the total earnings of the electric  
5 utility industry are now AFUDC speculative dollars. Furthermore,  
6 if AFUDC dollars are eliminated from the account, the industry is  
7 just barely earning enough to pay twice its interest costs each  
8 year."

9 Mr. Zimmer, would you care to tell us how Cincinnati  
10 Gas and Electric Company makes use of AFUDC in accounting?

11 MR. CONNER: Objection, Your Honor. We move that the  
12 previous section whereby Dr. Fankhauser from the magazine be  
13 stricken, since it obviously has no relationship to the pending  
14 question.

15 Dr. Fankhauser is attempting to testify from hearsay  
16 information, something that has something of the stature of a  
17 Captain Marvel comic. To get it in the record, that is the  
18 gimmick, I guess. The present question has nothing to do with  
19 what he read, other than the use of the term.

20 DR. FANKHAUSER: I believe it's abundantly clear that  
21 this is eminently germane to the question at hand, and what we  
22 are trying to do here is to look at the role that these utilities  
23 have used in terms of AFUDC to see whether or not, in fact, their  
24 apparent financial health may be built upon very shaky ground,  
25 which is the question that we are examining in this stage of the

28

1 hearing.

2 CHAIRMAN BECHHOFFER: The objection is overruled. You  
3 may answer.

4 MR. ZIMMER: May I have the question again, please?

5 DR. FANKHAUSER: Could you read the question?

6 (Whereupon, the pending question was  
7 read by the court reporter.)

8 MR. ZIMMER: We follow the uniform system of accounts  
9 prescribed by the Federal Energy Regulatory Commission.

10 DR. FANKHAUSER: Has the volume of AFUDC funds being  
11 used in Cincinnati Gas and Electric Company increased over the  
12 last decade?

13 MR. ZIMMER: Certainly.

14 DR. FANKHASUER: By what factor?

15 MR. ZIMMER: I can't give you the last decade, but,  
16 again, it will be in the record. And I might point out that the  
17 author of this article obviously doesn't understand allowance  
18 for funds. He is referring only to the allowance for funds for  
19 equity funds, and that is only one component. An allowance for  
20 other funds, which is the reference to equity funds in here, has  
21 increased from 1975 to 1979 from \$5.5 million to \$19.2 million,  
22 and I would like to define "allowance for funds." It is approved  
23 by Federal Energy Regulatory Commission, it is computed in  
24 accordance with a formula supplied by the Federal Regulatory  
25 Commission, and they define allowance for funds used during



29

1 construction as including the net cost for the period of  
2 construction of borrowed funds used for construction purposes  
3 and a reasonable rate on other funds when so used. This amount  
4 of AFUDC constitutes an actual cost of construction under  
5 established regulatory rate procedures. Return on and recovery  
6 of such costs has been permitted in determining the rate charge  
7 for utility services.

8 DR. FANKHAUSER: How does allowance for other funds  
9 differ from AFUDC?

10 MR. ZIMMER: Allowance for other funds is only one  
11 component of AFUDC.

12 DR. FANKHAUSER: What other components can be included?

13 MR. ZIMMER: Also allowance for borrowed funds, also.

14 DR. FANKHAUSER: Borrowed funds?

15 MR. ZIMMER: Allowance for borrowed funds.

16 CHAIRMAN BECHHOEFER: Dr. Fankhauser, at some point we  
17 would like to take a break, and --

18 DR. FANKHAUSER: We could break now. I will want to  
19 come back to the use of those funds, and I am willing to break  
20 right now, if you wish.

21 CHAIRMAN BECHHOEFER: O.K., let's have a 15-minute  
22 break.

23 (Whereupon, a short recess was  
24 taken at 10:45 a.m., to reconvene  
25 at 11:00 a.m.)

1 CHAIRMAN BECHHOEFER: Doctor Fankhauser,  
2 proceed.

3 MR. FANKHAUSER: Yes. Mr. Anderson, could you  
4 tell us the amount of AFUDC funds and D.P.&L.'s books  
5 that were used in 1975 and also in 1980?

6 MR. ANDERSON: Nine million dollars in 1975, 33  
7 million in 1979.

8 MR. FANKHAUSER: And about what percent of the  
9 earnings does that 33 million dollars represent for 1980?

10 MR. ANDERSON: Fifty-five percent.

11 MR. FANKHAUSER: Fifty-five percent? Mr.  
12 Emery, I would like to ask you the same question.

13 CHAIRMAN BECHHOEFER: Before you go, what's the  
14 percentage for '75?

15 MR. ANDERSON: Twenty-two.

16 MR. FANKHAUSER: Thank you. Mr. Emery, could  
17 you give us the amount of funds in 1975 that were AFUDC  
18 funds for Columbus, Ohio?

19 MR. EMERY: It's \$14,554,000 and that was 40  
20 percent of earnings.

21 MR. FANKHAUSER: Forty percent? And the 1980  
22 figure?

23 MR. EMERY: \$17,772,000 and that was 33 years  
24 of earnings.

25 MR. FANKHAUSER: And to complete this table,

1 let me go back to Mr. Zimmer.

2 Could you tell us what percent of the  
3 earnings in 1975 were AFUDC funds?

4 MR. ZIMMER: Twenty-five percent.

5 MR. FANKHAUSER: That's the 1971 figure?

6 MR. ZIMMER: That's right.

7 MR. FANKHAUSER: For 1980?

8 MR. ZIMMER: I don't have 1980. In the Record,  
9 you have 11 months end of June 30, 1980.

10 MR. FANKHAUSER: And what percent?

11 MR. ZIMMER: If you want that figure, it's  
12 65.1. It's in the Record.

13 MR. FANKHAUSER: 65.1?

14 MR. ZIMMER: Point 1.

15 MR. FANKHAUSER: One percent? No further  
16 questions.

17 CHAIRMAN BECHHOEFER: I guess Mr. Dennison?

18 MR. DENNISON: I believe Mr. Fisse wished to  
19 go next, Your Honor.

20 MR. FISSE: If you have an order, Your Honor?

21 CHAIRMAN BECHHOEFER: I don't have any  
22 particular order. Just do it counter-clockwise.

23 MR. FISSE: Mr. Borgmann, you testified  
24 yesterday in response to Mr. Woliver's questions concerning  
25 Exhibit 8, Item 1, Group 2.

3 1 MR. BORGMANN: Right.

2 MR. FISSE: That certain portion of those  
3 emergency planning costs concerned preparation of the  
4 plan and the providing of hardware?

5 MR. BORGMANN: Yes.

6 MR. FISSE: And you estimated -- or another you  
7 stated approximately two million dollars of that was  
8 needed for that, correct?

9 MR. BORGMANN: Correct.

10 MR. FISSE: And you also stated that the  
11 remainder, I think, was an estimate because you hadn't  
12 entered into any concrete figures in negotiations with  
13 Cleremont County; is that correct?

14 MR. BORGMANN: Not only Cleremont but the  
15 Kentucky counties as well.

16 MR. FISSE: Okay. So, in other words, the two  
17 million dollars is a known expense at this time?

18 MR. BORGMANN: Approximately, yes.

19 MR. FISSE: And the 2.6 million then is an  
20 estimated expense?

21 MR. BORGMANN: That's correct.

22 MR. FISSE: You also indicated that the 4.6  
23 million estimated was -- would be considered a one-time  
24 capital cost?

25 MR. BORGMANN: That's right.



4

1 MR. FISSE: And the balance would be incorporated  
2 into operating costs?

3 MR. BORGMANN: I didn't say that. I said the  
4 balance of any operating or continuing costs would be  
5 estimated in the operating costs, that's correct.

6 MR. FISSE: Okay. Do you anticipate any continual  
7 expenditures for maintenance of the equipment or updating  
8 of the equipment? Should more refined technology become  
9 available?

10 MR. BORGMANN: Yes.

11 MR. FISSE: Do you know what that figure might  
12 be?

13 MR. BORGMANN: I can't give you an exact number  
14 but there will be some maintenance costs obviously, and  
15 they're incorporated in the numbers in Exhibit 8 down at  
16 the bottom. If you wanted a breakdown, I'd have to go  
17 back and get some additional information. I don't have  
18 the breakdown.

19 MR. FISSE: Okay. Well, that's okay. You also  
20 stated that a portion of the costs would be born by the  
21 Government. I think your words were some -- very little;  
22 is that correct?

23 MR. BORGMANN: No, that wasn't the question.  
24 The question was asked, when we made the estimate, did we  
25

5  
1 assume that any others would be born by Governmental  
2 bodies, and I said in the estimate there was very little  
3 in the estimate that was planned on being born by the  
4 Government involved.

5 MR. FISSE: Okay. So, if the County Government  
6 in Cleremont County would provide no contribution, that  
7 would have no effect on your ability to finance?

8 MR. BORGMANN: No appreciable effect.

9 MR. FISSE: Okay. What is your anticipated  
10 method for raising those figures or would that be more  
11 directed to Mr. Zimmer?

12 MR. BORGMANN: Mr. Zimmer can answer that.

13 MR. ZIMMER: This would be part of our overall  
14 construction program, which over the next five years,  
15 totals over a billion dollars; and it's a relatively  
16 small portion of that and it's raised from securities and  
17 retained earnings.

18 MR. FISSE: Okay. Any of that absorbed in the  
19 rate base?

20 MR. ZIMMER: It would be included in the rate  
21 base if we own it.

22 MR. FISSE: Mr. Emery, are any portions of the  
23 costs incurred for these emergency preparedness plans in  
24 providing equipment? Are any of those costs-- Are you  
25 responsible for any of those costs?

6

1 MR. EMERY: I don't understand what you mean by  
2 my-- You mean company?

3 MR. FISSE: Well, your company.

4 MR. EMERY: Not that I know of.

5 MR. BORGMANN: Ownership.

6 MR. EMERY: Our ownership share because as far as  
7 the company is being responsible for meeting those costs and  
8 I think it's spelled out.

9 MR. FISSE: And the same goes for Dayton Power  
10 Light as well?

11 MR. ANDERSON: Yes.

12 MR. FISSE: This would probably be directed to  
13 Mr. Chitkara I believe. As far as decommissioning, is there  
14 safety threat after the plan has been decommissioned that  
15 would be reflected in the emergency preparedness plan?

16 MR. CHITKARA: No.

17 MR. FISSE: And so, there is no safety threat  
18 or it's not reflected in the plan?

19 MR. CHITKARA: The plan that you are talking  
20 about is for the use of the life of Zimmer Station.  
21 Decommissioning begins after the useful life has expired.  
22 So, I don't see any relationship between the two.

23 MR. FISSE: Right. Okay. I have no further  
24 questions at this point.

25 CHAIRMAN BECHHOEFER: Mr. Dennison? Pardon me.

7 1 Mr. Reder?

2 MR. REDER: I have very few questions that I  
3 would like to direct primarily to Mr. Zimmer or any  
4 gentlemen from the Cincinnati Gas and Electric.

5 Do you agree that there is a cause and  
6 effect relationship between the amount of electricity that  
7 you sell and the revenues that you receive from the sale  
8 of the electricity and therefore for the financial health  
9 of the company?

10 MR. ZIMMER: We derive our revenues from the  
11 sale of electricity, yes.

12 MR. REDER: And that's directly related to the  
13 counties in Ohio?

14 MR. ZIMMER: Sure.

15 MR. REDER: Back in the late Sixties when we  
16 were first contemplating construction of Zimmer, did you  
17 have any projections of demands for electricity and  
18 revenues from the sale of the electricity for the Seventies?

19 MR. CONNER: Objection. That's a clearly leading  
20 power question, and also something that is over and done  
21 with. It's all considered at the construction permit stage.

22 CHAIRMAN BECHHOEFER: Do you have an estimate  
23 that you want to make or where are you going with that?  
24 The need for power as such is not -- is no longer an issue.

25 MR. REDER: I think we've established that the



1 company developed revenues from the sale of electricity  
2 and that's directly related to the financial health of the  
3 company; and if it has developed it, if there were pro-  
4 jections and these projections were not met, that there  
5 is a close relationship between that and the company, and  
6 I intend to go further and ask if there are projections  
7 now for the 33 years life of the plant? I'd like to ask  
8 some questions, if I may, upon the factors used in the  
9 competition of these projections.

10 CHAIRMAN BECHHOEFER: Well, we're going to allow  
11 this question but we don't want to get into a need for  
12 power as such. So, that -- formulate your questions in  
13 terms of --

14 MR. REDER: Yes, I understand that. I try to  
15 avoid de-power. I want to get directly to financial  
16 qualifications.

17 CHAIRMAN BECHHOEFER: Well, as long as the  
18 questions are related to it, you may ask them. So,  
19 that objection is overruled.

20 MR. ZIMMER: I'm sorry. I've lost the question  
21 in this.

22 CHAIRMAN BECHHOEFER: Maybe it better be repeated.  
23 It was pretty long.

24 MR. REDER: Back in the late Sixties when you were  
25 first contemplating the construction of the Zimmer plant,

8

1 did you make any projections for the decade of the  
2 Seventies for demand for electricity and for anticipated  
3 revenues from the sale of electricity?

4 MR. ZIMMER: I do not project the demand for  
5 electricity but the people within my area use demands  
6 formulated by other people in our company that annually  
7 prepare budgets. Those budgets are reviewed every year  
8 and our adjustments are made accordingly, but we never  
9 project rate increases in those cases.

10 In many cases, we take the revenue derived  
11 from the sale of electricity, the level projected, the  
12 rates then in existence and use that to determine at such  
13 points when the rates are required.

14 MR. REDER: It says such projections were made  
15 at that time?

16 MR. ZIMMER: They're made every year.

17 MR. REDER: Do you have any knowledge of generally  
18 the content of those projections as to a perhaps a yearly  
19 increase as a percent over the previous year?

20 MR. ZIMMER: I can only tell you our current  
21 projection for the next five years.

22 MR. REDER: Well, I'm back in 1968 right now.

23 MR. ZIMMER: I'm sorry. I can't recall what  
24 they were. They're higher than they are right now, if  
25 that's what you're getting to.

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9 1 MR. REDER: Yes. Do any of the other gentlemen  
2 have these projections?

3 MR. BORGMANN: Yes. They're on the order of  
4 67 percent annually.

5 MR. ZIMMER: Compounded.

6 MR. BORGMANN: Compounded.

7 MR. REDER: And there were projections for  
8 revenues also?

9 MR. ZIMMER: We use those kilowatt hours, sales  
10 projections apply, the rates that were then in effect to  
11 determine the revenue.

12 MR. REDER: And not allowing for any increases?

13 MR. ZIMMER: Not allowing for any rate increases.

14 MR. REDER: Could you tell us some of the factors  
15 used in computing those projections?

16 MR. ZIMMER: What projections?

17 MR. CONNER: Excuse me, Your Honor. Now, we're  
18 getting into the work of the Public Utilities Commission  
19 and it's a matter it's in the Record. It's too late now  
20 to start into something that should have been looked into  
21 long before and start this all over again. We're just  
22 going to go on in definitely. The history of what may have  
23 happened on this has little or nothing to do with the  
24 financial amount to meet the responsibilities to operate  
25 the plant.

10

1 MR. REDER: Your Honor, I'm not going to  
2 contest those factors. I just wanted to know generally  
3 what they were.

4 CHAIRMAN BECHHOEFER: As a foundation, I think  
5 that's permissible. Objection overruled. You may answer.

6 MR. ZIMMER: Are we talking the sales forecast,  
7 revenue forecast, the demand forecast? I'm not sure.

8 MR. REDER: Let's talk first about demand  
9 forecast, and then revenue.

10 MR. BORGMANN: Well, in demand forecast you look  
11 at the number things, you look at the population, you look  
12 at the state of the economy, you look at the new industry  
13 in the area and you look -- use a lot of new judgments  
14 based on the past and all those factors allow you to make  
15 a projection.

16 MR. REDER: And by judgment?

17 MR. BORGMANN: Sure. There has to be judgment  
18 based on what you've seen in the past.

19 MR. REDER: You mean based on history?

20 MR. BORGMANN: Right.

21 MR. REDER: Of the previous five years, ten years,  
22 twenty years?

23 MR. BORGMANN: All of those factors are into it  
24 but you look ahead, and the population growth, you look at  
25 industry and the whole demographic situation; and there



11 1 are very complicated computer models. We put all these  
2 factors into a program and look at it.

3 MR. REDER: Then did I understand correctly that  
4 these projections were run in the area of about six percent  
5 per year approximately?

6 MR. BORGMANN: Approximately, yes.

7 MR. REDER: How about the revenue projections  
8 to some of the -- generally, the factors used?

9 MR. RANDOLPH: Well, we do in daily revenue  
10 projections, the sales forecasts are broken down by  
11 customer classification. We know what the average rate is  
12 by customer classification on the present rates. If we  
13 find that there is a change in the sales volumes that  
14 requires to do so, you'll have a change in the effective  
15 rates. We try to interpellate that the change in the  
16 effective rate, and then we price these sales out by the --  
17 at the average rate, at the current rate. We don't project  
18 any rate increases in pricing these sales.

19 Now, that's the factor for pricing base  
20 rates. With respect to the fuel adjustment rates, we do  
21 factor in there based on what the production part of the  
22 fuel costs are, projected fuel costs for the future.

23 MR. REDER: By customers classification, I  
24 suppose you mean residential, commercial, industrial?

25 MR. RANDOLPH: Yes.

1 MR. REDER: Mr. Zimmer or Mr. Borgmann, whoever  
2 wants to answer, have these demand projections generally  
3 proven valid now during the Seventies since we are passed  
4 the Seventies?

5 MR. BORGMANN: No, they've fallen off somewhat.  
6 In other words, the low growth has been less than  
7 anticipated back in 1969 if that's the question.

8 MR. REDER: By about how much?

9 MR. BORGMANN: Oh, on a year to year basis, it's  
10 pretty hard to tell. Instead of six percent it might have  
11 averaged maybe four and a half. I don't know. I'd have to  
12 go back and look at the numbers.

13 MR. REDER: Well, over ten years before?

14 MR. BORGMANN: Yes.

15 MR. REDER: Isn't it true that during at least  
16 two years of that decade that the average increase was  
17 less than one percent for the previous year?

18 MR. BORGMANN: It may be. I don't recall the  
19 exact numbers but I know that after the oil embargo there  
20 was quite a drop in consumption but you get preservations  
21 in any part of that.

22 MR. REDER: And specifically, do you have any  
23 knowledge that might be true for the past five or six  
24 years that there were a couple of years in there that  
25 demanded increase was less than one percent?

1 MR. BORGMANN: I don't recall the last five or  
2 six years.

3 MR. REDER: Did the revenue projections or did  
4 the reality fall short of the projections as far as  
5 revenue does?

6 MR. ZIMMER: To the extent that the sales  
7 slowed down, they did, but you have to also take into  
8 consideration that in that period of time, we also obtained  
9 rate increases so that they were picking up some of the  
10 shortfall of the sales.

11 MR. REDER: At present, are there similar  
12 projections for sales and revenue or demand in revenue if  
13 you wish, for the next 35 years or so or over the life  
14 of the Zimmer?

15 MR. BORGMANN: No, for the life, but we bought  
16 about 10.

17 MR. REDER: Sir?

18 MR. BORGMANN: We go on about 10 or 11 years on  
19 trying to calculate demand.

20 MR. REDER: But for the full lack, you have no  
21 complete projections?

22 MR. BORGMANN: No.

23 MR. REDER: Do you have projections complete up  
24 to 1990 or 19 --

25 MR. BORGMANN: Yes.

1 MR. REDER: Generally, what might then these  
2 projections as to yearly increases of percent over the  
3 previous year?

4 MR. CONNER: This is a totally different  
5 contention, one that was granted summary disposition. The  
6 fact that how the plant operating costs would be paid for  
7 has been fully covered, not only in the evidence but in  
8 the cross-examination. This is clearly talking about the  
9 power

10 MR. REDER: If the demand for electricity falls  
11 to zero suddenly for some reason and continues for a year  
12 or so, I think we've heard that the company would be in  
13 bad shape financially.

14 MR. CONNER: We'll stipulate to that.

15 MR. REDER: Now, if we assume that the company  
16 is reasonably healthy financially at the present time,  
17 then we have some point in between zero demand and the  
18 present demand for the company's failing.

19 CHAIRMAN BECHHOEFER: No, not necessarily but --

20 MR. CONNER: If the Board please, let me add  
21 this. The present demand for Zimmer has already been  
22 established at the construction permit stage, the forecast  
23 demand would relate to new units. The witness has already  
24 testified that Zimmer would operate as a base load plan  
25 because it would be cheaper than other plants. This has



1 all been gone over, but to go through it again in terms of  
2 demand in the ten year projections really has nothing to do  
3 with this issue.

4 MR. REDER: Sir, I'm not talking about demands  
5 on Zimmer. I'm talking about demands on the company.

6 CHAIRMAN BECHHOEFER: The witnesses have already  
7 testified that they would adjust their demand calculations  
8 yearly, and their new growth projections would be based on  
9 calculating the demand. I think the last objection we'll  
10 sustain.

11 MR. REDER: Did I understand correctly then that  
12 the projections for the next ten years on the order of ten  
13 percent per year?

14 MR. CONNER: Objection. Same attempt to ask  
15 the question.

16 MR. REDER: I just want to clarify my under-  
17 standing of it.

18 CHAIRMAN BECHHOEFER: I think that's the same  
19 question essentially.

20 MR. REDER: Did you use the same factors in these  
21 most recent projections that you used in the projections  
22 in the late Sixties?

23 MR. CONNER: Same objection and to such a line  
24 of questioning.

25 CHAIRMAN BECHHOEFER: I think that question is

1 a little different. He may answer that.

2 They're current forecasts certainly?

3 MR. BORGMANN: Pretty much so. I think the only  
4 difference is that the computer monitoring is a lot less  
5 sophisticated now than it was 10 years ago, but we're  
6 still under the same thing looking at population growth,  
7 looking at recent history, looking at industry coming into  
8 the area, making a judgment on the economic health and  
9 putting all those factors into equations.

10 MR. REDER: When you say recent history, just  
11 about how far back in general terms?

12 MR. BORGMANN: We go all the way back but we  
13 wait obviously the year term, and the last two or three  
14 years more than go back twenty-five years ago, but there  
15 is an overall trend, a near trend and all those are looked  
16 at in trying to come up with a forecast for the next five  
17 to ten years.

18 MR. REDER: I have no more questions.

19 CHAIRMAN BECHHOEFER: Finally, we get to Mr.  
20 Dennison.

21 MR. DENNISON: Thank you, Your Honor.

22 Mr. Emery, on behalf of your utility, is  
23 there any requirement in the Seventies or the calendar  
24 year 1980 that you go to the Public Utilities Commission  
25 for the purposes of obtaining an emergency rate increase?

1 MR. EMERY: No, there is not.

2 MR. DENNISON: Mr. Anderson, during the 1970's,  
3 did your utility bring any reactors from construction  
4 stage to generating stage?

5 MR. ANDERSON: Reactors, nuclear reactors?

6 MR. DENNISON: Generators, I beg to qualify it  
7 in that manner.

8 MR. ANDERSON: Did we bring any power plants on  
9 line in the Seventies? Yes.

10 MR. DENNISON: How many?

11 MR. ANDERSON: Four, to the best of my knowledge.

12 MR. BORGMANN: More than that. You got stored  
13 units at Miami Fort. In other words, the three of us are  
14 joint owners in the Stewart Station. At Dayton, construction  
15 operates and then Cincinnati and Dayton Power and Light  
16 Company for two more weeks. At Dayton Power and Light  
17 Company your interest just sits there.

18 MR. DENNISON: Six more Dayton Power and Light?

19 MR. ANDERSON: Six more ownership.

20 MR. DENNISON: Now, Mr. Emery, on each occasion  
21 that your three plants -- the one in '74, the one in '77 and  
22 the one in '78 -- commenced generating power, you were able  
23 to increase your rates relative to that generation of power,  
24 were you not?

25 MR. EMERY: When those plants went into service,

1 they became a part of the rate base. We were able to  
2 apply for rate increases including those rates on the  
3 rate base and thereby covering the costs of capital and  
4 the cost of operating the plant.

5 MR. DENNISON: Okay. So, in 1974, there was an  
6 increase in the rate base for the plant which was brought  
7 on line at that time?

8 MR. EMERY: I forget which one. I believe the  
9 last Stewart Unit, I believe, it was standard and went in  
10 in 1974 and that would have been added. I'd have to look  
11 at the history of the rate increases. It's in the  
12 Record, I believe. Yes, we obtained rate increases and  
13 we obtained a system-wide rate increase in 1974.

14 MR. DENNISON: And again, you would have  
15 obtained such a rate increase in '77?

16 MR. EMERY: We have one also in '75 and the rate  
17 increase in '76. I'm talking about-- These are the  
18 significant system-wide increases and one in '78, and  
19 what is your first question to me? Did you-- I may be  
20 misinterpreted it. It's about the emergency rates whether  
21 we had any in the Seventies?

22 MR. DENNISON: Or in 1980?

23 MR. EMERY: We had none in 1980. We did have  
24 an emergency rate increase that did increase in 1979, and  
25



1 I believe I think that's the only one; and we had one  
2 year back in 1975.

3 MR. DENNISON: Now, the rate increases that you  
4 have referenced previous to your qualifications of '79  
5 and '75 and '78 is an emergency rate increase.

6 Now, does your answer still stand that the  
7 other rate increases previously referenced would be as a  
8 result of that application of the Public Utilities Commission  
9 after having brought on line a new generating plant for  
10 purposes of covering the cost of that generation of  
11 electricity?

12 MR. EMERY: I would think that's probably the  
13 case. I can't remember now exactly how we timed the  
14 application for the rate increase relative to the in-service  
15 date of the plant, and in that interim, the Ohio Law has  
16 changed and the Ohio ratemaking process has changed.

17 MR. DENNISON: Now, Mr. Emery, 1978-- Following  
18 these respective rate increases and one emergency rate  
19 increase, you characterize the Columbus Utility as  
20 possessing a lack of financial integrity, did you not?

21 MR. EMERY: We had a period in 1978 where our  
22 financial condition was severely impacted largely because  
23 of the nation-wide coalminer's strike.

24 MR. DENNISON: Also, Mr. Emery, this lack of  
25 financial integrity that you had a duration on the decade,



1 did it not?

2 MR. EMERY: Had a what?

3 MR. DENNISON: Had a duration of the decade of  
4 1970's?

5 MR. EMERY: No, not necessarily. We had a  
6 period in 1974 and '75 where -- because we hadn't any  
7 rate relief for, I think, about two and a half years or  
8 two years at least, we had to obtain the emergency increases  
9 at a time when they were following the oil embargo in the  
10 Fall of '73 and all the associated problems there with it.

11 MR. DENNISON: Well, Mr. Emery, if I understand  
12 correctly the supposition of the utilities proposition for  
13 a standpoint of paying, for the operational expenses of  
14 the Zimmer Plant, these are to be paid by rate increases;  
15 do you understand that supposition?

16 MR. EMERY: Say that again. I didn't  
17 understand your question.

18 MR. DENNISON: From the standpoint of your  
19 reasonable assurance that you're financially capable of  
20 operating the Zimmer Power Plant, I understand that your  
21 credit for that is the degeneration from the rate base of  
22 customers paying the cost of that operation?

23 MR. EMERY: Well, we'll have to obtain from the  
24 customers the revenues to cover the cost of the operation  
25 and to cover the capital costs of Zimmer just as if we

1 were putting in a new fossil fuel plant at revenue interest.

2 MR. DENNISON: That's a predicate on which it  
3 rests in 1983, am I correct?

4 MR. EMERY: Ask that-- We were asked to  
5 commence?

6 MR. DENNISON: No. The predicate upon which  
7 your financial assurance rests commences in 1983. Is  
8 that the operational costs for operating Zimmer -- will  
9 be paid through a rate increase?

10 MR. EMERY: We will have to seek rate increases  
11 in the future, that's right; and we'll have to seek  
12 undoubtedly a rate increase at the time or thereabouts  
13 that Zimmer built into service.

14 Today in our last rate case, we were  
15 settled in December of 1979, and I believe it had a date  
16 set of June of that year as far as the rate base was  
17 concerned. We were allowed to include 50 percent of the  
18 construction work in progress at Zimmer in the rate base  
19 at that time. So, we are already collecting rates in  
20 terms of capital costs on a portion of the Zimmer Units.

21 MR. DENNISON: Now, would I be correct, Mr.  
22 Emery, that should you fail in the obtainment of a rate  
23 increase for the operation of Zimmer, you would be  
24 financially procluded from the operation that is paying  
25 for the operation; is that not correct?

1 MR. EMERY: Well, we had an obligation to pay  
2 for that rate increase -- the operation of Zimmer. We  
3 will be utilizing the power at Zimmer and it's part of  
4 our contractual obligation and share of Zimmer, and we  
5 will be seeking, undoubtedly seeking, a rate increase to  
6 include the entire Zimmer costs in the rate base; and I  
7 have no reason to believe that the Commission will be --

8 MR. DENNISON: Mr. Emery, my question does not  
9 concern itself with the contractual obligation of the  
10 utilities. My question simply put to you, sir, is this;  
11 that if you do know how to achieve a rate base increase  
12 after Zimmer commences operation, you are procluded  
13 financially for paying for that operation, are you not?

14 MR. EMERY: No, not necessarily; not necessarily.

15 MR. DENNISON: What reasonable assurances can  
16 you give us that you have the requisite funds when, in  
17 1978, '79, you categorize your utility as lacking  
18 financial integrity?

19 MR. EMERY: We have, as I think I testified  
20 yesterday, those situations in 1978 was a very unique and  
21 unusual situation primarily related to the coal strike,  
22 the coalminer's strike; and we have since obtained a major  
23 rate increase and we have restored our financial integrity;  
24 and in fact, because we have no other plants under-  
25 construction now, we are in a stronger position and we

1 have been for sometime.

2 MR. DENNISON: That emergency rate increase  
3 that you obtained in '75 and '79, that again was predicated  
4 on the necessity to present -- prevent rather injury to  
5 the interest of the public or to your interest a Public  
6 Utility; is that not correct?

7 MR. EMERY: That's true.

8 MR. DENNISON: So, that these are extraordinary  
9 reasons for a temporary rate increase; is that correct?

10 MR. EMERY: The circumstances in each case we  
11 were able to establish, and we did need emergency which  
12 takes less time than an ordinary rate case and we obtained  
13 that.

14 MR. DENNISON: Well, you were very honest in  
15 your presentation before the Public Utilities Commission  
16 that you were, in fact, involved in an emergency?

17 MR. EMERY: That is true.

18 MR. DENNISON: You were not doing this for  
19 expediency to the detriment of truth, were you?

20 MR. EMERY: We certainly were not.

21 MR. DENNISON: All right. So, that these  
22 emergencies in '74 and in '79 would indicate that you  
23 possessed at that time no reasonable assurance from your  
24 own financial capabilities of carrying on the services  
25 of utility and to the extent of being bailed out by the



1 Public Utilities Commission?

2 MR. EMERY: I think the utility such as ours or  
3 any other utilities which is subject to regulations of  
4 its rates in times of inflation, in times of stress must --  
5 is dependent on a large part on obtaining the necessary  
6 relief in order that we are now free to raise our prices  
7 as other types of businesses are.

8 MR. DENNISON: All right. Now, your current  
9 unit price per kilowatt hour is \$5.04?

10 MR. EMERY: No. I said 5.4 cents.

11 MR. DENNISON: 5.04 cents?

12 MR. EMERY: Per kilowatt hours.

13 MR. DENNISON: Okay. And you have a pending  
14 rate increase?

15 MR. EMERY: No, we do not.

16 MR. DENNISON: You will, however, be seeking  
17 one somewhere at or near the time that Zimmer goes on  
18 line?

19 MR. EMERY: I would expect it sometime.

20 MR. DENNISON: Okay. Now, you indicated that  
21 Zimmer possesses or provides to your utility 10 percent?

22 MR. EMERY: Plus eight percent of the capacity  
23 that we presently have in the place.

24 MR. DENNISON: All right. Your previous  
25 question to -- posed by one of the other intervenors of



1 10 percent was incorrect? It was actually 8 percent?

2 MR. EMERY: It's about 8 percent. I think our--  
3 Let's see. Our peak or capacity today is around 2,705  
4 megawatts and Zimmer is-- Our share of Zimmer is 226  
5 megawatts and that comes out to 8.35 percent.

6 MR. DENNISON: Now, of this rough 8 percentages  
7 in the event of outage at the Zimmer Station, you rely as  
8 Cincinnati relies upon its own generating plants to  
9 substitute their absence of 7 percent or must you purchase  
10 electrical power out elsewhere at an 8 percent?

11 MR. EMERY: In our case, today we have sufficient  
12 capacity. Our peak load last year was about-- Let me  
13 see if I can find it exactly here. If my recollection was--  
14 It was about 2,100 megawatts out of the 2,705 megawatt  
15 capacity; and so, that with the addition and peak loads are  
16 growing not quite as rapidly as they use to but still  
17 growing but then we also have the capability now as part of  
18 the American Electrical System-- We have the availability  
19 through that system of capacities in the order of over  
20 20,000 megawatts, not 2,000.

21 MR. DENNISON: If I could have a response to my  
22 question? It's simply this. In the event of an outage at  
23 Zimmer, are you able to compensate for that outage internally  
24 or must you go externally to purchase replacement power?

25 MR. EMERY: We would, in the most part, generate

1 the power internally without Zimmer.

2 MR. DENNISON: Well, how about the part that you  
3 go externally?

4 MR. EMERY: I don't think we would go externally  
5 today at all.

6 MR. DENNISON: Is this a speculation on your  
7 part, Mr. Emery, or do you have some reasonable degree of  
8 certainty?

9 MR. EMERY: I'm not an engineer. I'm not in  
10 the generating area of our business, but to the best of  
11 my knowledge, the system which provides the capacity and  
12 our own capacity today alone would take care of this for  
13 several years out.

14 MR. DENNISON: That is of your knowledge or is  
15 this something that you need to rely upon?

16 MR. EMERY: That's to the best of my knowledge.

17 MR. DENNISON: All right. To the best of my  
18 knowledge then, sir, what is the degree of external energy  
19 that you would have to purchase in the event of an outage  
20 at Zimmer? That was my original question.

21 MR. EMERY: I don't think we would have to  
22 purchase anything.

23 MR. DENNISON: You don't think so but you don't  
24 know?

25 MR. EMERY: I don't believe we will. That's my

1 opinion.

2 MR. DENNISON: Now, have you made any investi-  
3 gation relative to any of the responses prepared on your  
4 behalf or submission to this tribunal or in preparation  
5 for your test during this period of the presence of this  
6 tribunal in which you have ascertained within a reasonable  
7 assurance that you can oftenly tell this group that in  
8 the event of accident or outage at Zimmer, you will not be  
9 required to purchase external power?

10 MR. CONNER: Objection. Asked and answered.

11 MR. DENNISON: The form of the question is  
12 different than that which is previously put.

13 CHAIRMAN BECHHOEFER: I'll sustain that. He  
14 answered that yesterday at least once.

15 MR. DENNISON: Now, Mr. Anderson, what is the  
16 percentage of generating power that Zimmer will produce  
17 to your conglomerative utility?

18 MR. ANDERSON: Approximately nine percent.

19 MR. DENNISON: Nine percent? All right.

20 In the event of a power outage at the  
21 Zimmer Station, can you compensate for that outage  
22 internally or must you seek external means to compensate  
23 that loss of power?

24 MR. ANDERSON: I don't know.

25 MR. DENNISON: So, that the Dayton Power and

1 Light participating here in the sum of 31.5 percent can  
2 give no reasonable assurance in the event an accident or  
3 extended outage of the finance required to produce that  
4 missing power or the means with which those finances will  
5 be obtainable, am I correct?

6 MR. ANDERSON: No.

7 MR. DENNISON: All right. Then give an answer  
8 to the question.

9 MR. ANDERSON: Would you ask the question again?

10 MR. DENNISON: The question is, again, the event  
11 or a longstanding outage at the Zimmer Station to replace  
12 the lost 9 percent of generating power, is it required  
13 that you go to an external source?

14 MR. ANDERSON: My answer before was I don't  
15 know. That's still my answer. I can tell you why I don't  
16 know that answer if that would help.

17 MR. DENNISON: Now, in your don't know response,  
18 my next following question was that if you do not know, you  
19 cannot put yourself in a position of giving a reasonable  
20 assurance to this tribunal of the manner in which in the  
21 event of accident or outage at Zimmer that there would be  
22 a cost and yet the cost - and if so - how much of financing  
23 would that obtain?

24 MR. CONNER: If the Board please, we'll object  
25 to this as having gone on in it yesterday, while having



1 enjoyed the jury-still questions. This was gone into  
2 thoroughly as to how to meet the hypothetical loss of the  
3 Zimmer Plants for a period of time and how it would be  
4 done. I refrain from -- okay, from the preliminary  
5 questions but obviously this is the same material that  
6 we covered yesterday; and we object on that basis.

7 MR. DENNISON: I have no recall of it being  
8 covered yesterday or else I would not be back in the area.  
9 I might add an editorial. I'm quite pleased that we  
10 intervenors are beginning to entertain Mr. Conner.

11 MR. CONNER: Please start.

12 CHAIRMAN BECHHOEFER: I think we will overrule  
13 that objection. We're not precisely certain whether the  
14 exact question was asked and answered yesterday. So, that  
15 will be the end of that.

16 MR. DENNISON: Thank you, Mr. Anderson.

17 Do you recall the question, Mr. Anderson?

18 MR. ANDERSON: No, I don't.

19 MR. DENNISON: Would you read the question back,  
20 please?

21 (FROM THE RECORD ABOVE, THE  
22 COURT REPORTER READ BACK THE  
23 PRECEDING QUESTION OF MR.  
24 DENNISON.)  
25

1 MR. ANDERSON: The answer to that is no. I can  
2 give that assurance, and I think if you'd like me to try  
3 to be helpful, the reason is that regardless of whether  
4 the replacement power-- Well, perhaps I could take it two  
5 ways. If the replacement power comes from our own system,  
6 which might occur in periods of low demand, whereby our  
7 generating units would be able to fill in the void created  
8 by Zimmer, that obviously there is no additional finance  
9 required other than perhaps the coal cost which we might  
10 otherwise not spend. Those finances would not be a  
11 problem.

12 If the power were to be required outside  
13 of our system through a purchase power from another  
14 utility, then under the provisions of the present fuel  
15 clause of the Ohio Public Utilities Commission those costs  
16 or at least the energy part of it would be passed to the  
17 customers. So, I don't think financing would be a  
18 concern for replacement power on either option.

19 Also, there is an assurance arrangement  
20 whereby part of the costs of the replacement power can be  
21 provided through insurance. It's our belief at this point  
22 that we would be coming a participant in that insurance  
23 program. So, a remaining portion of the power of the  
24 purchase cost would be covered through that.

25 MR. DENNISON: Now, Mr. Anderson, you indicated

1 in your testimony yesterday that twice in the calendar  
2 year 1980 it was necessary for your utility to come before  
3 the Public Utilities Commission for the purposes of  
4 obtaining emergency rate increases.

5 Did I understand your testimony to be that?

6 MR. ANDERSON: Yes.

7 MR. DENNISON: The predicate upon which those  
8 funds were permitted to your utility through rate hike on  
9 both a temporary and emergency basis was because there was  
10 a direct influence to either the good of the public or  
11 the good of the Public Utility, am I not correct?

12 MR. ANDERSON: Yes.

13 MR. DENNISON: You have heard the testimony of  
14 Mr. Emery to the questions that I had put to him comparable  
15 to the questions that I have put to you, have you not?

16 MR. ANDERSON: Yes.

17 MR. DENNISON: All right. You and Columbus  
18 together have 60 percent of the financial obligation  
19 for this utility, am I not correct?

20 MR. ANDERSON: For this power plant?

21 MR. DENNISON: For Zimmer.

22 MR. ANDERSON: Yes.

23 MR. DENNISON: And in '79 and in '80 twice for you,  
24 once in '79 for Columbus, emergency rate hikes were required;  
25 is that correct?

1 MR. ANDERSON: Yes.

2 MR. DENNISON: That was because you were  
3 financially instable at that point in time unless under a  
4 temporary basis there would be a rate increase, am I  
5 correct?

6 MR. ANDERSON: Yes.

7 MR. DENNISON: And this had occurred over a  
8 period of a decade in which your utility had been involved  
9 in rate hikes and involving six plants coming on line and  
10 the Columbus utility being involved with three plants coming  
11 on line for which there were rate increases; is that  
12 correct?

13 MR. ANDERSON: Yes.

14 MR. DENNISON: And it's this historic financial  
15 background that you two utility possessing 60 percent of  
16 the financial obligation for Zimmer are telling us that  
17 you can give a reasonable assurance that you are financially  
18 capable or to the contrary that you do not lack an absence  
19 of financial integrity?

20 MR. ANDERSON: Yes, because the Public Utilities  
21 Commission has acted in each of the cases we've brought  
22 before them and seen the need for great relief on an  
23 accelerated basis.

24 MR. DENNISON: Right now you had a normal  
25 application for rate relief in 1979 before the Public



1 Utilities Commission?

2 MR. ANDERSON: Is that a question?

3 MR. DENNISON: That's a question.

4 MR. ANDERSON: Yes?

5 MR. DENNISON: Yes.

6 MR. ANDERSON: Yes.

7 MR. DENNISON: All right. Now, if I follow your  
8 progression here, Mr. Anderson, that rate increase would  
9 then just without violating your financial integrity that  
10 you would have the requisite financial ability to continue  
11 in operation? Does that proposition--

12 Is that proposition a sound one?

13 MR. ANDERSON: I don't understand your question.

14 MR. DENNISON: Okay. The question is this.

15 If I follow your last response, it is that  
16 the Public Utilities Commission will increase the rate so  
17 that the revenue then justifies the operating expense.

18 Can you tell me this is the way it works?

19 MR. ANDERSON: We put on a case before the  
20 Commission for a rate increase and then they make a decision  
21 based on that case. They don't always give us the amount  
22 we asked for.

23 MR. DENNISON: All right. Now, in '79 you put  
24 on such a case; is that correct?

25 MR. ANDERSON: Yes.

1 MR. DENNISON: All right. If I understand the  
2 way this process works, that should have then justified  
3 revenue to operating expense, am I correct?

4 MR. ANDERSON: Well, I'm not sure what you mean  
5 by your terms but we're given a certain level of revenues  
6 based on the evidence that we filed.

7 MR. DENNISON: It's operating expense, is it not?

8 MR. ANDERSON: Well, there are other things.

9 MR. DENNISON: And as I understand it, the Public  
10 Utilities Commission has the jurisdiction to make this  
11 sort of decision?

12 MR. ANDERSON: Yes.

13 MR. DENNISON: Right. However, you came back  
14 twice in 1980 on an emergency basis, did you not?

15 MR. ANDERSON: Yes.

16 MR. DENNISON: Now, if I understand the  
17 proposition that is being presented in these exhibits and  
18 the testimony of you on direct here, is that the operating  
19 costs for the Zimmer Plant that will be born by revenues  
20 received from rate hikes or rate increases; am I correct?

21 MR. ANDERSON: That's correct.

22 MR. DENNISON: Yet, historically or at least  
23 let me put it this way, Mr. Anderson.

24 In 1979 and 1980, this did not become the  
25 reality of the matter, did it?

1 MR. ANDERSON: I wouldn't agree with that.

2 MR. DENNISON: You would not?

3 MR. ANDERSON: No, because the emergency cases  
4 that we filed here to recover the operating costs among  
5 other costs, capital costs, and so on. So, by filing an  
6 emergency case, we were allowed to put rates into effect  
7 on an accelerated basis to recover the costs quicker than  
8 if we had waited for the normal process to take place.  
9 This is an acceptable procedure under the Ohio law, and  
10 we were just taking -- making use of that procedure.

11 MR. DENNISON: And now, did you or Dayton Power  
12 and Light involve themselves in any manner in the projection  
13 of the decommissioning costs for Zimmer in arriving at a  
14 6.5 percent factor for inflation?

15 MR. ANDERSON: Those computations were made by  
16 personnel at Cincinnati Gas and Electric Company.

17 MR. DENNISON: In which Dayton Power and Light  
18 took no position in other than to incur in the results; is  
19 that a fair statement?

20 MR. ANDERSON: We were involved in the process  
21 which lead up to those results.

22 MR. DENNISON: Now, if that factor of 6.5 percent  
23 is an error and 8 percent would be the correct factor, this  
24 would increase the financial obligation by about 10 million  
25 dollars, would it not?

1 MR. ANDERSON: I don't know how you got your 10  
2 million dollars.

3 MR. DENNISON: Beg pardon?

4 MR. ANDERSON: I don't know how you came up with  
5 10 million dollars.

6 MR. DENNISON: 6.5 percent for the 33 year  
7 anticipated life of this utility would be 3,500 -- pardon  
8 me, 3,500,000 roughly, would it not?

9 MR. ANDERSON: Yes.

10 MR. DENNISON: If rather than using 6.5 percent  
11 you use 8 percent, it becomes 13 million just short of 14  
12 million?

13 MR. ANDERSON: I really think you'd be more  
14 productive if you address those questions to someone from  
15 Cincinnati who participated in that. I can't answer those  
16 questions.

17 MR. DENNISON: You have no response or you feel  
18 incapable at this juncture of responding?

19 MR. ANDERSON: Yes.

20 MR. DENNISON: Now, is your understanding that  
21 Zimmer is to commence operation in 1983?

22 MR. ANDERSON: No, mid '82.

23 MR. DENNISON: Mid '82? And at that point, it  
24 would go in the rate base in '83?

25 MR. ANDERSON: Well, that would be dependent upon



1 when each of the companies filed rate cases but to the  
2 extent, it's already a rate case.

3 MR. DENNISON: The addition of Zimmer based upon  
4 the operating expenses which have been previously prepared,  
5 how would that influence the unit price per kilowatt hours  
6 as it would apply to Dayton Power and Light?

7 MR. CONNER: Objection, Your Honor. It's been  
8 asked and answered, even if it's relevant.

9 MR. DENNISON: I'll take the answer from Mr.  
10 Conner, if he has it.

11 MR. CONNER: I'm afraid it's in part of the  
12 transcript that was asked yesterday.

13 MR. DENNISON: In exclusion of the witness, may  
14 I have an answer then, Your Honor?

15 CHAIRMAN BECHHOEFER: If it can be answered  
16 very briefly, then repeat it. I think it's been probably  
17 asked but it might speed things along if you answer it  
18 again.

19 MR. DENNISON: Once an application is made and  
20 improved by the Public Utilities Commission for the operation  
21 of the Zimmer Plant, what would be your per hour unit that  
22 is per kilowatt hour unit price at that stage?

23 MR. ANDERSON: I don't know. I think Mr. Borgmann  
24 testified yesterday that the costs, the operating costs, of  
25 the nuclear plant would be less than that of the plant --

1 would be less than that of a fossil plant but I can't tell  
2 you that precisely.

3 MR. DENNISON: Now, the estimated costs as a  
4 result of the TMI related requirements under group or Item  
5 Number 2, it's been indicated, Mr. Borgmann, that the  
6 expense there would be \$4,600,000.

7 MR. BORGMANN: That's an estimate. That's right.

8 MR. DENNISON: And is that total estimate or is  
9 any percentage of it?

10 MR. BORGMANN: That's the total.

11 MR. DENNISON: Be actually hashed out?

12 MR. BORGMANN: You mean the date?

13 MR. DENNISON: Yes.

14 MR. BORGMANN: I can't give you the exact number  
15 but I suspect we spent probably a half million dollars  
16 thus far in preparation of the emergency plans. It might  
17 be a little more than that. It's of that magnitude.

18 MR. DENNISON: Now, of the \$4,600,000, \$2,600,000  
19 of that includes hardware; and by hardware, I presume that  
20 you meant this would be the related equipment monitoring  
21 devices, vehicles, whathave you?

22 MR. BORGMANN: That's right.

23 MR. DENNISON: Is that an estimated figure or  
24 is that a firm figure which if you purchased these items  
25 tomorrow, the reactivation facilities would be fully

1 equipped and that would be the price?

2 MR. BORGMANN: It's an estimate.

3 MR. DENNISON: Now, is there any dispute between  
4 you and the respective sovereigns that are involved as to  
5 the amount of hardware necessary from whence this estimated  
6 figure of \$2,600,000 is derived?

7 MR. BORGMANN: Well, I don't know how to determine  
8 dispute.

9 MR. DENNISON: Well, is there some disagreement  
10 between, generally between you and the sovereigns?

11 MR. BORGMANN: Well, let me tell you this. We  
12 have not come to a meeting of minds completely.

13 MR. DENNISON: And so that we can get some  
14 appreciation of estimates, were you to meet totally the  
15 mind of the Governmental bodies involved what would that  
16 figure of \$2,600,000 actually be?

17 MR. BORGMANN: That's really a difficult question  
18 to answer because if I could answer it based on what we've  
19 seen to date and that could possibly, if we gave the  
20 Governmental bodies everything, that they have brought up  
21 to date, we could conceivably add one to \$2 million to this,  
22 but in certain areas we come to pretty good agreement; and  
23 I think that this estimate is fairly accurate based on  
24 where we're headed from our discussions.

25 I couldn't give you an answer on anything

1 that might come up because at some point in time, there  
2 has to be a fine-eyed closure to this thing. I mean you  
3 can't get into negotiations forever and give people  
4 everything they want.

5 MR. DENNISON: Now, the second part of this  
6 estimation, the \$2 million for clients, is that a fairly  
7 stable estimation or maybe it has some fluctuation as  
8 some counterpart? The hardware fluctuates from \$2.6 to  
9 \$4.6.

10 MR. BORGMANN: No, that number is much firmer.

11 MR. DENNISON: Do the Governmental bodies in  
12 any way interplay in that figure?

13 MR. BORGMANN: Somewhat, but not to as large an  
14 extent. We, in effect, are providing consulting services  
15 to the Governmental bodies to write the plans.

16 MR. DENNISON: So, now does this include all the  
17 Governmental bodies involved that this service is being  
18 sponsored by Cincinnati Gas and Electric?

19 MR. BORGMANN: It's sponsored by the three companies  
20 by the plants. It applies to C.G.&E. It applies to as far  
21 as I know to the three counties, east in Kentucky in the  
22 State of Kentucky, as well as Cleremont County. It does not  
23 apply to the State of Ohio since it already has a plan  
24 in connection with the Davis-Besse Plan.

25 MR. DENNISON: What about the City of Mentor



1 who is an intervenor in this proceeding? You admitted  
2 them.

3 MR. BORGMANN: Well, we've been interfacing with,  
4 as we understand it -- as I understand it, we've been  
5 interfacing in the State of Kentucky with the disaster  
6 service people down in Frankfort; and we've been working  
7 with whomever they've told us to work with, and I think  
8 there has been contacts made with the various Governmental  
9 bodies in Kentucky. In other words, you representatives  
10 have called on everybody as far as I know.

11 MR. DENNISON: All right. Now, of the \$2 million  
12 for the planning aspect of this, adding to that the areas  
13 of some disagreement between the utilities and the  
14 Governmental bodies as we applied it in the avenue of  
15 hardware, to what figure would you inflate that amount to  
16 cover totally a respectable figure without the dispute  
17 as to the planning aspect?

18 MR. BORGMANN: Well, as I say, I would not add  
19 anything to the \$2 million. I think that's a pretty  
20 generous number, and it's based primarily on the time  
21 period on manhours involved in that time period; and we've  
22 established target dates which most of the people have  
23 agreed upon; and that meeting had been with the various  
24 Governmental agencies involved. So, I feel that \$2 million  
25 is a pretty good number. There is a normal contingency in

1 there about 5 percent. So, I think it's pretty good.

2 MR. DENNISON: So, now you say this meeting that  
3 you discussed and this target date, is this the target  
4 date originally proposed by the utilities of April 1  
5 which you subsequently recast to July?

6 MR. BORGMANN: No. The meeting I'm talking  
7 about is a meeting where we had the various people there  
8 along with the other regions and along with the NRC and  
9 we've established a target date of July the 22nd or 23rd,  
10 whatever it was, for test exercise.

11 MR. DENNISON: However, as I understand it,  
12 the course of that meeting April 1, was the date which  
13 was suggested by the utility, am I correct?

14 MR. BORGMANN: No; originally?

15 MR. DENNISON: Originally, certainly.

16 MR. BORGMANN: I'm talking about the meeting of  
17 a couple weeks ago. At that time, we went into that  
18 meeting with a June date but originally when this thing  
19 started we were looking at an April 1 date. Well, an  
20 April date. I don't know if it was April 1 or not.

21 MR. DENNISON: Now, does this interplay at all  
22 this test date with the financial circumstances that are  
23 present or let me put the question this way, Mr. Borgmann.

24 Was it suggested at this meeting that the  
25 test drill for emergency planning be undertaken absent the

1 hardware, the radio and the other things in which there  
2 would be simulation rather than the realities of the  
3 equipment in the mechanics because of some financial  
4 considerations on the part of the utilities?

5 MR. CONNER: Objection, Your Honor. We're now  
6 getting into the emergency planning and contingent and  
7 beyond the nature. While this will be thoroughly gone  
8 into in due course, I don't think it should be gone into  
9 here.

10 MR. DENNISON: I'm not interested in those  
11 plans, Your Honor. I'm interested in the financial aspect  
12 of those plans, which I believe is one of the questions  
13 which this Board has put to the utilities to respond to;  
14 and which they have -- submitted only limitedly responded  
15 to; and I think it's in our cross-examination to explore  
16 into these.

17 CHAIRMAN BECHHOEFER: I think we'll overrule  
18 that. I think the question is-- Are you knowledgeable  
19 whether they plan to do the test before they reach the  
20 financial arrangements with the Governmental agency?

21 MR. DENNISON: No, no. That's not my question  
22 at all. I'm sorry if I mislead the Board or if perhaps  
23 Mr. Borgmann or his counsel, Mr. Conner.

24 My question is directed simply to this.  
25 Is this expediency to have a test drill prior to any

1 equipment in some manner related to the financial  
2 capabilities of this utility to go forward with this  
3 particular plan?

4 CHAIRMAN BECHHOEFER: I see.

5 MR. BORGMANN: Absolutely not.

6 MR. DENNISON: So, that they know the test  
7 drill can await at least from financial considerations  
8 such a time in the future in which all the hardware is  
9 in place of the drill that can be run as to each of its  
10 avenues?

11 MR. BORGMANN: That's not so.

12 MR. DENNISON: All right. Then is the reason  
13 that this is not so very -- bearing upon the financial  
14 conditions of the utilities?

15 MR. BORGMANN: Not directly.

16 MR. DENNISON: All right. Therefore, it has  
17 indirectly-- I assume the converse naturally follows?

18 MR. BORGMANN: Right, but let me-- I think  
19 you're mischaracterizing the meeting because what was  
20 stated at the meeting was that the successful drill has  
21 to be undertaken before they go into the hearings and  
22 obviously we have to go into the emergency plan hearings  
23 before we can operate with a license, and obviously the hearing  
24 license is put off. The more it costs us by virtue of the  
25 fact that the cost of the plant keeps building up. So,



1 therefore, the longer the plant is sitting there idle  
2 before it's allowed to operate obviously the more the plant  
3 is costing. It's not only costing us, it's costing the  
4 consumer. So, therefore, we would like to have the drill  
5 run and it's quite common; and it's normal to run an  
6 exercise to show your capabilities, and there is no way  
7 we can have all of the hardware in place before we run a  
8 drill; and the NRC made a statement at the same meeting  
9 that they would not allow the plant to go into operation  
10 until these facilities are in place. That does not mean  
11 you cannot have an exercise. So, there is some of the mis-  
12 characterization there about what you're alerting to.

13 MR. DENNISON: I have one question coming from  
14 the response, Mr. Borgmann, and that is simply this.

15 How does this cost the consumer when the  
16 rate base is static at the moment for Zimmer?

17 MR. BORGMANN: That's an artificial situation.  
18 Whether Zimmer is in the rate base or whether Zimmer is not  
19 in the rate base, there is a certain amount of money that  
20 the utility has to have in order to operate, and as time  
21 goes on and it's costs increase, you're going to get a rate  
22 increase whether Zimmer is in the rate base or whether  
23 Zimmer is not in the rate base. The cost of the consumer  
24 because whether Zimmer gets on the line, the cost, as I  
25 indicated yesterday, the cost of the generation coming

1 from Zimmer is going to be lower and the generation from  
2 the other units. So, therefore, the overall operation, the  
3 overall costs of kilowatt hours will be reduced whether  
4 Zimmer gets into service and if Zimmer is not on the rate  
5 base; and you still have to have the rates accordingly, and  
6 if you want to get into ratemaking, I'll turn you over to  
7 Jack Randolph here but the consumer-- Let's put it this  
8 way.

9  
10 When Zimmer goes into operation, the rate of  
11 increase would be less than if they did not have a nuclear  
12 plant.

13 MR. DENNISON: Now, in your response to Unit  
14 Number 3 or Group Number 3, you indicated a figure of  
15 \$8,400,000 for the construction of onsite and offsite  
16 buildings, offices and other things which relate to the  
17 emergency aspects.

18 You had indicated an estimated figure of  
19 \$2,500,000 for the offsite emergency operation facility.  
20 However, you had not selected the site?

21 MR. BORGMANN: That's right.

22 MR. DENNISON: Have you selected the plants?

23 MR. BORGMANN: In general terms. We know what  
24 has to go into an EOF and the estimate was made based on a  
25 typical arrangement of what we think has to go into the  
emergency operation facility.

1 MR. DENNISON: Now, is this estimate of \$2,500,000--  
2 What one would characterize as a rough estimate?

3 MR. BORGMANN: I would characterize it had a  
4 budget estimate. It's the same type of estimate that we  
5 would make in order to decide to go ahead or not go ahead  
6 with the project; typical engineering estimate.

7 MR. DENNISON: So, that I will straight go  
8 historically back in the late Sixties, early Seventies you  
9 estimated this plant, Zimmer, itself had about \$244 million  
10 yet its construction cost is a billion? It's the same  
11 application applied here to this offsite emergency operation  
12 facility?

13 MR. BORGMANN: No. I'd like to think we do a  
14 little bit better in our day to day estimate on a six  
15 month to a year term basis of an office building. I think  
16 we're better than that.

17 MR. DENNISON: Now, this offsite emergency  
18 operating facility, might that be some refurbishing of  
19 the Moscow Elementary School?

20 MR. BORGMANN: That's one of the possibilities  
21 being considered.

22 MR. DENNISON: All right. Now, that would  
23 require, I believe, as part of your expenses that that  
24 building or structure be less shielded?

25 MR. BORGMANN: Not less shielded but shielded

1 to the concrete.

2 MR. DENNISON: Okay. Now, were you to take that  
3 facility or are you still talking about \$2,500,00?

4 MR. BORGMANN: We may or may not be. That is an  
5 alternative that would have to be looked at, and this  
6 estimate was based on the -- a new facility so obviously  
7 we would not spend any more than we had to.

8 MR. DENNISON: To the converse, have you been  
9 given any reliable information from the architects or  
10 others trained in that discipline relative to whether or  
11 not you would be adding a figure of \$2,500,000 where you'd  
12 undertake the Moscow Elementary School as the emergency  
13 operation facility?

14 MR. BORGMANN: That investigation is under way  
15 right now. I can't give you a definite answer on that  
16 point.

17 MR. DENNISON: Okay. So, that this figure is  
18 apt to fluctuate either downward or upward depending upon  
19 what you are explained or told by those individuals giving  
20 you cost estimates for the necessary requisite remodeling  
21 of the elementary school?

22 MR. BORGMANN: That's correct. This is a  
23 representative number I feel we can do the job for.

24 MR. DENNISON: Okay. Now, as a part of this  
25 \$2,500,000, do you take into consideration the cost of the



1 land or is this purely the construction costs?

2 MR. BORGMANN: We have a very nominal figure in  
3 there for the land. I forget what the number was but it's  
4 very nominal because we have some property which we owned  
5 and we have other facilities in the area, even over at  
6 Batavia. So, the costs of the land is very nominal.

7 MR. DENNISON: Okay. Now, could you give me some  
8 appreciation in this nominal land cost as to its size?

9 MR. BORGMANN: Size of the land?

10 MR. DENNISON: Yes.

11 MR. BORGMANN: No. I'd have to go back and look  
12 at our notes but we're a growing-- It's about something  
13 that the average lot size for a home, for example.

14 MR. DENNISON: You're not talking about anything  
15 having the financial capabilities of the value of the  
16 land upon which Zimmer citizens would know it's  
17 decommissioned?

18 MR. BORGMANN: Oh, nothing like that.

19 MR. DENNISON: Now, as a part of the expenses in  
20 Item Number 3, is also an onsite facility which is required  
21 to be constructed?

22 MR. BORGMANN: That's right.

23 MR. DENNISON: You have formalized plans as to  
24 that construction?

25 MR. BORGMANN: We have more than formalized

1 plans with this under construction.

2 MR. DENNISON: It's under construction at this  
3 point?

4 MR. BORGMANN: It's under construction at this  
5 point.

6 MR. DENNISON: Then your figure of \$5,200,000  
7 for the construction of that, I take it, that that is a  
8 firm figure based upon a construction contract?

9 MR. BORGMANN: Based upon contracts and based  
10 upon good engineering drawings that are just pretty solid.

11 MR. DENNISON: Now, Number 4 involves itself  
12 with monitoring facilities?

13 MR. BORGMANN: Right.

14 MR. DENNISON: And this figure of \$9,400,000,  
15 is this governed and is it covered by hardware only or  
16 is there some maintenance, labor and others involved in  
17 it?

18 MR. BORGMANN: The figure \$9 million is capital  
19 costs only.

20 - - - - -  
21  
22  
23  
24  
25

1 MR. DENNISON: This would be the capital  
2 cost for the purchase of the hardware and the  
3 installation as well?

4 MR. BORGMANN: Yes.

5 MR. DENNISON: Has this monitoring facility  
6 been purchased as yet?

7 MR. BORGMANN: Part of them have and part  
8 of them have not. We have ordered computers. We  
9 have ordered the in-plant radiation monitor equipment.

10 When we get into the instrumentaion mandated  
11 by 1.97, I would have to go down the list, and  
12 I don't have that with me. There is a lot of detail --  
13 some has and some has not been purchased. It's all  
14 on the road to being purchased.

15 MR. DENNISON: Now, turn to the decommissioning  
16 costs, and this is a question which you may wish to  
17 pass over or respond to as the case may be.

18 My understanding that the figure of  
19 \$3,000,551 was derived from using a 6.5 annual  
20 inflation percent over a period of thirty-three years.  
21 Am I understanding that correct?

22 MR. BORGMANN: That's correct.

23 MR. DENNISON: Now, if a percentage of  
24 eight is used, that figure of \$3 million increases  
25 to \$15,900.000.

1 MR. BORGMANN: No, I don't agree with that  
2 number.

3 MR. DENNISON: Well, I have noted the --  
4 for instance, the number of computers. I think it  
5 would be, if you don't mind, Mr. Borgmann, an easy  
6 matter to compute with a computer based upon an  
7 eight percent rather than 6.5 and then to indicate --

8 MR. CONNER: We object to the premise in  
9 the question that would necessarily relate to eight per-  
10 cent. It's a hypothetical number -- or any other  
11 number. We aware of Dr. Estes' findings, of course,  
12 but there is no foundation for this.

13 The question does not include all of the  
14 parts of the equation that should be included in  
15 such a hypothetical question.

16 MR. KARMAN: Mr. Chairman, it seems to me --

17 MR. DENNISON: I will withdraw the question.

18 MR. KARMAN: Your Honor, it seems to me we  
19 have been over this yesterday. It seems we are just  
20 going over grounds that have been tried before.

21 MR. DENNISON: Let me approach the matter  
22 this way, Mr. Borgmann. Have you had the opportunity  
23 to review the direct examination of Dr. Estes?

24 MR. BORGMANN: I went over it briefly, yes.

25 MR. DENNISON: Then, so that we might speed



1 along, you noted in that review that he used a --  
2 I would you to accept this -- it's a hypothetical  
3 question, but based upon his review using a six  
4 percent inflation for 1975 through 1979, and 6.5  
5 thereafter, one arrives at a cost of \$3,000,551 which is  
6 essentially what you have done in your estimation of  
7 decommissioning costs, is that correct?

8 MR. BORGMANN: Yes.

9 MR. DENNISON: You use those same factors  
10 of 6% and 6.5?

11 MR. BORGMANN: Yes.

12 MR. DENNISON: Now, what I would like for  
13 you to assume is Dr. Estes is correct in using an  
14 actual 6.5% rate of inflation for the years 1975 through  
15 1979, and thereafter 8%, and in so using, he would achieve  
16 a sum of \$13,000,901 for 1978.

17 You recognize that from Dr. Estes -- whether  
18 it is legitimate or not, you recognize that he takes  
19 that position?

20 MR. KARMAN: May I interrupt at this time?  
21 The figure you gave I think was not accurate. You were  
22 saying \$3,000,551. Is that what I understood you to say?

23 MR. DENNISON: \$3,551,610 to be exact. These  
24 figures get so long as you get toward the end, you know.

25 Using the eight percent under this same

1 scheme, and 6.5 for 1975 through 1979 would raise this,  
2 if Dr. Estes is correct, to \$13,991,278. Is that  
3 correct?

4 MR. BORGMANN: I recognize his position.

5 MR. DENNISON: Okay. Now, should his position  
6 be correct, or should this be borne out in the realities  
7 of the latter, is there any reasonable assurance that  
8 the financial stability of the utilities involved  
9 accept that sum, and you discharge accordingly without  
10 financial chaos?

11 MR. BORGMANN: Well, why would we accept a  
12 sum that we don't agree to?

13 MR. DENNISON: I say if this is the reality  
14 of the latter. That's what the dollar and cents come to.

15 MR. BORGMANN: I guess you could ask the  
16 question what if a plant costs \$10 billion. I don't  
17 like to respond to a question that's hypothetical.

18 MR. DENNISON: I request that the Board  
19 direct the witness to respond.

20 MR. CONNER: If the Board please, we object  
21 again on the grounds stated that the fundamental error  
22 in Dr. Estes' calculations and implicit in the question,  
23 is the fact that it makes no allowance for the increase  
24 in the interest rate corresponding to the increase  
25 from inflation rates, and accordingly, in our review the

1 number is spurious.

2 Now, this has been gone into yesterday on  
3 page 4048 of the transcript where this was in fact  
4 laid out, and I don't see any point in going through  
5 it again, because it's purely hypothetical.

6 It's like saying assume that the interest  
7 rate remains constant and the inflation rate goes to 18%,  
8 won't that be an awful lot of money? The answer would  
9 be of course, it would. So, that's why the witness  
10 properly refuses to accept the premise.

11 JUDGE BECHHOEFER: I think Mr. Borgmann could  
12 answer the question, but it could be qualified in the  
13 manner Mr. Conner has said, and I might add the Board  
14 would be interested in knowing what the financial  
15 effects of including the figure the way you have it  
16 written down -- \$4,766,000 -- which apparently does  
17 take into account a difference in earnings.

18 MR. RANDOLPH: I could respond with respect  
19 to that. We took upon ourselves in the rate department  
20 to check Dr. Estes' calculations, merely arithmetic that  
21 he used, and we accept his assumption of an eight percent  
22 increase inflation rate and a six percent tax income,  
23 we would come up with \$13,900,000, and we didn't hit  
24 his number precisely, we hit \$13,939,000, but the  
25 difference would be, using not quite as powerful

1 a computer as Dr. Estes, it's around it, and when I  
2 yesterday testified, there was certainly an apparent  
3 relationship between an inflation rate and an interest  
4 rate.

5 So, we used Dr. Estes -- made the same  
6 calculations using an eight percent inflation rate,  
7 and 7.4% interest rate, and that's where this \$4,766,000  
8 came from. We calculated again.

9 JUDGE BECHHOEFER: Perhaps Mr. Dennison's  
10 question could be answered using both figures?

11 MR. DENNISON: The essence to the question,  
12 if in reality the amount required is \$13 million rather  
13 than three or four million, do these utilities have a  
14 reasonable assurance they can respond financially to  
15 that kind of a cost?

16 MR. RANDOLPH: Well, I would presume that over  
17 the --

18 MR. CONNER: Did the Board rule on our ob-  
19 jection? It's the same problem -- the elements of the  
20 hypothetical are missing. I think you said the  
21 witness could answer in terms of adding the additional  
22 elements, but that is not the question that was just  
23 asked.

24 JUDGE BECHHOEFER: I said he could add with  
25 the qualification. The way I understand it -- what



1 would be the effect on the company if those figures  
2 were --

3 MR. KARMAN: Unless I am misunderstanding it,  
4 either the tone I get from the witness table -- they  
5 don't consider the \$3 million figure to be a possible  
6 figure.

7 JUDGE BECHHOEFER: Well, they can say that.  
8 The witness may say that.

9 MR. KARMAN: Well if that's the case, why  
10 pursue that any further, Mr. Chairman? How can you  
11 work from a premise from something that is considered  
12 to be impossible?

13 JUDGE BECHHOEFER: Because this witness  
14 thinks it's impossible, but every witness may or may  
15 not.

16 MR. KARMAN: But they are testifying.

17 MR. CONNER: Yes. They will put in their  
18 own evidence.

19 JUDGE BECHHOEFER: Well, they have done that,  
20 but I think the witness can testify to that figure --  
21 what the effects -- whether the conditions could cover  
22 that figure.

23 MR. CONNER: Why not go on to the next one,  
24 then -- 10% on his calculations would be \$132 million.

25 MR. DENNISON: That's fine.

1 JUDGE BECHHOEFER: What we are really in-  
2 terested in is the formula.

3 MR. KARMAN: I think we are cluttering the  
4 record with figures which are not going to serve a  
5 useful purpose in the future, Mr. Chairman.

6 JUDGE BECHHOEFER: I think the witness may  
7 answer.

8 MR. RANDOLPH: With the qualifications of  
9 anyone we have been discussing, \$13 million per year  
10 is completely irrelevant here. It's not likely to ever get  
11 to that extent. We think the calculation that we made  
12 is more reasonable, because we are looking at an  
13 inflation rate over a long period of time -- 104 years  
14 -- and we don't think we are going to experience an  
15 inflation rate for that period of time, but the answer  
16 to that question is we would not sit there for  
17 thirty-three years while it became accumulated, and  
18 accumulated at the rate of \$3.5 million a year when it's  
19 obvious it was going to be some other number.

20 This number must be reviewed periodically and  
21 adjusted accordingly, and at the time it's adjusted, it  
22 would become my responsibility to go before the Public  
23 Utilities Commission of Ohio and adjust the rate for  
24 decommissioning, which would be part of our decommis-  
25 sioning rate, and that would be reflected in rates.

1 I would assume that the other two companies  
2 would have that same sort of responsibility and they  
3 would do the same thing.

4 MR. DENNISON: I assume that your response  
5 would remain constant, or the same, for the \$132  
6 million figure?

7 MR. RANDOLPH: That would be a bigger problem  
8 -- a bigger hypothetical, but yes.

9 MR. DENNISON: And if that should be the  
10 case, that steps could be taken with reasonable as-  
11 surance at this juncture of the proceedings that steps  
12 taken in the future would be responsive and could  
13 satisfy this indebtedness without financial chaos  
14 to any of the utilities or to all utilities?

15 MR. RANDOLPH: I think the reasonable as-  
16 sumptions in calculating that rate, that we have  
17 reasonable assurance of being able to remain responsive.

18 MR. DENNISON: Now, while --

19 JUDGE BECHHOEFER: Mr. Dennison, at some  
20 point we would like to take a lunch break. So, when  
21 you come to a convenient --

22 MR. DENNISON: We have arrived at a spot,  
23 Your Honor.

24 JUDGE BECHHOEFER: Let's break for an hour  
25 and fifteen minutes for lunch at this time.

1 (Whereupon, the hearing in the above-entitled  
2 cause recessed at 12:45 to reconvene later this same  
3 day.)  
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A F T E R N O O N   S E S S I O N

(2:00)

JUDGE BECHHOEFER: Back on the record.

Mr. Dennison, are you ready to proceed?

MR. DENNISON: Yes, Your Honor.

As you recall, Mr. Randolph was about to respond to a question. The question is this: whatever the rate base may be as authorized by the Public Utilities Commission, your income can fluctuate based upon the consumer's consumption, whether it is exhorbitant, or on the contrary if he is conservative, is that not true?

MR. RANDOLPH Yes.

MR. DENNISON: And in a situation or circumstance in which consumers would become conservative, this would influence your ability to discharge the debts which you are undertaking after the rate base goes into effect as it relates to the Zimmer plant, is that not true?

MR. RANDOLPH: It could if we did nothing about it, but assuming that we took proper actions, we would go back in again and adjust the rates.

MR. DENNISON: That is increase the rate to sort of counter the action of the consumer in reducing his monthly payments to the respective utilities?

1 MR. RANDOLPH: With respect to the format  
2 that I understood you to present, that there was a  
3 decrease in sales volumes or something like that,  
4 then of course we are not predicting decreases in  
5 sales, we are predicting lesser increases.

6 MR. DENNISON: You are predicting what?

7 MR. RANDOLPH: Lesser increases.

8 MR. DENNISON: In sales?

9 MR. RANDOLPH: Yes.

10 MR. DENNISON: Now, I am not sure I understand  
11 the semantics of the matter -- you are talking about  
12 sales, or are you talking about sales to new customers  
13 or are you talking about increased consumption to existing  
14 customers.

15 MR. RANDOLPH: It would be an element of both.

16 MR. DENNISON: All right. Now you had indi-  
17 cated your expertise with the Public Utilities Commission,  
18 and as part of the obligation -- putting it another way,  
19 the responsibility of that Commission to respect the  
20 rights of the public itself -- is that not correct?

21 MR. RANDOLPH: That's correct, that's one  
22 of their responsibilities.

23 MR. DENNISON: And would you say that the  
24 principal or primary responsibility of that Commission  
25 is to the public and to the utility secondary?

1 MR. RANDOLPH: I don't know that it can be  
2 divided.

3 MR. DENNISON: Now, you have remarked in  
4 your testimony yesterday concerning some sort of  
5 experiment which was conducted, either by your utility  
6 or by yourself, concerning a test group of consumers who  
7 were asked to conserve.

8 MR. RANDOLPH: Well, that's not a proper  
9 statement of what we actually did. We did run an  
10 experiment involving a total of 150 customers, but  
11 we had fifty customers on one time of day rate  
12 schedule; fifty customers on another time of day  
13 schedule, with a bigger peak differential; and then  
14 fifty customers as a control group.

15 What we actually did was bill those cus-  
16 tomers -- the time of day customers on the time of day  
17 rate -- and what we were trying to find out is how  
18 acceptable this type of rate form would be to those  
19 customers.

20 Whether they thought this was a good --  
21 if they change their consumption standards -- if this  
22 was acceptable to them or not, and we also wanted to  
23 find out, because the peak differentials were used,  
24 if we could get some kind of response to price, and  
25 that ran for about a year and we, as I explained earlier,

1 we didn't feel that we got very good summer data off  
2 of that experiment because the summer was abnormally  
3 cool.

4 So, we asked the customers to continue for  
5 another year, we wanted to collect another year's  
6 data, and eighty-seven percent of them said they wanted  
7 no part of the rate structure, and take the experimental  
8 meters out, and they didn't want to continue.

9 MR. DENNISON: Now, here recently your  
10 utility has experienced a great deal of inquiry from  
11 its customers concerning its rates -- that is the  
12 customer rates.

13 MR. RANDOLPH: Yes.

14 MR. DENNISON: To such a degree that you were  
15 required to run advertisements by television explaining  
16 that switchboards were overloaded and that this was  
17 due to unseasonable weather.

18 MR. RANDOLPH: Yes, that's right.

19 MR. DENNISON: Now, from that representation,  
20 has this winter been more severe than the winter of  
21 '77-'78 and '79?

22 MR. RANDOLPH: It was colder for heating  
23 purposes than last year, and we measure these things  
24 by heating degree days, and we have had more heating  
25 degree days this year than previously.



1 Now, that doesn't mean the same severity of  
2 winter, but the actual heating requirements were greater.

3 MR. DENNISON: Now, were these consumers also  
4 advised that there had been a rate increase made appli-  
5 cable to their bill in the same period in which  
6 they were lodging inquiries to your utility?

7 MR. RANDOLPH: Are you talking -- what are you  
8 talking about when you are speaking about a rate in-  
9 crease? Are you talking about the increase granted by  
10 the PUCO on February 15 of 1980?

11 MR. DENNISON: This would be now -- on current  
12 billing?

13 MR. RANDOLPH: Well, that has been on billings  
14 as of February 15 of 1980. It's not a recent increase.

15 MR. DENNISON: And is there any additional  
16 rates since that which has been placed to the billing  
17 of customers of C.G. & E.?

18 MR. RANDOLPH: The change in the fuel adjustment  
19 cost, that's in there.

20 MR. DENNISON: That would also accelerate --  
21 or escalate, pardon me -- the rate, or the dollar the  
22 consumer pays to you?

23 MR. RANDOLPH: Yes, he would experience a  
24 higher bill.

25 MR. DENNISON: All right. Now in response to

1 the four questions posed to you -- rather to the  
2 utility, but responded as to, I believe two or more of  
3 you yesterday concerning your expertise with the  
4 Public Utilities Commission of Ohio as to what would be  
5 the circumstance of the influence of the shutdown over  
6 an extended period -- I think the period elected was  
7 the nineteen months by your response if I recall  
8 correctly.

9 MR. RANDOLPH: That particular response was  
10 not my response. It was perhaps the company's response,  
11 but I was not part of the drafter of that response.

12 MR. DENNISON: You responded then to three  
13 and four of that inquiry?

14 MR. RANDOLPH: Yes.

15 MR. DENNISON: In response to number three,  
16 you stated that there was, I believe, and correct me if  
17 I am wrong -- I am bearing somewhat on recollection  
18 of notes -- that there would be nothing by virtue of  
19 Public Utility Commission of Ohio regulation as it  
20 would pertain to the time out of service to remove  
21 your rate.

22 Did I understand that response correctly,  
23 and if I didn't, go ahead and enlarge upon it.

24 MR. RANDOLPH: That's not -- what I intended  
25 to do, and I believe I did say to the best of my

1 recollection I don't know of anything in the statutes or  
2 the rules and regulations of the Public Utility Commission  
3 that addresses the question of the time that a plant  
4 would be out of service, but it's going to be taken  
5 out of the rate base.

6 MR. DENNISON: All right. This does not say  
7 that it would be taken out of the rate base at any  
8 point in time pursuant to a determination of the Public  
9 Utilities Commission based upon appropriate notice and  
10 hearing to rescind the prior order.

11 Basically you did not mean to say that, did you?

12 MR. RANDOLPH: No.

13 MR. DENNISON: You are aware that this Zimmer  
14 plant, hypothetically, will experience a TMI related  
15 accident on its fourth month of operation, and there-  
16 after it would be appropriately removed from the rate  
17 base by the Public Utility Commission, is that correct  
18 -- by statute?

19 MR. RANDOLPH: Not appropriately, I wouldn't  
20 think. We can get argumentative on it, and I don't  
21 intend to do that, but all the Commission decisions to  
22 date -- I mean all of them that I am aware of, and  
23 these are the current ones -- have allowed the utility  
24 to retain the plant in its rate base and have made  
25 what's called a normalization adjustment, which means

1 that they have reflected the expenses of the utility  
2 company for the test period as if the unit in question  
3 had been in service for the entire period -- as it had  
4 been expected to be for the entire period, and whatever  
5 availability factor is appropriate.

6 MR. DENNISON: And did any of these involve  
7 a nuclear reactor?

8 MR. RANDOLPH: Yes.

9 MR. DENNISON: And did that nuclear reactor go  
10 out of service in any wise of the same degree of accident  
11 experienced at Three Mile Island?

12 MR. RANDOLPH: No.

13 MR. DENNISON: Would this be such things as  
14 have been experienced at Davis-Besse from the stand-  
15 point that it is shutdown because of circumstances  
16 having to do with the operation of the reactor itself  
17 as opposed to accident?

18 MR. CONNER: Objection. That was all gone  
19 into at length yesterday --the basis for this -- so  
20 we can't go over it again.

21 JUDGE BECHHOEFER: I think that particular  
22 question was answered.

23 MR. DENNISON: I am sorry. I didn't recall  
24 it, so I apologize to the Court for the redundancy.

25 Now, you are aware, are you not, Mr. Randolph,



1 that pursuant to Ohio statute any person, or the  
2 utility -- and I presume any person would include an  
3 individual such as the Intervenor -- may cause  
4 a hearing to be conducted before the Public Utilities  
5 Commission of Ohio for purposes of rescinding a prior  
6 rate and for proper finding, that rate may be re-  
7 scinded.

8 MR. RANDOLPH: Yes, I think that it would  
9 have to be qualified, though. The person, I believe,  
10 would have to be a customer of the company, but other  
11 than that, yes, I would agree.

12 Some customer of Cleveland probably couldn't  
13 do this in our service area.

14 MR. DENNISON: What you are saying is it  
15 would have to be a customer within the Zimmer scheme?

16 MR. RANDOLPH: Yes, they can bring a cause  
17 for complaint, yes.

18 MR. DENNISON: So, you don't quibble with  
19 the power of the Public Utility Commission by way of  
20 authorization to remove your grant of a rate base  
21 should you have a TMI accident much in the same manner  
22 as it was removed in Pennsylvania from their rate  
23 base?

24 MR. RANDOLPH: No, I wouldn't.

25 MR. DENNISON: Under that set of circumstances,

1 what sort of financial circumstance would this place  
2 all three utilities?

3 MR. RANDOLPH: Well, since the unit is about  
4 seven percent of the total, and we are talking about a  
5 company with a total gross sales volumes of approxi-  
6 mately \$2 billion, and assets of somewhere in the  
7 neighborhood of \$4 billion for each of the companies,  
8 I don't think that that would be a catastrophic type  
9 of occurrence as it was at Three Mile Island, although  
10 of course, it would be a financial difficulty for us for  
11 a while.

12 MR. DENNISON: Now, I take it that you address  
13 that adjustment basically a seven percent usage  
14 where you are concerned, nine to Dayton, eight to  
15 Columbus, as opposed to twenty-four percent usage in  
16 Pennsylvania?

17 MR. RANDOLPH: Basically, yes.

18 MR. DENNISON: All right. In your cost  
19 analysis here, have you contemplated like for like  
20 year from the standpoint of having the requisite  
21 capital for a clean up of the magnitude of Three Mile  
22 Island in which you would be required to spend funds  
23 from the three utilities in the amount exceeding  
24 \$1 billion?

25 MR. CONNER: Your Honor, we object to this.

1 This has been gone over. In yesterday's transcript,  
2 starting at 4092, the previous question, and this  
3 business about the clean up has all been gone into.

4 JUDGE BECHHOEFER: I think we had that line --  
5 there was hypothetical clean up costs, and the  
6 question was could they afford it. I think that line  
7 was gone into pretty thoroughly.

8 MR. DENNISON: I thank the Court for it's  
9 indulgence. That concludes my questions.

10 JUDGE BECHHOEFER: Mr. Heile?

11 MR. HEILE: Yes, thank you, Your Honor.

12 I will address my first question to Mr.  
13 Randolph.

14 Mr. Randolph, in the computations that were  
15 done by the company as to the operational expense of the  
16 Zimmer plant, I believe it's for first five years,  
17 in response to Question 1-A in your testimony at the  
18 bottom there is a return -- rate of return -- in each  
19 of those instances.

20 I believe in each one of the examples the rate  
21 of return is 10.52?

22 MR. RANDOLPH: Yes.

23 MR. HEILE: Do you have the source of that  
24 projected rate of return of 10.52?

25 MR. RANDOLPH: Yes, it's a weighted average

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1 of the three companies of the actual rates which  
2 were granted by the Public Utilities Commission of  
3 Ohio in our last rate cases

4 MR. HEILE: So, it's an overall rate return  
5 to the return of equity, is that right?

6 MR. RANDOLPH: That's correct.

7 MR. HEILE: Now, are you projecting then  
8 that the conditions would hold to an overall  
9 rate of return of 10.52 in the first five years of  
10 operation?

11 MR. RANDOLPH: No.

12 MR. HEILE: So, I can assume that the figure  
13 of 10.52 in the fifth year would actually be more  
14 likely higher than that, am I correct?

15 MR. RANDOLPH: I would hope so.

16 MR. HEILE: So, to the extent that you are  
17 applying the figure of 10.52 in the fifth year of  
18 operation, taking for example the instance of fifty-two  
19 percent plant factor, and then sixty-three in the  
20 second; seventy-six on the third; seventy-four on the  
21 fourth, and seventy-eight on the fifth -- do you know  
22 which document I am referring to?

23 MR. RANDOLPH: Yes

24 MR. HEILE: I would assume that that figure  
25 then is based upon your estimates of future rate of



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1 return areas is weighted for the three companies is  
2 slightly low, isn't it?

3 MR. RANDOLPH: I would think so, yes.

4 MR. HEILE: Do you have any estimates on what  
5 the projection of the actual amount of that figure  
6 might be?

7 MR. RANDOLPH: No, we are waiting for an  
8 order by the Commission now that will give us a new  
9 number, and I don't know what that will be

10 Mr. Zimmer has pointed out that it depends on  
11 the cost of capital, on the relative merits of the  
12 testimony of all witnesses in rate cases, and all  
13 that sort of thing.

14 MR. HEILE: Speaking of cost of capital, have  
15 you or your company, or anyone on the panel, made any  
16 effort to determine the effect on cost of common  
17 equity capital of a -- that is the perception of risk  
18 viewed by the investor by the companies that may  
19 be in the construction phase of a nuclear plant,  
20 and whether that in fact may increase the cost of  
21 capital?

22 MR. RANDOLPH: No, we haven't made any  
23 specific calculations to quantify that, although we  
24 are aware of written analysis by other -- by securities  
25 and lists who would indicate that utilities who are

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1 in a construction or operating phase would have a  
2 higher risk.

3 MR. HEILE: Do you know how that quantifies  
4 in terms of raising equity capital in the market?

5 MR. RANDOLPH: No.

6 MR. HEILE: Do you know if there was testimony  
7 in the most recent rate case from any of the witnesses  
8 that the investor perceives a higher risk, and  
9 therefore the cost of capital is greater to those  
10 companies?

11 MR. RANDOLPH: I don't recall the specific  
12 testimony, but I think that there was testimony to that  
13 effect.

14 MR. HEILE: Now, I assume perhaps you would  
15 be the right person to ask, Mr. Randolph. Do you  
16 know why the Applicant has submitted the testimony  
17 of Dr. Melnick who was the rate of return witness in  
18 the most recent Cincinnati Gas and Electric rate case,  
19 and has been in other previous cases.

20 Do you know why that particular testimony  
21 has been placed into evidence in this case?

22 I am aware of the fact that  
23 the Commission has asked certain questions. However,  
24 I am not certain that the intent was to put it into  
25 this case. Were you responsible for that decision?

1 MR. CONNER: Objection. I think perhaps  
2 Mr. Heile wasn't here yesterday when we went into this,  
3 but we pointed out this information was submitted in  
4 response to the questions asked by the regulatory  
5 Staff and submitted in November of 1980, and that's  
6 all it was offered for. Just to make the record  
7 complete it was part of the application, and it was  
8 tendered as such, and I explained that yesterday.

9 MR. HEILE: Your Honor, I am assuming from  
10 Mr. Conner's response that the thought of the Applicant  
11 to submit into evidence responses to those questions,  
12 albeit, not necessarily to prove the financial cap-  
13 ability of the company.

14 Is that a fair characterization?

15 MR. CONNER: More or less. As I explained this  
16 at some length yesterday, since it's part of the  
17 application, we felt the obligation to present it  
18 to the Board, but you probably weren't here.

19 We struck one piece of testimony because  
20 it really doesn't matter that much as far as we are  
21 concerned.

22 MR. HEILE: Perhaps I wasn't present, was  
23 the -- excuse me.

24 Was the testimony of Dr. Melnick stricken?

25 MR. CONNER: No, it was not.

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1 MR. HEILE: May I inquire, is it the  
2 Applicant's intent to set forth Dr. Melnick's testimony  
3 for the truth of the statements contained therein?

4 MR. CONNER: No, if you would like to strike  
5 it, we will strike it, too.

6 MR. HEILE: I am presently inquiring as to  
7 its function. Actually, I don't know if I want it  
8 stricken, but I am trying to apprise myself of the  
9 purpose of the presentation, and I would like to  
10 know if it is the presentation for the truth.

11 MR. CONNER: No, it is not.

12 MR. HEILE: Mr. Randolph, do you know in the  
13 most recent rate case if the witness whose testimony  
14 is appearing in response to these questions categorize  
15 the Cincinnati Gas and Electric Company in an analogy  
16 as a sick company?

17 MR. RANDOLPH: I don't recall that statement  
18 -- a sick company. Can you direct me?

19 MR. HEILE: In cross examination, the analogy  
20 would have been along the lines of "don't take  
21 numbers from a sick company to try to make a company  
22 well."

23 MR. RANDOLPH: Well, the analogy that I  
24 remember is close to that. I think Dr. Melnick was  
25 talking about the electric utility industry in total,



1 and he was talking about comparative analysis. Was  
2 that not correct?

3 MR. HEILE: I am asking you. I don't know.

4 MR. RANDOLPH: As I recall he was talking  
5 about a comparative analysis that we thought will be  
6 made by another witness, I believe.

7 MR. HEILE: In any event, you certainly would  
8 not agree that Cincinnati Gas and Electric Company is  
9 a sick company in those terms?

10 MR. RANDOLPH: No, I wouldn't characterize it  
11 as sick. I think we've got some problems in rate  
12 relief, and we are doing the best we can to get  
13 that, but I don't think we would characterize it as a  
14 sick company.

15 MR. HEILE: Now, in the area of rate relief,  
16 Mr. Randolph, isn't it a fact that the company,  
17 notwithstanding rate increases, has been lagging  
18 behind the authorized rate of return that's been  
19 granted in the most recent rate case?

20 MR. RANDOLPH: Absolutely.

21 MR. HEILE: Was that because of inflation  
22 or because of construction program? Do you have any  
23 opinion?

24 MR. RANDOLPH: Yes. Primarily because of  
25 inflation and because in Ohio our test period for this

1 last rate case was for the twelve months ended October,  
2 and here it is March, and we haven't received a rate  
3 relief yet.

4 So, we are that far behind where we should  
5 have been on the rate of return, and by the time  
6 these rates are put into effect, the full effect of  
7 the rate increase won't be felt for a full year.

8 So, there is that lag, even though under  
9 the new law we are not quite as far behind as we used  
10 to be, we are still at least a year behind.

11 MR. HEILE: Now, in the computation of  
12 decommissioning costs, there was reference to a 6% tax  
13 free interest rate.

14 Perhaps, Mr. Randolph, you may be the  
15 appropriate witness to address this. If you are not,  
16 please direct me to any member of the board that is.

17 Is that a net tax or after tax, or statutory?

18 MR. ZIMMER: That was a tax free rate

19 MR. HEILE: So, my assumption is it would  
20 be addressed in some kind of a tax-free bond?

21 MR. ZIMMER: That's correct -- that's under  
22 the present circumstances. You understand that there  
23 are some requests pending for different tax agreements  
24 that could change the type of investment?

25 MR. HEILE: Yes. There certainly has been

1 no legislative conclusions as to that?

2 MR. ZIMMER: Not at this time. That's why  
3 we use the tax free rate.

4 MR. HEILE: The assumption would be to  
5 invest the money in the tax free rate -- whatever  
6 that might be at the time?

7 MR. ZIMMER: That's right.

8 MR. HEILE: And you are assuming then,  
9 also, the tax-free rate to be approximately 6% over the  
10 thirty-three year period?

11 MR. ZIMMER: I assume that, and I will grant  
12 you that it will change. It will go up, or it will  
13 go down, I don't know where. It's lower at the moment,  
14 but it changes in concert with the inflation rate, and  
15 there are a lot of questions asked earlier today  
16 about the 6.5% inflation rate.

17 Obviously that will change. If we use the  
18 6 1/2% inflation rate and applied it to a quarter  
19 candy bar, over the next 137 years you are going  
20 to have a \$13 or \$14 hundred candy bar.

21 MR. HEILE: Perhaps you would be the person  
22 to answer this. Who would the trustee of these funds  
23 be?

24 MR. CONNER: Objection. That has nothing  
25 to do with the financial qualifications of the Applicant.

1 MR. HEILE: Your Honor, my perception  
2 is whoever the trustee would be would invest the  
3 money in a prudent fashion, and I am just trying to  
4 ascertain --

5 JUDGE BECHHOEFER: Objection overruled.

6 MR. ZIMMER: No trustee has been selected yet.  
7 This is pending before the Ohio Commission at the  
8 present time. Final determination of whether there  
9 will be an external fund or an internal fund will be  
10 determined in our application now pending before the  
11 PUCO.

12 MR. HEILE: So, my assumption is it's not  
13 been determined whether or not there will be an  
14 independent trustee?

15 MR. ZIMMER: If our request is granted  
16 there will be an independent trustee.

17 MR. HEILE: And that would be in the nature  
18 of an independent -- some type of financial --

19 MR. ZIMMER: Well, along the lines of a  
20 local bank, or New York bank, or some other responsible  
21 establishment.

22 MR. HEILE: We spoke earlier about insurance  
23 -- casualty insurance -- and there was some questions,  
24 and my recollection is there is currently property  
25 insurance -- I am talking about non-liability property



1 in the amount of \$300,000,000, I believe.

2 Is that currently being financed out of  
3 the rates collected for the Cincinnati Gas and  
4 Electric?

5 MR. CONNER: Objection. The question-- is it  
6 currently?

7 MR. HEILE: That's the question.

8 MR. CONNER: Witnesses yesterday answered  
9 some questions about what will be.

10 MR. HEILE: My question today is is it  
11 currently being financed out of the rates.

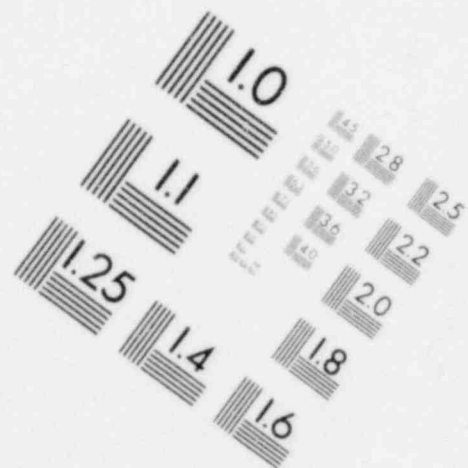
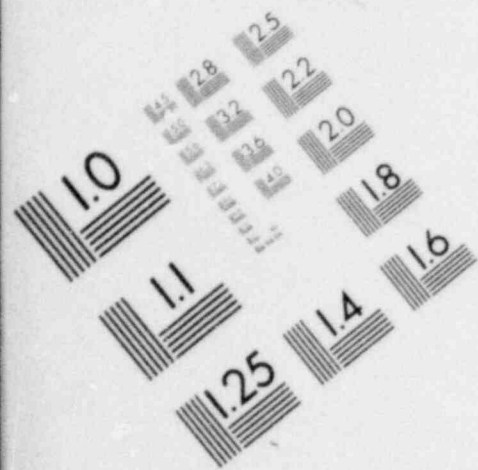
12 MR. ZIMMER: As I understand it, at the  
13 present time that premium is being capitalized, and  
14 will be recovered over the life of the plan.

15 MR. HEILE: Perhaps you could be a little  
16 more descriptive.

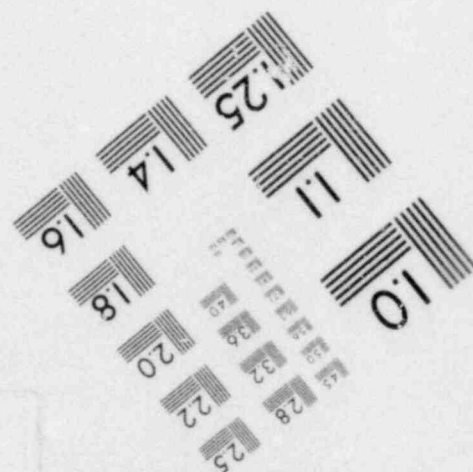
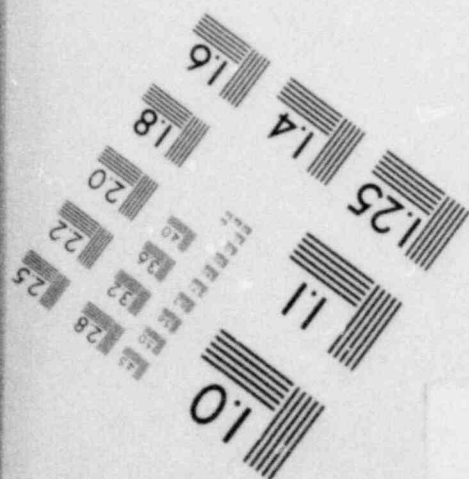
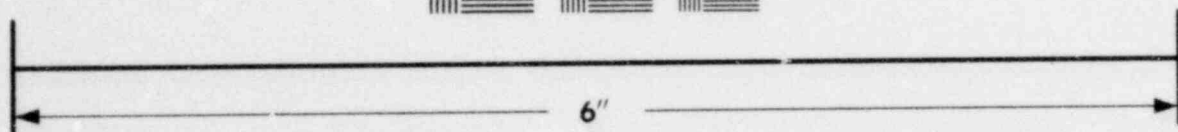
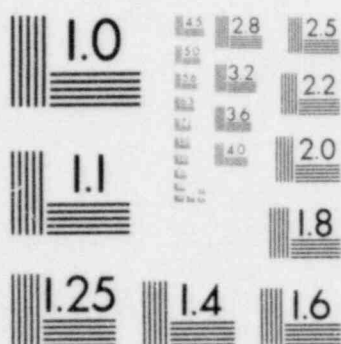
17 MR. ZIMMER: It's being charged to the cost of  
18 the plant -- the plant not in operation.

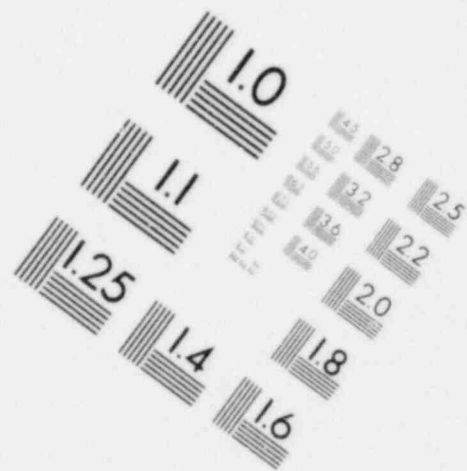
19 MR. HEILE: I see. It's presently going in  
20 the cost of the plant to the extent that a portion of  
21 the cost of the plant may be in the rate base may be  
22 an expense to the rate payer currently?

23 MR. RANDOLPH: No, the only thing that was  
24 charged to the rate payer was the return of the plant  
25 investment. None of the operating costs have ever

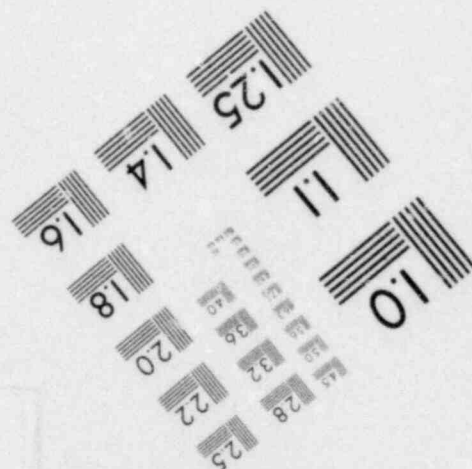
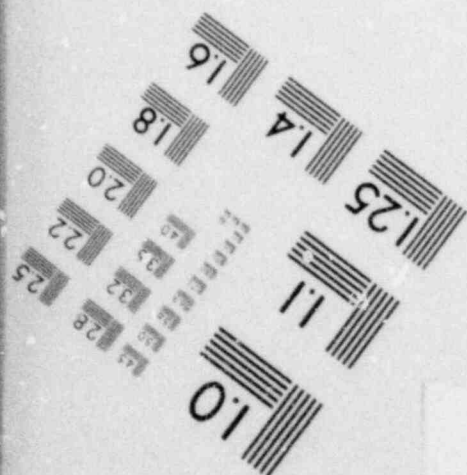
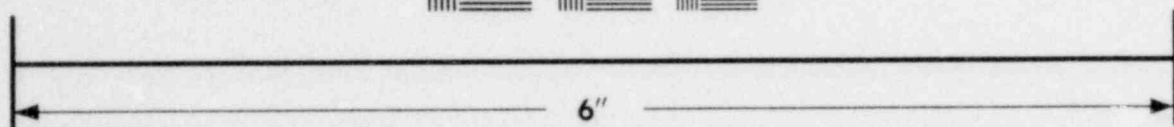


**IMAGE EVALUATION  
TEST TARGET (MT-3)**





A resolution test chart featuring several groups of horizontal and vertical lines of varying thicknesses. Each group is accompanied by a numerical value indicating its resolution. The values include 1.0, 1.1, 1.25, 1.4, 1.6, 1.8, 2.0, 2.2, 2.5, 2.8, 3.2, 3.6, 4.0, 4.5, 5.0, 5.6, 6.3, 7.1, 8.0, 9.0, 10, 11.2, 12.5, 14, 16, 18, 20, 22.5, 25, 28, 31.5, 36, 40, 45, 50, 56, 63, 71, 80, 90, 100, 112, 125, 140, 160, 180, 200, 224, 250, 280, 315, 360, 400, 450, 500, 560, 630, 710, 800, 900, 1000, 1120, 1250, 1400, 1600, 1800, 2000, 2240, 2500, 2800, 3150, 3600, 4000, 4500, 5000, 5600, 6300, 7100, 8000, 9000, 10000.



1       been included in any rate of the company.

2               To the extent that that insurance cost  
3       has been capitalized, it would have increased the amount  
4       of return applied to rate base. So, you are only  
5       talking about the cost of money.

6               MR. HEILE: Thank you.

7               Now, with respect to -- once again, the  
8       projected operational costs for the first five  
9       years of operation, I see there is an amount given  
10      here for nuclear fuel expense -- a plant factor.

11              Is that commensurate with the current cost  
12      of nuclear fuel?

13              MR. CHITKARA: We answered some of it  
14      yesterday, but I can summarize it real briefly.

15              The nuclear fuel assembly for the initial  
16      core have already been bought and paid for and they are  
17      at the Zimmer station. So, for the first two  
18      years these numbers are exact numbers. For the other  
19      three years some are estimate numbers, some are exact  
20      numbers.

21              MR. HEILE: Thank you.

22              Getting back to the testimony once again that  
23      was provided by Dr. Melnick in this -- and Mr. Randolph,  
24      you may be able to answer this question.

25              It's a fact that the Commission in its



1 order, which is also annexed to this filing, did not  
2 accept Dr. Melnick's overall representation on the  
3 return on equity or the return on overall return, is  
4 that correct?

5 MR. CONNER: Objection. Your Honor, since  
6 we have now said we are not going to rely on the  
7 testimony for any purposes here relevant, I see no  
8 profit in wandering around it.

9 MR. HEILE: Your Honor, it's still in the  
10 record. I was only inquiring whether it was offered  
11 for truth of content. I am simply trying to demonstrate  
12 any inconsistencies that might exist between the  
13 testimony on the one hand, and the filing on the  
14 other.

15 MR. CONNER: It would be irrelevant in any  
16 event.

17 JUDGE BECHHOEFER: Objection overruled.

18 MR. CONNER: Then we request that the witness  
19 display the particular part of this order. I mean  
20 display the particular part of this order that he is  
21 talking about so this witness can respond directly.

22 JUDGE BECHHOEFER: Yes, please do that --  
23 tell us so we know.

24 MR. HEILE: On page twenty-five of the  
25 opinion and order of the Public Utilities Commission of

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1 Ohio in case No. 79-11-EL-AIR, undercost of equity  
2 in the first paragraph:

3 "Company witness Melnick recommended a range  
4 of 14.8 to 16.5% cost of equity, while Mr. Wathen  
5 found the cost of equity to be in the range of 12.93  
6 to 13.78.

7 "Consumer's counsel, Witness Parcell, con-  
8 cluded the cost of equity was in the range of 12.0  
9 to 13.0% based primarily on his capital earnings  
10 approach."

11 Then, if we drop down to the second to the  
12 last paragraph, in the middle of the paragraph, the  
13 Commission states:

14 "Whereas Dr. Melnick does not use any  
15 empirical data in calculating his yield range, and Mr.  
16 Parcell seems to ignore recent changes in dividend  
17 yields, Mr. Wathen has used market data for the twelve  
18 month period November, 1978, through October, 1979 for  
19 C. G. & E. arriving at his dividend yield of 10.09%."

20 I will now go the following page -- the third  
21 paragraph:

22 "Adding the estimated growth rate of 2.44  
23 percent to the dividend yield of 10.65 percent, the  
24 Commission concludes that the base line cost of equity  
25 is 13.09 percent."

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1 That tells me, and correct me if I am wrong --  
2 that tells me that the Commission does not agree with  
3 Dr. Melnick's recommendations for the base line cost of  
4 equity in that case. Is that correct?

5 MR. RANDOLPH: Well, you haven't gone far  
6 enough. The Commission actually found the cost of  
7 equity was 14.39%

8 MR. HEILE: Which Dr. Melnick -- the high  
9 part of his range was considerably over that, am I  
10 correct?

11 MR. RANDOLPH: Yes, that's true, and to clearly  
12 characterize that they didn't take into consideration  
13 Dr. Melnick's testimony is not correct either, be-  
14 cause they did go to the upper end of the Staff's  
15 range.

16 So, Dr. Melnick may have had some influence  
17 in directing them to the upper end of the Staff's range,  
18 but they did not find Dr. Melnick's return of equity  
19 as being appropriate return.

20 MR. HEILE: I assume they did not agree with  
21 Dr. Melnick's overall return percent -- if you recall?

22 MR. RANDOLPH: No, the same would apply. The  
23 fact that Dr. Melnick may have had some influence in  
24 directing the Commission to go to the upper end of  
25 the range.

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1 MR. HEILE: All right.

2 Now, Mr. Borgmann, let's get into the issue  
3 -- I believe you testified that Zimmer would be providing  
4 eight percent of the Cincinnati Gas and Electric  
5 Company's total power?

6 MR. BORGMANN: I think I said about seven.

7 MR. HEILE: About seven percent, okay,  
8 that is assuming Mr. Borgmann, that other plants are  
9 not down for maintenance and operations during the  
10 fall season -- that's an average, is it?

11 MR. BORGMANN: Yes, that's right.

12 MR. HEILE: Does it take into consideration de-  
13 grading for maintenance?

14 MR. BORGMANN: Well, basically it does. We  
15 are saying that with respect to the capacity of the  
16 system it would supply about seven percent, and we nor-  
17 mally carry at least twenty percent reserve.

18 So, either with the seven percent out, we  
19 would still have more than our load requirements. So,  
20 depending on the type of load that we have -- whether  
21 it be our peak load or somewhere in the spring or fall,  
22 you would have more and more excess at other times, but  
23 basically you would always have excess that you can  
24 carry.

25 Now, obviously if everthing were out of



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1 service then you could have a problem, but basically,  
2 even with a thirteen or fifteen percent reserve,  
3 you ought to be able to carry your load just about  
4 at all times.  
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1 MR. HEILE: So I assume that your answer is that the  
2 seven percent figure does, in fact, account for the gradient  
3 for maintenance?

4 MR. BORGMAN: Yes, it does.

5 MR. HEILE: And I am also assuming the seven percent  
6 figure is based upon 100 percent capacity operation of the  
7 Zimmer Plant?

8 MR. BORGMAN: Yes, if we have 320 megawatts. So if it  
9 were operating at 320 megawatts, that would represent seven  
10 percent.

11 MR. HEILE: So it doesn't have to operate at its full  
12 capacity, some 790 megawatts?

13 MR. BORGMAN: No, but, as I said yesterday, if having  
14 the lowest operating cost, it would be always loaded as high as  
15 it could carry, because it would be the lowest kilowatt hours  
16 produced on the system.

17 MR. HEILE: Mr. Borgman, you also mentioned the sum  
18 of approximately \$2,000,000 that you anticipated it might take to  
19 satisfy, I think all they were characterized as sovereign agencies  
20 in terms of emergency communication funding pending, right?

21 MR. BORGMAN: I think a question was asked if I would  
22 or if the three companies would give them everything they wanted,  
23 what number could they possibly be expanded to, and I said  
24 possible one or two million dollars.

25 MR. HEILE: One or two?

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2 1 MR. BORGMAN: Right.

2 MR. HEILE: Two being a very generous figure?

3 MR. BORGMAN: Very generous.

4 MR. HEILE: But that is not part of the figure that you  
5 used in your consideration by Mr. Dennison with respect to it.  
6 You related additional monitoring and communications, is that  
7 right?

8 MR. BORGMAN: He was questioning Group No. 2 in  
9 emergency plans, and that's when I said he was asking if we  
10 increased the \$2.6 million that I indicated that we had in  
11 there to whatever was requested, how high could the number go?  
12 And I said one to two million more, possibly.

13 MR. HEILE: Now, in that Group 2 figure, did you  
14 include any budget for -- and we are speaking of sovereigns, so  
15 we are considering devices being sought by the City of  
16 Cincinnati in these proceedings?

17 MR. BORGMAN: There is some communications commitment  
18 in that number, monitoring equipment in Group 4.

19 MR. HEILE: Group 4, there is monitoring equipment?

20 MR. BORGMAN: There is some, yes, in Group 4.

21 MR. HEILE: Can you modify that?

22 MR. BORGMAN: Not exact. My recollection is there is  
23 100,000 in sampling of monitoring equipment, but I have to go  
24 back and get some materials on these particular items.

25 MR. HEILE: Would you be willing to provide --

3 1 MR. CONNER: Objection, Your Honor. We can be  
2 providing things from the records for everything. As I said,  
3 the time for discovery is over, time for negotiations is over,  
4 and Mr. Heile represents the City and he ought to know what they  
5 want. So I don't think we should allow this to be used for  
6 negotiating purposes.

7 MR. HEILE: Your Honor, we are not able to test the  
8 reasonableness of the equipment that we are setting forth in  
9 here, unless we have some concept of whether, in fact, they have  
10 projected some instruction.

11 MR. CONNER: Mr. Borgman represented \$100,000 out of  
12 \$30,000,000. That is pretty fine tuning.

13 CHAIRMAN BECHHOEFER: We will overrule the objection.

14 MR. BORGMAN: You are asking for a detailed number?

15 MR. HEILE: Yes.

16 MR. BORGMAN: I'd have to go back --

17 MR. HEILE: I asked if you would provide it for the  
18 record.

19 MR. BORGMAN: Yes.

20 MR. HEILE: Thank you. That's all, Your Honor.

21 JUDGE HOOPER: Mr. Heile, what is the status of your  
22 negotiations with the utilities about the matters that you just  
23 referred to, the equipment?

24 MR. HEILE: I suppose, if the affiliate has no  
25 objection, I can characterize that we have entered into



4 1 negotiations for water and air monitoring. That negotiation is  
2 at a standstill. I imagine we can go into other negotiations  
3 corresponding to utilities with other local governments, as well  
4 as other intervenors in the case. Currently, there is certainly  
5 no resolution.

6 Did you want a more detailed -- I will be glad to --

7 JUDGE HOOPER: I was concerned about the role of this  
8 hearing, in carrying the role of those negotiations.

9 MR. HEILE: I don't think this hearing has a role in  
10 the negotiations. I think ultimately, if the City does go to  
11 hearing on communication, that monitoring device, I am trying to  
12 ascertain whether or not the company, in its present plan for  
13 cost of operation, has, in fact, concluded what might be  
14 reasonably given by this Board and that requests for national  
15 qualification of the company in terms of operating expenses.

16 CHAIRMAN BECHHOEFER: Thank you.

17 Mr. Karmen?

18 MR. KARMEN: Judge Bechhoefer and members of the  
19 Board, in view of the exhaustive cross-examination that has been  
20 going on here for the past day and a half, the staff has no  
21 additional questions of the applicant at this time which it feels  
22 would beneficially enhance the record at this time.

23 I do have one question that I was not quite sure I got  
24 the answer to yesterday afternoon --

25 CHAIRMAN BECHHOEFER: Mr. Karmen, am I supposed to

5 1 assume that this question won't beneficially enhance the record?

2 You can ask it.

3 MR. KARMEN: I might possibly submit that.

4 In the response yesterday, either Mr. Zimmer or  
5 Mr. Randolph, I don't remember, you indicated that your last  
6 application to the Public Utilities Commission of Ohio was not  
7 fully granted and that you will have to go back or have gone back  
8 again. What percentage of that request was granted?

9 MR. RANDOLPH: The increase that was granted in  
10 February of 1980, we received 43 percent.

11 MR. KARMEN: 43, and you have gone back now?

12 MR. RANDOLPH: We have one pending now for \$55,800,000  
13 increase, which we expect the order now in the next couple of  
14 weeks.

15 MR. KARMEN: I have no further questions.

16 CHAIRMAN BECHHOEFER: The Board, we have just a few  
17 questions. Mr. Bright will lead off.

18 MR. BRIGHT: All I want to do is clarify the record  
19 just a bit. I think it was a question asked this morning by  
20 Mr. Fisse, I think, of you, Mr. Chitkara. I am not very good  
21 on names. You will excuse me. He asked about the expense, or  
22 his question was looking at the expense of the emergency plan,  
23 and he asked about after decommissioning, and, as I recall, the  
24 entirety of your answer was, "No." And I would like for you to  
25 tell me a little more about why a security plan of the magnitude

6 1 that will be in place when the plant is in operation will not be  
2 needed when the plant is finally taken out of operation.

3 MR. CHITKARA: I think the question that was asked  
4 in the morning was, "Did you have an emergency plan," th we  
5 were talking about \$30,000,000, "Would there be any part of  
6 this after we go into the decommissioning mold?"

7 The answer was, "No," and I explained by saying, "There  
8 is no relationship between this \$30,000,000 type of emergency  
9 plan, portions of that. I think Mr. Borgman answered that there  
10 was no relationship between the emergency plan during the life  
11 of the plan and the decommissioning mold. That was my answer,  
12 and I can discuss it a little bit further now, and in the  
13 decommissioning, if you recall, we have four different  
14 components in the decommissioning campaign.

15 In the third one, we have surveillance for the  
16 104 years. Now, I was making a distinction between the  
17 surveillance going on for 104 years and the emergency planning  
18 activities going on during the 32 years of the Zimmer life, and  
19 we do have cost estimates on the surveillance and on the  
20 decommissioning.

21 MR. BRIGHT: Maybe I can clarify what I was trying to  
22 get at just a little bit. When the plant is finally shut down  
23 for the final time, it's not going to run again, is there any  
24 conceivable accident that could happen to that plant that could  
25 require the kind of emergency plan that is necessary during the

7 1 plant's operation?

2 MR. CHITKARA: After the plant is put in a decommis-  
3 sioning mold?

4 JUDGE BRIGHT: Yeah, after you quit running for the last  
5 time, or never again.

6 MR. CHITKARA: After the plant is decommissioned, then  
7 we have not taken into account any of the facilities that may be  
8 available in our cost estimates.

9 JUDGE BRIGHT: I am still not coming through, I don't  
10 think. Does the plant, when it shuts down for the final time  
11 and whatever, does it present any risk to the health and safety  
12 of the public beyond the immediate environment of the plant,  
13 itself?

14 MR. CHITKARA: No, it does not, because, as we are  
15 identified in the decommissioning mold, we have taken all the  
16 radioactive wastes, spent nuclear fuel, away from the reactor  
17 site, so I don't see any accident or any other situation that  
18 would have any impact upon the public safety.

19 JUDGE BRIGHT: So, therefore, there would be no need  
20 for this elaborate emergency system?

21 MR. CHITKARA: That is right.

22 JUDGE BRIGHT: Thank you.

23 JUDGE HOOPER: I have one clarifying question of  
24 Mr. Borgman. Yesterday we were talking about situations with an  
25 accident where there could be a long down time, and I believe that

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1 you said that Cincinnati Gas and Electric could absorb the load  
2 at little or no cost and without any outages because of the  
3 relatively small fraction of power you had in '76 with this plant.  
4 What other resources would be used in that situation, Mr. Borgman?  
5 What other power resources would you be substituting?

6 MR. BORGMAN: I don't think I said "at no cost." I  
7 said we could supply it within our system, and as I indicated  
8 in conversation with Mr. Heile, normally we build a generating  
9 system with on the order of 20 percent reserve over peak load.  
10 So even at the peak period of a year, he'd have 20 percent  
11 reserve, and in the seven percent, you will subtract 20 percent,  
12 and theoretically you still have 13 percent reserved, even at  
13 peak times.

14 Now, there are other periods of the year where your  
15 load would be less but you schedule machines for outages. If  
16 the accident would occur in those periods of time, you could  
17 conceivably, keep equipment running for a year or maybe 18 months  
18 to carry you through that period of time, because you do have the  
19 built-in reserves, monitoring facility system in the system.

20 JUDGE HOOPER: I understand you have these reserve  
21 factors in the facility, but I'd like to know what they are.

22 MR. BORGMAN: It would be a combination of older coal-  
23 fired units and some gas turbines. We have a combination of  
24 500 megawatts combustible turbines we use in the summer, we have  
25 two 40-year-old coal-fired, converted boilers which we bring in

9 1 for peak periods of time. Then we have some late 1940 coal-  
2 fired units which right now are intermediate-type units. They  
3 are not used continuously, so that would be the type of  
4 equipment that would come on. There would be some incremental  
5 cost differences in the kilowatt hours, but it would not outage  
6 powers.

7 JUDGE HOOPER: It would be a fuel difference?

8 MR. BORGMAN: That is right.

9 JUDGE HOOPER: Let me ask you this, then. Are these  
10 resources such that they would -- how long could they continue?  
11 That is the question. Are they so old that you would be able to  
12 use them a short time, or could you use them indefinitely?

13 MR. BORGMAN: Well, I think it would be a combination.  
14 I think part of these you could use indefinitely. The gas  
15 turbines, if you get over 1500 hours on them, you are going to  
16 get some maintenance on the gas turbines, but, again, that would  
17 get you through your peak periods, because the 20 percent  
18 reserve is based on a very narrow band in the summertime, and  
19 we have decreased reserves. So it would be a combination. Part  
20 of the coal-fired equipment could run pretty continuously, and  
21 some of this gas turbine equipment could not run for more than  
22 2,000 hours at a time.

23 JUDGE HOOPER: There would still be a good deal of  
24 reliability in the reserve system, then?

25 MR. BORGMAN: Yes.

10

1 JUDGE HOOPER: I have another question. I am not really  
2 sure where it was in the record. I tried to look it up this  
3 morning, but I heard something yesterday that I didn't quite  
4 understand, and I think it had something to do with a Supreme  
5 Court decision in Ohio relative to the penalty cost of an  
6 accident was going to be charged. I didn't quite understand this  
7 yesterday. Did the Supreme Court decision say that cost of any  
8 such accident had to be charged to the stockholders, or if there  
9 was something said resulting in stockholders versus base rates?  
10 I am not sure how you handled that. I think it was Mr. Randolph.

11 MR. RANDOLPH: If I recall, it was the decision -- it  
12 was in cross-examination by Mr. Woliver, and he said the  
13 Supreme Court decision in Toledo-Edison involved outage use.  
14 That decision was not an accident, but Toledo-Edison had changed  
15 its policy of putting plants in a rate plan. Ordinarily we  
16 don't put a plant in a rate case until it becomes a commercial  
17 operation. They put this Davis-Besse unit, and I am talking  
18 about Toledo-Edison's Besse unit in the rate base plant and  
19 service. At the time the unit was first synchronized to the  
20 system, which is a new concept.

21 That was appealed to the Supreme Court, and the  
22 Supreme Court decision ruled against Toledo-Edison, and they  
23 said that because -- and I think the language was something  
24 like "new innovative technology." This unit should have gone  
25 through some sort of a testing procedure before we put the plant

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1 into service and charged the customer.

2 JUDGE HOOPER: That is everything?

3 MR. BORGMAN: It was not dealing with accidents but  
4 rather when putting time in service for rate purposes.

5 The significance of this thing is that under Ohio law  
6 you can only include 20 percent of the rate base before you add  
7 the construction work in progress. And Toledo-Edison -- and I  
8 would characterize it as a relatively small utility in Ohio, and  
9 they have a small rate amount of Davis-Besse they could include,  
10 as construction work in progress was a pretty small number. So  
11 it meant quite a bit of difference to them to put it in plants  
12 and service where they could put the whole of Davis-Besse in  
13 plants and service and then add the fixed cost associated with  
14 that plant.

15 JUDGE HOOPER: My real question I am trying to get to  
16 is this: Was there anything in that decision which could  
17 preclude the commission from making some awards to you, and in  
18 case there was some effort to recover from resources from some  
19 sort of an accident, or you said yesterday that you couldn't  
20 pay interest on it.

21 MR. RANDOLPH: Well, the --

22 JUDGE HOOPER: You did not think you could pay it.  
23 Is there anything in that that precludes you from recovering  
24 money from an accident?

25 MR. RANDOLPH: As I indicated, I am not an attorney,



12

1 and starting to interpret what they can use in Supreme Court  
2 decisions, then, I am not on firm ground. But in my opinion,  
3 that was an entirely different circumstance. The plan had not  
4 been subjected to an accident, had never been devoted to utility  
5 service before, this was the first time. And I, in my own  
6 decision, I would rely on prior Commission orders that have not  
7 been decided by the Supreme Court, and in all those orders that  
8 I cited, the Commission did allow the company to include in the  
9 plant and the rate base and the normalized operation which means  
10 that the company, some part of the demand cost of purchase  
11 power, the company might not be able to recover, but it is only  
12 that portion that they would not be able to recover. That would  
13 be relatively insignificant in the magnitude that you are talking  
14 about.

15 The other decision we were talking about was the Ohio-  
16 Edison decision where the company was allowed to amortize some  
17 \$87,000,000 of cost it had incurred in planning a new nuclear  
18 generating unit with the CAPCO system. The company decided to  
19 cancel that unit, and they were allowed to amortize those costs  
20 over a 10-year period. Now, they were not allowed to add those  
21 costs into the rate base so they could earn a return on that  
22 basis, all they were allowed to recover was dollar-for-dollar  
23 cost. So the effect of that is that the shareholder -- that the  
24 company -- let me see, the common shareholder would have to stand  
25 the capital cost of about that \$87,000,000 investment until it

13

1 is fully amortized with no return being returned on that money  
2 over the 10-year amortization period, but they would receive the  
3 \$87,000,000 back in their rates.

4 JUDGE HOOPER: Then it would be your contention there  
5 is nothing in the Supreme Court decision that would mean that  
6 you couldn't get some recovery in terms of amortizing some of  
7 those losses?

8 MR. RANDOLPH: It would be my opinion that is  
9 distinguishable, and that would be one of our arguments, that  
10 there is nothing.

11 CHAIRMAN BECHHOEFER: There was a series of questions  
12 yesterday on accounting for costs of spent fuel, disposition of  
13 spent fuel. And there was testimony that a certain expansion of  
14 the spent fuel pool was already included in the capital costs  
15 of the company. Is that correct?

16 MR. CHITKARA: Yes, sir.

17 MR. CONNER: Mr. Chairman, can you speak up? I can  
18 hardly hear.

19 CHAIRMAN BECHHOEFER: I am sorry. There was testimony  
20 yesterday, that certain costs for expansion of this spent-fuel  
21 pool were already included in the capital costs of the company?  
22 My first question was am I accurate? Is my impression  
23 accurate?

24 MR. CHITKARA: Yes.

25 CHAIRMAN BECHHOEFER: There was testimony to that

14

1 effect. Does that amount to, in effect, a reracking?

2 MR. CHITKARA: Yes.

3 CHAIRMAN BECHHOEFER: To what degree, how great an  
4 expansion does that contemplate? In other words, for how many  
5 years could the plant continue to operate under the expansion  
6 which you had in mind and which you said was already included  
7 in the capital costs?

8 MR. CHITKARA: O.K. First of all, the storage  
9 capacity that we have right now is adequate for the first five  
10 years of operation of Zimmer, and there has been storage for  
11 1120 fuel assemblies. We can expand it to anywhere from 22 to  
12 2500 storage capacity, which I think would be sufficient for  
13 maybe 13, 14 years of operation of Zimmer, total operation.

14 CHAIRMAN BECHHOEFER: In terms of what you included as  
15 your finance charge, costs for that are already factored into the  
16 capital costs of the plant?

17 MR. CHITKARA: Yes. In the five-year cost of  
18 operation, we have already accounted for a project which would be  
19 built for reracking of the spent fuel assemblies, with the fuel  
20 pool and with the expanded spent fuel pool, we have the expanded  
21 storage for that.

22 CHAIRMAN BECHHOEFER: In terms of decommissioning costs,  
23 when is it contemplated that the last spent fuel that is used at  
24 the plant will be removed from the site, or is that concluded to  
25 be decommissioning costs, or would that be included in the cost

15 1 of operation?

2 MR. CHITKARA: The cost of taking our spent fuel  
3 assemblies and sending them to a base repository that is part  
4 of the nuclear fuel expense that is shown on the annual cost of  
5 operation, and it is not a part of the decommissioning cost  
6 estimates.

7 CHAIRMAN BECHHOEFER: So even the removal of the last  
8 fuel that was used during the life of the facility, that would be  
9 an operating fuel expense, rather than a decommissioning expense?

10 MR. CHITKARA: That's correct.

11 CHAIRMAN BECHHOEFER: Now, the remaining of the  
12 decommissioning, I would like a little more clarification of the  
13 inflation rate that was used. I think we used 1975 to 1979, a  
14 lower rate was used. My question is, how was that used? Was  
15 that only used to update the AIF figures and bring it up to 1983,  
16 or was that used in the other way?

17 MR. CHITKARA: I think, like you have stated, there  
18 was six percent rate of inflation from '75 to '79 and then 6.5  
19 percent from '79 to '83 was used only for the purpose of bringing  
20 up to 1983 the decommissioning costs of 1983 dollars. In other  
21 words, Zimmer number in '75 dollars. We brought them forth to  
22 1983 dollars by escalating the '75 data, and that is the basis  
23 of information presented in Table 1 in response to Questions 2  
24 and 3.

25 CHAIRMAN BECHHOEFER: Now, between 1975 and 1979, what



16

1 was the actual inflation rate, if there was an average?

2 MR. CHITKARA: I think Mr. Zimmer can address that.

3 MR. ZIMMER: Using the consumer price index, my figures  
4 are eight percent, from '75 to '79.

5 CHAIRMAN BECHHOEFER: In terms of arriving at 1983  
6 dollars, why would not actual expenses be used, at least for the  
7 period of -- at least for the period of where the inflation rate  
8 was determinable in, say, '75 to '80, why would not that aspect  
9 of updating be based on actual experience?

10 MR. CHITKARA: At the time when we updated this  
11 information in response to Staff Questions 2 and 3, we were also  
12 looking back at the previous submittals. In the previous  
13 submittals, six percent was an estimated number, but for some of  
14 the other areas. And I think we essentially stayed with the same  
15 number from '75 to '79 to stay consistent with our previous  
16 submittals to the NRC, and then we looked at '79 to '83, because  
17 in the meantime Zimmer facility had been delayed from our hearing  
18 in January of '81, and we decided to go for the higher inflation  
19 rate.

20 So, I guess, in summary, what I can say is we have  
21 tried to stay consistent with the previous submittal in terms  
22 of using six percent from '75 to '79 and then an estimate of  
23 6.5 percent from '79 to '83. It was done merely for the sake  
24 of maintaining consistent the previous submittal to the NRC.

25 CHAIRMAN BECHHOEFER: Well, if you take your Table 1 as

17

1 your responses to Questions 2 and 3 of the staff, if you take  
2 Table 1, if that were figured on the basis of actual inflation  
3 rates from 1975 through 1980, if you have it, then an assumed  
4 rate thereafter, have you computed the difference? If not, could  
5 you? And I'd be interested in finding out, not only based on  
6 the actual rates for the past, if you could use your 6.5  
7 percent for the future. But I'd also like to know what it would  
8 be at eight percent for the future.

9 MR. ZIMMER: If we use the eight percent for the  
10 future, may I ask what earnings rate we'd use?

11 CHAIRMAN BECHHOEFER: The 7.4.

12 MR. ZIMMER: I think --

13 CHAIRMAN BECHHOEFER: Is that Willoughby testified to  
14 that?

15 MR. ZIMMER: As a ratio?

16 CHAIRMAN BECHHOEFER: Yes.

17 MR. CHITKARA: Yes, that could be done.

18 CHAIRMAN BECHHOEFER: I assume you could be here  
19 tomorrow to give that, if you haven't given it yet?

20 MR. CHITKARA: Yes. Right. Would you want Table 1  
21 reproduced, or would you want both Tables 1 and 2 reproduced?

22 CHAIRMAN BECHHOEFER: Yes, I think Tables 1 and 2  
23 would be useful with that calculation in mind.

24 MR. CHITKARA: O.K.

25 CHAIRMAN BECHHOEFER: In terms of the answer -- the

18

1 answer to one of our questions, I believe -- and I haven't  
2 looked it up yet, but, apparently, two plants were shut down for  
3 repairs for repairs for 18-month periods, I guess Surry and  
4 Brown's Ferry.

5 MR. CHITKARA: Yes.

6 CHAIRMAN BECHHOEFER: I realize this is a different  
7 state, but did Surry request a rate base during that period?

8 MR. ZIMMER: I don't know.

9 CHAIRMAN BECHHOEFER: Brown's Ferry, I am not sure  
10 TVA has it. I don't think TVA is into this. That is not the  
11 same setup here.

12 In terms of the accident scenario that we were talking  
13 about earlier, if the -- I think your answers probably -- I  
14 could construct this from your answers already, but if you have  
15 that accident scenario, if, assuming, now, that the plant was  
16 taken out of the rate base as a result, would any of the companies  
17 at least for that reason alone and assuming financial status  
18 approximately at the present, other than this accident, would  
19 that lead to insolvency or bankruptcy?

20 MR. ZIMMER: No.

21 CHAIRMAN BECHHOEFER: In any of the three companies?

22 MR. ANDERSON: I don't think so.

23 MR. EMERY: (Shaking head negatively.)

24 CHAIRMAN BECHHOEFER: In terms of the -- if I can find  
25 it -- contract which appears in the early part of Exhibit 7 --

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19

1 I can't locate it -- Page 9. If a defaulting party were to  
2 be denied a share of the output as provided in this paragraph,  
3 would that leave that share of the output available to be either  
4 used or sold by the other contracting parties?

5 MR. BORGMAN: (No~~ing~~ affirmatively.) In a default,  
6 it would, yes.

7 CHAIRMAN BECHHOEFER: Yes, that is the situation  
8 covered on the top paragraph on Page 9.

9 MR. BORGMAN: Yes.

10 CHAIRMAN BECHHOEFER: So that if that happened, the  
11 earning capacity of that electrical capacity would still be in  
12 existence?

13 MR. BORGMAN: Like the proceeds from the third-party  
14 share would be used to offset their portion of the expenses if  
15 they defaulted.

16 CHAIRMAN BECHHOEFER: Is it always salable, or would  
17 it be salable?

18 MR. BORGMAN: I would think so. You say "always  
19 salable"?

20 CHAIRMAN BECHHOEFER: Yeah. In the event of this need  
21 fall, the other party, assuming they didn't need it themselves,  
22 could make it available to your power pool, or could you sell it?

23 MR. BORGMAN: Of course, it would always be available  
24 to the power pool and, depending upon what price you wanted to  
25 sell it for, I am sure you certainly could get rid of it at cost

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20

1 someplace else if you had to sell it cheap. It would all depend  
2 on how much you want for energy.

3 CHAIRMAN BECHHOEFFER: If you sold it as secondary  
4 power?

5 MR. BORGMAN: Yes, if you want to sell it off, there  
6 is average sale and unit sale. If you sold it unit sale, I know  
7 you could sell it.

8 CHAIRMAN BECHHOEFFER: To clarify some of the earlier --  
9 going to a different subject -- the earlier testimony about the  
10 use of AFUDC, I assume that that accounting technique is used  
11 only for the portion of the plant which is not covered by  
12 construction work in progress, is that correct?

13 MR. ZIMMER: That part which is non rate based.

14 MR. EMERY: That which is in construction work in  
15 progress is subject to AFUDC.

16 MR. RANDOLPH: There is a mix-up in terminology.  
17 Excuse me for butting in. The department allowed in the rate  
18 case your rate must reflect the capitalized portion of that  
19 construction at the plant. In the last rate case we had  
20 \$109,000,000, and the 79-11 case decided their \$109,000,000 may  
21 go in the Zimmer Plant. And the \$109,000,000 we have to stop  
22 capitalization on that portion of the plan. All the rest we  
23 continued capitalizing the funds.

24 CHAIRMAN BECHHOEFFER: There was testimony to the  
25 effect that eventually the allowance for funds would disappear.

21

1 The implication was that the earnings represented by what  
2 someone referred to as phoney earnings or "funny money" or some  
3 term of the like disappeared. What I am trying to find out is  
4 when that happens, it would be replaced, I take it, by legitimate  
5 earnings. (Laughter.) I will put that in quotes.

6 MR. RANDOLPH: What happens is when the plant goes  
7 into commercial operation, the allowance for funds for  
8 construction calculation and begin to calculate the precision  
9 expense. Now, depending upon the time of rate application filings,  
10 these earnings can become good earnings if we get in fast enough  
11 for a rate increase, yes.

12 CHAIRMAN BECHHOEFER: So that it is not really a  
13 question of source of earnings disappearing?

14 MR. ZIMMER: No, not at all.

15 MR. BORGMAN: It becomes part of the rate base.

16 MR. RANDOLPH: On the funds that were capitalized become  
17 part of the expense for future years, and you recover those  
18 dollars in depreciation expense over the life of the plant.

19 CHAIRMAN BECHHOEFER: There was a discussion this  
20 morning concerning the equipment used for emergency planning,  
21 what it actually would consist of. I assume that what we are  
22 talking about and what you are prepared to finance or whatever,  
23 the equipment that the NPC refers to is the kind it has  
24 prescribed or is likely to prescribe, or is the equipment you  
25 were talking about something else?

22

1 MR. BORGMAN: No, I don't think the NRC is exactly  
2 describing equipment per se. They are prescribing a time limit,  
3 a 15-minute warning and notification. What we are talking about  
4 is combination of sirens, tonal radio and some communication, and  
5 it would meet the criteria, but there is no exactly history of  
6 equipment that the NRC has mandated. In other words, this would  
7 be an early-warning system, sirens, tonal radio and communica-  
8 tions, dedicated radio systems. And then in the other  
9 category I had monitoring equipment, some monitoring equipment.

10 CHAIRMAN BECHHOEFER: So that the discussions are  
11 really what is necessary to meet the criteria that the Commission  
12 would allow?

13 MR. BORGMAN: It goes beyond the criteria of the  
14 Commission in some cases, because we are negotiating with  
15 government bodies, and we have to negotiate with them, because  
16 it's not simply a case of meeting an absolute set of criteria. We  
17 are negotiating to satisfy the government bodies and satisfy the  
18 NRC, so we have another negotiating posture. That's the mode we  
19 are in, give and take with the people within a 10-mile radius in  
20 the State of Kentucky.

21 CHAIRMAN BECHHOEFER: The last question I have may  
22 require you to prepare some material. I don't know if you can  
23 answer it offhand. I'd like to know, for the last five years,  
24 what rate increases each company has received and what the --  
25 either the percentage or the relative dollar values are, what you

23

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1 asked for. And I would also like to know -- some of these figures  
2 are in the record, and some may not be. I'd also like to know  
3 whether each company has been authorized to receive, what dollar  
4 amount you have been authorized to earn in the last five years  
5 and what amounts you have actually earned. There are figures  
6 for isolated years. I don't think there is a complete five-  
7 year coverage. You could put this in tomorrow, if you can't  
8 calculate it now. Either way, if you have it available.

9 MR. ZIMMER: We will put it in tomorrow.

10 MR. RANDOLPH: I have everything, actual earned returns.

11 CHAIRMAN BECHHOEFER: Actually, the Board would prefer  
12 it if you could put a combined -- a table in. It would be useful,  
13 I think. It might get together some isolated answers in various  
14 portions of the transcript which the Board may want to put some  
15 order into.

16 MR. EMERY: We would have to go back to Columbus or  
17 call Columbus and get it. I do not have all that information with  
18 me. I could tell you exact amounts of the rate increases that  
19 were granted, of what the total requested was and what the  
20 percentage was available.

21 CHAIRMAN BECHHOEFER: Well, by "percentage" I was  
22 referring to the relationship between the amount you received and  
23 the amount you asked for. I didn't mean any -- you could do that  
24 in either dollars or some other comparative figure.

25 MR. RANDOLPH: Another problem. I think we can



24

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1 probably answer questions. We are going to provide the return  
2 of common equity actually earned, but in order to make a  
3 calculation of what the actual earned return was on a rate basis  
4 compared to what was in a jurisdictional rate case involves a  
5 very involved calculation. We first have to calculate the rate  
6 base and then allocate the actual earnings to a jurisdictional  
7 area. And that is something that can't be done very easily.  
8 But we can tell you the return that the Commission authorized  
9 us to earn in common equity and then what was actually earned  
10 on equity, and that wouldn't be such a difficult calculation.

11 CHAIRMAN BECHHOFFER: Yes, that will satisfy for the  
12 purpose I think we need it for. That would be satisfactory.

13 That's all the questions the Board has.

14 Are your witnesses going to want to give any redirect?

15 MR. CONNER: May I have just a moment?

16 CHAIRMAN BECHHOFFER: Do any of the parties wish to  
17 cross-examine on any of the questions we asked at this time?  
18 Those tables will come in later, but --

19 MR. REYLE: The City has no more questions.

20 MR. DENNISON: I have nothing further.

21 MR. FELDMAN: I have two questions or three questions.

22 CHAIRMAN BECHHOFFER: Why don't you ask those at this  
23 time.

24 MR. FELDMAN: I am not sure these exactly have to do  
25 -- these didn't grow out of your examination, but of other

25

1 people's cross-examination.

2 MR. CONNER: Objection. This should be limited only  
3 to questions asked by the Board under the ground rules we have  
4 established.

5 CHAIRMAN BECHHOEFER: It should be on the Board's  
6 questions.

7 MR. FELSMAN: I don't have anything.

8 MR. FISSE: I have no questions.

9 MR. KARMEN: No questions.

10 CHAIRMAN BECHHOEFER: If you have redirect, you could  
11 --

12 MR. CONNER: Let me take a minute.

13 CHAIRMAN BECHHOEFER: Why don't you take a short  
14 break?

15 MR. CONNER: A short break is all right, if you wish.

16 CHAIRMAN BECHHOEFER: We will take a 15-minute break.

17 (At 3:45 p.m., a short recess was taken, to reconvene  
18 at 4:00 p.m. of the same day.)  
19  
20  
21  
22  
23  
24  
25

1 CHAIRMAN BECHHOEFER: Mr. Conner, I take it you  
2 do not wish to present redirect?

3 MR. CONNER: We have fled.

4 CHAIRMAN BECHHOEFER: Mr. Feldman?

5 MR. FELDMAN: Your Honor, I'd like to call my  
6 witness, Dr. Ralph Estes, to testify.

7 Would you take the stand?

8  
9 RALPH ESTES,  
10 called as a witness herein, having been first duly  
11 sworn, was examined upon oral interrogatories and  
12 testified as follows:

13  
14 DIRECT EXAMINATION

15 BY: MR. FELDMAN

16  
17 MR. FELDMAN: Doctor, would you please state  
18 your name for the Record?

19 THE WITNESS: Ralph Estes.

20 MR. FELDMAN: Q And your address?

21 A 3926 East First Street, Wichita, Kansas.

22 Q I want to show you what's captioned,  
23 "Direct Testimony of Ralph Estes, Regarding Contention  
24 13 by Applicants' Financial Qualifications."

25 Would you take a look?

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1 Is this your testimony?

2 A Yes, it is.

3 Q And does this vita which is attached,  
4 Exhibit A, does it fairly and accurately describe your  
5 qualifications as an expert?

6 A Yes, it does.

7 Q And is this testimony true and accurate  
8 as you believe?

9 A Yes, it is.

10 Q Your Honor, I would move to incorporate this  
11 testimony into the Record as the direct testimony for  
12 Miami Valley Power Project.

13 MR. CONNER: Subject to Motion to strike. We  
14 will not object.

15 MR. KARMAN: No objection.

16 MR. DENNISON: No objection, Your Honor.

17 MR. HEILE: Your Honor, will that be itemized  
18 as an exhibit number so and so for the Record?

19 CHAIRMAN BECHHOEFER: I anticipate it will be  
20 bound into the transcript as if read. It will be a  
21 portion of the transcript. The testimony will be admitted  
22 at this point and bound into the transcript.

23 MR. FELDMAN: Your Honor, I didn't make enough  
24 copies at this point. I was wondering if I-- How many  
25 copies we need?



3

1 MR. CONNER: If the Board please, we would ask  
2 that you follow the practice of physically binding in the  
3 prepared copies so that we don't have to proof read them  
4 over again and errors might be in there. I think the  
5 reporter indicated only by saying one copy, that she  
6 intended to recopy it. We've already noted mistakes in  
7 the transcript and I think we'd be better off to stick  
8 to the practice of putting in Xerox copies rather than  
9 retranscribed copies.

10 CHAIRMAN BECHHOEFER: Isn't that your usual  
11 practice?

12 MS. REPORTER: Yes, it is.

13 CHAIRMAN BECHHOEFER: Off the Record.

14 (Discussion had off the  
15 Record.)

16 MR. FELDMAN: I have no further questions on  
17 the direct, and therefore, the parties may cross-examine.

18 CHAIRMAN BECHHOEFER: Mr. Conner?

19 (WHEREUPON, the direct, typed  
20 testimony of Mr. Ralph Estes  
21 was admitted into the Record  
22 as if read.)  
23  
24  
25

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY LICENSING BOARD

In the Matter of )  
CINCINNATI GAS AND ELECTRIC COMPANY ) Docket No. 50-358  
(Wm. H. Zimmer Nuclear Power Plant) )

DIRECT TESTIMONY OF RALPH ESTES REGARDING CONTENTION 13,  
APPLICANTS' FINANCIAL QUALIFICATIONS

TESTIMONY ON BEHALF OF MIAMI VALLEY POWER PROJECT

State of Kansas )  
County of Sedgwick ) ss.

Ralph Estes, having first been duly sworn, hereby states as follows: I am employed by Wichita State University as professor and chairperson of the Department of Accounting, although I am not representing nor speaking in behalf of Wichita State University in this testimony. My further qualifications are fully delineated in my curriculum vita which is attached hereto and made a part hereof as "Exhibit A."

The Miami Valley Power Project has raised the following Contention:  
Contention Number 13, Applicants' Financial Qualifications

The equipment used in the construction and operation of the plant will be excessively costly and, in effect, beyond the financial capability of Applicants. Applicants are financially unqualified to operate the plant because of escalating costs.

My testimony addresses this contention:

Although construction and operation of a nuclear power plant involves many factors that may have a financial impact, one of these factors -- decommissioning costs -- has generally received little attention in past analyses. Presumably this is because decommissioning is expected to occur years in the future, and

because nonnuclear plants have not involved substantial decommissioning costs. My testimony focuses on the potential financial effects on the applicants of decommissioning the proposed Zimmer Nuclear Power Plant.

In their responses to questions 2 and 3 to Miami Valley Power Project's request for additional financial information, applicants projected data from a study by the Atomic Industrial Forum to arrive at an estimate of total decommissioning costs of \$35,882,146 in 1983 dollars, and further projected that these costs could be met through annual deposits of \$3,551,610 to a sinking fund for a 33-year period. Applicants' estimates are too low because of inadequate allowance for cost escalation, and are unreliable because of problems inherent in using the Atomic Industrial Forum data.

First, with respect to allowance for cost escalation, applicants assumed a 6 per cent annual inflation rate from 1975 through 1979 and a 6.5 per cent rate for all years after 1979 (i.e., from 1980 through the year 2120, when they project that final dismantling and removal will occur). The term "inflation" is usually used to refer to increases in the Consumer Price Index (since 1978 two CPIs have been calculated, with the CPI for all wage earners and clerical workers most commonly referenced). According to the U. S. Department of Commerce the Consumer Price Index increased at an average rate of 7.8 per cent from 1975 to 1979, and increased by 12.4 per cent during 1980 (compared to 11.5 per cent in 1979). Business Week (February 2, 1981, p. 38) projects an increase of 12 to 14 per cent for 1981. A more conservative index, often used by industrial firms, is the Gross National Product Implicit Price Deflator. This index, according to the Department of Commerce, increased at the rate of 6.5 per cent from 1975

to 1979. My 1981 estimate based on preliminary Department of Commerce figures is 8.1 per cent. The pattern of change in this index is informative:

	Change from previous year
1976	+ 5.3%
1977	+ 5.8%
1978	+ 7.3%
1979	+ 7.5%
1980	+ 8.1%

Because of escalator clauses in many union contracts and the indexation of social security and other retirement benefits to the Consumer Price Index, we now have factors built-in that will prevent the rate of inflation from falling to the historical levels experienced prior to the 1970s.

These general price indexes may not adequately reflect cost inflation associated with construction, operation, and decommissioning of a nuclear power plant. Philadelphia Electric Company projected, in June 1978, capital cost estimates for coal and nuclear plants in 1988 by escalating current costs at approximately 12 per cent per year (per "Electric Power Generation Economics" by Vincent S. Boyer, Vice President-Engineering and Research, Philadelphia Electric Company, June 1978). And cost estimates for the Zimmer plant have escalated much more rapidly than the general price indexes: the estimated cost of the facility has grown from \$288,000,000 in September, 1972 to \$1,067,320,000 in November 1980, a rate of cost inflation of approximately 18 per cent per year; while the estimate of annual operating costs has increased from \$53,000,000 (including decommissioning) in 1977



to \$259,915,200 (not including decommissioning) in 1980, an average annual increase of over 70 per cent per year.

The uncertainty and risks surrounding future decommissioning of nuclear power plants, including questions of federal, state, and local restrictions and regulations, availability of permanent burial sites, possible disallowance of entombment or mothballing, security issues, and the possibility of more stringent safety requirements, combine to make extreme cost inflation more than a mere possibility. My calculations are therefore based on two annual rates for decommissioning cost increases for 1980 and beyond: 8 per cent, reflecting what I believe to be a reasonable projection of industrial cost increases into the future taking into account the cost escalation built into labor contracts; and 10 per cent, reflecting what I believe is a more realistic assessment of the risk and past experience of cost escalation for nuclear power.

Applicants' decommissioning cost estimates may now be recalculated using the actual increase in the Gross National Product Implicit Price Deflator from 1975 to 1979 of 6.5 per cent, and the two rates of 8 per cent and 10 per cent, just discussed, for succeeding years:

Net total annual decommissioning fund deposit required over assumed 33 year operating lifetime:

Per applicants, based on 6.0 per cent inflation 1975-1979 and 6.5 per cent for succeeding years	\$ 3,551,610
Based on actual 6.5 per cent rate of inflation 1975-1979, and 8 per cent for succeeding years	13,991,278
Based on actual 6.5 per cent rate of inflation 1975-1979, and 10 per cent for succeeding years	132,352,407

The foregoing projections are not based on a facility-specific analysis by applicants of decommissioning costs for Zimmer Unit 1; they are derived

instead from estimates published in 1975 by the Atomic Industrial Forum (AIF). AIF estimated the cost of several decommissioning alternatives for a reference 1176 MWe boiling water reactor, and also estimated a percentage reduction factor for a 550 MWe WR. Applicants have stated that they interpolated between these two capacities to obtain initial estimates, in 1975 dollars, for the Zimmer plant, and these were then escalated to 1983 dollars at the rates previously cited. In other words, applicants' estimates of decommissioning costs are based entirely on estimates developed by another organization in 1976, without reference either to the specific characteristics of Zimmer Unit 1 or to any knowledge or experience concerning decommissioning costs that may have been gained since 1976.

Besides the possibility that the AIF estimates may be outdated, they may have been too low in the first place. The project manager noted that reviewers had expressed concern that the costs appeared to be underestimated, and he further noted that the cost estimates in the study do not include a contingency factor, "typically on the order of 25%" ("An Engineering Evaluation of Nuclear Power Reactor Decommissioning Alternatives - Summary Report," National Environmental Studies Project, Atomic Industrial Forum, Inc., November 1976, p. iv.). When consultant John S. Ferguson applied the decommissioning cost estimates from the AIF report, he factored in an allowance for contingencies at 25 per cent (John S. Ferguson, "The Capital Recovery Aspects of Decommissioning Power Reactors," Public Utilities Fortnightly, September 25, 1980, pp. 34-42).

In light of these questions over the original estimates on which applicants' decommissioning cost projections are based, it would seem prudent to consider other approaches to estimating decommissioning costs. I understand that Connecticut's Public Utility Control Authority has approved a 10 per cent

negative salvage charge to consumers to provide for decommissioning costs of Northeast Utilities' Millstone Nuclear Power Station at Waterford. And Nuclear Engineering International (June 1979, p. 38) recently reported, "The general consensus is that the cost of dismantling a nuclear station will be about 10 to 15 per cent of the original capital cost, escalated to the time of decommissioning." Applying a 10 per cent factor to the November 1980 estimate of \$1,067,320,000 for Zimmer provides a decommissioning cost estimate of \$106,732,000 in 1980 dollars. Assuming a 33-year plant life, 6 per cent tax free return on the decommissioning fund (as used by applicants), and an 8 per cent annual rate of cost escalation, this would require an annual fund deposit of \$17,508,316 in 1983 dollars. At a 10 per cent rate of cost escalation the required annual fund deposit, in 1983 dollars, would be \$33,894,236.

In summary, we can evaluate the potential impact of applicants' underestimation of decommissioning costs on shareholders, ratepayers, and the applicants themselves. The latest data available to me indicates that common shares outstanding, earnings per share, and percentage participation in the Zimmer plant for the three participating companies were as follows:

	Common shares outstanding (12/31/79)	Earnings per share (1979)	Per cent of Zimmer
Cincinnati Gas & Electric	27,233,399	\$2.59	40%
Columbus & Southern Ohio Electric Company	16,345,951	\$2.84	28.5%
Dayton Power & Light	23,835,462	\$2.01	31.5%

Consumption by an average size residential consumer is assumed to be 7000 kilowatt hours per year (actual consumption by applicants' customers is not known but should be reasonably close to this estimate). An average plant capacity factor of 65 per cent will be assumed, in accordance with the U. S. General Accounting Office's suggestion ("Analysis of Estimated Cost for Three Pacific Northwest Nuclear Power Plants," U. S. General Accounting Office, July 30, 1979, p. 4 of cover letter to Congressman Weaver). Since it is not clear at this time as to who will bear the cost of decommissioning, and especially the excess cost due to underestimation and underprovision by applicant companies, these data will be used to project the impact on the different decommissioning cost estimates on each group (all amounts are in 1983 dollars):

	<u>Cost to shareholders</u>			<u>Charge per year to average residential customer for decom- missioning cost</u>
	<u>CG&amp;E</u>	<u>C&amp;SOEC</u>	<u>DP&amp;L</u>	
1. AIF data, 3 per cent cost escalation (\$13,991,278 annual deposit)				\$ 21.50
Cost per share	\$0.21	\$0.24	\$0.18	
Per cent of 1979 EPS	8%	8%	9%	
2. AIF data, 10 per cent cost escalation (\$132,352,407 annual deposit)				\$203.39
Cost per share	\$1.94	\$2.31	\$1.75	
Per cent of 1979 EPS	75%	81%	87%	
3. 10 per cent of facility cost, 8 per cent cost escalation (\$17,508,316 annual deposit)				\$ 26.91
Cost per share	\$0.26	\$0.31	\$0.23	
Per cent of 1979 EPS	10%	11%	11%	
4. 10 per cent of facility cost, 10 per cent cost escalation (\$33,894,236 annual deposit)				\$ 52.09
Cost per share	\$0.50	\$0.59	\$0.45	
Per cent of 1979 EPS	19%	21%	22%	




The preceding calculations show the amounts that will have to be either collected from an average residential customer each year, or absorbed by each share of stock annually, to provide for required annual decommissioning fund contributions under each cost estimate.

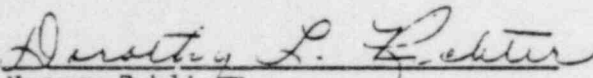
Applicants have indicated that they believe an annual deposit of \$3,551,610 will be sufficient to provide for all possible future decommissioning costs. What will be the financial impact on applicants if they do deposit only this amount annually? The following tabulation shows the shortfall or fund deficit in the year 2016 (at the anticipated shutdown date with a 33-year life beginning in 1983), in both 2016 and 1983 dollars, under the four cost estimates developed herein:

	<u>Fund balance required (year 2016)</u>	<u>Fund provided by applicants' estimate</u>	<u>Deficit (2016 dollars)</u>	<u>Deficit (1983 dollars)</u>
1. AIF data, 8 per cent cost escalation	\$ 1,361,955,283	\$345,724,958	\$ 1,016,230,325	\$ 80,169,324
2. AIF data, 10 per cent cost escalation	12,883,602,200	345,724,958	12,537,877,242	539,840,426
3. 10 per cent of facility cost, 8 per cent cost escalation	1,704,314,394	345,724,958	1,358,589,936	107,177,707
4. 10 per cent of facility cost, 10 per cent cost escalation	3,299,372,209	345,724,958	2,953,647,251	127,174,494

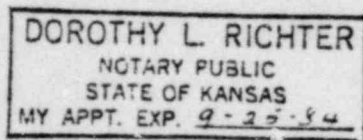
I have taken an essentially conservative approach to estimating the financial impact of decommissioning costs on applicants. I have not allowed for possible property taxes charged during a possible 104-year entombment period. I have not considered the tremendous financial impact of premature shutdown. I have not dwelt on the difficulties of obtaining access to permanent burial sites nor the possible charges for such sites. I have based my calculations on the assumption that the funds collected from ratepayers to provide a decommissioning fund will be exempt from income taxes, although I understand this is not currently the position of the Internal Revenue Service. The cost escalation rates I have used do not reflect the much higher escalation rates experienced in recent years for nuclear facilities generally. My purpose has not been to exaggerate the potential financial impact of decommissioning costs, but to provide calculations that show the potential impacts on applicants and their ratepayers and/or shareholders from very reasonable alternative possibilities.

  
Ralph Estes

Subscribed and Sworn to before  
me this 11 day of February 1981.

  
Notary Public

My Commission expires: 9-25-84



RALPH ESTES  
Professor of Accounting  
Wichita State University

Curriculum Vitae

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EDUCATION

D.B.A., Indiana University (1967)  
M.B.A., University of Kentucky (1963)  
B.S., University of Kentucky (1959)

ACADEMIC EXPERIENCE

Wichita State University, Professor (1973-present)  
University of Texas at Arlington --  
Professor (1971-1973)  
Associate Professor (1968-1971)  
Assistant Professor (1966-1968)  
Northeastern University, Visiting Professor (Summer 1969)  
Indiana University, Teaching Associate (1963-1965)  
University of Kentucky, Instructor (1962-1963)

BUSINESS EXPERIENCE

Accounting and management consulting (1966-present)  
Federal Election Commission (on public impact of campaign audit procedures and financial reporting requirements; also to monitor, at the FEC's request, a review by Arthur Andersen & Co. of FEC procedures, to insure freedom from bias)  
Environmental Protection Agency (on economic value of noncompliance with pollution control requirements)  
Arthur Andersen & Co. (on corporate social accounting)  
State Senate of Kansas (on the state budget)  
Kansas Department of Planning and Research (on cost determination)  
Volunteer consulting to numerous minority-owned businesses, public interest groups, and anti-poverty organizations, generally on systems and procedures  
Practicing CPA (1963-1965)  
Staff accountant, Owens Owens & Hisle, Lexington, Ky. (1962-1963)  
Staff accountant, Arthur Andersen & Co., St. Louis and Chicago (1959-1962)  
Administrative clerk, United States Air Force (1953-1956)

PROFESSIONAL ACTIVITIES AND MEMBERSHIPS

Certified Public Accountant  
Accountants for the Public Interest --  
President (1979- )  
Vice President (1978-1979)  
Executive Committee (1977- )  
Board of Directors (1977- )  
Chair, Executive Director Search Committee (1979)  
Chair, Membership Committee (1978-1979)  
Chair, Committee on Relations with Colleges and Students (1977-1978)  
Long-Range Planning Committee (1978)

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PROFESSIONAL ACTIVITIES AND MEMBERSHIPS (continued)

American Institute of Certified Public Accountants

American Accounting Association --

Committee to Nominate Outstanding Contributions to Accounting Literature (1978-1979)

Research Editorial Board (1976-1977)

Committee on Accounting for Social Performance (1974-1975)

Editorial Board, The Accounting Review (1973-1974)

Accounting Educator Award Committee (1972-1973, 1975-1974)

International Accounting Committee (1971-1972)

Committee on Application of Learning and Communication Theory to Accounting Instruction (1970-1971)

Committee on International Aspects of Accounting Teaching and Research (1968-1969, 1969-1970)

Research Committee on International Accounting (1966-1967)

Research Project Consulting Committee (Simmons & Barrett project)

AAA Delegate to Ninth International Congress of Accountants, Paris (1967)

American Institute for Decision Sciences

Financial Executives Institute (1970-1973) --

Chair, Dallas Chapter Education Committee

Greater Wichita Area Chamber of Commerce --

Community Livability Committee

Legislative Committee

Chair, Education and Culture Committee

PUBLICATIONSBooks and Monographs:

Dictionary of Accounting (Cambridge: The MIT Press, forthcoming), cloth and paperback editions.

Corporate Social Accounting (New York: John Wiley & Sons, 1976), 166 pages. Japanese edition published by Chuo Keizai Co., Ltd., 1979; translated by Kiyoshi Aoyagi and Takatsugu Wato. Taiwan edition published by Modern Book Co., Taipei, 1977.

Accounting and Society (Los Angeles: Melville Div. of John Wiley & Sons, 1973), 411 pages; cloth and paperback editions.

An Introduction to Financial Control and Reporting in Multinational Enterprises (Austin: Bureau of Business Research, The University of Texas, 1973), 89 pages. Coauthored.

Accounting for Excellence: An Evaluation of the Relative Quality of Programs in Accounting (New York: Laventhol Kiekstein Horwath & Horwath, 1970), 20 pages.



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PUBLICATIONS (continued)

Journal Articles:

"The Profession's Changing Horizons: A Survey of Practitioners on the Present and Future Importance of Selected Knowledge and Skills," The International Journal of Accounting Education and Research, Spring 1979, pp. 77.

"Accounting and Public Service," The Accounting Review, April 1979, pp. 402-408. With Gerald Zeisel.

"An Experimental Study of the Differential Effect of Standard and Qualified Auditors' Opinions on Investors' Price Decisions," Accounting and Business Research, Spring 1979, pp. 157-162. With Marvin Reimer.

"On the Present and Future Importance of Accounting History," The Accounting Historians Journal, Fall 1978, pp. 63-65.

"Achieving Practical Relevance in Accounting Education: A Survey of Public Accountants on the Present and Future Importance of Curricular Areas," The Woman CPA, October 1978, pp. 7-12.

"Social Accounting in a Manufacturing Company: An Action Research Study," The Journal of Contemporary Business, Winter 1978, pp. 33-43. With Nicole Zenz.

"Social Accounting in Japan," Accounting: Kigyo Kaikei (Japan), April 1978, pp. 45-50. With Hiroshi Yoshida.

"Corporate Social Accounting," Accounting: Kigyo Kaikei (Japan), January 1978, pp. 65-69. With Hiroshi Yoshida.

"Improving Executive Decisions by Formalizing Dissent: The Corporate Devil's Advocate," The Academy of Management Review, October 1977, pp. 662-667. With Theodore Herbert.

"A Study of the Effect of Qualified Auditors' Opinions on Bankers' Lending Decisions," Accounting and Business Research, Autumn 1977, pp. 250-259. With Marvin Reimer.

"Standards for Corporate Social Reporting," Management Accounting, November 1976, pp. 19-22, 26.

"A Comprehensive Corporate Social Reporting Model," The Federal Accountant, December 1976, pp. 9-19.

"Caveat Exsecutor: A Warning on the Misuse of Linear Regression," Managerial Planning, January-February 1974, pp. 29-34. Coauthored.

"The Joint Probability Approach and Reorder Point Determination," Production and Inventory Management, 2nd Quarter 1973, pp. 50-56.

## Journal Articles (continued):

"Socio-Economic Accounting and External Diseconomies," The Accounting Review, April 1972, pp. 284-290.

"Application of Communication Theory to Accounting Instruction," in Report of the Committee on Application of Learning and Communication Theories to Accounting Instruction, The Accounting Review, Supplement to Vol. XXVII (1972), pp. 268-275.

"A Ranking of Accounting Programs," The Journal of Accountancy, July 1970, pp. 86-90.

"The Accountant's Social Responsibility," The Journal of Accountancy, January 1970, pp. 40-43.

"An Assessment of the Usefulness of Current Cost and Price-Level Information by Financial Statement Users," The Journal of Accounting Research, Autumn 1968, pp. 200-207.

"Professional Education for the Mature Accountant," Canadian Chartered Accountant (now CA), March 1968, pp. 193-195.

"Comparability and Flexibility: A Proposed Solution to the Uniformity Dilemma," The Financial Analysts Journal, May-June 1966, pp. 65-68. With Homer Brown.

## Other Articles:

"Social Reporting in Japan," in The Status of Social Reporting in Selected Countries (Center for International Education and Research in Accounting, The University of Illinois, 1978), pp. 73-80.

"The Corporate Social Accounting Model: An Information System for Evaluating the Impact of Corporations on Growth, Resource Use, and Specific Constituent Groups Within Society," in Accounting and Corporate Social Responsibility (The University of Kansas, 1978), pp. 103-109.

"Social Accounting -- Where Are We and Where Are We Going?" 1976-1977 Distinguished Speaker Series (The University of Kentucky, 1977), pp. 15-28.

"Evaluation of a Proposed Social Reporting Model," in Accountancy in the 1980s - Some Issues (Reston: The Council of Arthur Young Professors, 1977), pp. 159-167.

"The Inefficient Markets Theorem, or Why There Will Always be a Need for Social Accounting," in Bridging the Gap, Gary John Previts, editor (The University of Alabama, 1976), pp. 153-162.

"Social Measurement in the Accounting Curriculum -- Where and Why?" in Researching the Accounting Curriculum: Strategies for Change, William L. Ferrara, editor (Education Series No. 2, American Accounting Association, 1975), pp. 203-217.

---

Other Articles (continued):

"A Comprehensive Social Accounting Model for Corporations and Other Entities," Proceedings of the Southwest Regional Meeting of the American Accounting Association (Houston, 1975), pp. 238-252.

"A Comprehensive Corporate Social Reporting Model," in Social Accounting by Lee J. Seidler and Lynn L. Seidler (Los Angeles: Melville Div. of John Wiley & Sons, 1975), pp. 185-204.

"Social Accounting," Wichita State University Magazine, Winter 1975, pp. 4-7.

"Advanced Principles of Auditing," in Accounting Trends VIII, Thomas J. Burns, editor (New York: McGraw-Hill, 1974), pp. 38-40.

"What's All This About Social Accounting -- or Can I Make It to Retirement Without Having to Learn?" Elmer Fox & Company '74, pp. 10-11.

"Education for the Mature Professional," Proceedings of the Second International Conference on Accounting Education (London, 1970), pp. 27-33.

"The Decision Scientist: 1984," Proceedings of the First Annual Meeting of the American Institute for Decision Sciences (New Orleans, 1970), pp. 281-293. With Lee Smith.

## Book Reviews:

Trevor Gambling, Societal Accounting (London: George Allen & Unwin Ltd., 1974); in The Accounting Review, April 1976, pp. 457-458.

J. E. Smyth, The Accounting Model (Toronto: The Ryerson Press, 1970); in The Accounting Review, October 1971, p. 836.

INVITED PAPERS AND PROGRAM APPEARANCES

## National/International Meetings:

"An Experimental Study of the Behavioral Impact of the Auditor's Standard Opinion," Annual Meeting of the American Institute for Decision Sciences, New Orleans, November 1979.

"Fads, Foibles and the Future: Social Accounting in the Twenty-First Century," Annual Conference of the Order of Chartered Accountants of Quebec, Pointe-au-Pic, June 1979.

"The Profession's Changing Horizons: A Survey of Practitioners on the Present and Future Importance of Selected Knowledge and Skills," Annual Meeting of the American Accounting Association, Denver, August 1978.

---

National/International Meetings (continued):

"Monetary Measures of Performance," Annual Conference of Accountants for the Public Interest, Miami, November 1977.

"Accounting in the Twenty-First Century: The Road to Gnomologica," Annual Meeting of the American Accounting Association, Portland, August 1977.

"The Now and Future Accountant's Need for Decision Sciences," Annual Meeting of the American Institute for Decision Sciences, San Francisco, November 1976.

Panel discussant, "How Can We Utilize Student Volunteers More Effectively?" Annual Conference of Accountants for the Public Interest, San Francisco, November 1976.

"A Model for Measuring and Evaluating the Social Impact of Multinational Corporations," XXIInd International Meeting of The Institute of Management Sciences, Kyoto, July 1975.

Session chair, "The Measurement of the Social Impact of Multinational Corporations on Host Countries," XXIInd International Meeting of The Institute of Management Sciences, Kyoto, July 1975.

Session chair, "Social Accounting: Cases in Social Measurement," Annual Meeting of the American Institute for Decision Sciences, Atlanta, October 1974.

"Social and Environmental Accounting," Twenty-Third Annual Symposium of the Federal Government Accountants Association, Dallas, June 1974.

"Social Accounting and Accounting Education," American Accounting Association Symposium on Accounting Education, Chicago, May 1974.

"A Comprehensive Corporate Social Reporting Model," XXth International Meeting of The Institute of Management Sciences, Tel Aviv, June 1973.

"Application of Communication Theory to Accounting Instruction," Annual Meeting of the American Accounting Association, Lexington, August 1971.

"Accounting for Social Costs," Annual Meeting of the American Accounting Association, University of Maryland, August 1970.

"The Decision Scientist: 1984," Annual Meeting of the American Institute for Decision Sciences, New Orleans, October 1969. With Lee Smith.

"Education for the Mature Professional," Second International Conference on Accounting Education, London, August 1967.

Other Meetings:

"Public Interest Accounting: Putting the 'P' in CPA," Wichita State University Chapter of Beta Alpha Psi, October 1979.



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Other Meetings (continued):

"The Present and Future Importance of Selected Knowledge and Skills," Second Annual Kansas Society of CPAs Accounting Educators Conference, Manhattan, March 1979.

"The Value of Virtue: Can Corporate Morality be Measured?" University of Notre Dame, invited lecture sponsored by the Joint University Committee on Business, Theology and Philosophy, April 1978.

Discussant, "The Role of Fact and Interpretation in the Evolution of the Auditing Method," by Florence Sneed, Annual Meeting of the American Accounting Association Southwest Region, Dallas, March 1978.

"The Corporate Social Accounting Model: An Information System for Evaluating the Impact of Corporations on Growth, Resource Use, and Specific Constituent Groups Within Society," Social Accounting Symposium sponsored by Arthur Andersen & Co. and the University of Kansas, Lawrence, May 1977.

Panel Discussant, "Corporate Social Responsibility and Social Accounting," on Market Place, public television program produced for national syndication, Kansas City, May 1977.

"Social Accounting -- State of the Art and the Future Outlook," University of Kentucky Distinguished Speaker Series, October 1976.

"Total Performance Accounting: A New Tool for Evaluating Your Social Performance," Wichita State University Community Leaders' Luncheon, Wichita, September 1976.

"Social Accounting in the Curriculum: How Much, Where, Why?" Annual Meeting, Coordinating Council of Accounting Educators of Minnesota, Winona, April 1976.

"Evaluation of a Corporate Social Reporting Model," The Arthur Young Professors' Roundtable, University of Illinois, Urbana, March 1976.

"Social and Environmental Accounting," Robert Morris Associates, St. Louis Chapter, February 1976.

"The Inefficient Markets Theorem, or Why There Will Always be a Need for Social Accounting," University of Alabama Accounting Research Convocation, November 1976. Also served as a member of the convocation faculty.

"Social Accounting," AICPA's Faculty Summer Seminar for Representatives of Accounting Departments in the Traditionally Black Colleges and Universities, Florida A & M University, Tallahassee, June 1975.

"Measuring the Unmeasurable: Social Accounting for Social Responsibility," Emporia Kansas State University Annual Accounting Club Banquet, Emporia, April 1975.

---

Other Meetings (continued):

"Integrating Economic and Social Effects in a Comprehensive Corporate Reporting Model," American Accounting Association Southwest Regional Meeting, Houston, March 1975.

"A Proposed Corporate Social Reporting Model," The University of Minnesota, invited lecture for faculty, Ph.D. candidates, and area business executives, Minneapolis, February 1975.

"A Corporate Social Reporting Model," The University of California, invited lecture for faculty and Ph.D. candidates, Berkeley, November 1974.

"Social Accounting: Progress and Prospects," U. S. Civil Service Commission Seminar for Financial Executives, Dallas, October 1974.

"Social Accounting," Annual Meeting of the Kansas Society of Certified Public Accountants, Dodge City, September 1974.

"Social Accounting and the CPA," Wichita Chapter of Kansas Society of CPAs, Wichita, January 1974.

"Innovation in Accounting Instruction," State Convention of Community Colleges in Kansas, Wichita, January 1974.

"Corporate Social Accounting," Wichita State University Accounting Club, Wichita, January 1974.

"Corporate Social Accounting," Annual Professional Banquet of the University of Houston Chapter of Beta Alpha Psi, October 1973.

"Accounting in the Executive Suite," Golden Triangle Chapter of the National Secretaries Association, Arlington, August 1973.

"Social Accounting," three-day seminar for Arthur Andersen & Co. partners, Chicago, May 1973. Directed by R. Lee Brummet.

"Quantitative Systems for Social Performance Evaluation," Seminar on Measurement of Corporate Social Performance sponsored by the California CPA Foundation for Education and Research and the University of Southern California, Monterey, April 1973.

"The Future of Accounting Education," Seminar on Accounting Education, jointly sponsored by American Institute of Certified Public Accountants, American Accounting Association, and North Texas State University, Denton, November 1972.

"Mathematical Communication Theory and Accounting," Annual Meeting of the American Accounting Association Southeast Region, Baton Rouge, May 1972.

"Public Interest Accounting," Texas Christian University Chapter of Beta Alpha Psi, Fort Worth, December 1971.

---

**Other Meetings (continued):**

"Information Theory," Dallas Chapter of the Institute of Internal Auditors, Dallas, October 1971.

"Are Accountants Relevant?" Annual Meeting of the Fort Worth Chapter, Texas Society of CPAs, Fort Worth, January 1971.

Discussant, "Feasibility of Obtaining Current Cost Data: A Case Study," Annual Meeting of the American Accounting Association Southwest Region, Dallas, March 1970.

"Business and Social Change," Southwestern Bell Telephone Company College Faculty Conference, Arlington, November 1968.

"International Financial Reporting," Annual Meeting of the American Accounting Association Southwest Region, Dallas, March 1967.

**OTHER RESEARCH COMPLETED**

"A Discriminant Analysis of Career Choice Decisions Among Accountants, Attorneys, Engineers, and Physicians," research report submitted to The Accounting Review.

"An Investigation of Intergenerational Socioeconomic Status Change Among Four Professions," research report submitted to The Accounting Review.

A series of controlled experiments, extending over a five-year period, to investigate the effects of different audit opinion forms on stockholders, financial analysts, institutional investors, and business persons in general; will be prepared for publication as a research monograph.

"Accounting Problems of the Multinational Enterprise," for the American Accounting Association's International Accounting Committee, 1971-1972.

"Resources for Research in International Accounting," for the American Accounting Association's Committee on International Aspects of Accounting Teaching and Research, 1968-1970.

"International Accounting and the AAA Basic Standards," for the American Accounting Association's Research Committee on International Accounting, 1966-1967; results published in The Accounting Review, Supplement to Vol. XLVIII (1968), pp. 3-14.

International Accounting: With Particular Reference to Application of Price-Level Adjustment and Future Service Valuation Concepts (Doctor of Business Administration dissertation, Indiana University, May 1967).

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HONORS AND AWARDS

Honored by student and alumni groups (Omicron Delta Kappa, Mortar Board, and Student-Alumni Association) for "Leadership in Service to Wichita State University," February 1978.

Listed in Outstanding Educators in America, 1970 and 1974-1975.

Listed in American Men and Women of Science.

Beta Alpha Psi, accounting professional and honorary organization.

Beta Gamma Sigma, business honorary.

Phi Alpha Theta, history honorary.

Earhart Fellow, 1962, 1963, and 1964.

UNIVERSITY SERVICE

Chair, University Committee on Credit for Experience

Moderator and member of Planning Committee, WSU Annual Accounting/Auditing Conference

Faculty advisor to several student organizations, including Beta Alpha Psi

Elected member, University Graduate Assembly

University Curriculum Committee

University Computer Board

University Goals Committee

University Humanities Committee

University Human Research Review Committee

University DELTA Project Advisory Committee

College Graduate Studies Committee

College Doctoral Program Committee

College Tenure and Promotion Committee

College Research Committee

College Retrenchment Committee

College Management Science Committee

College Honors Committee

Chair, College Computer Requirements Committee

College Dean Evaluation Committee

College MBA Accreditation Committee

College Dean Search Committee

Chair, Department Chairperson Search Committee

Developed following new courses:

Management Accounting for Public Administration (graduate)

Advanced Public Accounting Practice (graduate)

Information Systems Analysis (graduate)

Business and Society (graduate)

Accounting Research Seminar (graduate)

International Accounting and Financial Analysis (graduate)

Electronic Data Processing (undergraduate)

Electronic Business Systems (undergraduate)



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COMMUNITY SERVICE

Community service has included service as officer or board member of numerous community and public interest organizations; volunteer consulting to Federal Election Commission, Environmental Protection Agency, State Senate of Kansas, and numerous other government agencies, minority-owned businesses, public interest groups, and anti-poverty organizations; over one hundred addresses to community, educational, and religious organizations; and service as finance chairperson for a Kansas gubernatorial candidate.

OTHER INFORMATION

Date of birth: August 13, 1935.

Married to Sue Ellen Horn; no children.

Personal and professional goals include continued efforts to advance knowledge through personal scholarly activities and by stimulating other scholars including Ph.D. candidates and younger professors; and efforts to serve the public interest through the application of accounting and economic skills and knowledge.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Charles Bechhoefer, Chairman  
Dr. Frank F. Hooper, Member  
Glenn O. Bright, Member

In the Matter of

CINCINNATI GAS AND ELECTRIC  
COMPANY, ET AL,  
(William H. Zimmer Nuclear  
Power Station)

:  
:  
:  
: DOCKET NO. 50-358  
: APPLICATION FOR  
: OPERATING LICENSE.

CERTIFICATE OF SERVICE

I hereby certify that copies of The Direct Testimony of  
Ralph Estes Regarding Contention 13, Applicants' Financial Qualifications  
\_\_\_\_\_ in the above-captioned proceed-  
ing have been served on the following persons by posting the same  
in the U.S. Mails, postage prepaid, this 13 day of February  
1981.

Charles Bechhoefer, Esq., Chairman  
Atomic Safety and Licensing Board  
Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

~~Dr. Frank F. Hooper~~  
~~School of Natural Resources~~  
~~University of Michigan~~  
~~Ann Arbor, Michigan 48109~~

~~William J. Moran, Esq.~~  
~~General Counsel~~  
~~Cincinnati Gas & Electric Co.~~  
~~P.O. Box 966~~  
~~Cincinnati, Ohio 45201~~

W. Peter Heile, Esq.  
Assistant City Solicitor  
Room 214, City Hall  
Cincinnati, Ohio 45220

Mr. Glenn O. Bright  
Atomic Safety and Licensing Board  
Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Troy B. Conner, Esq.  
Conner, Moore & Corber  
1747 Pennsylvania Avenue, N.W.  
Washington, D.C. 20006

John D. Woliver, Esq.  
P.O. Box 47  
550 Kilgore Street  
Batavia, Ohio 45103

Chairman  
Atomic Safety and Licensing Appeal  
Board  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Charles A. Barth, Esq.  
U.S. Nuclear Regulatory Commission  
Room MNBB 9604  
7735 Old Georgetown Road  
Bethesda, Maryland 20014

Chase Stephens  
Docketing and Service Section  
Office of the Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Richard S. Saltman, Esq.  
Chairman  
Atomic Safety & Licensing Appeal  
Board  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Lawrence Quarles  
Atomic Safety & Licensing Appeal  
Board  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Michael C. Farrar, Esq.  
Atomic Safety & Licensing Appeal  
Board  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dr. Frank Hooper  
Apartment 204  
105 Inn Lane  
Oak Ridge, TN 37836

Chairman  
Atomic Safety and Licensing Board  
Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

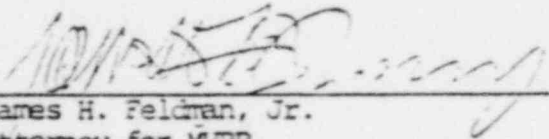
Mary Reder  
Box 270  
Route 2  
California, Kentucky 41007

David K. Martin, Esq.  
Assistant Attorney General  
Division of Environmental Law  
Attorney General for the Commonwealth  
of Kentucky  
209 St. Clair Street  
Frankfort, Kentucky 40601

Andrew B. Dennison  
200 Main Street  
Batavia, Ohio 45103

Robert Jones  
Prosecuting Attorney  
Clermont County  
154 Main Street  
Batavia, Ohio 45103

I further certify that I have served a copy of the foregoing on Mr. William J. Moran, CG&E, by personally delivering it to his office this 13 day of February, 1981.

  
James H. Feldman, Jr.  
Attorney for MWPP  
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## CROSS-EXAMINATION

BY: MR. CONNER

Q Doctor Estes, in making -- in directing your attention to Page 3 of your testimony, are you there?

A Yes.

Q You indicate that the table appearing at the top of the Page 3 is taken from the Gross National Product Implicit Price Deflator, and you give the rate of inflation, a change from the previous year, in that table; is that correct?

A Yes.

Q Doctor, did you make any effort to compare that with the earnings rates for those same years for investment grade tax-free municipal bonds?

A No.

Q Have you looked at Moody's, for example, on the particular point?

A I believe there is on one point.

Q On the point of the average earnings rate for the five years?

A For tax-free municipal bonds?

Q Correct.

A No.



5 1 Q You have, I believe, testified in your  
2 deposition that you do not consider yourself an expert on  
3 economic cycles; is that correct?

4 A No.

5 Q Well, excuse me, Doctor. Directing your  
6 attention to the transcript of your deposition, I asked you  
7 the question, "Do you consider yourself knowledgeable or  
8 an expert in economic cycles?" Answer, "I'm not. I  
9 would-- I'm comfortable in saying I'm not an expert in  
10 economic cycles. I do not occupy my time studying or  
11 doctoring any economic cycles. I study economic cycles  
12 in the course of my extensive studies of economics."

13 Is that your testimony?

14 A Yes, it is.

15 Q Now, are you changing your testimony now?

16 A I don't mean to be. I understood your  
17 question a moment ago presently to be asked much more in  
18 the negative sense such that in the affirmative answer, I  
19 indicated I'm not an economist. Perhaps I misunderstood  
20 your present question.

21 CHAIRMAN BECHHOEFER: Doctor Estes, would you  
22 speak up, please?

23 THE WITNESS: Yes, sir.

24 MR. CONNER: Q Are you changing your testimony  
25 from your deposition, "I'm not an expert in economic

6

1 cycles."

2 A I'm not changing my testimony from the  
3 full response I gave at the deposition.

4 Q Do you or do you not consider yourself an  
5 expert on economic cycles?

6 A As I stated in the deposition, I don't  
7 consider myself to be an expert on economic cycles although  
8 I'm not completely unfamiliar with them.

9 Q All right. Then to make an economic  
10 projection of decommissioned costs subject to your  
11 testimony, would it not have been proper and important  
12 for you to have related any inflation rates to the rate  
13 of -- retire the interest rates for the same periods of time?

14 A Would you please repeat the question?

15 Q As you follow proper accounting procedures  
16 to escalate --

17 CHAIRMAN BECHHOEFER: I could not hear the last  
18 answer.

19 THE WITNESS. I said, "Would you please repeat  
20 the question?"

21 MR. CONNER: I'll start all over again.

22 Q As an accountant, wouldn't it be proper in  
23 attempting to make a long-range projection of inflation  
24 rates? Wouldn't it also be necessary to make corresponding  
25 adjustments by showing the interest rates to calculate the

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7 1 overall cost of the decommission?

2 A The question, sir, is over-simplified, and  
3 it's not one that can be really answered yes or no. If  
4 you'd like, I'll elaborate.

5 Q Do you agree that there is a definite  
6 correlation between inflation rates and interest rates?

7 A Sir, in the term correlation, it refers to  
8 a number that ranges from minus one to plus one all the  
9 way through zero, and then the correlation can be  
10 interpreted to mean .01, .001, .99. I don't consider  
11 it to be a strong correlation between the rates of inflation  
12 rates, but there is a correlation.

13 Q Doctor, would you agree, for example, that  
14 the interest in inflation rates moved enroute to --

15 MR. FELDMAN: Objection, unless a specific time  
16 period is introduced.

17 MR. CONNER: All the questions relate to my  
18 original premise of long-range projections such as Dr.  
19 Estes has made in his testimony for decommission.

20 THE WITNESS: I would agree with what you're  
21 saying.

22 MR. CONNER: If the Board please, I'm just  
23 looking at NUREG CR 1481, dated July 1980, at Page --  
24 Roman Numeral IV-VIII; and I would request the Board take  
25 judicial notice of that document in findings made by the

8

1 Staff on that point.

2 Q Well, Doctor, if this is true that they do  
3 move in harmony, isn't your analysis in your testimony  
4 unfair to escalate the interest rate to, say, 8 percent  
5 or to 10 percent as you did without making a corresponding  
6 adjustment for the interest rate?

7 A I'm having some difficulty with the term  
8 unfair since I use the interest rates that the Applicants  
9 used in their analysis, but I'm quite willing to agree on  
10 that the most accurate projection could be made by the  
11 parking then from the procedure used by the Applicants in  
12 their response and indeed relating the return on an  
13 assumed decommission fund to the rate of inflation.

14 Q Then Doctor, as I understand your answer,  
15 interest rates increases should have been a concluded in  
16 the analysis that you did for the inflation rate increase;  
17 is that correct?

18 A I didn't assume inflation rates increasing.  
19 I assumed cost inflation rates increasing.

20 Q I'm sorry. I direct your attention to  
21 Page 8 of your testimony.

22 You did not, there, increase the inflation  
23 rate to 8 percent on Item 1, and on Item 2, increase it  
24 to 10 percent without making any corresponding increase in  
25 the interest rate?



9

1           A     Sir, when you referred to increasing  
2 inflation rates, I assume you're referring to the inflation  
3 rate assumptions embodied in my calculations in comparison  
4 to inflation rate assumptions to be used by the Applicants  
5 but your question about increasing the inflation rate and  
6 concurrently increasing the interest rate implies, at  
7 least to me, that you're talking about a period of time  
8 and increasing the interest rate over that period of time  
9 and likewise increasing the interest rate as I responded,  
10 when I use 8 percent, I used 8 percent cost to be  
11 throughout the life of the plant and assumed the Commission  
12 without changing it and likewise with the 10 percent rate.

13           Q     But you did not change the earnings rate  
14 correspondingly, did you?

15           A     That is correct. As I stated with the 6  
16 percent, I believe it was that the Applicants used in  
17 their analysis.

18           Q     And had you adjusted the earnings rate to  
19 be in harmony with your assumed increase inflation rate,  
20 the so-called deficits that you have referred to on Page 8  
21 would be much smaller numbers; is that correct?

22           A     I don't think so, sir.

23           Q     If you were to increase the earnings rate  
24 by, say, 7.4 percent as it has been done here today, for  
25 example, 27.4 would not be so-called deficit, would not be

1 significantly reduced?

2 A That is correct, if I would do that but I  
3 wouldn't agree with you on it.

4 Q Have you made any studies of any of the  
5 NRC documents that have been published concerning the  
6 cost of the decommissioning and the assumptions for  
7 financial information?

8 A Yes.

9 Q Have you, for example, examined NUREG 0584,  
10 Revision 2 entitled, "Sharing The Availability of Funds  
11 For Decommissions, Nuclear Facilities," dated October 1980?

12 A I can't be certain that I have or not, but  
13 I don't know that I have. I don't have it here for sure.

14 Q Doctor, Mr. Wetterhahn is handing you the  
15 copy of the document. Turn to Page 26 and look at the  
16 footnote there. The footnote states, for the benefit of  
17 those who do not have the document, "With respect to the  
18 longer term relationship between the interest rate and  
19 inflation rate, studies have found that the real interest  
20 rate, i.e. the annual yield on investments over and above  
21 the inflation is averaged from approximately 1.5 percent,  
22 2.2 percent has indicated a NUREG CR 0570, "For the period  
23 1961 to 1976, the average real return relative to the  
24 First National Product Deflator on a three to five versus  
25

11

1 Government securities is 1.42 percent. For the period  
2 1963 to 1976, the average real return on Triple A  
3 corporate bonds was 1.95 percent. The average expected  
4 real return on nine to twelve month issues relative to  
5 inspected inflation rates for the period 1953 to 1975 --  
6 about 23.2 percent."

7 Two percent thus appears to be a reasonable  
8 assumption for a real rate of return, and then it makes  
9 the citation there.

10 Doctor, have you examined this paragraph  
11 now?

12 A Just now, yes.

13 Q Do you agree with the conclusion reached  
14 in that NRC document?

15 A Let me read the last sentence in the  
16 paragraph, Counselor. The real rate of return discussed  
17 here is before income taxes. Now, while I haven't done a  
18 personal study on these returns, I'm prepared to accept  
19 the figures given in this paragraph, and in fact, I made  
20 calculations based on these figures for the decommissioning  
21 costs of Zimmer.

22 Q I'm sorry. You have made calculations  
23 having this two percent increase in the -- I mean the  
24 real return of two percent?  
25

12

1 A Yes, sir, I have those here.

2 Q But in your testimony, you didn't include  
3 that; is that correct?

4 A That's correct. I had not had access, at  
5 that time, to NRC 6072 entitled, "Technology Safety and  
6 Costs of Definitions of Boiling Reactor Power Station."  
7 That has cause that would be much more valid because it's  
8 much more up-to-date and more detail than those used by  
9 the Applicant

10 Q Sir, isn't it a fact that your table on  
11 Page 8 would be significantly different if you had  
12 included the real rate of return in correlation to your  
13 assumed cost escalations and inflation escalation? These  
14 numbers would be quite different. In fact, they would  
15 actually show a profit.

16 A I don't think so, sir. Those numbers  
17 are all based on the original numbers at the bottom of  
18 Page 4 and while I haven't carried my new calculations  
19 out to show the deficit that would result as originally  
20 shown on Page 8, I do have comparable numbers for the  
21 assumptions given on Page 4. As you noticed on Page 4,  
22 I cite the Applicants' estimate of the annual fund deposit  
23 requirement based on a certain assumption. Roughly three,  
24 three and a half million; and on that page I'm assuming 8  
25 percent rate of inflation. My estimate is approximately

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1 14 million and 10 percent inflation. My estimate is  
2 approximately 112 million plus annual fund deposits.

3 Now, based on the information in the NUREG  
4 CR 672, I just referred to, still remaining an 8 percent  
5 of inflation but allowing for a 10 percent return on the  
6 fund before taxes and factoring in an average 40 percent  
7 tax rate, which is less than the statutory rate but  
8 approximates the Applicants of C.G.&E.'s recent March  
9 real rate as reported in their annual reports. The  
10 equivalent annual fund deposit required in 1983 dollars  
11 has 8 percent rate of inflation, which would be \$33,725,000,  
12 much larger than the figure given there.

13 Whereas, the annual fund deposit required  
14 had a 10 percent rate of inflation going down to \$98,961,000  
15 per year, and that is, I understand, based on assumed 10  
16 percent rate of inflation and 12 percent rate of return  
17 on the decommission fund subject to the income taxes and  
18 it's noted in the last paragraph.

19 Q Would there be any deficits if, as you  
20 reflect here on Page 8, if you allowed-- I think you said  
21 a 10 percent earnings on the 8 percent inflation or a 12  
22 percent return or earnings on the 10 percent inflation?

23 A Yes, sir. It would be an enormous deficit  
24 as to the client, the Applicants rather. We are to  
25 collect from the three and a half million from the rate

1 payers each year.

2 Q Now, Doctor. I'm sorry.

3 You were presumably not here today when  
4 you heard testimony that in the event the rates were to  
5 change anyway, there would be a constant review of  
6 supervision and periodic evaluation of this fund which,  
7 of course, would be adjusted depending on whether the  
8 rates went up or down on a continuing basis over the  
9 life of this fund. I think your counsel will verify  
10 that this testimony did, in fact, come forth today.

11 So, you do understand that the fund of  
12 the annual fund decommission would be adjusted to reflect  
13 increases or decreases in the rates of the inflation  
14 and/or earnings?

15 A No, sir. I'm not prepared to understand  
16 that. That's what the Applicants have in mind since  
17 they have previously responded to a three and a half  
18 million dollar fund, or rather annual contribution to  
19 the fund would be adequate; and at that rate with these  
20 data, I think it's inadequate and the results, and I  
21 think it's a very large deficit. I have not calculated  
22 it out but it would be quite large.

23 Q Directing your attention to Page 7 of  
24 your testimony, I would ask you how you assumed-- Did  
25 you assume that all of the power from Zimmer Plants would

1 be paid for by residential customers?

2 A No.

3 Q Can you show me here where you show the  
4 percentages paid by commercial or industrial customers?

5 A I didn't make that assumption.

6 Q Would you tell me how you arrived then at  
7 the figure \$21.50 as the code charge per year to average  
8 residential customers for inflation costs?

9 A Yes, sir. You have to give me a moment.

10 Based on the estimate of the total  
11 kilowatt hours to be produced by the plant, maximum  
12 capacity multiplied by assumed factors of 65 percent  
13 with the result then divided into the annual charge to  
14 get a charge per kilowatt hour. This is strictly an  
15 average linear charge, and that in terms multiplied by  
16 7,000 as my assumed average consumer resident per year  
17 to obtain the figures on the right-hand column of that  
18 year, but I would conclude, sir, that those figures are  
19 based on the under estimates that are reported on Page  
20 4 and do not reflect the data that I think is more  
21 reliable for purposes of increasing and decreasing  
22 Zimmer; and it's based on more study and less than  
23 understate than the figures you'd produced by the  
24 Applicants.

25 Q Did you take your number from Page 4,

1 \$13,991,278 and divide it by 800,000 per kilowatts, times  
2 8,760 hours per year times 65 percent capacity factor and  
3 get a number of .00307 per kilowatt hours in the Zimmer  
4 Plant?

5 A That sounds right but it can be possible.

6 Q Well, and is that-- If you take the  
7 number .00307 times 7,000 that would give you your first  
8 number of 2,150; is that correct?

9 A That does calculate.

10 Q Well, I'm asking you how you calculated  
11 it, how you figured it?

12 A What you said sounded right, but I couldn't  
13 be sure without sitting down and reanalyzing it but the  
14 real 7,000 times 7,000 does produce 49,000.

15 Q Well, Doctor, if you collated it some  
16 other way because this is the only way --

17 MR. FELDMAN: I'm going to object. It's been  
18 asked and answered.

19 MR. CONNER: If the Board please, if that  
20 completes the answer, I move that the Page 7 of the  
21 witness's testimony be stricken on the grounds of no  
22 foundation for the basis of calculations as having been  
23 sustained by the witness.

24 CHAIRMAN BECHHOEFER: We'll deny the motion to  
25 strike but the witness may answer the question as to how



1 he calculated the figure.

2 MR. CONNER: He said he doesn't know after he  
3 did it.

4 CHAIRMAN BECHHOEFER: Well, I didn't understand  
5 you to say he didn't know. May I have a moment?

6 THE WITNESS: Your Honor, I'm prepared to state  
7 that the calculation was as Counsel described it.

8 MR. CONNER: Q You say you're p~ ired to do  
9 this?

10 A He accepted your statement.

11 Q Oh, I'm sorry.

12 Doctor, why do you assume that every  
13 residential customer is going to take 7,000 kilowatt  
14 hours per year average from Zimmer?

15 MR. FELDMAN: I'm going to object to that.  
16 That makes no sense -- every customer? It doesn't mean  
17 every customer. It means an average of customers. So,  
18 therefore, the question makes no sense.

19 CHAIRMAN BECHHOEFER: Was your question every  
20 customer or was it just how do you --

21 MR. CONNER: Let me try it to get a little  
22 faster here.

23 Q Doctor, as to your first sentence on Page  
24 7, "Consumption by an average size residential consumer is  
25 assumed to be 7,000 kilowatt hours per year."

1 Does it say that?

2 A The sentence also concludes, "actual  
3 consumption by Applicants customers is not known but  
4 should be reasonably close to this estimate."

5 Q But what happened to you to make your  
6 calculations that each of these customers takes the 7,000  
7 kilowatt hours from Zimmer?

8 A No. You're misinterpreting the use of  
9 the habit there, sir. It's not an assumption that this  
10 be the amount that was used by each customer, but it's  
11 an average calculated for illustory purposes.

12 Q All right. Doctor, isn't it a fact that  
13 the customer is who will use the Zimmer Plant, and also  
14 the customers of the three companies system and with the  
15 amount of electricity they would get from Zimmer would  
16 only be about 8 percent of the total electricity in the  
17 system?

18 A I don't know the amount of electricity  
19 they would get from Zimmer.

20 Q I think your Counsel will again advise you  
21 that this is, in fact, has been stated at the hearing  
22 that 8 percent represents the contribution that Zimmer  
23 will make to the total system for the three companies.

24 Will you accept that?

25 A Certainly.

1 Q And if this was so, shouldn't the numbers  
2 that you have calculated here such as the 21.50  
3 multiplied by 8 percent to get the actual amount; that  
4 under your theory the individual residential customer,  
5 the average residential customer, would --

6 A I'm not sure I follow you, sir, but an  
7 easier way of getting it would simply to be to divide  
8 the number of customers by the amount of the annual  
9 charge that is necessary, and I would state, if you  
10 remember, that my estimate of the annual charge is an  
11 understatement of the amount that would have to be  
12 charged to the customers for two reasons.

13 First, --

14 Q Can you answer my question first, that  
15 if Zimmer represents only 8 percent, shouldn't this  
16 number be spread evenly among all of the customers?  
17 Therefore, shouldn't this 21.50 be multiplied by the  
18 percent in order to deflect the true value - not value -  
19 true charge under your theory?

20 A I'm not sure I follow your question, sir,  
21 but let me answer this way and see if it doesn't clarify  
22 it. Based on those understated statements that you're  
23 holding 1 through the back and Page 4, this \$21.50 figure  
24 as well as the \$233 and 10 percent cost escalation would  
25 be the charge for every 7,000 kilowatt hours used from

1 Zimmer.

2 Q And should that not have been spread over  
3 all of the customers of the three companies, including  
4 residential, industrial and commercial customers?

5 A Should the charge for decommissioning  
6 Zimmer be spread over all those classes of customers?

7 Q To make your calculation.

8 A Well, a charge to be spread along the  
9 class of the customers, I'm sure the Utilities Commission  
10 can decide that. It seems reasonable to me, and in  
11 making the calculation, it would also be reasonable to  
12 base that on -- you have all the different classes so I  
13 would reiterate that since I'm not prepared to make  
14 those calculations because I don't know the percentage  
15 of uses by the different classes of customers, we can  
16 simply say that every 7,000 of kilowatt hours you buy  
17 from Zimmer, it's going to cost \$102.03 if we can, with  
18 those lower figures, but beside those.

19 Q But you don't know how these costs would  
20 actually be spread among all the customers of the three  
21 companies?

22 A No, sir. That would depend on the rate  
23 of the return structure of these three companies.

24 MR. HOOPER: Can I ask a question here? I'm  
25 confused by the questions so far.



1           Are you now saying that you're heading for  
2 this table where 21.50 is listed and should no longer  
3 have charges per year to have -- to the average residential  
4 customer? Are you saying-- Your testimony now says it  
5 should be per anyone using 7,000 hours. Spell it out.

6           THE WITNESS: Sir, I think that would be a  
7 clear heading saying the charge per 7,000 hours of usage.

8           MR. HOOPER: Okay. That's quite a different  
9 heading you have here.

10          THE WITNESS: Yes.

11          MR. HOOPER: Okay. So, you're changing your  
12 testimony?

13          THE WITNESS: Well, yes.

14          MR. FELDMAN: I think he is testifying that  
15 7,000 kilowatt hours is used by the average residential  
16 customer. Now, you're saying he's changing the  
17 testimony.

18          MR. HOOPER: I would like this clarified.  
19 Would this be-- Is this charge per year to average  
20 residential customers for decommissioning costs? Now,  
21 does this mean that the bill of every customer in their  
22 service district, residential, would be increased 2.50 to  
23 pay for the decommissioning costs of Zimmer? Is that  
24 what your testimony is now, regardless if they use 7,000?  
25 If they use 7,000 kilowatt hours of power per year -- if

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1 that's there what they're being billed for, that amount  
2 of power, -- If their increase due to the decommissioning  
3 costs would be \$21.50, is that still your testimony?

4 THE WITNESS: I think I agree, sir, but it  
5 might be helpful if I just repeat my understanding of  
6 what you're saying when you stated for each 7,000 hours  
7 used from Zimmer that there is going to be a cost?

8 MR. HOOPER: Excuse me. Can I interrupt? Without  
9 not taking all that power from them so the bill they get  
10 at the end of the year would not be increased by \$21.50?

11 THE WITNESS: Sir, I'm not in a position to  
12 answer that because I don't know the way the customers  
13 use the power. I don't know where it's going to be  
14 distributed. So, that's why I'm trying to clarify this  
15 and to help the Board by emphasizing that it's for each  
16 7,000 hours used by Zimmer there will be an additional  
17 cost of 10 percent rate of inflation of \$203 based on  
18 these figures that I've noticed are not the best figures  
19 we should be working with here. They are out of date.

20 MR. HOOPER: Then this table would be much  
21 more appropriate if it said per 7,000 kilowatt hours used  
22 from Zimmer?

23 THE WITNESS: No, sir. The table would be  
24 wrong for another reason.

25 MR. HOOPER: Is this reason involved in what

1 the examination of this is so far -- similarities?

2 THE WITNESS: I believe so. I believe it's  
3 involved.

4 MR. HOOPER: Okay. Let's go with the procedure.  
5 I want to see if I understand things so far.

6 MR. CONNER: Q Doctor Estes, if I told you that  
7 there are approximately a million and a half residential  
8 customers from -- in the service areas between the  
9 companies and the residential areas, would you accept  
10 that?

11 A Yes, sir.

12 Q And would you say that under your  
13 calculations that each of those million and a half  
14 customers would have to pay \$21.50 in your first example  
15 for the year from Zimmer?

16 A No, sir. I won't make such a concrete  
17 statement. The table on Page 7 is designed to give the  
18 impact or to illustrate the impact under certain morals.  
19 I'm not sure I would say arbitrary assumptions but the  
20 assumptions that I certainly have any authority on, and  
21 that is not the testimony that I am-- I'm obviously not  
22 competent to testify on the structure of the usage among  
23 the various utilities. Where my testimony can be most  
24 useful is on the absolute cost estimate per year and the  
25

1 annual fund deposit per year.

2 MR. CONNER: No further questions.

3 CHAIRMAN BECHHOEFER: I don't know what order  
4 the other intervenors want to cross-examine.

5 MR. KARMAN: Might I get a few questions? I  
6 believe I'm on this witness now and that we should go  
7 first unless there is some strong objection. I really  
8 don't anticipate that the intervenors will mind and I  
9 don't have that many myself.

10  
11 CROSS-EXAMINATION

12 BY: MR. KARMAN

13  
14 Q Doctor Estes, on Page 2 of your testimony  
15 in the first full paragraph you indicate "in your response  
16 to Questions 2 and 3 to Miami Valley Power Project's  
17 request for additional financial information," could you  
18 give me the date of that request?

19 A Well, I have a Xerox copy that is undated.  
20 I'm sure that counsel could get --

21 Q Is this a request from the intervenor  
22 to the applicant?

23 MR. FELDMAN: No. I think Dr. Estes' mixed up  
24 with the request by the NRC.  
25



1 MR. KARMAN: Oh, the NRC request?

2 THE WITNESS: I'm sorry. The document is not  
3 headed up. It says --

4 MR. FELDMAN: It says, "Cincinnati Gas and  
5 Electric Company, William H. Zimmer Nuclear Power Plant."

6 MR. KARMAN: Q So, this would say Staff request  
7 other than intervenor?

8 A Well, it doesn't say anything.

9 MR. FELDMAN: Well, I can say that it's a  
10 request of Questions 2 and 3 which are in exhibits.

11 MR. KARMAN: Q Doctor Estes, the heading of  
12 your testimony, direct testimony of Ralph Estes  
13 Regarding Contention 13, Applicants' Financial Qualifications

14 Is this your entire testimony with respect  
15 to Contention 13?

16 A As I noted earlier, sir, there is some  
17 information that's come to my attention from the study  
18 that I've cited earlier that would require some changes  
19 in the data.

20 Q With respect to matters other than  
21 decommissioning, is this your entire testimony with  
22 respect to Contention 13?

23 A I'm offering no testimony on matters  
24 other than the decommissioning costs and the facts you  
25 have from the Applicants.

1 Q So, this is fully decommissioning  
2 testimony with respect to Contention 13? Perhaps Dr.  
3 Estes you will explain to me once again, my not having  
4 understood how the figures on Page 8 would remain the  
5 same or increase by taking into consideration the rate  
6 of return as well as the inflationary costs?

7 A They would increase for a variety -- for  
8 actually several interacting factors. May I address  
9 those in a complete answer?

10 Q No. The basic thrust of the question is,  
11 we have these figures as listed in tables on Page 8, and  
12 you have indicated that you did not include therein any  
13 of the interests, costs or return costs to the Applicant.  
14 Is that not so?

15 A No, sir, that's not correct. It included  
16 a return of 60 percent after taxes as done in the  
17 original calculation.

18 Q You did not increase that return?

19 A These figures I did not, sir.

20 Q But you did increase the inflation costs?

21 A In these calculations, the entire inflation  
22 rates than those used by the Applicants.

23 Q That is correct. And if I'm not mistaken,  
24 you testified that taking into consideration increased  
25 the return, the interest of return, the rate of return

1 that these figures would not be diminished?

2 A That's what I said a moment ago, sir, taking  
3 into account an increased return using the two percent  
4 excess of return over the rate of inflation and also  
5 using the cost estimates in NUREG CR 0672 and projecting  
6 those under two different alternative or rather under  
7 similar alternatives. I didn't do earlier in the  
8 testimony that figure for an 8 percent rate of inflation  
9 do increase and a figure for a 10 percent rate of  
10 inflation -- bear with me just a moment. It does  
11 decrease. It's fairly a dramatic increase for 8 percent,  
12 from roughly 14 million as I indicate there, annual fund  
13 for or per costs to require an annual fund at 33.725.

14 Q You didn't use those figures in this?

15 A No, sir.

16 Q Would you give us the figures?

17 A This was in NUREG CR 050.

18 Q What I'm trying to get into is on this  
19 table on Page 8, using the figures that you did use, had  
20 you incorporated into those figures an increase, a  
21 concomitant increase with the rate return along with the  
22 increase inflation. How would that have affected --

23 A I'm not certain because it wasn't  
24 calculated out but I think that the figures for the 8  
25 percent of the rate of inflation would not change and

1 that the figures for the 10 percent rate of inflation  
2 would change.

3 Q How could they not change?

4 A Because when I used the 8 percent inflation,  
5 I allowed for 6 percent after tax return but when you  
6 take an 8 percent and allow for a pretax of two, which is  
7 two percent over, and then figure that's going to be  
8 taxed at an average rate of 40 percent, that leaves the  
9 Applicant with a 6 percent return which is exactly what  
10 I used in it to begin with.

11 Q Doctor Estes, are you aware of the present  
12 day yield on municipal bonds, the rate on municipal bonds?

13 A I'm not really aware of them, sir. I  
14 checked them personally as a matter of potential invest-  
15 ments, but I have not followed closely.

16 Q You have no idea what the rate would be at  
17 the present time?

18 A I wouldn't want to answer that.

19 Q If I said they were 10 percent, would that  
20 strike you as being 10 percent?

21 A I would assume that.

22 Q And those are tax-free?

23 A Ten percent tax-free yeild. I assume it  
24 would be high.

25 MR. KARMAN: I have no further questions.



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1 MR. FELDMAN: I have no questions.

2 MR. FISSE: I have no questions.

3 MR. REDER: I have no questions.

4 MR. DENNISON: A few, Your Honor.

5 Doctor Estes, you've been indicating  
6 though it's not been quite developed here that since the  
7 preparation of the written direct testimony you've  
8 come upon additional material, and with that additional  
9 material you have made other computations.

10 How do these newer computations alter from  
11 the direct testimony as consists in Page 1 through 9?

12 MR. CONNER: Objection, Your Honor; two points.

13 One, the prepared testimony of every  
14 witness to be presented in the proceeding was to be  
15 submitted by January 15th. Point 2 is that in this case  
16 before we have seen several times where what one intervenor  
17 forgot to put in his witness's testimony is attempting to  
18 be brought out by another intervenor on the guy's  
19 cross-examination. I submit that is what we are faced  
20 here with, and I object to any questions that attempt to  
21 recross Dr. Estes' testimony beyond that which he submitted  
22 in accordance with the Board's orders and the Commission's  
23 rules, and I think anything else would be totally improper.

24 MR. KARMAN: Well, I have a great problem with  
25 that too, Your Honor. We this this prefiled testimony.

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1 We have an opportunity to examine it and prepare what we  
2 deem to be proper cross-examination. If there are new  
3 facts and books and records that are going to be coming  
4 in, I find it greatly difficult to attempt to assimilate  
5 that in five minutes' notice, especially with an esoteric  
6 subject such as rates and mathematics and accounting,  
7 speaking for myself.

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1 MR. FELDMAN: Mr. Conner himself opened up  
2 this area when he asked the witness whether or not he  
3 had made any new computations based upon the  
4 assumptions that --

5 MR. CONNER: I couldn't hear you, would you  
6 repeat what you said?

7 MR. FELDMAN: I said Mr. Conner opened up  
8 this area himself earlier when he asked a similar question  
9 of the witness.

10 MR. CONNER: No, sir, I asked the witness  
11 what he had considered in making his calculations  
12 in his evidence. I don't want any voluntary new  
13 information.

14 MR. FELDMAN: In addition he asked him do  
15 you make any computations assuming -- I don't know I  
16 would have to go back to the record to find his  
17 exact words, but he set up a similar set of facts.

18 MR. CONNER: I am confident the record will  
19 reflect that I said in calculating these numbers did  
20 you make any such assumptions, and the answer was no.

21 JUDGE BECHHOEFER: I think it isn't proper  
22 for Dr. Estes to talk about new calculations based on  
23 new information, except those relating to the cal-  
24 culations he talked about with a varied interest  
25 return on deposited funds, which was raised by Mr. Conner.

1 The rest of it wasn't, and that calculation would have  
2 to be on the funds deposited in accordance with the  
3 decommissioning costs appearing in the testimony  
4 where the AIF figures are updated.

5 So, to the extent the new calculations  
6 are based upon purely the calculations using a different  
7 interest return, I think those were fairly raised  
8 by questions, but I don't think the other things were.

9 To the extent you are asking about new cal-  
10 culations -- they have to be limited to that.

11 MR. DENNISON: It would be my understanding,  
12 if I follow the Court, it was in the area of page four  
13 that Mr. Conner was making -- or rather posing  
14 questions -- at least my notes indicate that the  
15 second and third responses were corrected following the  
16 indented paragraph net total annual decommission  
17 deposits required, etc.

18 I would inquire into that area, as well as  
19 page seven, which would be my understanding of the  
20 areas previously inquired into by preceding counsel.

21 JUDGE BECHHOEFER: It was my understanding  
22 those were different calculations based on assuming the  
23 two percent -- I wouldn't say profit, but differential.  
24 The NRC guide spells out, and I understood Dr. Estes  
25 had made calculations of applying the NRC's --



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1 the factor appearing in the NRC guide that was  
2 referred -- the two percent factor, and I understood  
3 Dr. Estes to have made calculations based on the eight  
4 percent, or based on the ten percent return -- inflation  
5 rate, I am sorry -- but using, I guess, ten percent  
6 and twelve percent taxable return.

7 The question may be asked about those because  
8 I thought those were in response to Mr. Conner's  
9 question.

10 MR. CONNER: Sir, that wouldn't be cross  
11 examination. Just so the record is clear on this, we  
12 asked Dr. Estes if he included the increase in earnings  
13 in his calculations, and the answer to that was "No,"  
14 he did not, and we said if he did then he would not  
15 have deficits the size that he indicated, and that  
16 was really where it went. Then you got to the  
17 question shouldn't you have correlated the earnings  
18 rate in the inflation rate, and I think the record will  
19 show the answer to that generally was yes.

20 I think that's as far as it went. I do  
21 not say there are new calculations from anybody on this.

22 JUDGE BECHHOEFER: Well, I had thought  
23 that Dr. Estes came up with two different numbers --  
24 instead of the thirteen and the 132 -- that was raised  
25 and one was lower, and I thought those are legitimate

1 subject of questioning.

2 MR. CONNER: Well, I would object if Mr.  
3 Dennison is giving Dr. Estes a chance to change his  
4 testimony.

5 JUDGE BECHHOEFER: Well, I think in terms  
6 of clarification he answered those questions, and he  
7 may answer further questions along that subject.

8 I don't think -- going to the other side, I  
9 do not think that he properly presented calculations  
10 based on the decommissioning cost in NUREG 0672 --  
11 whatever they may be. I don't think those are properly  
12 before the parties, and I do not think that cross  
13 examination on that subject is permissible.

14 So, that's where we try to draw the line.  
15 I hope I am clear. Maybe my notes aren't as good as  
16 they should be.

17 MR. KARMAN: I thought that was the  
18 predicate for Mr. Dennison's question -- the citation  
19 to these other documents.

20 JUDGE BECHHOEFER: Well, I thought the  
21 question was general. The ones I am including that  
22 are proper are the ones based on interest.

23 MR. DENNISON: Perhaps to clarify this  
24 momentarily, my original question which created the  
25 great debate shall we say, was as Staff Counsel has

1 indicated, Mr. Karman is correct, my original question  
2 which no longer seems to be pertinent was my  
3 understanding that he had indicated that he had some  
4 corrections to make, and I was inquiring into those  
5 corrections.

6 Since that time, I have come to realize in  
7 my pensive moments here that that question was  
8 perhaps illegitimate for being just too general.

9 Let me simply withdraw it and start afresh,  
10 and we will take up the ground work as we come to it.

11 BY MR. DENNISON:

12 Q Dr. Estes, on page seven, the table that  
13 is contained there, is that table presented purely  
14 for illustrative purposes?

15 A Yes.

16 Q And the illustrative purposes simply present  
17 in a hypothetical illustrative manner, assuming a 700  
18 or 7,000 kilowatt hour per year circumstance, and given  
19 the difference eight percent, ten percent, and what  
20 have you as set forth in paragraphs one through four,  
21 this merely reflects how those different percentiles  
22 would give different costs.

23 Is that the object of this table?

24 A Yes, sir.

25 Q You don't present that table for purposes

1 of attempting to say that is a matter of exactitude  
2 7,000 kilowatt hours per year will cause a residential  
3 customer to pay \$21.50 extra as a matter of fact as  
4 it is contained in paragraph one?

5 Would I be correct in that understanding?

6 A Under the combination of assumptions that  
7 are indicated in the preceding paragraph, 7,000 hours of  
8 usage from the Zimmer plant, would mathematically impose  
9 this additional cost -- the cost in the righthand  
10 column.

11 Q Now, there was some questions posed to you  
12 by Judge Hooper pertaining to perhaps changing the  
13 category heading of charge per year to average resi-  
14 dential customer to per 7,000 kilowatt hours per  
15 year, and you responded that that was one area of  
16 correction, and you started to explain a second area  
17 that you wished to clarify in this table.

18 You didn't have the opportunity to so  
19 clarify; I would like that clarification now.

20 A Yes, yes, there was an error in the transition  
21 from page four to page seven.

22 Q And in what manner is that error of transition?

23 A On page four I show under the specified  
24 assumptions in using what I considered to be the  
25 forum data, as I noted earlier, the annual fund deposit



1 that would be required to provide the funds necessary  
2 to pay the decommissioning costs as they were to become  
3 due, and then I was undertaking to relate that to  
4 the charge to consumers, and in the process I neglected  
5 to take into account the fact that the revenue ob-  
6 tained by the utilities from the consumer would be subject  
7 to a tax rate.

8 So, consequently, the charges to consumers  
9 would be increased by a factor of roughly 1.67.

10 So, what I am saying is that my illustrative  
11 calculations for the effect on consumers were under-  
12 stated, even given the low figures back on page four.

13 Q All right. Now, turn your attention to  
14 page four, the indented paragraph commencing with  
15 net total, and decommissioning funds, etc. The  
16 first category there is per applicant based on 6%  
17 inflation from the year '75 through '79 and 6.5% for  
18 succeeding years for a total cost of \$3,551,610.

19 Is that your understanding of the utilities  
20 cost for decommissioning?

21 A Yes sir, my understanding of their cal-  
22 culations of the annual fund deposit required.

23 Q Are you in agreement, or do you concur in  
24 that utilities determination here of their 6% in-  
25 flation for '75 through '79 and their 6.5% for

1 succeeding years to come to that total of \$3,551,000  
2 plus?

3 A I am not sure I understand the question.

4 Q Do you agree with the figure?

5 A With the use -- that the use of those in-  
6 flation rates would be proper rates?

7 Q That's correct.

8 A No, sir, I do not.

9 Q In what way?

10 MR. CONNER: Objection. The witness has in-  
11 dicated he is not an expert in this area, so he should  
12 not be permitted to give opinion testimony on such  
13 basis.

14 MR. DENNISON: Your Honor, I am not all that  
15 familiar with the practices of this tribunal. However,  
16 it's my understanding that the capabilities and the  
17 expertise of this witness has been previously es-  
18 tablished and not objected to on any voire dire.  
19 Otherwise, the -- as set forth in Exhibit A -- I  
20 was rather impressed by the man's credentials.

21 MR. CONNER: If the Board please, I would  
22 note that on cross examination Dr. Estes agreed with  
23 me as to the correctness of his earlier statement --  
24 deposition -- on page 61, and he said: "I am not, I  
25 would -- I'm comfortable saying I am not an expert

1 in the economic cycles." I believe that's where the  
2 record stands.

3 The question he is being asked, asked him  
4 to give his opinion as an expert as to the selected  
5 values for inflation rates, and rates on that economic  
6 cycle basis. It calls for a conclusion, and since  
7 this witness is not testifying as an expert on this  
8 topic by his own statement, should not be permitted to  
9 answer.

10 JUDGE BECHHOEFER: We will overrule the  
11 objection. The witness said although not an expert,  
12 he was familiar with the subject, and this all goes to  
13 the weight that we will give to the testimony in  
14 general.

15 So, we will overrule the objection.

16 BY MR. DENNISON: (Resuming)

17 Q We were about to explore your disagreement  
18 with the utilities conclusions of \$3,551,000 and their  
19 use of the respective percentiles.

20 A Yes, sir. In the first instance they have  
21 used -- the Applicants have used -- a 6% rate of in-  
22 flation for 1975 to 1979, and in the short time I  
23 have sat in the court here, it has been fairly evident  
24 that the term inflation has been used synonymously  
25 with the change in the consumer price index, which

1 I would note by way of elaboration, is by no means  
2 the same thing as economic cycle, business cycle.  
3 Inflation is quite a different matter from that,  
4 and the consumer price index has been rising at a  
5 considerably faster rate per year than 6%.

6 Now, in my written testimony I used what  
7 would be a more conservative figure, or rather a  
8 figure that would produce a lower cost estimate with  
9 respect to the Applicants by selecting what I considered  
10 to be a more appropriate rate to apply in this case,  
11 and that's the gross national product and fiscal  
12 price inflator.

13 We need to understand that we are not  
14 trying to forecast the consumer price index here. We  
15 are not trying to forecast a general rate of inflation.  
16 We are trying to forecast the rate at which the costs  
17 of decommissioning this particular plant are going to  
18 change, and those costs are going to change at a rate  
19 different from the way costs change throughout the  
20 economy. They are going to change at a rate different  
21 than the rate wheat prices change, and rent changes,  
22 and so forth.

23 I am no expert on decommissioning, but it's  
24 my understanding that the majority of the costs are  
25 labor costs. Labor costs rise fairly rapidly because



1 there are costs of living, escalated costs in the union  
2 contracts, and it is primarily for that reason that I  
3 think a somewhat higher rate would be in order, and  
4 based on the experiences with respect to the costs on  
5 the Zimmer plant in the past to add to that, I would  
6 choose the most likely rate as being ten percent  
7 throughout the life of the plant.

8 MR. CONNER: I move that answer be stricken  
9 as going beyond the depth -- or beyond the scope of  
10 the direct examination and adding new information,  
11 much of which is obviously heresay and without  
12 foundation, and on the further grounds that capital  
13 costs have nothing to do with the cost of operating  
14 and decommissioning.

15 JUDGE BECHHOEFER: I will overrule this. I  
16 think the gist of what the answer was appears in the  
17 testimony, and this is an explanation of how he  
18 reached his ten percent figure.

19 So, there are one or two statements that  
20 do go beyond the depth, but I think they are  
21 explanatory in nature.

22 So, the objection is overruled.

23 BY MR. DENNISON: (Resuming)

24 Q Now, Dr. Estes, you indicated --

25 JUDGE BECHHOEFER: O, rather, motion to

1 strike is denied.

2 BY MR. DENNISON: (Resuming)

3 Q Dr. Estes, you indicated that in your opinion  
4 the appropriate percentage to be used here would be  
5 that of ten percent.

6 A Yes, sir.

7 Q Likewise, do you agree with the Applicant's  
8 usage of 6% as the inflationary for 1975 through '79  
9 as opposed to 6.5%?

10 A No, sir, I calculated the rise '75 to '79 in  
11 gross national product and fiscal price deflator at  
12 6.5%, not 6%, and also calculated the rise in the  
13 consumer price index, which seems to be the index most  
14 preferred in general testimony here, during that  
15 same period, '75 through '79, at 7.8% per year on the  
16 average.

17 Q So, that I trust it is obviously lower, you  
18 have looked to historical data rather than opining  
19 future data as to the years '75 through '79?

20 A That's correct, technically the Department  
21 of Commerce statistics.

22 Q All right, then using the inflation rate  
23 of 6.5% as you have indicated in your opinion based  
24 upon historical data for '75 through '79, and then  
25 applying in your opinion a 10% for the succeeding

1 years what would be the total funds or costs involved  
2 utilizing those standard methods of accounting necessary  
3 to arrive and achieve the funds necessary as the de-  
4 commissioning funds.

5 A Under the assumptions that we are commonly  
6 working with here, that is a thirty-three year plant  
7 life beginning -- with operation beginning in 1983  
8 -- a form of what is being called here entombment  
9 for a period of 104 years, and as you have indicated  
10 a rate of 6.5% cost escalation from 1975 through 1979  
11 and 10% for the period succeeding that, the annual  
12 fund deposit required based on the Atomic Industrial  
13 Forum data would be the figure given at the bottom  
14 of page four, \$132,352,000 approximately, and  
15 that would be required over the thirty-three year  
16 life of the plant.

17 JUDGE BECHHOEFER: That is with a 6% tax  
18 return -- tax rate return of the fund?

19 THE WITNESS: Yes, sir.

20 BY MR. DENNISON: (Resuming)

21 Q Now, in achieving that determination based  
22 upon a 6.5 rate of inflation for 1975 through 1979,  
23 and 10% for the succeeding years, did you utilize any  
24 nuclear regulatory guide material in your computations?

25 A In the one I just gave I did not. I relied

1 only on the information that was available to me at  
2 the time, which was the Applicants' responses to the  
3 questions, and their integration of the Atomic  
4 Industrial Forum figures.

5 Q Did you use these same computations or  
6 figures and apply an NRC guide and achieve a determination  
7 of the cost factor involved?

8 MR. CONNER: Objection, Your Honor, that's  
9 beyond the direct examination. There is nothing like  
10 that in there.

11 JUDGE BECHHOEFER: I think I will overrule  
12 that. How he developed any part of this testimony.

13 MR. KARMAN: I thought he said he had  
14 not used these by the time he gave this testimony. I  
15 thought that came out clearly.

16 MR. CONNER: He said he used only the  
17 information he got from the Applicants' information  
18 given to him by his counsel.

19 MR. KARMAN: Testimony that is not before us.

20 JUDGE BECHHOEFER: Well, then --

21 MR. KARMAN: What Mr. Dennison is trying to  
22 do now is what he backed off doing at the very be-  
23 ginning of the question, Your Honor. He himself  
24 backed off by predicating his question with respect  
25 to the NUREG document when he sensed that the Board



1 was not going to go along with that. He backed off  
2 of that, and now he is coming through the side door.

3 JUDGE BECHHOEFER: Well, he can answer  
4 whether he used these calculations.

5 MR. CONNER: He has answered. The previous  
6 answer was the answer to that. He said he did not  
7 use them in preparing the testimony.

8 JUDGE BECHHOEFER: That's not what he said.  
9 He was referring to the figures on page four.

10 Let's get the answer to this question --  
11 if he used the document --

12 MR. CONNER: I would like to hear the answer  
13 to the last question then, because I am not sure this  
14 is correct, and the next question I think opens up  
15 a new ballgame.

16 JUDGE BECHHOEFER: Let's hear his last  
17 answer, because he -- I thought he did not answer --

18 MR. CONNER: I would like to have the answer  
19 read. I think this is too critical. Too much in  
20 these cases do the Intervenorors get away with murder  
21 seven times over, and I don't think they should be  
22 given any more rights than --

23 MR. FELDMAN: I would move that that be  
24 stricken -- the reference to murder. If anyone gets  
25 away with murder, it's the Applicants.

1 MR. CONNER: I will change that to larceny.

2 MR. DENNISON: May we have the last answer  
3 read back?

4 JUDGE BECHHOEFER: He may answer that  
5 question.

6 MR. CONNER: We understand that it relates  
7 only to documents used to prepare the existing testimony,  
8 and does not go beyond that, is that correct?

9 MR. DENNISON: It does not ask for new  
10 calculations beyond those given in the direct testimony.

11 JUDGE BECHHOEFER: That's correct. Well,  
12 the question is whether he used some guide in preparing  
13 this document.

14 MR. CONNER: That's right. He is limited  
15 to this document.

16 JUDGE BECHHOEFER: He hasn't answered that.  
17 He answered only for the three figures on page four.

18 JUDGE HOOPER: I think we want his answer,  
19 and then you can object.

20 JUDGE BECHHOEFER: Then you can object to  
21 further questions.

22 JUDGE HOOPER: But he hasn't answered the  
23 question yet, that's the problem. He may answer and  
24 then you can object.

25 JUDGE BECHHOEFER: Then you can object to

1 further questions.

2 JUDGE HOOPER: But, he hasn't answered the  
3 question yet, that's the problem. He may answer if  
4 he can remember it.

5 THE WITNESS: Would I be in a lot of trouble  
6 if I told you I don't remember it?

7 MR. DENNISON: Could we please have it read  
8 back?

9 (Answer read)

10 BY MR. DENNISON: (Resuming)

11 I hate to make -- after hearing the witness's  
12 response by the reporter I am going to withdraw. He  
13 did respond to the question previous. So, it nullifies  
14 the question that have had all the harangue about.

15 Let's proceed on.

16 Q Now, Dr. Estes you indicated in your  
17 testimony that you used a 2% differential and that is  
18 the part that I am not particularly clear on. What  
19 do you mean when you say you used a 2% differential?

20 A I think that came out earlier when I was  
21 asked by Mr. Conner if I had made -- I am sure I  
22 will be corrected if I get this wrong, but if I had  
23 made any further calculations from my written testimony  
24 by allowing or providing for the 2% differential that  
25 was discussed in the document that he handed to me

1 earlier, and my response to that was that I had  
2 made additional calculations based on that 2%.

3 Q All right. Now, I think that's the area  
4 that we have come to. What are your calculations based  
5 upon that use of the 2% differential that Mr. Conner  
6 had posed to you?

7 MR. CONNER: Objection. We asked if he  
8 should not have considered using such a 2% differential  
9 in preparing his testimony, not what would happen, or  
10 why didn't he, or would he make a new calculation.  
11 There is a distinction there, and the point is that  
12 Dr. Estes simply took half of an equation -- the  
13 part that suits his position, and used it, without  
14 having to have that interest put in, but we do not  
15 want to open up new testimony in that guide.

16 If he didn't use it, if he didn't use the  
17 balancing 2% more real rate of return, that's it on  
18 his testimony. He should not now be allowed to  
19 inject new testimony.

20 JUDGE BECHHOEFER: He gave two figures, and  
21 I would like to know how those figures are computed.  
22 He gave a figure of about thirty, and a figure of  
23 something less.

24 MR. CONNER: That has nothing to do with  
25 any new calculations by adding -- he didn't use any



1 increase.

2 JUDGE BECHHOEFER: I disagree with you. You  
3 can check the transcript, but he gave two figures --  
4 if the Staff's basic assumption were used, he said he  
5 calculated them and then rejected them, but he was  
6 asked if they were, and I want to find out how they  
7 were computed.

8 MR. CONNER: But that has nothing to do  
9 with this point of what we asked him about -- about  
10 the failure to use an increased rate of interest.

11 JUDGE BECHHOEFER: Well, you asked him in  
12 the following series of questions.

13 MR. CONNER: No.

14 JUDGE BECHHOEFER: What would happen if  
15 he had used them, and he gave some answers.

16 MR. CONNER: He said had he used them it  
17 would be different, and he didn't give a clear answer  
18 on that, but that does not allow new calculations.

19 JUDGE BECHHOEFER: But he did, and I am  
20 interested in --

21 MR. CONNER: But the fact, Sir, that you  
22 are interested in seeing it doesn't allow us to go  
23 beyond the rules of adding new testimony now, beyond  
24 that submitted on January 15.

25

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1 CHAIRMAN BECHHOEFER: He was asked on cross-  
2 examination and he gave an answer, and I'd like to have  
3 it clarified. You yourself said it wasn't clear, and I  
4 agreed with you. It wasn't objected to at that point.  
5 Don't you remember that?

6 JUDGE HOOPER: I think it's true that, at that  
7 time, there was no objection to that -- to his giving  
8 some calculates he made since this testimony was prepared,  
9 and in fact, it seems to me that that got into the Record  
10 and you should have objected at that time before he put  
11 this information in.

12 Now, it's in the Record.

13 MR. CONNER: No, sir. The mere fact that he  
14 volunteered an answer still does not allow him to start a  
15 whole new bunch of testimony. I think it's a matter for  
16 the discretion of the Board. I'll ask for exception on  
17 it to be done.

18 CHAIRMAN BECHHOEFER: I think thus far the  
19 questions are permissible. I can't remember what your  
20 last one was but I think the line of questioning is  
21 permissible as long as it goes to the computation based  
22 on the Staff's two percent differential, which I would like  
23 some clarification about.

24 MR. DENNISON: Your Honor, I could make a request  
25

1 for the consideration of the Board. It's quarter to 6:00.  
2 Insofar as I understand they like us to be out of the  
3 building by 6:00 and I further understand that we do have  
4 access to copy, perhaps we should resume with the printed  
5 copy of the direct examination of Dr. Estes in the morning,  
6 and get away from all of this "he said, I remember, I  
7 recall" and so on because I've got a sneaking feeling that  
8 from here until 6:15 we're going to be faced with this  
9 constant problem.

10 CHAIRMAN BECHHOEFER: We think we'll run to about  
11 6:00 but you can skip this current line and pick this up  
12 tomorrow. The Board, or at least I am interested in the  
13 details of the calculation which Dr. Estes did and from  
14 my understanding, rejected but he did it previously using  
15 the Staff's footnotes saying that the fund could earn two  
16 percent more than the inflation rate in terms of taxable  
17 returns; and I believe that Dr. Estes came forward with  
18 two different figures based on that calculation; one for  
19 the 8 percent this succeeding year - this six and a half  
20 percent from 1979 - and 8 percent the succeeding year and  
21 one based on six and a half percent from 1979 and 10  
22 percent for succeeding years; and from my recollection,  
23 was that the latter figure that was lower and the second  
24 figure was higher? I'm interested in how those calculations  
25 were made and what produced those calculations. So, to

3  
1 that extent, I would encourage-- Well, I would encourage  
2 those questions, but I'm interested in finding out the  
3 details of those calculations, and the only way we can  
4 figure it out is if it's in the Record.

5 MR. DENNISON: That was the entirety of my  
6 inquiry to Dr. Estes, and I've got some notes here and I  
7 can try and -- before the boat is in dock, but if I'm  
8 going to get hit with objections as what was said on  
9 direct, then I don't want to be accused of going in the  
10 back door and getting out of here early this evening for  
11 another reason, but I can go either way.

12 CHAIRMAN BECHHOEFER: Do you have seven minutes  
13 of questions that are not likely to be controversial?

14 MR. CONNER: Can I make a very simply suggestion?

15 Mr. Chairman, I cannot tell from the  
16 chairman's rulings whether he's going to allow in new  
17 calculations or not, but I would say for you to ask the  
18 witness how he did whatever it is you want to know; and  
19 it might simplify it for everybody.

20 MR. DENNISON: I'm, you know --

21 CHAIRMAN BECHHOEFER: Can you answer that?

22 THE WITNESS: Yes.

23 CHAIRMAN BECHHOEFER: Because I think the Record  
24 is very confusing on that at the moment, and I'd really  
25 like to know.



1 THE WITNESS: Do you mind if I stand? It's just  
2 a little more comfortable.

3 The two percent figure that came to my  
4 attention this morning from Mr. Conner had actually come  
5 to my attention prior to this date, and a statement in  
6 Volume 2 of NUREG CR 0672 that I referred to earlier,  
7 the title "Technology, Safety and Costs of Decommissioning  
8 a Referenced Boiling Water Reactor Power Station;" and this  
9 is in the appendix where it says, "effective rate on return  
10 of capital entity inflating economy is the difference  
11 between the obtainable interest rate and the indication  
12 rate; and in recent times the interest rates on, say, the  
13 survey investments is generally exceeding the inflation  
14 rate by about two percent per year. So, I wasn't really  
15 basing it on the information that's given to us this  
16 morning but on the information of this document.

17 Now, using that and factoring in the tax  
18 effect assumed to be 40 percent on the average for the  
19 Applicants and further using the cost figures obtained  
20 by Batelle and recorded in NUREG CR 0672 and adjusting  
21 those cost figures for the plant size, using an 8 percent  
22 rate of inflation over an assumed 33 year life of the  
23 plant and assuming further that it would go on line in  
24 1983; and it would be decommissioned at the end of 33 years  
25 and then would be in a safe storage situation for 100

5 1 years; and I note that's the departure from 104 years  
2 because in their study they said after 100 years, you're  
3 not gaining that much more. So, it's better to go ahead  
4 and dispose of it at that time.

5 Products acquire an annual charge to rate  
6 payers when a 10 percent cost escalation figure is used  
7 of \$165,265,000. That will permit then an annual fund  
8 deposit of \$98,961,000 which is the annual fund deposit  
9 calculated to be required to provide for the decommissioned  
10 costs under the assumptions just given with 10 percent  
11 rate of inflation and a 12 percent pre-tax return on the  
12 fund. At an 8 percent rate of inflation and at 10 percent  
13 pre-tax rate of return on the fund, the annual charge to  
14 rate payers must be \$56,320 -- Let me say roughly  
15 320,000 which, in turn, after taxes are produced as an  
16 amount available for deposit; and I think decommissioned  
17 fund of \$33,725,000 and that is the annual deposit in 1983  
18 dollars that would be required to be the decommissioned  
19 costs; and again, an 8 percent rate of inflation and a 10  
20 percent pre-tax return.

21 Now, I must emphasize that all of these  
22 numbers that I just read or 1983 dollars and likewise  
23 all the numbers used throughout the hearing, at least  
24 since I've been here, is 1983 dollars.

25 CHAIRMAN BECHHOEFER: Now, they are based on--

6  
1 Now, they are based on other decommissioning expense  
2 figures that you used in your direct testimony; is that  
3 correct?

4 THE WITNESS: That's right. They are based  
5 on the -- what I have to take to be more accurate figures  
6 than those in the Atomic Industrial Forum study since the  
7 AIF study has been criticized by some sources including --  
8 I won't say outright - criticizing this study, but they  
9 did observe that the AIF estimates were considerably  
10 below those produced here.

11 CHAIRMAN BECHHOEFER: Now, if you took the AIF  
12 estimates and used the return and interest factor --  
13 inflation and return factors that you just spelled out,  
14 how would the results or would they -- how would they  
15 differ from the figures that appear at the bottom of  
16 Page 4?

17 THE WITNESS: I can't answer that immediately,  
18 Your Honor, since I haven't made those calculations. There  
19 is an old saying, if you'll forgive me, the computer work  
20 will garbage in and garbage out; and if we're using  
21 unreliable figures at the front end, what we'll have at  
22 the other end will also be unreliable. So, I didn't use  
23 those in this calculation.

24 CHAIRMAN BECHHOEFER: Well, could you, by the  
25

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7 1 time you come back tomorrow, give us those figures?

2 THE WITNESS: I could, Your Honor. I could  
3 characterize them as being meaningless figures.

4 CHAIRMAN BECHHOEFER: Well, I realize that you  
5 claim that other figures are more appropriate for the  
6 decommissioning policy, but there is some testimony in the  
7 Record which supports the AIF figures.

8 What I'm interested in is if you applied  
9 the inflation and earning factor, which you've just  
10 described, how would that come out?

11 THE WITNESS: Yes, sir, I would be happy to  
12 do that.

13 CHAIRMAN BECHHOEFER: And I ask the Applicants  
14 to do slightly different calculations if they're going to  
15 be coming in with some new figures tomorrow morning too.

16 THE WITNESS: I would be happy to do that, sir,  
17 but could I just reiterate my statement in my original  
18 testimony that the Applicants' estimates are too low  
19 because of an adequate loss escalation and are unreliable  
20 because of problems inherent in using the Atomic Industrial  
21 Forum data. So, I have made that statement already.

22 CHAIRMAN BECHHOEFER: I recognize that, but I'm  
23 really now focusing on the first part of your criticism --  
24 the cost of escalation price.

25 THE WITNESS: Yes, sir?



1 MR. CONNER: For the Record, I move to strike  
2 the questions and answers started with your first -- the  
3 Judge's first question to Dr. Estes as clearly beyond the  
4 scope of the direct examination and contrary to the rules  
5 for submitting prepared testimony.

6 CHAIRMAN BECHHOEFER: Well, it's denied. Having  
7 gotten to 6:00 o'clock, which is the time when the building  
8 would appreciate, at least, if we were out, I think we'll  
9 adjourn for the day beginning again at 9:00 A.M.

10 One question for Mr. Karman.

11 MR. KARMAN: I wonder if Your Honor could give  
12 us some idea as to how we're going to be moving along  
13 tomorrow if it's at all possible on the timing? We're  
14 from out of town, and I'd just like to wonder whether we  
15 should cancel reservations.

16 CHAIRMAN BECHHOEFER: A good portion of the  
17 time will be spent with your witness, but I can't really  
18 say the degree of cross-examination. So, it's difficult  
19 for me to answer.

20 MR. KARMAN: Is there any feeling as to the time  
21 involved?

22 MR. FELDMAN: I'm not certain how long the Board  
23 wishes to cross-examine the witness.

24 MR. KARMAN: I'm talking about Mr. Karlowicz.

25 MR. FELDMAN: I don't think for myself more

9 1 than several hours. A lot of it depends on how many  
2 objections there are.

3 CHAIRMAN BECHHOEFER: I'm afraid we can't give  
4 you too much guidance.

5 ' .. KARMAN: It's about as definite as everything  
6 else in here.

7 MR. CONNER: If the Court please, we've had  
8 two witnesses here from Dayton and Columbus whereas all  
9 through this hearing so far -- Mr. Emery and Mr. Anderson.  
10 We will submit the information the Board requested from  
11 those two companies on the Record tomorrow, but I will  
12 ask that they be excused so that they can get back to  
13 their respective homes, unless the Board has some questions  
14 for them?

15 CHAIRMAN BECHHOEFER: Well, as far as the Board  
16 is concerned, I think it will be all right but the tables,  
17 the figures will be subject to cross-examination and  
18 they did include some information from Dayton Power and  
19 Light, rate increases and that type of thing.

20 MR. CONNER: We will have a recap of what has  
21 been gone over for the last two days.

22 CHAIRMAN BECHHOEFER: Well, I think that's  
23 correct.

24 MR. CONNER: May we put Mr. Emery on right now to  
25 read these into the Record because we were going to type

1 them up and submit them as unified exhibits as to the  
2 information and he would like to get out of here; and can  
3 I put him on and read it into the Record right now?

4 CHAIRMAN BECHHOEFER: That's all right. I am  
5 hoping tomorrow you will introduce everything as an  
6 exhibit.

7 MR. EMERY: This is in response to Judge  
8 Bechhoefer's request for information on the rate requests  
9 granted over the five year, 1975 to 1980 by the Public  
10 Utilities Commission of Ohio. By the turn of where  
11 applicable in those great machines and the actual return  
12 on equity earned for each of those years. Actually,  
13 when you go from 75 to 86 years of return, and we've  
14 also indicated the type of a writ case and the date of the  
15 rater.

16 The first such rater was an emergency  
17 case. The order was dated March 1975, and the amount  
18 requested was \$27,123,000 and the amount granted was  
19 21 million. There was no authorized return on equity  
20 because the Ohio Commission does not consider return on  
21 equity in an emergency rate increase. I'll read the rate  
22 of return for each year after I give you the cases.

23 The next case was a regular rate case. The  
24 order was dated September 1976. The amount granted was  
25

11

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1 \$23,100,000. The total amount, which was added to the  
2 21 million already granted in the immediate previous  
3 emergency case. So, the total, including the emergency  
4 was \$44,100,000 as compared with the total request of  
5 \$50,700,000. The next case was a regular rate case, and  
6 the order was made in 1978 and the amount requested was  
7 \$46,050,000. The amount granted was \$28,680,000. The return  
8 on equity in that case was 12.99 percent, and I should  
9 back up and say that in that September 1976 order, the  
10 case was based on the previous Ohio rate law, which did  
11 not require a return on common equity determination; and  
12 also, this case was settled by a stipulation of the  
13 parties.

14 So, the return of equity was not involved  
15 and I have so noted on my schedule.

16 The next case was March of 1979, date of  
17 the order was emergency.

18 MR. HEILE: Excuse me. May I interrupt for  
19 just clarification? That has a return on equity that  
20 you give. Was that earned or was that --

21 MR. EMERY: Those are all returns that equity  
22 granted in the case. It was 12.99. The March 1979  
23 emergency we requested \$63,600,000. We were granted  
24 \$48,400,000.  
25



1 As I said before, there is no return on  
2 equity in emergency cases.

3 The last one was a regular case. The order  
4 was handed down in December of 1979. The amount granted  
5 was \$33,620,000 and when added to the previous emergency  
6 case, which is a part of the current case, now it brings  
7 us out to a total of \$72,020,000 compared with a total  
8 application of 126 million. The rate of the return  
9 granted in that case was 14.77 percent. The rates have  
10 returned -- earned on economic equity for each of these  
11 years. These are the calendar years 1975, 15.6 percent;  
12 1976 is 14.9 percent; 1977 was 11.4 percent; 1978 was  
13 6.6 percent; 1979 was 10.9 percent, and 1980 was 12.1  
14 percent. That constitutes my exhibit.

15 CHAIRMAN BECHHOEFER: Do any parties have any  
16 questions?

17 MR. KARMAN: No questions from the Staff.

18 MR. FELDMAN: No questions from Miami Valley.

19 MR. CONNER: It's all a matter of the Record.

20 CHAIRMAN BECHHOEFER: I only have one question.

21 Is there any reason why you were much more  
22 relatively successful in getting what you asked for in the  
23 early days than in the later days relatively?

24 MR. EMERY: I think in one case we stipulated  
25

1 in the early case we were under the old Ohio rate law,  
2 and that rate law was much more favorable in my opinion  
3 to the companies to the treasury, and we were coming off  
4 of an emergency in '75; and we had to sell a lot of  
5 common stock and we had to-- In order to finance the  
6 treasury program and all those things had their bearing.

7 MR. FELDMAN: I have one question based on  
8 your question.

9 So, what you're saying is that the  
10 historical ability of your company to get rate increases  
11 really has no bearing on the future ability to get rate  
12 increases?

13 MR. EMERY: No, I'm not saying that at all.  
14 I'm just saying the situation was different back in 1975  
15 and '76 when the old rate law was there.

16 MR. FELDMAN: But it's to your detriment?

17 MR. EMERY: What?

18 MR. FELDMAN: To your detriment?

19 MR. EMERY: No, not really.

20 MR. FELDMAN: Didn't you just testify to --

21 MR. EMERY: The new rate law has other changes  
22 in there, and the changes taking place with a big  
23 advantage in the old rate law. It uses a reproduction  
24 cost, new less permeation rate base. Now, in that  
25

14

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1 generally covered construction of the progress. Today,  
2 we're using-- We had much lower rate return. Today,  
3 we're getting much higher rate return, and in the last  
4 case, the Commission allowed a large -- I forget the amount;  
5 the large amount of the construction representing 50  
6 percent of our investment in the consumer plant at that  
7 time.

8 MR. FELDMAN: You just testified though that the  
9 new law was favorable to your company; did you testify to  
10 that?

11 MR. EMERY: No, I didn't say that. I didn't  
12 say that.

13 MR. FELDMAN: Did you describe though the new  
14 rate law as being -- the old rate law as being more  
15 favorable?

16 MR. EMERY: In one respect, it was favorable --  
17 in more economic factors, but the today's Commission has  
18 changed and they have a deadline for time in getting out  
19 rates; and they are now including as we demonstrated the  
20 facts including construction with the progress on a  
21 rate base and they have raised the rates of internal  
22 substantially which is obvious.

23 MR. FELDMAN: Well, if the law isn't less  
24 favorable to you now, why have you been less successful  
25

15 1 in getting the rate increases?

2 MR. EMERY: I don't think we have been less  
3 successful. One of the reasons, and I can state one  
4 reason. In the two of those later cases we asked for full  
5 normalization in the appreciation, and the Commission  
6 has nothing with full normalization. So, that that's  
7 an accounting complicated matter, and the Commission we  
8 asked for but the Commission didn't get it; and so, the  
9 amount requested deductible from both sides of the  
10 equation would be the amount that we requested. We  
11 didn't get in that and that was a fairly sizable amount  
12 and that was in the last case.

13 MR. FELDMAN: So, you got 16 million dollars  
14 less than you requested?

15 MR. EMERY: No, I didn't say that at all.

16 MR. FELDMAN: What did you say?

17 MR. EMERY: These matters are all a matter of  
18 historical record. This is all just factual material,  
19 and I can speculate and speculate all night why the  
20 Commission did or did not give us --

21 MR. FELDMAN: I'm not asking you to speculate.

22 MR. EMERY: And I don't know all the answers as  
23 to why the Commission gave us more or less in any one  
24 case as versus another.  
25



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MR. FELDMAN: Okay. Thank you.

MR. CONNER: May Mr. Emery be excuse?

CHAIRMAN BECHHOEFER: Yes.

MR. CONNER: And I would speak to Mr. Anderson that we submit a similar exhibit to this one tomorrow and that he be excused subject to recall in the event there are any important questions anybody might want to ask him. We'll bring him back from Dayton.

CHAIRMAN BECHHOEFER: We'll do that for Mr. Anderson. You're excused.

With that proceeding, we'll be adjourned for the day.

(The hearing on the above-entitled cause was adjourned until March 4, 1980, 9:00 o'clock A.M.)

- - - - -

Columbus and Southern Ohio Electric Company  
Summary of Rate Increases Requested and Granted by PUCO,  
Return on Equity Authorized (where applicable) and Actual Earned  
Five years 1975 to 1980

Type of Rate Case	Date of Rate Order	Amount		Authorized Return on Equity	Earned Return on Equity	
		Requested	Granted		Year	%
Emergency	3-75	\$27,123,000	\$21,000,000	(1)	1975	15.0
Regular	9-76	see below	23,100,000 (3)	(2)	1976	14.9
		\$50,700,000	\$44,100,000 (3)			
					1977	11.4
Regular	5-78	\$46,050,000	\$28,680,000	12.99%	1978	6.6
Emergency	3-79	\$63,600,000	\$38,400,000	(1)		
Regular	12-79	see below	33,620,000 (3)	14.77%	1979	10.9
		\$126,000,000	\$72,020,000 (3)			
					1980	12.1

(1) The Return on Equity determination is required or made in an emergency rate case

(2) This case was based on that previous Ohio rate case which did not require a Return on Common Equity determination. Furthermore this case was settled by stipulation of the parties.

(3) In all of these cases the total settlement included the immediately previous emergency increase granted, and is compared with the amount requested in the Regular (permanent) rate case.

John M. Emery  
Vice President and Treasurer

NUCLEAR REGULATORY COMMISSION

This is to certify that the attached proceedings before the

in the matter of: Cincinnati Gas & Electric Company (William H. Zimmer)

Date of Proceeding: March 3, 1981

Docket Number: 50-358-OL

Place of Proceeding: Cincinnati, Ohio

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

Bessie J. Gibbs

Official Reporter (Typed)



Official Reporter (Signature)

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Rose Marie Martini, C.S.R.

Official Reporter (Typed)

Official Reporter (Signature)



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Date of Proceeding: March 3, 1981

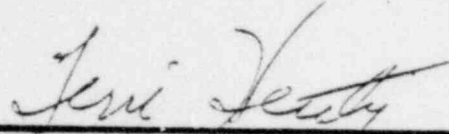
Docket Number: 50-358-OL

Place of Proceeding: Cincinnati, Ohio

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

Terri Heraty

Official Reporter (Typed)



Official Reporter (Signature)