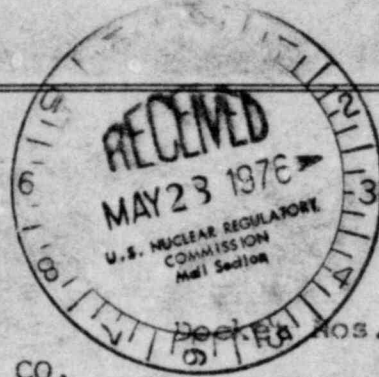


NUCLEAR REGULATORY COMMISSION



IN THE MATTER OF:

TOLEDO EDISON COMPANY and
CLEVELAND ELECTRIC ILLUMINATING CO.

(Davis-Besse Nuclear Power
Station, Units 1, 2 and 3)

50-346A
50-500A
50-501A

and

CLEVELAND ELECTRIC ILLUMINATING
CO. et al.

(Perry Nuclear Power Plants, Units
1 & 2)

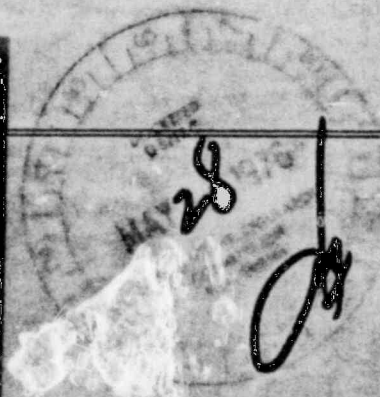
50-440A
50-441A

Place - Silver Spring, Maryland

Date - Monday, May 24, 1976

Pages 10,344
10,549

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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	:	Docket Nos.
In the Matter of	:	
	:	50-346A
TOLEDO EDISON COMPANY and	:	50-500A
CLEVELAND ELECTRIC ILLUMINATING CO,	:	50-501A
	:	
(Davis-Besse Nuclear Power Station	:	
Units, 1, 2 and 3)	:	
	:	
and	:	
	:	
CLEVELAND ELECTRIC ILLUMINATING CO.	:	
<u>et al.</u>	:	
	:	
(Perry Nuclear Power Plant	:	50-440A
Units 1 and 2)	:	50-441A
	:	
	:	
----- X		

First Floor Hearing Room
7915 Eastern Avenue
Silver Spring, Maryland

Monday, May 24, 1976

The Hearing in the above-entitled matter was reconvened, pursuant to adjournment, at 9:30 a. m.,

BEFORE:

DOUGLAS RIGLER, Chairman

JOHN FRYSIK, Member

IVAN SMITH, Member

APPEARANCES:

(As heretofore noted.)

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C O N T E N T S

<u>Witness</u>	<u>Direct</u>	<u>Cross</u>	<u>Redirect</u>	<u>Recross</u>
Harold L. Williams	10,346	10,424	10,521	10,527
Donald Hauser	10,533			

<u>Exhibits</u>	<u>For Identification In Evidence</u>
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Staff Exhibit 214, memo and 15 pages of charts	10,503	10,503
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P R O C E E D I N G S

EAK:bw1

1 MR. BUCHMANN: I will call Mr. Williams,
2 please.
3
4 Whereupon,

HAROLD L. WILLIAMS

5
6 was called as a witness on behalf of the Applicants,
7 The Cleveland Electric Illuminating Company, and having been
8 first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BUCHMANN:

9
10
11 Q Would you state your name and address for the
12 record, please.

13 A Harold L. Williams. I am with the Cleveland Electric
14 Illuminating Company. 55 Public Square, Cleveland, Ohio.

15 Q In what capacity?

16 A Executive Vice President.

17 Q When were you first employed by the Illuminating
18 Company?

19 A 1947.

20 Q Would you briefly tell us your employment history
21 with the company?

22 A I started as a junior engineer in what is now the
23 System Planning Engineering Department. I went through a
24 series of position in engineering and served for a short
25 time in the personnel department. I was manager of the office

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1 building service department and back to engineering as manager
2 of distribution.

3 Then civil mechanical engineer. In 1962 I
4 became vice president of engineering and in '74, executive
5 vice president.

6 Q What was your duties as vice president of
7 engineering?

8 A As vice president of engineering I was responsible
9 for all of the planning of the electrical system, the engineering
10 and design of the whole system and the various parts of the
11 system.

12 Also for all of the construction that was done by
13 contract crews.

14 Q What do you mean by "contract crews"?

15 A The construction of the company, much of it is
16 done by our own employees and much of it is done by hiring
17 contractors. The hires of contractors was under my
18 responsibility as vice president of engineering, but the
19 company employee construction people were under the vice-
20 president of operations.

21 Q When you talk about the engineering of the whole
22 system, it includes generation as well as transmission?

23 A It was the overall design of the system, and then
24 of the individual parts, the generating plants, transmission
25 lines, substations, distribution lines. Feeders. Right down
to individual customer installations.

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1 Q What were your duties as executive vice-
2 president?

3 A As executive vice-president I'm part of a three-
4 man top management office, you might say, consisting of
5 the president and two executive vice-presidents.

6 We have the overall policy-making
7 responsibility for the company. We also divide the individual
8 aligned responsibilities for the various areas within the
9 company among the three of us.

10 I have the specific responsibility for engineering,
11 which includes everything I have described. That is, the
12 vice-president of engineering reports to me and also the
13 responsibility for technical and administrative service
14 which would include purchasing, the computer operations, the
15 office building operation, nuclear quality assurance.
16 Miscellaneous things of that sort.

17 Q Would you tell me briefly what your educational
18 background is?

19 A I was graduated from Tufts University in
20 Bedford, Massachusetts in 1947. I started with the
21 Illuminating Company immediately on graduation.

22 I received a bachelor of science degree in
23 electrical engineering. I received a master of science
24 in industrial engineering from Case Institute of
25 Technology in 1952.

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Q Are you a member of professional organizations or societies?

A I am a member of Cleveland Engineering Society and National Society of Professional Engineers Institute of Electrical Engineering.

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arl 1 Q Are you familiar with the CAPCO executive committee?

2 A Yes, sir.

3 Q What does it consist of?

4 A Basically the chief executives of the five
5 CAPCO companies or the four CAPCO companies, depending on
6 whether you consider Ohio Edison and Penn Power as one or
7 two.

8 Q Have you attended any of those meetings?

9 A I have attended virtually every meeting of
10 the CAPCO executive committee, including informal meetings
11 before it was officially organized as a committee.
12 Whenever the chief executives meet, even back in the times
13 of the negotiations of the original memorandum of under-
14 standing, I was taken as part of the staff, as the company's
15 chief executive.

16 I would almost say at every meeting. There may
17 have been one or two I may have missed for one reason or
18 another, but virtually every meeting.

19 Q Why were you at these meetings, if you were not
20 the chief executive?

21 A Typically each of the chief executives brings
22 to these meetings a staff of people. The staff would
23 ordinarily consist of an engineer, a lawyer, specialists in
24 any of the fields for which there was an item on the agenda.
25 There seemed to be always something on the agenda for

1 engineering and planning as -- and as vice president of
2 engineering I was the key staff individual in that area.

3 Q Did the other companies also bring staff?

4 A Yes. Typically the same sort of group from each.

5 Q You referred to the negotiating meetings prior
6 to the execution of the memorandum of understanding. How
7 did CEI get into this situation? How did it come to be in
8 CAPCO?

9 A During the mid-'60s, technology was expanding very
10 rapidly in the power field. Large generating units
11 were becoming more and more available at much more economic
12 costs per kilowatt than the smaller units that we were all
13 buying. We felt there would be considerable economies to be
14 gained by grouping with other people in order to justify
15 the construction of these larger, more economical units.

16 We also felt there would be economies in operation
17 and increased reliability of the power system by coordinated
18 activity. And so out of this was growing really around
19 the country a number of groups trying to take advantage of
20 these possibilities, and one that we were interested in obviously
21 consisted of CEI and the companies immediately adjacent to
22 it.

23 Q Why didn't you just build these large units
24 yourself?

25 A The size of our system in relation to the size of

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1 the units that were available was just not big enough
2 to sustain these large units.

3 You have the problem, of course, when the unit is
4 off for maintenance, and you have to have reserves to cover
5 it. If it trips because of fault or trouble, you have to
6 have capacity to cover it.

7 When you have first put it in, it may be too
8 large. That is if it is four or five years' load growth,
9 you have to put it in four years before you need all of the
10 kilowatts, and you have to carry the cost for all this
11 time. Whereas if you get a large enough system with one
12 year's load growth, it is considerably more economical and
13 you can also afford the loss of it.

14 Q You referred to coordinated activity. What did you
15 mean by that?

16 A There are a lot of different kinds of activities
17 that can be coordinated efficiently among companies. One of
18 them is the overall planning of the system. That is, what
19 kind and type and size and location of generating plants
20 is appropriate. What transmission is necessary in order to
21 get that to the load. How can we operate most efficiently.

22 And if each of these things is done by each company
23 separately, you get a different result than if you work
24 together and coordinate or plan together for what will be
25 optimum on a total basis.

1 Q Why did CEI, in trying to set up something of
2 this sort, deal with companies with which it did deal? That
3 is Toledo Edison, Ohio Edison, and Duquesne, rather than
4 somebody else?

5 A The obvious thing, of course, is to deal with
6 companies close by. If you are going to have coordinated
7 operation, you need to have interconnections so that you can
8 bring power in and out of the system. They are companies
9 with whom we had been doing business. We had had inter-
10 connections with Ohio Edison, for example, for 40 years,
11 or something like that.

12 So it was a natural to develop those relation-
13 ships and to use both the people relationships that had
14 been developed, and more importantly, the physical
15 facilities that were there, and the potential for further
16 facilities with those people that were close by.

17 Ohio Edison surrounds CEI on two sides.

18 Q I was about to say you have interconnections
19 with companies other than Ohio Edison, do you not?

20 A Yes. I started to say Ohio Edison surrounds us
21 on two sides. Lake Erie is on the third side. The
22 fourth side is the Penn Electric Company, and we had done
23 planning and construction with them in the construction of
24 the Seneca Hydro Plant. PJM is the
25 Pennsylvania, New Jersey, and Maryland Interconnection.

1 It was operating and quite large. The logic of
2 adding ourselves to that group seemed small.

3 Q How many companies are there in the PJM group,
4 approximately?

5 A I don't know, but it is more than a dozen. I would
6 think.

7 Q Did you make any effort to initiate discussions
8 with the PJM pool?

9 A Yes, we broached the question of joining PJM as either
10 a regular member or under some sort of affiliate arrangement.
11 Discussions showed, in short, it wasn't a practical or feasible
12 thing to do.

13 Q Did you consider including any additional
14 companies in the CAPCO group beyond the five that are
15 presently members?

16 A Yes, there was a lot of consideration of various
17 groups. As I mentioned, about that time a lot of different
18 groups were forming around the country. There was some
19 considerable consideration of Cincinnati and Dayton being
20 associated with the group.

21 The companies along with Cincinnati and Dayton
22 and American Electric Power and quite a number of others
23 formed the ECAR group at about the same time.

24 ECAR has a relatively narrow purpose, being
25 primarily reliability, but it is a multi-state group.

1 Q What about the other utilities in Ohio?
2 Did you pursue anything with Cincinnati and Dayton?

3 A We pursued some discussions, but fairly early
4 in the game Cincinnati and Dayton pulled out of those
5 discussions and joined with Columbus in what is called
6 the CCD or Cincinnati, Columbus, Dayton pool, and those
7 three companies did some joint construction separate from us.

8 Q What about Ohio Power?

9 A Ohio Power is part of the American Electric Power
10 system. Basically the American Electric Power system, which
11 is under one ownership, is an integrated system as roughly
12 the same size as CAPCO. It appeared to be doing fine, and
13 able to take advantage of the economies of scale and
14 coordinated operation and so on, without anybody else added
15 to their group.

16 Q What about the Michigan companies?

17 A The Michigan companies were pooling together
18 also, specifically Detroit Edison and Consumers Power.
19 Their approach was a little different. I guess every
20 group's approach was different.

21 They seemed to be pretty well coordinated,
22 the two of them, and again the two of them combined were
23 of a size that could utilize the largest generating equipment
24 that was then being produced.

25 Q I was going to ask you that. If you get an

1 organization which is able to use large generation to get
2 the economies of scale, why wouldn't it be of benefit to
3 it to continually get bigger?

4 A There is a point of diminishing returns in two
5 regards. As the units are getting large, the benefits of
6 still making them larger taper out.

7 Secondly, and maybe more important, technically
8 there is a top size limit that generators are made. Currently
9 you can't buy larger than 1300 megawatts. At the time the
10 limit was about 1000.

11 And so although there were extrapolations
12 into the future, of course, everybody was forecasting
13 future growth. If you had a pool that could use a 1000
14 megawatt unit at the time CAPCO was organized in 1957,
15 you had about the largest feasible size.

16 To make it larger produced no benefits and,
17 of course, would produce complications in terms of the more
18 people in the act, the more difficult it is to coordinate.

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1 Q What, by the way, is the total load of the
2 CAPCO companies now, approximately?

3 A Around 10,000 or a little over.

4 Q 10,000 megawatts?

5 A Megawatts, yes, excuse me.

6 Q What do you mean the more people that are in the
7 act, the more difficult it gets?

8 A You know, in any human endeavor, if you have several
9 people with different individual positions, and you try to get
10 them to work together it becomes more complicated, the more
11 parties there are.

12 Each company has different objectives, different
13 history, different facilities.

14 As you try to bring these together the more
15 different pieces you have, the more different points of view
16 you have, and the more difficult it is to reconcile.

17 Q Can you then briefly describe to me what the
18 agreement was, what the CAPCO agreement was, what deal did
19 you make?

20 A Well, the so-called memorandum of understanding
21 which, as you know, I think is a rather long complicated
22 memorandum, 30 or 40 pages or some such thing as this, but
23 the essence of it was we agreed to several things.

24 First, we agreed to one-system planning. That is,
25 we would plan the CAPCO system as if it were one group.

bw2 1 We would determine the optimum size of generators,
2 the type, that is, coal-fired or nuclear or peaking capacity
3 or whatever, on a one-system basis.

4 We would determine the location of it.
5 We would determine the transmission, as if we were one system.
6 Then we would determine how to allocate the ownership
7 responsibility and the operating responsibility and so
8 forth, among the parties in as equitable a fashion as
9 possible.

10 We described in some detail what those terms
11 meant. We outlined how we might operate. We outlined
12 the bases of operating for all these responsibilities.

13 We provided mechanism for withdrawal from the pool
14 for any company that wanted to do that at any future
15 time.

16 We provided for compulsory binding arbitration
17 to resolve differences.

18 Various other legal and other things.

19 Q How are decisions made in CAPCO?

20 A The decisions are made basically by
21 unanimous agreement of chief executives based on
22 studies and analyses worked up by a whole series of
23 committees.

24 Q Why did you require unanimous agreement?

25 A We require unanimous agreement,
because, basically, each company insisted from the

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1 beginning, and still does, that its autonomy has to be
2 separate and independent. None of the companies is willing
3 to delegate to any of the others the responsibility for
4 making its own corporate decision as to where it is going
5 to spend hundreds of millions of dollars in generating
6 capacity, transmission lines, et cetera.

7 We have said you can develop the plans, et cetera,
8 but before we implement naything we much each of us agree
9 this is to be done.

10 There is always the option of withdrawal, if you
11 don't want to or can't agree.

12 We can't agree now that by a four to one vote, we
13 will decide where a generating plant will be built in 1987,
14 and then CEI, as a dissenter, being responsible for having
15 to pay for the thing anyway.

16 We weren't willing to go that far, and none of
17 the other parties was willing to either.

18 Q Did you in the -- let me withdraw that.

19 You talked about allocating ownership
20 responsibility. I presume money follow ownership
21 responsibility, in a sense?

22 A Yes.

23 Q How do you do that?

24 A Basically, the mechanism works like this. For each
25 generating plant or each generating unit, we set up a

1 joint bank account. One company is designated by
2 mutual agreement as the company to be responsible for the
3 design, construction and operation of the plant. Each
4 month, or sometimes two or three times a month, as the bills
5 are to be paid, they call for each of the companies to
6 pay into the joint bank account a certain total money,
7 and then it is allocated in percentage according to the
8 percentage ownership in the plant.

9 Each pays this money into the joint bank account,
10 and the company who has been designated in advance as the
11 one responsible for design, construction and
12 operation, writes out the check from the joint bank account
13 to pay the bills.

14 Q How do you decide how much each company will
15 put in?

16 A This is determined by the percentage ownership
17 that has been agreed upon.

18 Q How do you decide what the percentage ownership
19 is?

20 A We allocate the capacity on the basis of a
21 rather detailed procedure which we call for short P over N.

22 I don't know to what extent that has been
23 explained, but I will go on and you can ask if you like.

24 The P over N calculation is/^arather sophisticated,
25 technically advanced, mathematical concept which determines

1 by trial and error an allocation of capacity, such that
2 each company's contributions to the pool divided by their
3 take from the pool -- in other words, the ratio of
4 positive to negative use of pool facilities -- will be
5 equal.

6 This ratio should be equal for each of the
7 companies. The generating capacity is juggled on paper.
8 That is, the allocation is juggled on paper, until we get a
9 situation where that ratio is the same for all companies.

10 Then that becomes the final allocation of
11 capacity. Each company agrees to own that number of megawatts
12 or that percentage of the unit, so as to produce that
13 result.

14 Q What was the objective in trying to get that
15 ratio equal?
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arl 1 A The objective was to create a fair and equitable
2 distribution among the parties of the financial responsibility
3 and operating responsibility for maintaining the capacity
4 within the pool.

5 Q Did you consider any other methods of accomplish-
6 ing that result?

7 A Yes.

8 Q What kinds?

9 A We considered and rather quickly rejected
10 a couple of systems that had been used years ago. Say at
11 the time of World War II, two simple systems that were being
12 used by some groups were so-called equal percent reserve,
13 where you look simply at the load and capacity on the
14 highest load day of the year, and ignore all of the rest of
15 the days of the year. Ignore the maintenance schedules,
16 sizes of units and a lot of other things, and make it
17 equal percent reserve on that day.

18 We rejected that as ignoring many too many factors.

19 Another approach was the outage of the largest
20 unit or outage of the largest two units, which was a
21 simplified approach many companies had used. That takes
22 into account one more factor, but still omits a lot.

23 We looked at another, more complex, more complete
24 approach which incorporated all of these various factors
25 that need to be considered, and instead of

1 ratioing megawatt margin days, which is what the P/N calcula-
2 tion does, we tried to just look at the number of days
3 that a given company would call on the resources of the
4 pool.

5 We found that this was much better. It took
6 into account these various factors. As a matter of fact,
7 it was used to come up with the numbers in the original
8 memorandum of understanding. It didn't determine them,
9 but it was used as a factor along with judgment to come
10 up with the original numbers.

11 The problem with that was if you used -- looked
12 at only the number of days use of the resources of the
13 other members of the pool, it ignored whether that use
14 was one megawatt or 1000 megawatts.

15 We felt it needed to be the megawatts times the
16 days as the measure of the use.

17 It ignored also contributions to the pool, and
18 we felt that was important. We put that all together
19 and came up with this system we call P/N.

20 Q At the time we are talking about -- what time
21 did you have these negotiations? When was that?

22 A About 1967, I believe.

23 Q At that time was there any dissimilarity in the
24 configurations of the systems of the several companies that
25 were involved?

1 A Yes, there were a lot of factors there were
2 different. Some, for example -- Duquesne Light, although
3 the second smallest system, had the largest unit.

4 Toledo Edison had a number of units which were
5 unusually reliable. Their forced outage rates were lower
6 than virtually anybody else's. It had been their practice
7 over a long basis to build a particularly high
8 reliability into those units.

9 CEI and Ohio Edison had already entered into an
10 agreement for sharing of capacity between our Avon 9 Unit and
11 their Sammis 6 Unit. Each of these were unique to the
12 companies.

13 There were other factors in terms of unit
14 size, reliability and so forth. We all felt these
15 factors needed to be taken into account in whatever
16 allocation system was ultimately adopted for the pool.

17 Q You made reference to Duquesne being the second
18 smallest company. Was there much variation in size among
19 the companies?

20 A Roughly then and now Ohio Edison is 40 percent
21 of the pool, CEI 30 percent, Duquesne about 17 or 18, and
22 Toledo 12 or 13; something like that.

23 Q When you say percent of the pool, what do you
24 mean?

25 A Percentage of load, I meant.

1 Q Load.

2 At the time you were negotiating this agreement, was
3 any consideration made of having other members other than
4 investor-owned utilities such as municipal operations?

5 A We really didn't give particular attention
6 to that, no.

7 Q Why didn't you give any attention to that
8 subject?

9 A The purpose of this pool -- there were several
10 purposes, but the primary purpose was the pooling of
11 generation and the coordination of interconnected operations.

12 The only municipality with any significant
13 amount of generation in the service territory of any of us
14 was the Cleveland Municipal System. At that time we weren't
15 even interconnected with them. So there seemed no
16 logic to talk about coordination of an interconnection
17 that didn't exist.

18 They already had twice as much generation as load.
19 So there seemed to be no logical reason why we would
20 consider that particular one.

21 Anybody else with whom we were interconnected
22 either had no generation or very small generation, which
23 would have been an insignificant part of the total group.

24 So there seemed no logic to incorporating any
25 other smaller systems.

1 I already indicated why we didn't add in Penn-
2 sylvania Electric or Ohio Power or some of these other
3 larger groups.

4 Q Did you nonetheless run studies as to the impact
5 of your method of allocating ownership upon small systems?

6 A Yes.

7 Q Why did you do that?

8 A We could foresee the possibility at some time in
9 the future that the Cleveland Municipal System might want
10 an interconnection. When and if they wanted one, and were
11 tied in with us, they might want to be affiliated with the
12 group. We felt that whatever system we devised from the
13 beginning ought to be designed to give a fair and equitable
14 basis under whatever circumstances, and so we wanted to test
15 our system.

16 The one that we ultimately call P/N we wanted
17 to test it by the extremes, and add a number of hypothetical
18 possibilities along those lines.

19 Q Did you run other kinds of studies on other
20 extremes?

21 A We considered hypothetical studies that tied
22 CAPCO to another CAPCO. That is a hypothetical system as
23 big as CAPCO and two CAPCOs, and one where we tied it to
24 10 CAPCOs, which would have been comparable to the whole
25 United States.

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1 It was almost ridiculous, but we did look at that
2 to test the reasonableness of the methods we were developing.

3 Q What did those tests show as to the
4 reasonableness of the methods you were developing?

5 A We felt they showed the P/N system was in fact
6 the most reasonable system we could devise as a method of
7 fairly allocating responsibility for generation among the
8 parties.

9 Q Didn't the study with respect to the Cleveland
10 test case show that it -- that method would impose very
11 large reserves on the City of Cleveland?

12 A Yes, it did. But basically one of the factors
13 was that the City of Cleveland had one unit -- as a matter
14 of fact, their largest and most efficient unit was 85 megawatts
15 in size when their load was many days less than 85.

16 Their peak load was something like 100. So,
17 naturally, the outage of an 85 megawatt unit, if you are
18 running with 100 megawatts of load, would put a very heavy
19 drain on the rest of the pool.

20 If you are going to have equal ratio of contribu-
21 tions to the pool to benefits, then when you put a heavy
22 drain on the pool, you have to have a heavy distribution
23 on the other days. That means more reserve.

24 Q Why would it put a heavy drain on the pool?

25 A The typical way to operate an interconnected

1 system would be to operate with a relatively small
2 operating reserve.

3 That is reserve on the line ready to pick up on
4 a moment's notice. Relatively small -- well, under the
5 ECAR rules, it is now 7 percent or something like that.
6 If Cleveland Muni, with a load of 100, operated with a
7 7 percent reserve, they would have 107 megawatts of
8 capacity on the line. If 85 is on one unit
9 and that unit trips because of the trouble on the line,
10 they are able to carry 25 megawatts on their own system
11 and the balance of the load, 75 megawatts comes in over the
12 interconnection.

13 That is what I meant by a heavy drain on the
14 interconnection. It would be importing three-quarter of
15 their total load on the interconnection or from the inter-
16 connection.

17 Q Now obviously, the companies went ahead and
18 executed the memorandum of agreement.

19 A Right.

20 Q And have been operating under that ever since.

21 A Yes.

22 Q What, if any, do you feel from the point of view
23 of CEI are the advantages to CAPCO viewing it from now
24 rather than back in those days?

25 A Looking back at the advantages of CAPCO,

1 certainly we have achieved great economies of scale. There
2 is no question that our generating costs are a great deal
3 less than they would have been without CAPCO.

4 We have saved money in transmission. We have
5 less transmission facilities than we otherwise would have
6 needed.

7 We have actually improved reliability. In spite
8 of less costly generation and less actual physical
9 transmission, the reliability of the system is greater
10 as a result of CAPCO.

11 You have the best of both worlds, better service
12 and lower costs.

13 Q Are there any balancing obligations you have
14 to undertake to be a member of CAPCO, or as a result of
15 your membership in CAPCO?

16 A Yes, there are a lot of them.

17 Q Give me some examples.

18 A First, you have to agree to joint coordinated
19 planning.

20 You have to agree you are going to plan this as if
21 it were one system. This sometimes has disadvantages. What
22 is best for CEI might not be the best for the total, for
23 example.

24 Q Can you give me an example of how that could be?

25 A One simple example might be when we concluded to

1 build the Mansfield coal-fired plant on the river, that was
2 the best thing for the whole group. If we were doing it
3 alone, we would never have built that on the river.
4 We had a plant site on the river for years, and could never
5 justify building it.

6 We agreed to build a plant there, which is not
7 what we would have done as an individual.

8 Q Can you give me some of the other obligations?

9 A One-system planning. The agreement to allocate
10 the ownership and operating responsibilities according to the
11 P/N formula that I have described.

12 The responsibility for accepting joint ownership
13 in the plants and for paying the bills through the joint
14 bank accounts that I have described.

15 The responsibility for building transmission
16 in their own area and for paying for all of the transmis-
17 sion, all of the 345 kV transmission that is designated as
18 CAPCO transmission, the cost of this is shared by all of
19 the group.

20 Agreeing to negotiate on these things on a one-
21 system basis and to agree promptly on the conclusions.

22 This is a difficult technical process, and when
23 the companies -- when the chief executive committee
24 meetings are reaching an agreement, they want agreement
25 that can be finalized very quickly, and they agree to come

1 to the meetings ready to commit their organizations.
2 Sometimes subject to review by the board of directors, but
3 that can almost be guaranteed to have an answer within
4 30 days, and the answer is final.

5 Many of the agreements are reached at the
6 executive committee and are final right then. The chief
7 executives feel they have the responsibility and authority
8 to make those decisions, so they do.

9 There is responsibility to pay the bills on time.

10 There is responsibility to participate in all of
11 this committee structure.

12 Q What do you mean by that?

13 A Well, the decisions that are made are based on a
14 whole series of studies, and we have some 30-odd
15 committees and task forces and subgroups and what-have-you.
16 It is the planning committee, operating committee, finance
17 and legal committee, financing, accounting, and legal are
18 separate committees.

19 There is the drafting committee that drafts the
20 document. The chief executives reach an agreement and
21 they say to the lawyers, "Write that up for us." We have
22 lawyers to do that.

23 Each of the groups has subcommittees to study
24 various things. Matters like what is cost. What is
25 included in cost, and what isn't included in cost.

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How do you allocate the cost of existing facilities? We are going to build a new unit at Eastlake; what do you do about the present investment, in not only land, but rail, and what-have-you.

All of these things are explored by a whole series of committees whose reports funnel ultimately to the executive committee.

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1 Q Are there also agreements in the CAPCO
2 arrangement for the exchange of energy?

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3 A Yes. . . There is an operating agreement which provides
4 for this and provides the mechanism by which we would provide
5 mutual backup between each other, both operating capacity
6 and operating energy on a planned and unplanned, that is,
7 emergency basis.

8 And the operating agreement spells out the ways
9 in which this is done, and the ways it is paid for, et cetera.

10 Q Emergency CEI supports itself or members in
11 CAPCO; is that what you are saying?

12 A Right. If somebody needs power now, and it is
13 not available, for whatever reason, CEI will send them power
14 under the emergency section or if we are short, they will
15 send us power under the emergency section.

16 Q It is a two-way street, I gather?

17 A Right.

18 Q Are you aware that the City of Cleveland has
19 requested membership in CAPCO?

20 A Yes, sir.

21 Q And do you see a role that the City could play
22 in CAPCO as a member of the organization?

23 A Frankly, I was somewhat puzzled when I read and
24 reread and restudied the proposal of the City of Cleveland
25 for joining CAPCO, because, in the same proposal they spell out

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1 a number of other things they wanted, many of which were
2 inconsistent with membership in CAPCO.

3 Q Tell me what you mean by that?

4 A There was a letter and an attachment back in late
5 summer of '73 or something like that. At any rate, a letter
6 in which they gave us a proposal for what they would like.
7 They mentioned they wanted to join CAPCO. They listed
8 specific megawatts out of specific units, they would like
9 to have.

10 All of the units they listed were nuclear.

11 Q What is inconsistent about that?

12 A In CAPCO you agree to plan on a one-system basis,
13 what is best for the total and to allocate the capacity
14 among the parties on an equal P over N basis, and then each com-
15 pany takes a share of every unit, as it turns out.

16 The company doesn't decide which units it
17 wants to have part ownership in or how many megawatts
18 they want to take.

19 There were other areas in which they asked for
20 things inconsistent with membership also.

21 Q You said that the units they designated were all
22 nuclear?

23 A Yes.

24 Q What difference does it make if one of the members
25 of a system takes its ownership all in nuclear, rather than a

bw3 1 mix?

2 A If you are going to have a fair and equitable
3 participation in all of the units, the way you get the benefit
4 of economy of scale is to have everybody have a share of
5 every unit. If people pick and choose, then you can't justify
6 the large units in a particular area.

7 For example, take the coal-fired Mansfield
8 Plant, which I said wasn't exactly what we would have done
9 on individual basis, yet apparently it wasn't one of the
10 things Cleveland Muny wanted either. But if several of us
11 say to Ohio Edison and Duquesne Light, who are in the position
12 most to benefit from a coal-fired unit, right there close
13 by, well, we are not interested in taking a piece of this
14 one, then they can't justify the economies of scale, and
15 they lose a substantial benefit.

16 They lose a substantial benefit, if we refuse to
17 go along.

18 So what you have to do is decide whether you like
19 the whole package. You can't pick and choose and say, well, the
20 whole package looks great, but if I could have this piece
21 and this piece, and this piece, it would be even better.

22 So you can't operate a coordinated operation
23 in the basis of each company picking and choosing what is
24 in its best interests.

25 CHAIRMAN RIGLER: Mr. Williams, suppose during the

bw4 1 next ten years, there is a substantial influx of industry
2 into Northern Ohio and none in the Duquesne area, so that
3 all of the Northern companies have a ten, twelve, fifteen
4 percent load growth and Duquesne only has a one percent
5 load growth, and it is necessary to build a lot of new
6 units to serve this new industry, but Duquesne is doing
7 fine with the units it has?

8 THE WITNESS: What would happen, would be taking
9 the one system concept, putting in the load forecast
10 and so forth, the engineering study would obviously show
11 that the load was in the northern area.

12 Therefore, the generation ought to be put in the
13 northern area. Then we would go through the calculation to --
14 the P over N calculation to determine the equitable way to
15 divide the total cost, total responsibility for the
16 generating capacity.

17 If Duquesne's growth over the period were very,
18 very small, then the equal P over N calculation would
19 show they needed very, very little of the new units.

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1 CHAIRMAN RIGLER: Suppose they were experiencing
2 a decrease in load while everyone else was gaining
3 dramatically?

4 THE WITNESS: Then the calculation would show
5 they had too much capacity and it would provide for a purchase
6 sale, purchase by the other companies, and sale by Duquesne
7 Light to achieve the equal ratio.

8 CHAIRMAN RIGLER: You told us Duquesne would be
9 obligated to take an ownership share in each of the new
10 units built in Northern Ohio, yet using P/W, they would be
11 shedding capacity?

12 THE WITNESS: I should have said assuming everybody
13 has a load growth, they would each need a share of the
14 new units.

15 If they actually had a reduction, so that the
16 total capacity required would be less than ownership, then
17 the system does provide for them to sell, not sell ownership
18 interest in capacity, but to sell megawatts for which they
19 would be paid by the other companies in order to -- so
20 that in effect they can get rid of that excess capacity.

21 If they were on their own, they couldn't. This
22 way they can. They have a way to get rid of that excess
23 capacity if their load decreases, namely, to sell it to the
24 people who need it.

25 CHAIRMAN RIGLER: I'm not clear as to what happens

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1 when you add the new units. Are they required to purchase
2 a specific share of the new units, even though they are
3 engaged in selling capacity in the existing units?

4 THE WITNESS: They would not.

5 BY MR. BUCHMANN:

6 Q They would be obligated to take that share in
7 the new unit which the P/N formula said they should take.
8 If the formula says you don't take a share, you don't
9 have to buy anything?

10 A Right. The P/N determines the total capacity
11 needed, actually. the P/N determines the total capacity
12 needed. You subtract from that what you already own, and
13 that determines what you take out of the next unit.

14 If when you make that subtraction, the
15 number is negative, which it would be in the case you
16 hypothesized, then obviously you don't have to take it.

17 If what you need is negative, you sell instead.

18 MR. SMITH: This is an important advantage in
19 pooling. You spread the risk of miscalculating your load
20 among others, too. If you miscalculate your load and you
21 have a market for your excess load, a place to get rid of it,
22 haven't you reduced your risk in planning new capacity?

23 THE WITNESS: Yes.

24 MR. SMITH: Does that help you in your financing?

25 THE WITNESS: It helps you in your planning. I

1 don't know whether it would help you in your financing.

2 You mean does it make it easier to obtain financing?

3 MR. SMITH: Yes.

4 THE WITNESS: I wouldn't think it would have a
5 material effect. The key thing, of course, that determines
6 your ability to finance is your credit rating, that is the
7 bond rating by the rating agencies.

8 I don't believe that they take a look that far
9 into the detail. I may be wrong. But I think it probably
10 would not actually make a difference in your bond rating,
11 which is the thing that determines your ability to finance.

12 BY MR. BUCHMANN:

13 Q Going back to the request of the City of Cleveland
14 with respect to nuclear units, are there differences in
15 the cost consequences of building nuclear units as distin-
16 guished from fossil fuel units?

17 A Yes. These change over the years, but generally
18 speaking, a nuclear unit costs more to build than a fossil
19 unit, but costs less to operate. So that in weighing which
20 one to build, you have to take into account the cost of
21 money.

22 That is what it costs you to get the money to
23 build the plant. If your fixed charge rate is higher or
24 lower, that will affect the overall economic study. By fixed
25 charges, I mean the cost of money, that is interest.

1 dividend payments, or whatever combination of
2 those is appropriate, plus real estate taxes, depreciation,
3 and so forth.

4 You put these factors together to determine a
5 fixed charge rate which is the effective annual cost of invest-
6 ing a dollar in a power plant.

7 If that fixed charge rate is different, then
8 the relative values of higher capital cost plants, like
9 nuclear, vs. lower capital cost plants, like coal, will be
10 different.

11 Q Depending on that circumstance, variation in
12 fixed charge that may affect whether a person wants to go
13 into nuclear rather than fossil?

14 A Right. In the case of the City, the fixed
15 charge rate is lower for a municipality, both because
16 they can issue taxfree bonds, which therefore can be sold on
17 the market at a lower rate, and the fact that they don't have
18 to include real estate taxes in the fixed charge rate.

19 They do, in fact, have a lower fixed charge
20 rate. The application of this would make it more advantageous
21 for a governmental body or municipality to invest in a
22 nuclear plant than it would be, relatively speaking, for an
23 investor-owned plant or --

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1 Q While we are here, because of CAPCO's plans to build
2 nuclear generation, CAPCO does have fossil fuel generation
3 plants, does it not?

4 A Yes.

5 Q They are still planning to build fossil fuel plants?

6 A Yes, there are some under construction. CAPCO
7 also has build a number and would in future probably
8 build a number of combustion turbines which burn oil.

9 They are very low capital costs and very high
10 operating costs. They are used normally for peaking
11 purposes. But they are even more extreme in terms of the
12 big advantages.

13 The big advantage is the low capital cost.
14 That advantage would be less for a municipality, because
15 it has a lower fixed charge rate to apply to that capital
16 cost.

17 Q Now, would you assume with me for a moment that the
18 City of Cleveland is admitted to CAPCO, the way CAPCO stands
19 today, all else being equal.

20 What advantages or disadvantages to the operation
21 of CAPCO would you foresee?

22 MR. LESSY: I object, unless it is clear that that
23 is from the point of view of CEI.

24 BY MR. BUCHMANN:

25 Q From the point of view of CEI.

There would be several things that would happen

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1 if Cleveland Muny became a member of CAPCO and operated with
2 us. They would be sending representatives to all of these
3 various committees, et cetera.

4 As I have indicated before, I think in any human
5 endeavor, as you increase the number of parties with differing
6 points of view, you make it more difficult to resolve
7 questions. Not singling out Cleveland Muny, but anybody added
8 to the meetings would make the meetings more difficult.

9 In Cleveland's case, since their objectives and
10 cost structures are different, it would be particularly
11 hard, I would think, to incorporate them.

12 But, assuming we got over that hurdle and we did
13 properly start out with another one system study, we would
14 take their inputs into account, along with everybody
15 else's.

16 Since their load is about 1 percent of the
17 pool, they would have a one percent weighting in the various
18 calculations and the result would be a slight change, but
19 very slight change in the overall fixed charge rate.

20 Each of the four companies has a different
21 fixed charge rate. We don't all have the same tax structure
22 or bond interest costs.

23 We have a slightly different fixed charge rate.
24 When you make a one-system study, you calculate an average.
25 You get a composite for a one-system study.

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1 Muny's would be put in there and it would have
2 little effect. We make up a one-system study and come up with
3 a result which very likely would not be in their
4 interest.

5 CHAIRMAN RIGLER: You started out by
6 saying they had different objectives.

7 What different objectives does Cleveland have
8 from other CAPCO companies?

9 THE WITNESS: I was talking about different
10 economic objectives. Their fixed charge rate would be
11 considerably different. That is basically what I was talking
12 about.

13 CHAIRMAN RIGLER: But they would have under the
14 hypothetical, the same common objectives of increased
15 reliability and achieving the economies of scale that you
16 mentioned with respect to the CAPCO memorandum of understanding?

17 THE WITNESS: I would think those objectives
18 they would share with the other CAPCO companies.

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arl 1 BY MR. BUCHMANN:

2 Q Mr. Williams, you were saying if you make this
3 study, assuming that Muni is in there, you would come up
4 with the result which my note says would not be in Muni's best
5 interest.

6 A Which might not be, would be more accurate.

7 Q Maybe my note is inaccurate.

8 In any event, what do you mean?

9 A The study would determine what was the best
10 thing for the overall CAPCO group. It might be a coal-
11 fired plant. It might be oil-fired peaking capacity. It
12 might be nuclear. It might be located on Lake Erie or
13 it might be down on the Ohio River. It might call for
14 added transmission.

15 In weighing location you pay generation cost and
16 transmission distance, you take those into account, et
17 cetera. From Muni's point of view, units that are located
18 close by with short transmission and have a high capital
19 cost and low operating cost would be the best thing in their
20 interests.

21 That might or might not be the best thing from
22 the total CAPCO pool position.

23 The point I was trying to make with the illustration,
24 if I can go one step further, is that if it turned out that
25 the one-system study produced an answer that was not optimum.

1 from Cleveland Muni's point of view, Cleveland Muni
2 would have a difficult problem, I would think.

3 Certainly when we produce one that any of the
4 other four of us is not optimum from our point of view,
5 we speak up and we say this is in my best interest, et
6 cetera, and we go around considerably.

7 If the difference is small, it can usually be
8 resolved by ultimately demonstrating that the overall
9 benefit to each of us is substantial, even though we might
10 find something that would still be better for us.

11 Whether you would achieve that result with Cleveland
12 Muni, I don't know, but the wide difference in the economic
13 fact of life there would make it, I would think, more
14 difficult.

15 Also the fact that they are so much smaller,
16 so much smaller in size would make a difference. They
17 would be inputting into this one-system system a lot of
18 data about their system. Unit sizes, forced outage rates,
19 reliability, and what-have-you.

20 I would suspect if we were doing that today, we
21 would have a considerable problem just agreeing on the input
22 data.

23 Our ordinary practice is to take as the forced
24 outage rate and availability the actual data for the last
25 five years. If we took the record of that 85 megawatt

1 unit over the last five years and used that as a basis for
2 projection, we would get a very low contribution. I would
3 think it would be likely that Muni would say that is not a
4 proper way to do it, you should do something different.

5 Then we would be in a hassle on the input before we
6 even made the study.

7 Q Let us assume in this discussion that you do
8 come up with a CAPCO recommendation which is not in Muni's
9 best interest, and that could be low capital costs, high
10 operating cost unit, or something of that sort; right?

11 A Yes.

12 Q You couldn't-- you would still have the unanimity
13 rule, wouldn't you? You would need Muni's consent to go
14 forward with that, would you not?

15 A Yes.

16 Q It would be perfectly possible for Muni to decline
17 to go forward?

18 A Yes.

19 Q What would the consequence be on the pool?

20 A The pool would be facing the prospect of
21 inadequate capacity. As time went on, if you couldn't
22 agree on doing something, the prospect of inadequate capacity
23 would get worse and worse as the loads grow, and as the
24 projects grow. The options that would be available to the
25 other parties or the options that would be available to CEI

1 or capacity or anything else that had been made by the
2 Illuminating Company to the City of Cleveland?

3 A Yes.

4 Q Can you tell us what they are and when they
5 were made, if you can recall?

6 A I'm starting with the last question, trying to
7 recall dates. It was some time back, couple of years ago,
8 at least, that we offered firm power -- first of all, I might
9 explain.

10 We have an interconnection now with an emergency
11 rate that was established by the Federal Power Commission.
12 That is what Cleveland Muni said they wanted in the
13 Federal Power Commission hearing cases.

14 We have since offered them firm power. We have
15 offered them participation in the nuclear units, either as
16 owners, which would be the normal CAPCO procedure, or we
17 have also offered to sell them power out of it on a pay-as-you-
18 go monthly basis, which would not available to them under
19 the CAPCO ground rules.

20 We have offered them the opportunity to pick and
21 choose among the units, to designate the number of megawatts
22 they wanted out of each unit.

23 Q Would that be available to another CAPCO member?

24 A No.

25 We have offered them to wheel power from any source

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1 would be about the same options available to Muni, obviously.
2 You can either agree or you can stymie action, or you can
3 withdraw from the pool.

4 CEI would, of course, have the same three
5 options that Muni would have.

6 Q Do you see, in your view, -- or in your view,
7 would the Cleveland Municipal Electric operation get any
8 advantages from becoming a member of CAPCO which haven't
9 been offered to them already?

10 A Sir, in my view --

11 MR. HJELMPFELT: May I have that question again,
12 please?

13 (Whereupon, the reporter read the pending
14 question, as requested.)

15 MR. HJELMPFELT: I object to putting hypothetical
16 questions to a nonexpert witness.

17 MR. MELVIN BERGER: I would object to the
18 "which haven't been offered to before already." We have
19 no definition as to what that means.

20 CHAIRMAN RIGLER: I think a better definition
21 of the objectives which you say have been offered would be
22 helpful.

23 MR. BUCHMANN: Okay. I will withdraw it.

24 BY MR. BUCHMANN:

25 Q Are you aware of what offers of electric service

1 from which we are entitled to buy power. That would not
2 ordinarily be available to other CAPCO members, either.

3 Q What do you mean, it wouldn't be available
4 to other CAPCO members?

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1 A. In the CAPCO arrangement, each company is free to
2 buy power from anyone with whom it is interrelated.

3 Each company is also free to buy power from the
4 CAPCO pool. But we do not agree to wheel power
5 through our system for another system under the CAPCO
6 arrangement. There is not a wheeling clause in any of the
7 CAPCO arrangements.

8 Is everyone clear on what wheeling is?

9 Q Why don't you tell us what you mean by it?

10 A. Wheeling is an arrangement by which one party
11 agrees to transmit party power between two others.

12 In other words CEI would agree to transmit
13 power from Ohio Power to the Cleveland Muny system
14 without any rights to the power ourselves. Under the CAPCO
15 arrangement we would buy the power and resell it, but with the
16 right to hold it, if we needed it ourselves. The
17 wheeling would be, we would agree to transmit the
18 power and the contract would be between Muny and Ohio Power,
19 and we would simply agree to transmit it through.

20 MR. SMITH: So this is, in effect, an agreement
21 among CAPCO members, not to compete with each other
22 in purchasing outside power?

23 THE WITNESS: No, that is not what it is.

24 MR. SMITH: Is that the effect of it, however?

25 THE WITNESS: It is simply -- we are simply silent

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1 on the question of whether we would wheel power. It is not
2 typical in the industry to wheel power.

3 Wheeling is relatively unusual. The typical pattern
4 in the industry and the pattern in CAPCO is that you buy power
5 only from companies with whom you are interconnected and then
6 you sell power to only companies with whom you are
7 interconnected.

8 The company in the middle between somebody
9 who has access and somebody who has a deficiency, typically
10 the one company sells to the intermediary company and the
11 intermediary company sells to the company who needs it.

12 MR. HOELMFELT: I move to strike the answer
13 as to what is typical in the industry as being expert
14 testimony, which was not filed in advance.

15 MR. SMITH: In answer to my question?

16 MR. HOELMFELT: Yes, sir. In the first place,
17 I don't think it was responsive to your question.

18 In any event, when we get expert testimony in this
19 case, I think we are entitled under the rules to get it in
20 advance.

21 CHAIRMAN RIGLER: Denied.

22 May I interrupt here?

23 Going back to the advantages you have offered
24 Cleveland as a substitute for CAPCO membership, you indicated
25 that you offered them operation in selected CAPCO units

bw3 1 which would come out of CEI share, as I understood you
2 answer, and not out of the share of other CAPCO members?

3 THE WITNESS: We have no authority to offer
4 somebody else's capacity.

5 Yes, we offered them a portion of CEI ownership.

6 CHAIRMAN RIGLER: But you were not intending
7 to state that Cleveland could not negotiate for additional
8 shares from other CAPCO members in these same or in
9 different units?

10 THE WITNESS: That is correct.

11 CHAIRMAN RIGLER: You were not precluding the
12 possibility of Cleveland obtaining additional participation
13 over and above what CEI would offer from its share?

14 THE WITNESS: Not at all.

15 CHAIRMAN RIGLER: Assuming that Cleveland took
16 you up on your offer and asked for a percentage of the
17 CEI share in Davis-Bess^{er} and in Mansfield and maybe Perry,
18 and you yielded, I have a question as to how this affects
19 the P over N overall capacity formula as you described as the
20 method by which your share is determined. It would throw
21 that askew, if you were giving up the share that you had
22 to have in order to satisfy the formula?

23 THE WITNESS: I will explain how that works.

24 We have, in CAPCO, an annual review of capacity
25 for the following year. The target date is to have it set
by July 1st of each year, a whole new calculation of equal

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1 P over N for the following calendar year which takes into
2 account a lot of things that may have changed in the interim.

3 Sometimes the units come in large. Sometimes
4 the capacity is different than what was expected
5 originally.

6 Sometimes somebody has retired capacity. Maybe
7 it is older stuff that he though would be part of his line-up.

8 Certainly this situation would be reflected in that
9 calculation.

10 We would determine July 1, preceding each new
11 calendar year, a new P over N and if that produces a different
12 result -- something always changes, the loads -- to the extent
13 that produces a different result, then we agree to what we call
14 buy-sells for the following calendar year, in order to
15 readjust for all of these factors.

16 The result of this particular item, if we sell part
17 of our capacity to Cleveland Muny, then we would have to buy
18 power in the buy-sells and somebody else who was long would sell
19 power to us, and the P over N would calculate the amounts, so that
20 for the one calendar year we buy and somebody else sells enough
21 to bring us back to the equal P over N.

22 CHAIRMAN RIGLER: I'm not sure that is an entire
23 answer.

24 When you set your percentage of ownership in, let's
25 say, Davis-Besse, that is done on the life of the plant basis

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1 isn't it?

2 THE WITNESS: Yes.

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ax1 1 CHAIRMAN RIGLER: Even a one-year buy-sell adjust-
2 ment wouldn't solve that problem.

3 THE WITNESS: Let me continue more.

4 Each year you do this, and we will end up
5 buying power each year until such time as we take a bigger
6 percent of the next unit. That would happen whenever we
7 commit the next unit, we would try with the ownership to bring
8 the forecast buy-sells to zero.

9 We would have to own more of the next committed
10 unit, whatever kind of type it was.

11 In the interim, until such time as the unit came
12 in, we would be buying power. When the unit came on,
13 we would be back even again.

14 CHAIRMAN RIGLER: Then in effect, aren't all
15 of the CAPCO members giving up some percentage of their
16 ownership to accommodate the sale of ownership to
17 Cleveland because the shares in the subsequent unit then
18 have to be readjusted to give a greater share to Cleveland,
19 and that must perforce come out of the shares of the
20 other members?

21 THE WITNESS: But practically speaking, that
22 future unit would be either larger in size than it otherwise
23 would have, or earlier in time. So that the other companies,
24 while they may have a different percent, would likely have
25 the same megawatts on the average as they would have had,

1 and we would have the same megawatts as we would have had,
2 and Muni's extra megawatts in effect will make more total
3 capacity in the pool.

4 It is hard to illustrate it with only a 1 percent
5 size system. But basically when we determine how much
6 capacity is required, it would either take a bigger unit,
7 or the same unit earlier in time, either of which, of
8 course, increases the average capacity over the year when it
9 goes in service.

10 Can I clarify that, or is that all right?

11 CHAIRMAN RIGLER: If you have more clarification,
12 go ahead.

13 THE WITNESS: I don't know whether I can say it
14 any differently.

15 The effect -- let me illustrate with a big
16 example.

17 If we sold a couple hundred megawatts out of
18 Davis-Besse -- we own 400 megawatts of Davis-Besse -- if
19 we sold that 400 megawatts when we make the one-system
20 study for determining the next unit, then either that unit
21 would have to be bigger, in which case we get the extra
22 piece, and the others get the same they would have, or the
23 unit has to be earlier, which has in effect the same effect.

24 That is, every unit has to be earlier in
25 the sequence. The other companies get the same capacity, and

1 we end up getting extra to replace the megawatts we sold.

2 CHAIRMAN RIGLER: When this new unit comes along
3 bigger and earlier, if Cleveland asks for a share of it,
4 you repeat the process all over again?

5 THE WITNESS: If Cleveland asked for it when we
6 really would like them to, which is before we make our
7 commitment, that is the best time to tell us they need
8 capacity, is when we are planning.

9 If they asked for it when we were planning, we
10 would take it into account in the planning. We would
11 provide the capacity that the group plus Muni needed.
12 Then it would be clear you were providing the extra capacity
13 to meet their request.

14 If they wait until several years later, then you
15 have to take it out of somewhere in the interim.

16 CHAIRMAN RIGLER: It seems to me that your
17 present proposal cuts into somewhat the burden you
18 described in terms of letting them be a full member, and
19 incorporating them under your various operating and planning
20 committees.

21 Either way there will be a substantial burden
22 associated with factoring them into new units that come on
23 line.

24 THE WITNESS: Yes, that is true. The burden or
25 imposition on us, and the benefit for them of being able
to designate this later in the game, is a significant one.

1 But I think the point that I was trying to make
2 was that we have offered them this opportunity. Partly, of
3 course, because of their size. We know they are not going
4 to ask for 400 megawatts. But we feel we have offered
5 them without membership in CAPCO, in the fact, more
6 than they would get if they were members.

7 BY MR. BUCHMANN:

8 Q That was the question we originally started with.
9 I asked you whether by becoming a member of CAPCO,
10 Cleveland Muni could get something more than what you had
11 offered them?

12 A Yes, they would.

13 Q What would they get?

14 A They would get the right to pick and choose on
15 the units.

16 Q You didn't hear my question.

17 A Would you read it back?

18 Q I will rephrase it.

19 I said by joining CAPCO and becoming a formal
20 member, would they get anything more than what you offered
21 them?

22 A By joining CAPCO, they would get less than what we
23 offered them.

24 Q Explain that.

25 A They would be obligated to participate in the one-

1 system plans. They would be obligated to take a share of
2 every unit.

3 They would be obligated to joint ownership in
4 each unit, to pay the bills monthly as they come in.

5 They would be obligated to present us all of
6 their data on load and capacity and grind that into the
7 one-system study.

8 Q Would they have transmission obligations?

9 A They would be obligated to share in the cost
10 of all of the CAPCO transmission, some of which is down in
11 Pennsylvania, of course, and various other places.

12 They would pay fixed charges on the total CAPCO
13 transmission in proportion to their system load.

14 Q What about fuel?

15 A They would be obligated to have joint ownership
16 in the fuel pile in the coal-fired plant, or in the investment
17 in nuclear fuel in a nuclear plant, to pay a proportion of
18 the cost of the fuel as it is delivered to the plant, et
19 cetera. Just like any of the other owners.

20 They would be obligated to pay a portion of the
21 operating costs other than fuel, that is labor and other
22 costs, repair costs on the units. That would go into the
23 cost formula.

24 Q Earlier you said that one of the obligations
25 of CAPCO was to finalize decisions quickly or something of

1 that sort. Do you remember that?

2 A Yes.

3 Q Why is it desirable to have quick decisions?

4 MR. LESSY: From the point of view of CEI?

5 MR. BUCHMANN: Yes, of course.

6 CHAIRMAN RIGLER: Mr. Lessy, I think he can
7 answer both ways. As I listen to his background informa-
8 tion and his participation in all of these CAPCO meetings, it
9 seems to me he has broad familiarity with CAPCO as a whole.

10 I don't know necessarily that it is helpful to
11 restrict his answers to CEI.

12 MR. LESSY: Including conclusions or opinion
13 testimony which is what the testimony was. Why is it
14 helpful? It calls for conclusion. Is it from the point of
15 view of all CAPCO? That broad of an answer?

16 CHAIRMAN RIGLER: I didn't hear whether you
17 limited your question in response to Mr. Lessy's comments.

18 MR. BUCHMANN: I will limit it. I don't under-
19 stand this business, but I will limit it.

20 BY MR. BUCHMANN:

21 Q Why from the point of view of CEI is it good
22 to have prompt decisions in this process?

23 A Typically it is good to have prompt decisions.
24 Typically the process of arriving at these is a long
25 and complicated, technical analysis. It includes analysis

1 of load forecasts and capacity forecasts and other things.

2 When you finally get to the answers, usually you
3 are close to the lead time on units. It takes about 10-year
4 lead time to build a nuclear unit, maybe eight years to build
5 a coal-fired unit.

6 If the study showed we needed a unit in 1986, we
7 would really need to decide this year, or we would miss the
8 boat.

9 And so we need to be able to get decisions so that
10 we can act and operate.

11 Now you can say why don't you plan 15 years ahead
12 so that you have plenty of time. The answer to that is that
13 it is difficult to forecast the load 10 years ahead. The
14 farther ahead you lead, the less sure you are. So we say
15 this is what we want to do in the next year or year after
16 that, but we want to make the commitment at the
17 latest possible date.

18 You delay the decision to the last minute, and when
19 the last minute comes, you have to make the decision.

20 Q You said any of the members can veto a decision?

21 A Yes.

22 Q What would happen if one of the members simply
23 didn't make up its mind?

24 A I think practically it would have the same impact
25 as a veto. The parties are going to agree to build a new

1 unit. You decide how it is to be allocated.

2 Four parties agree, and the fifth one says --
3 well, doesn't take action, was your question. Then you
4 haven't got the whole unit allocated, and you really haven't
5 got a conclusion.

6 You can't move ahead on that basis. You have to
7 have a decision.

8 Q In the situation you were describing, that could
9 result in a shortage of capacity?

10 A That's right.

11 Q Impacting on the entire system?

12 A Right.

13 Q Do you have any reason to believe, based on your
14 experience with the Illuminating Company and the City of
15 Cleveland, that the City of Cleveland would have more
16 difficulty in reaching a conclusion on matters of this
17 kind than would the other members of CAPCO?

18 A Yes, indeed. Based both on my observation of
19 their operation and perhaps, more importantly, what I learned
20 about their operations at the Federal Power Commission hearings.
21 I participated in the Federal Power Commission hearings
22 on the proposed interconnection which has been implemented
23 now. The Muni testimony there was very explicit on the
24 fact that the -- whatever was decided or agreed upon with
25 respect to that interconnection line was subject to approval

1 by the City Council.

2 It could be financed only with allocations
3 approved by the City Council.

4 It had also to be approved by the officials
5 in the administration before it went to the City Council.

6 Muni, the Cleveland Muni official testifying at
7 the Federal Power Commission, made it clear that they
8 couldn't negotiate an arrangement with CEI and put it
9 into effect without going these other hurdles.

10 My observation has been that it takes a long
11 time to get concurrence of the administration and the council
12 in Cleveland.

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1 Q Now, Mr. Williams, you described previously the
2 request by the City of Cleveland for membership in CAPCO.

3 Would you tell me -- that request was made by
4 letter, wasn't it?

5 A Yes.

6 Q What did CEI do when it got the letter?

7 A CEI contacted the other CAPCO parties because
8 one of the things being requested was membership in CAPCO.
9 That wasn't a subject we could determine unilaterally. We
10 sent this to the other CAPCO companies for their information.

11 As a matter of fact, as I recall, the letter
12 itself was addressed to each of the CAPCO companies or if
13 not addressed to them, they were sent carbon copies of it.

14 I don't recall the mechanism. Each of the CAPCO
15 companies had it. We contacted them and concluded, now,
16 what do we do? How do we deal with this situation?

17 The generally --

18 Q Was this done by telephone or by letter? Did you
19 have a meeting or what?

20 A I'm not quite sure. I believe this was in
21 August of '73, if I'm right. And there was a meeting in
22 December of '73, but there were some discussion ahead of that.
23 I think they were informal. They were not at any executive
24 committee meeting I attended. I believe they were informal.

25 The essence of it was somebody ought to go to

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1 Cleveland Muny and talk to them about it, because we
2 are not sure we understand everything that is in the letter.
3 The logical somebody was CBI, and we did go back and
4 talk to them about it. To try to understand what they were
5 proposing and to try to help them understand what membership
6 in CAPCO meant, to reconcile their request for membership
7 in CAPCO with their request for certain specific units.

8 Q Did you say there was a meeting in December?

9 A Yes.

10 Q December 7?

11 A December 7, '73, was a meeting of the CAPCO
12 Executive Committee, at which there was discussion of what
13 do we do with the current situation? That is, then
14 current. The basic conclusion at that meeting, as I
15 recall, was that each company would go back and think for
16 itself as to what action it thought ought to be taken.

17 And well, of course, at that meeting, Mr. Rudolph
18 updated everybody on the discussions that CBI had had with
19 Cleveland Muny and then each company went back to decide
20 for itself what to do.

21 They were going to inform Mr. Rudolph as to
22 what their conclusions were.

23 Q Did they?

24 A Yes, and the general -- different people did
25 different things.

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Duquesne wrote a letter directly to Cleveland Muny. Toledo and Ohio Edison contacted Mr. Rudolph.

The essence and conclusion was that it seemed more logical to CEI, and the others seemed to indicate in one form or another that it was more logical to them, rather than joining CAPCO, Cleveland Muny would be better off for themselves, and we would all be better off, if they would pursue some of the offers I have already indicated, in terms of some of the things we had offered to them.

Firm power, participation in the nuclear units out of CEI share.

Q By the way, just to -- are you aware of any request from the City of Painesville to become a member of CAPCO?

A Not from the City of Painesville, no.

Q The things we have talked about, generally, with respect to the City of Cleveland's potential membership in CAPCO would apply equally or more so to the City of Painesville; correct?

MR. LESSY: I object. The witness says he is not familiar with the request from the City of Painesville. How can he say consideration would apply to something he has not received?

MR. BUCHMANN: Since we are continuing to get letters from Painesville prompted by the Staff and by you,

1 Mr. Lessy, I don't know what the next thing will be that we
2 will be opening in the mail.

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3 MR. LESSY: I don't know what Mr. Buchmann
4 is referring to, and the insinuation that Staff counsel
5 was prompting any action, I object to, and if that is the
6 essence, I would like to see on my own on the record or
7 some other time, proof of the fact that Staff is prompting
8 letters on behalf of the City of Paynesville. Since this
9 witness testified he doesn't know anything about it, I can't
10 see how it is a concern of CEI, anyway, at this point.

11 The Witness' answer to Mr. Buchmann's last
12 question should be read back.

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1 MR. BUCHMANN: I ask leave of the Commission
2 on behalf of the Illuminating Company to reopen the
3 discovery for limited purposes of ascertaining communica-
4 tions between the Staff and City of Paynesville within
5 the last couple of months.

6 MR. CHARNO: May I inquire at this time
7 whether it is Mr. Buchmann's position he does have some
8 factual basis for his statement, or whether that
9 allegation which was dropped in the record is based upon
10 some suspicion that he's going to try to substantiate?

11 It is a serious allegation to make.

12 MR. BUCHMANN: I wouldn't have made it unless I
13 had a suspicion that I was going to make an effort to
14 substantiate, Mr. Charno.

15 CHAIRMAN RIGLER: We will consider the request
16 to reopen discovery in a limited area during our break.

17 MR. BUCHMANN: Yes, sir.

18 CHAIRMAN RIGLER: Is there opposition by the
19 Staff?

20 MR. LESSY: If counsel would restate what his
21 desire is. . .

22 CHAIRMAN RIGLER: I think maybe the better way
23 to handle it would be to have the request set forth in
24 writing so that we understand exactly what the boundaries
25 are. Obviously any such request would be extraordinary,

1 and would be on a good-cause-shown basis.

2 The request should indicate precise boundaries, both
3 in terms of time and of the scope of the information being
4 sought.

5 MR. BUCKMANN: It is obviously something that
6 doesn't have to be ruled on right now.

7 CHAIRMAN RIGLER: Now with respect to the pend-
8 ing objection, which is not unlike others we have heard
9 this morning, Rule 701 of the Federal Rules of Evidence
10 does provide for opinion testimony by lay witnesses in
11 circumstances where the answer would be rationally based
12 on the perception of the witness and helpful to a clear
13 understanding of his testimony.

14 I think that provides ample basis for him to
15 answer.

16 MR. LESSY: That was not my objection in this
17 instance. The witness testified he had no factual basis
18 for answering the question. The question was, would the
19 same considerations apply to Painesville. His answer was, he
20 wasn't familiar with the Painesville situation.

21 CHAIRMAN RIGLER: Let us ask him that.

22 Did you say you were not familiar with a request
23 from Painesville, or familiar with the Painesville situa-
24 tion?

25 THE WITNESS: I'm very familiar with the Painesville

1 situation and have been involved in it for some time.

2 I thought that the question was, are you familiar
3 with a request from the City of Painesville for membership
4 in CAPCO. I said no, I'm not familiar with a request
5 from the City of Painesville for admission into CAPCO.

6 CHAIRMAN RIGLER: Now you may answer Mr.
7 Buchmann's pending question.

8 The objection is overruled.

9 BY MR. BUCHMANN:

10 Q Do you remember what it was?

11 A Would you state it again?

12 Q If Painesville should request membership in
13 CAPCO, would the advantages and disadvantages of municipal
14 membership in the organization which you have described
15 relative to the City of Cleveland be equally or even more
16 applicable to Painesville?

17 A They would be even more applicable to Painesville
18 because Painesville is even smaller. The smaller you are,
19 the less benefit or the more adverse it would be to be
20 tied in with a one-system concept with a pool whose financial
21 fixed charge rates, et cetera, were so much different.

22 The better off you would be to be able to decide
23 what you wanted to do individually.

24 CHAIRMAN RIGLER: We will take 10 minutes.

25 (Recess.)

1 CHAIRMAN RIGLER: Mr. Buchmann, if you file a
2 motion for additional discovery, the Board is not encouraging
3 or discouraging you from doing so, we would expect an
4 indication of relevance with respect to this particular
5 hearing.

6 MR. BUCHMANN: I'm sure of that, sir, and if we do
7 so, I will try to satisfy that.

8 I assume you don't want any indication from me
9 now?

10 CHAIRMAN RIGLER: No.

11 MR. BUCHMANN: Should I resume?

12 CHAIRMAN RIGLER: Yes.

13 BY MR. BUCHMANN:

14 Q Mr. Williams, with reference to the arrangement
15 of the CAPCO pool, is it your belief that the memorandum
16 of understanding covers all possible situations which might
17 occur in the future?

18 A Not at all.

19 Q What happens if something unexpected arises?

20 A Well, of course, already a number of unexpected
21 things have arisen. And what is needed obviously is the
22 flexibility of all of the members of CAPCO to be willing
23 to adapt to the changing circumstances.

24 We have had the famous White Paper, for example,
25 in which the whole buy-sell calculation I was describing

1 was not in the original memorandum of understanding, but
2 was added later.

3 We have had adjustment in capacity requirement.

4 We have had changes in the sequence in which units
5 were brought on the line.

6 We had CAPCO recognizing that it needed extra short
7 lead time capacity. That is capacity which we put in, in a
8 hurry, because of delays of the units.

9 We committed combustion turbines.

10 We have done a number of things since the
11 original memorandum of understanding which require flexibility,
12 and which certainly, if the pool is going to work, all of
13 the parties need to be willing to be flexible to change
14 the memorandum of understanding to adopt new concepts in
15 the interest of making the whole thing go.

16 This is another reason why we need fast decisions
17 also.

18 We talked about fast decisions before.

19 We need flexibility to change decisions or
20 provide for unforeseen circumstances.

21 Q What sort of things would cause an adjustment
22 in capacity requirement?

23 A It might be either a change in the load forecast
24 or delays in units coming on the line.

25 For example, either of which would, of course,

1 make the load to capacity ratio that you had expected it to
2 be. You have to be able to adjust to the changed
3 circumstances.

4 Q What about changes in capital costs?

5 A Changes in capital costs is another area.

6 As a matter of fact, we have deferred units on two occasions,
7 almost three.

8 At one time we concluded we were going to delay
9 some units and cancel one. A couple of months later we
10 decided we didn't want to cancel it, because we decided when
11 we went to cancel, that the cancellation costs were so great
12 that we deferred it instead of cancelled it.

13 We deferred other things because of the
14 ability to raise money. That is the CAPCO companies were
15 finding it very difficult to finance the program, and
16 concluded, as a matter of fact, publicly announced that
17 because of the high capital costs and the difficulty of
18 financing, we were deferring units, even though it might
19 produce a power shortage.

20 We were changing our basic one-system planning
21 concept of how much capacity was needed because we couldn't
22 finance the program.

23 That required the flexibility to say we are not
24 going to stay with our standard. Here is a new unforeseen
25 circumstance, and we adapted to it two or three times.

1 Q What do you mean by cancellation costs?

2 A The specific unit we were talking about was
3 the Mansfield 3 Unit. We had a number of contracts for
4 boiler, turbine, and other equipment. When we went back
5 to the manufacturer and said, "We would like to cancel this
6 order," he said, in effect, "We have spent a lot of money
7 on it. We have done a lot of engineering work, and done
8 parts," et cetera. "We are willing to cancel the contract,
9 but you have to pay us for the costs we have already
10 incurred."

11 Naturally when you have a contract, both sides
12 must agree to the cancellation. If the manufacturer was
13 to agree to the cancellation, he wanted us to agree to pay
14 the costs we had already incurred.

15 Obviously that was a reasonable request, but that is
16 what I meant by cancellation charge.

17 Q Referring to flexibility, would that
18 flexibility permit restructuring of CAPCO to permit the
19 inclusion of a publicly-owned electric utility?

20 A Yes, if all of the parties agreed that was the
21 thing to do. If you are going to be flexible to adapt to
22 changing circumstances, you have to recognize whatever changing
23 circumstances there are.

24 Basically, of course, the change has to be in
25 everybody's best interests. If a proposed change is

1 favorable for some party, but unfavorable for us,
2 obviously those that will be unfavorably affected will say,
3 "We are not going to do that."

4 You have to find an approach in everybody's
5 best interests. That is more difficult. The more people
6 that you are trying to satisfy. . .

7 Q Are you familiar with a request by the Borough
8 of Pitcairn to join CAPCO?

9 A Yes.

10 Q How did that come to your attention?

11 A That came in the form of a letter from Pitcairn
12 to the company.

13 Again, I believe they sent it simultaneously
14 to all of the companies, in which they asked for membership
15 in CAPCO.

16 As I recall, their letter was short, as contrasted
17 with Cleveland, as I have already described, ran several
18 pages.

19 Q What did you do about the letter?

20 A We responded that we didn't think really it
21 was a feasible kind of thing. We weren't sure they understood
22 what CAPCO was or what was involved in membership in CAPCO.
23 But we suggested if they wanted to sit down and talk about
24 it, we would be glad to discuss it with them.

25 Q Are you aware that Pitcairn has three megawatts

1 of capacity?

2 A Yes.

3 Q Would the addition of three megawatts of
4 capacity to the CAPCO system bring any benefits to it that
5 you can see?

6 A No. Three megawatts is insignificant in CAPCO.

7 Q By the way, when you compute the capacity
8 participation of various companies in new units, carried out
9 to the last tenth of a kilowatt, or how do you do it?

10 A At the beginning we round it to the nearest five
11 megawatts. With our trim calculation now we round it to the
12 nearest one megawatt.

13 Q What is a trim calculation?

14 A Before we talked about the buy-sell. What I
15 was explaining, with this calculation, we make by July of
16 each year for the following calendar year, where we calculate
17 buys and sells, we sometimes call that a trim calculation.

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1 Q Did Pitcairn ever get back to you?

2 A They got back to us in effect, as I recall,
3 and indicated they were discussing this with Duguesne
4 Light. Obviously, they didn't need to discuss it with each
5 of us, if the purpose was to find out what CAPCO was all about,
6 et cetera.

7 Q CEI has a four megawatt unit on its system; doesn't
8 it?

9 A Yes.

10 Q What is it used for?

11 A It is used for dead start capability at our
12 Lakeshore Plant. By dead start capability, I mean if the
13 whole system were shut down completely, how do you get
14 yourself started? This four megawatt is a diesel unit
15 which is used to start up the rest of the Lakeshore plant
16 one unit at a time.

17 Q Wouldn't a three megawatt unit be useful for that
18 purpose?

19 A Three megawatts wouldn't be big enough even for
20 the Lakeshore Plant. The reason we put in a four megawatt
21 plant is because that is what size we needed.

22 Q Mr Williams, one other things, in response to some
23 questions from the Board, we were talking about
24 entering into transactions with other utilities. Is the
25 Illuminating Company free under the CAPCO agreement to enter
into transactions with utilities other than CAPCO members?

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A Yes.

Q Does it do so?

A Yes.

Q Some of these other utilities, let's take Ohio Power, for example. You have transactions with Ohio Power?

A Yes, we buy power and so forth from them.

Q Is Ohio Power, to your knowledge, interconnected with other members of the CAPCO group?

A Yes, it is.

MR. BUCHMANN: Could I have just a moment?

I have nothing further.

CHAIRMAN RIGLER: I have one or two.

Would it be helpful for me to ask them at this time?

MR. BUCHMANN: Yes, sir.

Whenever you want to do it, as far as I'm concerned.

CHAIRMAN RIGLER: It relates to your line of questioning on advantages, other than CAPCO membership which CEI has offered. You indicated that CEI was willing to wheel power for the City, provided that CEI had access to the source of that power on the same terms as the City.

THE WITNESS: That is right.

Q CHAIRMAN RIGLER: How about wheeling out for the City?

THE WITNESS: I don't think that question has been

1 raised. I don't believe the question has been
2 raised, so I really couldn't tell you right off the cuff
3 what our position would be, if it were raised.

4 You're talking about wheeling out, if the City
5 wanted to sell to someone else?

6 CHAIRMAN RIGLER: Right, which, in turn, might
7 enhance its prospects in getting a partner to consider
8 wheeling in the first place, if they had some sort of
9 coordination agreement to have it wheeled out.

10 That has not not been considered?

11 THE WITNESS: No, it hasn't been.

12 CHAIRMAN RIGLER: How about wheeling between the
13 City of Cleveland and Painesville?

14 THE WITNESS: I'm not sure whether I should offer
15 you what I think the position would be or not. That doesn't
16 quite seem like the best thing for me to do. If it was
17 recognized that it was an opinion of what I think the
18 position would be without committing the company to it that
19 it is our position, it might be useful to help you understand.
20 I think our position on wheeling out would be the same
21 as our position on wheeling in. That is to say, if the
22 power were available to us on the same terms and conditions
23 which said if we didn't want it or need it, I would think we
24 would be willing to wheel it out to somebody else who
25 did want it or need it.

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1 I don't know because that hasn't been requested
2 and to my knowledge it hasn't been discussed and, naturally,
3 when you are formulating your position on a new request
4 for a different kind of service, you do more study and
5 analysis than I can do off-the-cub sitting here and
6 testifying.

7 But I'm sort of thinking out loud.

8 CHAIRMAN RIGLER: As you thought out loud I
9 detected a right of first refusal on wheeled out power;
10 is that correct?

11 THE WITNESS: Yes, what I was thinking about,
12 what I was thinking about was the general industry
13 practice. I spoke before about the general industry practice
14 and what I think we would do is something close to the
15 general industry practice.

16 I'm sure we would follow the general industry
17 practice. We would be willing to buy from --

18 CHAIRMAN RIGLER: Can the general industry
19 practice always be identified? Is there such an animal
20 that can be captured and put in a cage called "general
21 industry practice"?

22 THE WITNESS: Not precisely. Every contract
23 is different. But most companies would be willing --
24 with an interconnection arrangement would be willing to
25 buy from Cleveland Muny and sell to Painesville simultaneously.

bw5 1 Most would insist that if they were short,
2 they would -- if Cleveland Muny was long and Painesville
3 was short, they would buy from Cleveland Muny without the
4 obligation to sell to Painesville. These are two separate
5 transactions.

6 That is, I guess, the same as, or close to,
7 what you were referring to when you talked about the right
8 of first refusal.

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CHAIRMAN RIGLER: If it is cheap power coming out of Cleveland that they are making available to Painesville or some other customer down the line and that is cheaper than the power CEI is generating on an incremental cost basis, there would be a tendency for CEI to use that power itself, rather than go into a wheeling transaction?

THE WITNESS: Yes.

CHAIRMAN RIGLER: That could affect the ability of the City to get into a viable arrangement with a power system down the line, if the other party had to always worry about that cheap power being intercepted?

THE WITNESS: Yes, that is true.

MR. BUCHMANN: I have nothing further.

CHAIRMAN RIGLER: Let me ask one more question.

Suppose Cleveland took you up on your proposal that they purchase small percentages in a number of units of their selection, and it developed that they had excess power available; would CEI be willing to assist in the transmission of that power from, say, Davis-Besse or Perry to some other customer specified by the City?

THE WITNESS: I'm sure that we would on what I call the conventional arrangement. Maybe I can amplify the conventional arrangement a little bit with illustrations of what we now do with people.

1 If PJM, who is not interconnected directly with
2 AEP, wants to buy low-cost power that AEP has available
3 on economy interchange basis, a typical interchange
4 transaction between CEI and PJM, or Ohio Power, is on a
5 split-saving basis.

6 If AEP can generate cheaper than we can, we
7 buy it from them, and pay half the difference in cost.

8 If we can sell to PJM at a lower cost than their
9 generating cost, we will sell it to them on a split-saving
10 basis.

11 We would buy from Ohio Power and sell to PJM on a
12 split-saving basis where the difference is between our cost
13 and PJM's.

14 It is two separate transactions. We would do
15 the same thing, I'm sure, with respect to excess power which
16 Muni might have available in Davis-Besse or Perry. Whether
17 we would go beyond that is, as I said before -- we haven't
18 been asked or haven't studied or analyzed it.

19 CHAIRMAN RIGLER: Think about it. Would you be
20 willing to do that?

21 Suppose there is a use for that power within
22 the CAPCO system.

23 THE WITNESS: First of all, if we don't need the
24 power, and somebody else does --

25 CHAIRMAN RIGLER: I'm assuming CAPCO needs it, and

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1 Cleveland has excess capacity from its share in Davis-Besse.

2 THE WITNESS: If CAPCO needs the power and
3 Cleveland has excess available, and it is the best power that
4 CAPCO can buy, CAPCO would be willing to buy the power.

5 If CAPCO can buy cheaper power from somebody else,
6 they would presumably do that.

7 CHAIRMAN RIGLER: This is the cheapest power
8 available to CAPCO, which has a need for it. The City
9 looks around and finds another customer also needs that
10 power, and on a split-to-savings basis, the return to
11 Cleveland would be higher if sold to the other customer than if
12 sold to CAPCO.

13 Under those circumstances, would CAPCO be
14 willing to assist in the arrangement?

15 THE WITNESS: We don't do that now with anybody
16 who has a contract. I don't know whether we would be willing
17 to do it with Cleveland or not.

18 CROSS-EXAMINATION

19 BY MR. REYNOLDS:

20 Q Mr. Williams, let me just follow up the Chairman's
21 line of questioning there for a minute, and ask you why is
22 it that you don't now have the kind of arrangement that
23 was suggested with everybody?

24 A I guess the simplest answer is that in all our
25 interconnection negotiations, neither we nor the other people

1 have proposed it. I don't believe that it has been proposed,
2 analyzed, and put down. I think -- to me, it is a new
3 idea in how to operate an interconnection.

4 I don't know of situations where it is being done
5 that way.

6 Q In the situation posited, would that not merely
7 make available the savings to the two parties as opposed to
8 spreading the savings to everybody, as is the case, the way
9 you now do it?

10 MR. LESSY: I'm not clear on that question.

11 CHAIRMAN RIGLER: I'm not, either. What
12 do you mean by spreading the savings to everybody?

13 BY MR. REYNOLDS:

14 Q Who gets the benefit of your economy inter-
15 change transactions now under the way you do it?

16 A If I follow the example -- it is not hypothetical,
17 we have actually done it -- where we buy from AEP and sell
18 to PJM economy power. AEP, CEI and PJM all get benefits
19 by that transaction.

20 Q Under the hypothetical that was posed, would the
21 savings of the economy transaction be spread among all of
22 the participants or not?

23 A As I understood what the Chairman was describing,
24 it would be split between the two end parties with our
25 company being, I presume, paid some sort of transmission

1 charge or something, but not sharing in the benefits of
2 the economical generation.

3 That is the way I understood the questions.

4 CHAIRMAN RIGLER: That was correct.

5 MR. REYNOLDS: I don't have anything else.

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1 MR. LESSY: The City will go first in cross-
2 examining this witness.

3 BY MR. HJELMFELT:

4 Q Mr. Williams, I'm David Hjelmfelt, and I'm
5 asking questions on behalf of the City of Cleveland.

6 Could you tell me who is responsible for the
7 design of the Perry plant?

8 A Our company is.

9 Q Was that designed by CEI engineers?

10 A It is being designed by CEI engineers with
11 considerable help of outside consulting engineers, namely,
12 Gilbert and Associates from Reading, Pennsylvania.

13 Q How does CEI protect its system against
14 cascading outages, or does it?

15 A It certainly does. It protects its system through
16 overall system design, providing adequate generation,
17 adequate transmission, proper protective relation, high
18 speed communication, automatic communication between various
19 points on the system where trouble may develop, et cetera.

20 Q Prior to the formation of CAPCO, was CEI inter-
21 connected with Toledo Edison?

22 A No.

23 Q And was it interconnected with Duquesne Light?

24 A No.

25 Q Were those companies, companies with which CEI

bw2 1 did business?

2 A Without an interconnection you can't do business with
3 them or without an interconnection contract.

4 Q When was it that consideration was given to
5 to including Cincinnati Gas and Electric and Dayton Power
6 and Light in CAPCO?

7 A To be clear technically, CAPCO -- the consideration
8 was before CAPCO was formed in the concept I have been
9 describing it. The consideration of some sort of joint
10 planning and coordination among all of these companies,
11 was just shortly before the memorandum of understanding was
12 finalized. By shortly before, I mean, maybe, a couple of
13 years or so.

14 Maybe 1965 or '66.

15 Q Were discussions leading up to CAPCO begun
16 as early as 1965?

17 A I don't believe the discussions explicit to the
18 memorandum of understanding started that soon. Certainly,
19 discussions of how can we more effectively coordinate our
20 operations having been going on for a long time.

21 Q Was it ever considered that APS might be a
22 member of CAPCO?

23 A I don't think CEI gave much thought to that,
24 but I would suspect Duquesne Light probably did.

25 I don't recall any meetings at which APS was
present in that sense. So was consideration given to it,

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1 I guess my answer is probably, but the Illuminating
2 Company didn't give any significant consideration to it.

3 Q Did CEI have an interest in the Michigan Pool
4 in 1967?

5 A No.

6 Q You testified that each company had different
7 history and facilities and objectives when it came into
8 the pool. Did that require a transaction into the pool?

9 A Yes.

10 Q What was that transaction?

11 A The main heart of it was the recognition of this
12 one-system concept. That is the idea instead of planning
13 for what that one system needed, we planned for what the
14 whole system needed.

15 The input, of course, was the then existing
16 situation.

17 So you put into the pool all of the
18 generation that was then available, obviously. Then you
19 said, all right, with a system that starts this way, what is
20 the logical thing to do next? And that was a considerable
21 change, because everybody had been doing different things
22 before, and what we ended up doing, namely, committing
23 four large units, was much different than anybody had done
24 before.

25 That was the primary nature of the change, I

bw4 1 guess.

2 Q Well, with the first four units located on the
3 basis of a one-system concept?

4 A I would say, generally, yes.

5 But the first -- at the beginning we were not
6 as well integrated in our planning as we are now.

7 So we looked in general. We also had the situation
8 where each company had something it wanted to do.

9 We sort of put together on a combination engineering
10 plus management-judgment basis a mixture of what a one-system
11 study would say and what the individual companies wanted to
12 do. And we ended up with negotiated compromise, is about
13 the best way to describe it.

14 Q Was the same true with respect to the ownership
15 of the first unit?

16 A Yes, probably even more so.

17 Because in the commitment of the ownership of the
18 first four units, we did not follow the practice I described
19 of each company owning a piece of each unit. That concept
20 was also added later in CAPCO.

21 We instead, in effect, negotiated ownerships.

22 Toledo, for example, indicated in the
23 meetings that they particularly wanted to own as much as possible
24 of Davis-Besse which is the fourth unit and that they would
25 like to buy power out of the first three units, until such

1 time as Davis-Besse came on line. And that was agreed
2 to in the original memo.

3 Q Did Duquesne Light take an ownership interest in each
4 of the first four units?

5 A No. Duquesne Light owned part of each of the
6 first three units, but none of Davis-Besse.

7 Q Is it your testimony that the equal percent
8 reserve basis of allocating reserves is no longer followed
9 in the industry?

10 A No. My testimony was that the CAPCO companies
11 agree that it is not the best way to do it.

12 Q You stated that when Duquesne Light came into the
13 pool it had the largest unit. What was the size of that
14 unit?

15 A 540 megawatts.

ari 1 Q What was the size of the largest CEI unit at
2 that time?

3 A Our largest -- the largest unit we owned was
4 625, but as I mentioned, we had a special arrangement
5 with Ohio Edison where they agreed they would send us
6 300 megawatts any time that unit was off. So we agreed for
7 our planning purposes that it was a 325 megawatt unit.

8 Q At the time that you were negotiating the CAPCO
9 agreement, did CEI expect that it would be soon receiving a
10 request for an interconnection from MELP?

11 A No, I didn't believe we did expect it. I
12 don't think we expected a request for an interconnection
13 from MELP.

14 Q If the Municipal Electric System of Cleveland
15 was a member of CAPCO and running its 85 megawatt unit,
16 and experienced an outage with that unit, that unit went
17 down, how much of that would CEI pick up from its own
18 generation?

19 A It would depend on the circumstances at the
20 moment in terms of how much each company had in reserve,
21 and so forth. If we assume everybody had a balance or
22 normal situation, instantaneously we would pick up all of it,
23 and then gradually the other companies would pick up more
24 of it, and we would come back to a load that was proportional
25 to the relative sizes of the companies, and their relative

1 transmission distances to the other load.

2 We would probably pick up roughly a third. I
3 would guess, after the first few seconds. We would pick
4 up all of it initially, but after things settled down, it
5 would be about a third of it.

6 Q What operating reserves does CEI carry?

7 A Operating reserve, we follow the ECAR rules
8 which I indicated come out to about 6 or 7 percent. They
9 are figured by a more complicated formula than that, but the
10 average comes out to about 7 percent.

11 Q You carry about 3 percent spinning reserve under
12 that formula?

13 A Yes.

14 Q What would that be at the time of your system
15 peak?

16 A Our system peak is about 3000 megawatts. So the
17 7 percent would be 210. 3 percent spinning would be 90.

18 Q And do you know what the spinning reserve on
19 the CAPCO system would be?

20 A Something in the order of 7-800 megawatts,
21 probably. I'm sorry. You said spinning reserve?

22 Q Yes.

23 A Maybe 300 megawatts of spinning reserve. 700 or
24 800 of operating reserve.

25 Q When the City of Cleveland requested membership

1 in CAPCO, when did CEI make its decision on what its
2 response would be?

3 A The initial response of saying we want to sit
4 down and talk with the City, I think, was made within a few
5 days and communicated to the City. I think the response in
6 terms of a specific proposal, the various things I outlined
7 we offered, I believe was made about -- seems it was February
8 of the following year. From August to February, six
9 months or so, I think.

10 There had been some discussions in the interim
11 and then we gave this written proposal in two or three
12 letters in February, I believe.

13 Q Now was there a meeting with the City in
14 December of 1973 in which CEI responded to the City's
15 proposal?

16 A I don't know. I don't believe I attended one
17 with the City.

18 Q At the time of the December 7, 1973 meeting of
19 CAPCO executives, to discuss the proposal, had CEI
20 determined what its response to the City's request would be?

21 A No, I don't believe so.

22 Q Do you know how long after that meeting CEI
23 determined what its response would be?

24 A I believe it was the following February, '74, that
25 we sent two different letters that gave a specific proposal.

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1 Q And those letters would have been sent shortly
2 after you determined, or CEI determined what its response
3 would be?

4 A I would think so.

5 Q Now after MELP sent out its request, its
6 proposal on August 3, you testified that there were
7 discussions of some sort with the other CAPCO members?

8 A Yes.

9 Q Did you participate in those discussions?

10 A No.

11 Q How did you become aware of what transpired
12 during those discussions?

13 A Through internal company memoranda that referred
14 to them.

15 Q Who were those memoranda from?

16 A I'm not sure.

17 Q Were you an addressee on those memoranda?

18 A Yes, either direct addressee or carbon copy.
19 I wouldn't recall which.

20 Q Was there more than one such memoranda?

21 A I think so.

22 Q To the best of your recollection, what did those
23 memoranda say?

24 A I think the essence of it was that the logical
25 thing would be for CEI to talk to Cleveland Muni and

1 explore this proposal.

2 As I said, it was several pages and how to go about
3 understanding it, you have to talk to people. The essence
4 of the conclusion was we ought to sit down and talk together.

5 Q Did the memo that you saw set forth what the
6 other CAPCO members had stated?

7 A I believe that in general they concurred in the
8 idea that it would be well for CEI to talk about Muni.

9 Q Was CEI then to report back to the other CAPCO
10 members?

11 A Certainly in general we keep the other CAPCO
12 members informed on whatever we were doing with inter-
13 connected operations, et cetera, and we obviously would with
14 this one.

15 Q Could CEI have simply told the City that it was
16 not going to permit it to join CAPCO?

17 A I guess we could have.

18 Q Would that have prevented MELP from joining CAPCO?

19 A If the position prevailed, it would have.

20 Q What do you mean, if the position prevailed?

21 A Your hypothesis was could we have told you that?

22 Q Yes.

23 A By prevail, I mean if we told you that, and you
24 came back and said let's talk about this more, it is
25 conceivable after some discussion or what-have-you we might

1 have thought differently. That is what I meant by if it
2 prevailed.

3 Q Duquesne Light, Ohio Edison, Pennsylvania Power,
4 and Toledo Edison had stated that they thought a great idea
5 and that MELP should be in CAPCO and CEI said no way, could
6 MELP then have joined CAPCO?

7 A If those would have been the positions of the
8 various parties, we obviously would have sat down with them
9 and discussed why do you feel this, tried to understand it,
10 et cetera.

11 While you have individual determination, you
12 certainly exchange ideas with each other, et cetera. But
13 the basic bulwark of CAPCO is this unanimous consent
14 concept which says in effect that no company should be or can
15 be or will be obligated to accept the decisions of the
16 other companies. That each of the companies is an autonomous
17 individual organization. That it is not bound by the others.

18 Now CEI, and in this unanimous consent rule, it
19 always has the three options of doing nothing, saying yes,
20 saying no, or pulling out of CAPCO. Of course, the others
21 do also.

22 If the others thought it was a great idea and
23 CEI said no way will we in any way, the others would have
24 the option of withdrawing from CAPCO, forming a new pool,
25 excluding CEI, but including Cleveland Muni and proceeding

1 from there.

2 Q When did CEI first decide that the City's
3 proposal was inconsistent with the CAPCO memorandum of
4 understanding?

5 A I reached the conclusion the moment I read it.
6 I communicated that -- I was vice president of engineering
7 at the time.

8 When I read it, I said no way. This is incon-
9 sistent on its face. I immediately communicated that to
10 Mr. Rudolph and others in the company. I think the conclu-
11 sion was pretty much bought by everybody.

12 Others reached, I think, the same conclusion
13 independently, but at any rate, very quickly we concluded
14 that some of the things we were asking for were inconsistent
15 with some of the other things they were asking for.

16 Q Did you have a meeting with the City after
17 the City's August 3, 1973 letter and prior to the December 7
18 CAPCO meeting?

19 CHAIRMAN RIGLER: By "you," do you mean CEI?

20 MR. HJELMFELT: I mean EI, that's correct.

21 THE WITNESS: I don't know.

22 BY MR. HJELMFELT:

23 Q Now I think you testified that the initial
24 response of CEI was to write back and say, hey, we ought to
25 discuss your proposal. You don't know whether any such

1 discussions took place?

2 A No, I don't.

3 Q Do you know whether the City then was ever
4 informed that its position, its request was inconsistent with
5 the CAPCO memorandum of understanding?

6 A I would presume they were from the discussions
7 somewhere. There have been a lot of discussions.
8 Generally speaking, I was not involved in the negotiations
9 with the City. I had been in just a few meetings earlier
10 when we were talking about the interconnection itself, and
11 the communication among -- the internal communication
12 during the course of the negotiations was relatively
13 small. It was confined primarily to those people who were
14 involved.

15 Although I have been very much in all of the
16 CAPCO negotiations, I have not been involved in the Muni
17 negotiations. So I'm really not qualified to tell you what
18 happened in the Muni negotiations.

19 Q You cannot say from your own knowledge whether
20 or not the City was ever informed that its request was in-
21 consistent with the CAPCO pool?

22 A No, I can't say that from my own knowledge.

23 Q Do you know whether the City was ever informed
24 that if it joined CAPCO, it would have to participate in coal-
25 fired units as well as nuclear units?

1 A No, I don't know.

2 Q You testified in a hypothetical vein with
3 respect to what the effect would be if the City joined
4 CAPCO. Was any such study actually made?

5 A I testified about the studies we made of the
6 hypothetical capacity effect. These were the only --

7 Q That was in 1967, or during the negotiations?

8 A About that time. That was the only studies
9 that CAPCO made related to Cleveland Muni.

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1 Q How about CEI? Did it make any study after the
2 study after the City made its proposal on August 9, 1973?

3 A Of course, CEI has been studying the implications
4 of Muni and operations with Muni for 50 years.

5 We have had all kinds of studies. The specifics
6 you are talking about of the implications in CAPCO, I
7 recall participating myself in an effort to list the
8 responsibilities and obligations of CAPCO participation,
9 which I believe was to assist our attorneys in negotiations
10 with Muni.

11 Earlier you had asked did we communicate any of
12 this. As I think with you here, my recollection is becoming
13 clearer.

14 I participated in helping the attorneys to
15 understand this point. To what extent and how they communicated
16 that to the City, I don't know.

17 Q Now, in this listing of the responsibilities that
18 the City would undertake if it joined CAPCO, was there any
19 engineering economic studies of what would happen in CAPCO
20 if the City joined?

21 A There really weren't engineering economic studies,
22 as such.

23 I think we went through the mental process I des-
24 cribed awhile ago, when we said we would take all of the
25 Muni data and input it. On a weighted average basis, since they
are one percent of the load, they would have a one percent

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effect.

Our conclusion was that would be a mini effect on the rest of CAPCO. What CAPCO would do in the one-system study would be the same whether it had their Muni system or not. That is what the one-system study would say would be about the same.

Q What you really are saying is on the basis of judgment you made that determination without making an actual study?

A That is right.

Q Getting back to the point in time when CEI made a determination what is response to the City's request for membership in CAPCO would be, do you recall attending a CEI company meeting on August 8, 1973 attended by Mr. Rudolph, Mr. Ginn, Mr. Williams, Mr. Hauser, Mr. Lansdale, Mr. Charnoff, Mr. Davidson, r. Lester?

A I can't recall exactly the specific date, et cetera, but I presume from what you are reading, there was such a meeting, and I can visualize there would have been, to determine what our response was on this proposal.

Q Do you recall at that point it being decided that the company should refuse to Cleveland its becoming a member of CAPCO?

A No, I don't recall it. I'm not saying it didn't happen, but I'm saying I don't recall it.

1 Q Is ownership in CAPCO units determined by the
2 P over N method?

3 A Yes. You are talking about if we were doing it
4 now. We have changed the system over the time.

5 But the last time we calculated ownership in the
6 units, which is when we allocated the last six units,
7 it was done by the P over N method.

8 Q Are you talking with the calculation of
9 of capacity responsibility or the actual ownership of
10 the unit?

11 A The last time what we did was this: The last
12 six units were committed all at the same time.

13 Two units at Erie, two units at Davis-Besse 3 and
14 4 and two units at -- which were they -- at any rate there
15 were six of them, all committed at the same time. We calculated
16 equal P over N for the last unit. That is for the year the
17 last unit would be in service.

18 We determined what the percentage ownership
19 should be in all six units to achieve equal P over N for
20 that last year.

21 Then we had agreed in advance they would accept
22 the same percent ownership in each of the six units. That
23 is precisely the same.

24 Then we would have buys and sells which we called
25 tentative buys-sells. The intervening years between the
7th and 8th units and 8th and 9th and so forth.

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1 In the end it would come out exactly zero, if
2 we forecast everything right on the nose. We also
3 agreed to the annual time calculation or buy-sell.

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arl 1 Q Total ownership was determined by P/N, but with
2 respect to certain units, it was negotiated?

3 A No, it was agreed we would have the same percentage
4 for all units. What P/N gave us for the total of the six
5 we would use that for each of the six.

6 Q That would be the same as if you calculated it
7 with the P/N for each individual unit?

8 A Close, but not exactly the same. One of the main
9 reasons for this was the concern about slightly differing
10 percentages in different units and just the bookkeeping
11 complexities, et cetera, which is what we had in the
12 previous units.

13 We said everybody owned the same percentage, and a
14 lot of things will be a lot easier. Things were hard
15 enough so we concluded making them a lot easier would make
16 them desirable.

17 Including ownership in nuclear fuel, for example.

18 Q If a system doesn't agree enough to need that
19 percent that is determined, it still has to buy that
20 percent of the unit; but then it sells megawatts; is that
21 correct?

22 A That's right.

23 You mean if the load forecast turns out to be
24 wrong?

25 Q Correct.

1 A Yes.

2 Q What coal-fired plant does CAPCO now plan to
3 build?

4 A Three different generating units at the Mansfield
5 Plant.

6 Q Those are all currently planned?

7 A Yes.

8 Q Are they currently all under construction?

9 A Yes.

10 Q When was the last one committed to construction?

11 A I think that Mansfield -- darn, I wish I would
12 remember -- whether Mansfield 3 was one of those last
13 six or not. Let me count them off here.

14 The first four, Beaver Valley 2 -- Perry 1 and
15 2. I think Mansfield 3 was not one of those last six
16 units. It would have been committed beyond around 1970 or
17 so.

18 I have trouble with all of these dates on all of
19 these units. That is easily determinable, but I don't
20 have it in my head.

21 Q All the units committed since Mansfield have been
22 nuclear?

23 A Yes.

24 Q You indicated that if MELP were in CAPCO
25 and they were making a one-system study, that the results

1 might not be what the City had wanted, or what the City
2 would choose if it were making the study to fit its position?

3 A Yes.

4 Q Could that happen and the result still be better
5 than a plan for the City isolated?

6 A It would be better than a plan for the City
7 isolated, yes, but it might not be as good as if the City
8 accepted the proposals that CEI has made.

9 MR. HJELMFELT: I move to strike that last part
10 of the answer as being nonresponsive.

11 CHAIRMAN RIGLER: Granted.

12 BY MR. HJELMFELT:

13 Q Did the City once ask for firm power and
14 have that request refused?

15 A Did the City once ask for firm power and have it
16 refused?

17 I don't recall. Maybe you can refresh my memory.

18 Q Do you recall whether CEI ever responded it didn't
19 have any power to sell to the City?

20 A In connection with the Federal Power Commission
21 case, when the City was asking for emergency power,
22 specifically when Mr. Hinchee was the director and testifying
23 at the Federal Power Commission, we made it very clear that
24 our understanding of emergency power was that it would be
25 sold when, as, and if available. And that we would not

1 guarantee that this would be firm power. And that the rate
2 should be based on that premise. And we wanted to be sure that
3 Mr.Hinchee and the Muni system understood that that was
4 the kind of power they were asking for, and that was the kind
5 of power we were willing to provide.

6 Q In 1974, did the City request firm power and you
7 write back a letter to the City saying that CEX didn't have
8 any firm power to sell, or was unwilling to make a sale
9 of firm power?

10 A That well could be.

11 Q Has the City ever been offered an opportunity
12 to participate in all CAPCO units?

13 A What was offered was an opportunity to participate
14 in every unit they asked for participation in. What
15 they didn't ask, I don't believe we offered.

16 Q With respect to CEX's offer to sell a portion
17 of its share in the CAPCO units to MELP, did the
18 other CAPCO members agree to make an adjustment in CEX's
19 share in the event that that sale occurred?

20 A They agreed to consider an adjustment in CEX's
21 share and, of course, through the buy-sell arrangement, we
22 were all committed to make an adjustment in the share at least
23 through the buy-sell arrangement.

24 Q Now, does the unanimity rule apply to -- let me
25 start over.

1 Is it necessary for a member of CAPCO to get
2 permission of other CAPCO units -- CAPCO members to engage
3 in joint ownership of generation with a nonCAPCO member?

4 A What the contract says, what the CAPCO memorandum
5 of understanding says is that we will not enter into an
6 arrangement with third parties if they adversely affect the
7 other members of CAPCO.

8 So applying that specific statement to the
9 hypothetical case you suggest, if you could make this
10 arrangement without adversely affecting the other parties,
11 you could do it unilaterally; if it adversely affected the
12 other parties, you would have to somehow take care of that
13 adverse effect before it would be legal for you to make
14 that agreement without violating the memorandum of under-
15 standing.

16 CHAIRMAN RIGLER: I'm going to call a short
17 break. Please don't leave the room. I will be two or
18 three minutes.

19 (Pause.)

20 MR. HJELMFELT: Could I have my last question,
21 please?

22 (Whereupon, the reporter read from the
23 record, as requested.)

24 BY MR. HJELMFELT:

25 Q Who would determine whether there was an adverse

1 effect?

2 A Well, obviously the company would -- that is we
3 would make the initial determination and we would tell
4 CAPCO what our conclusion was.

5 Q Would most -- wouldn't all joint ownership
6 arrangements have an effect on CAPCO?

7 A I think that practically speaking, if you are
8 talking about selling a piece out of our capacity, it would
9 have an effect on CAPCO, because the amount of power
10 available for CAPCO would be reduced.

11 So that I think what would happen would that
12 we would report that. We would point out that the pool is
13 less. We would point out that the trim calculation, buy-
14 sell calculation will adjust our shares and that either we
15 think this is a material effect or it is not a material
16 effect.

17 It would probably depend on whether CAPCO were long
18 or short on capacity. If CAPCO already had more capacity than
19 it needed to meet its planning criteria, then the effect
20 would be minimal or perhaps even favorable. If it were
21 short of capacity, then the effect would be adverse.

22 Q Has CAPCO generally been short of capacity?

23 A CAPCO was short of capacity for several years,
24 and we are now entering into an area -- let me take three
25 aspects:

1 We were short for some time. We even put in extra
2 gas turbines or combustion turbines to make up for the
3 shortage.

4 Then we deferred units and said we are going to be
5 short in the future. And the loads developed as rapidly as
6 expected.

7 So we began to be long. Right now we expect to be
8 long on capacity for the next several years. So the situa-
9 tion changes, I guess, in answer to your question.

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1 Q So that delay of the Davis-Besse 1 Unit going
2 into operation wouldn't affect the capacity -- wouldn't
3 endanger capacity in the CAPCO area? Or wouldn't endanger
4 reliability, I should say.

5 A The unit was supposed to go in December of '74.

6 We had adequate capacity in 1975 and we expect to
7 have adequate capacity in 1976, even though the unit is not
8 expected to be commercial until early in '77.

9 Q You expect to be long on capacity in 1977?

10 A We expect to be long, assuming that Davis-Besse
11 and Beavery Valley are both in service. Beaver Valley 1.

12 Q Now, assume a joint ownership agreement between
13 a CAPCO company and a non-CAPCO entity which does not involve
14 a sale of CAPCO capacity.

15 Would that have an effect on CAPCO?

16 MR. REYNOLDS: Let me have that question back.

17 (Whereupon, the reporter read the pending
18 question, as requested.)

19 THE WITNESS: Are you talking about an existing
20 joint arrangement or new one?

21 MR. HJELMFELT: A new one.

22 MR. REYNOLDS: Joint ownership arrangement in
23 what sense?

24 BY MR. HJELMFELT:

25 Q Suppose that the parties agree to jointly construct

bw2 1 an operating unit?

2 A Inasmuch as it would increase our capacity, if
3 we jointly own the unit with some third party, a new unit,
4 then that extra capacity brought into CAPCO, would not
5 adversely affect the other parties in CAPCO.

6 It might favorably affect them, but it wouldn't
7 adversely affect them.

8 Have I answered your question?

9 I'm not sure I understaocd your question, but if I
10 haven't answered it, let me make it clearer or have I
11 answered it?

12 Q I think you have answered it. What is typical
13 in the industry?

14 A For what?

15 Q How do you know when something is typical in the
16 industry?

17 A Oh, I would say you would say something was typical
18 in the industry, if it was a widespread practice.

19 If a lot of companies similarly situated were
20 doing it.

21 Q So that if a lot of parties are wheeling power,
22 that is typical in the industry?

23 A Yes.

24 Q How many would it take to be a lot?

25 A I don't know how many it would take to be a lot.

bw3 1 It is a judgment kind of a thing that you really have to have
2 specifics in order to form the judgment. It is very difficult
3 to exercise judgment on a loosely defined hypothetical.

4 Q Are you aware of wheeling in the CVEC agreement?

5 A Yes.

6 Q Are you aware that PG&E wheels California
7 Valley power?

8 A I wasn't aware of that.

9 Q Are you aware of N.M. Public Service Company
10 wheels for Plains Electric Co-op?

11 A No.

12 Q Are you aware that the Southern Company wheels
13 SEPA power?

14 A Yes.

15 Q Do you know any other companies that wheel SEPA power
16 or groups of companies?

17 A I'm not sure.

18 CHAIRMAN RIGLER: Do you want to spell SEPA power
19 for the reporter?

20 MR. HJELMFELT: S-E-P-A.

21 MR. BUCHMANN: Could I inquire if the Witness
22 knows what it is?

23 THE WITNESS: Southern Power Administration, I
24 think.

25

arl 1 Q Are you aware that PENNEC has agreed to wheel
2 PASNY power?

3 A No, I wasn't aware of that.

4 Q Are you aware that ISM has agreed to wheel power
5 for Richmond, Indiana?

6 A No.

7 Q Are you aware that Ohio Power has agreed to wheel
8 power for Richmond, Indiana?

9 A I had heard it was being considered, but I
10 wasn't aware it had been finalized, if it has been.

11 Q Are you aware that Louisiana Power & Light has
12 agreed to wheel power by, between, and among municipa.
13 systems in Louisiana?

14 A No.

15 Q If, in fact, all of these wheeling transactions
16 exist, would that be typical in the industry?

17 A I don't know.

18 Q With respect to the December 7, 1973 meeting, do
19 you know when Ohio Edison and Penn Power contacted Mr. Rudolph
20 with respect to their response to the City's request?

21 A Not precisely, but I think it was fairly promptly.

22 Q Do you recall whether it was on the same day of
23 the meeting?

24 A I believe that Ohio Edison indicated their
25 probable answer. I'm not sure whether they were giving it as

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BY MR. HJELMFELT:

Q Are you aware that New York Utilities wheel
PASNY power?

A Yes, I think so.

1 a definitive answer or whether they were telling us how
2 they were leaning.

3 Q Was their answer a refusal?

4 A I think the essence of their answer was we
5 wish you people could handle the problem. The heart of
6 everybody's feeling in the CAPCO arrangement really was,
7 "CEI, why don't you talk to these Cleveland Muni people and
8 see if you can work out a proper, equitable solution?"
9 Whatever the fancy words that were said, I think that was
10 the heart of the answer.

11 Q With respect to the Borough of Pitcairn, I believe
12 you indicated that CEI didn't think Pitcairn understood
13 what CAPCO was all about; is that correct?

14 A That's right.

15 Q Would it have helped Pitcairn to understand
16 CAPCO if it could have looked at a copy of the memorandum
17 of understanding?

18 A It might have helped, but I think they would
19 have been better off to talk with somebody who understood.

20 Q Are you aware that CEI refused to provide a copy
21 of the memorandum of understanding to Pitcairn?

22 A On the contrary, I thought we offered to sit
23 down and discuss it with them.

24 Q Did you offer to show them a copy or provide them
25 a copy?

1 A I don't know whether we offered to provide them
2 a copy or not.

3 Q You spoke of deferring units to prevent CAPCO
4 from obtaining the -- deferral of CAPCO units for financial
5 reasons. Did that prevent CAPCO from obtaining optimum
6 coordination?

7 A No, it didn't prevent obtaining optimum coordina-
8 tion. What it did was reduce the total capacity that would
9 be available to serve the load. We still had the optimum
10 coordination of the capacity that was there.

11 Q Would the pool have been better off if it had
12 had that additional capacity?

13 A It would have been better off from a point of view
14 of reliability and worse off from the point of view of the
15 financial stability of the companies.

16 Q In considering what is the optimum coordination,
17 you consider factors of reliability?

18 A Yes.

19 Q Is there a theoretical optimum?

20 A No, the optimum contains a number of technical
21 aspects, but it contains a lot of judgment also.
22 So it isn't a thing that you can just grind through and
23 out pops an answer. It takes a lot of interpretation and judg-
24 ment to determine what is optimum also. That judgment can
25 differ.

1 Q Was that gentleman's agreement reached at the
2 December 7 meeting?

3 A I don't recall. It was discussed and that sort of
4 conclusion reached at one of the executive committee
5 meetings, but I'm not clear in my mind which one it was.

6 MR. HOELMFELT: I have no further questions.

7 CHAIRMAN RIGLER: Mr. Smith has a question or
8 two at this time.

9 MR. SMITH: Mr. Williams, I think that I did not
10 follow too well some of the testimony in relation to
11 allocation of capacity responsibility in CAPCO, and I would
12 like you to help me understand it better.

13 When you use the term "equal percentage" in
14 your testimony, what do you mean by that? I think Mr.
15 Hjelmfelt used it in his question.

16 THE WITNESS: We have talked about equal percent
17 reserve, and we have talked about equal P/W.

18 MR. SMITH: Equal percent reserve, what do you mean
19 by that?

20 THE WITNESS: Equal percent reserve, I mean a
21 situation in which each of the companies has the same percent
22 reserve.

23 By percent reserve, I mean the --

24 MR. SMITH: Percent of peak?

25 THE WITNESS: Percent of peak on the highest

1 load day of the year.

2 MR. SMITH: Okay.

3 Was it your testimony that P/N was computed
4 based upon what it would be at the end of the completion
5 of the six units?

6 THE WITNESS: What I was trying to say was
7 that in order to allocate the ownership responsibility in
8 those six units, we said let's go out to the hypothetical --
9 the expected action planned, forecast in-service date of
10 the last of these units. Let's calculate what total
11 generation would give each of the companies equal P/N.

12 Then let's -- that will determine the total mega-
13 watts out of the six units.

14 Let's allocate that among the six units so that
15 each company gets exactly the same ownership in each of the
16 six units.

17 MR. SMITH: When the final unit goes on line, your
18 P/N and your equal percent reserves would be the same,
19 wouldn't it?

20 THE WITNESS: Not at all.

21 MR. SMITH: Would it be close?

22 THE WITNESS: Not necessarily. The percent
23 reserve basically looks only at the installed capacity and
24 the load on the highest day of the year. The P/N method is
25 much more sophisticated approach which takes into account

1 the forced outage rates, the sizes of the various units,
2 the maintenance schedule, the relative reliabilities of
3 the units.

4 It takes into account the load on the other 364
5 days of the year.

6 It calculates by a computerized method the likeli-
7 hood on any given day of being long or short, and of each
8 party's being long or short.

9 It calculates that hypothetically for every one
10 of the days of the year. It adds all of that together.

11 On a day it is long, it is positive times so
12 many megawatts a day.

13 On a day it is short, it is a negative.

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1 It adds up the positives and negatives and
2 puts those together.

3 The percent reserve method is the sort of
4 thing you can do with a slide rule in 30 seconds.

5 You take a look at the load on the highest
6 single day. You ignore the rest of the factors.

7 The generation on the highest single day. The
8 difference between the two numbers divided by the load is the
9 percent reserves. So the two methods are poles apart in
10 terms of what is involved and what is considered and so on.

11 If they came out with the same answer, it would
12 be sheer coincidence.

13 MR. SMITH: Doesn't application of P over N approach
14 equal percent reserves?

15 THE WITNESS: If all of the capacity on the system
16 were owned by all of the companies, in the same
17 percentage, then the two methods would approach the same
18 answer.

19 Although, to be the same, not only would the
20 capacity have to be the same, but the load patterns would have
21 to be the same also.

22 That is the ratio of the hottest peak load,
23 highest peak load on a hot day in the summer to the lowest
24 peak load on a cool day, that ratio would have to be the
25 same for all companies also. They do approach each other.

1 The more units that are jointly-owned and the
bw2 2 more you retire the old, individually-owned units, they approach
3 each other.

4 But they wouldn't reach each other unless the
5 capacity and load characterizations are the same.

6 MR. SMITH: Are they generally close in the peak
7 load days in CAPCO?

8 You have similar systems, don't you?

9 THE WITNESS: The variation is more than one might
10 expect. The heavily industrialized areas are different than
11 those that are less industrialized.

12 Our forecasts are different. If you look at
13 only the 12-monthly peak loads, CEI, for example, has forecast
14 the other 11 monthly peak loads closer to the system peak
15 than some of the other companies have.

16 MR. SMITH: Does equal percent reserves anticipate
17 a percent of the CAPCO peak or the individual entities'
18 peak?

19 THE WITNESS: Equal percent reserves would mean that
20 each entity, separately calculated, was the same as each other
21 one. That is what we mean by equal in equal percent
22 reserves.

23 If everybody had same percent reserves, then the
24 total would be the same also.

25 MR. SMITH: In reference to whose peak?

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1 THE WITNESS: Each one in reserves to its own
2 peak .

3 MR. SMITH: Which may or may not be the same
4 to each other?

5 THE WITNESS: Let me back up a minute.

6 MR. SMITH: We have different peak days?

7 THE WITNESS: Yes. CEI would calculate its
8 percent reserve on the basis of its peak load, whatever
9 day it occurs to its capacity on that day.

10 Duquesne would do the same, Ohio Edison and Toledo
11 Edison. Those might be four different days. When you calculate
12 that percent number, if you adjusted the capacity so as to make
13 those numbers equal, you would be using the so-called equal
14 percent reserve method.

15 MR. SMITH: When you apply your uniform P over
16 N to your first unit, isn't the effect of that to depart from
17 P over N and to approach percentage reserve?

18 A. There is no relationship between the P over N and the
19 percent reserve.

20 It departs from equal P over N, presumably,
21 by a small amount. It isn't necessarily closer than or
22 farther than equal percent reserve.

23 MR. SMITH: Could it be farther than?

24 THE WITNESS: It could be. It could be farther
25 than. I wouldn't know without making the calculation both

bw-1

1 ways, which it turned out to be.

2 MR. SMITH: It is my impression, statistically,
3 that it could not be farther than. That it would approach.
4 That is why I asked you the questions.

5 Thank you.

6 THE WITNESS: I don't think you could say, or
7 let me say, I don't think I could say with any confidence
8 which way it would be.

9 CHAIRMAN RIGLER: Is there further cross-examination?

10 MR. MELVIN BERGER: Yes, there is.

11 Would this be an appropriate time for a lunch
12 break?

13 CHAIRMAN RIGLER: Let's go off the record.

14 (Whereupon, at 12:55, the hearing was recessed,
15 to be reconvened at 2:00 p.m., this same day.)

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AFTERNOON SESSION

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(2:00 p.m.)

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Whereupon,

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HAROLD L. WILLIAMS

5

resumed the stand and, having been previously duly sworn,

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was examined and testified further as follows:

7

CROSS-EXAMINATION (Continued)

8

BY MR. CHARNO:

9

Q Mr. Williams, did you review any materials

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prior to your testimony right now?

11

A Yes.

12

Q Can you tell us what those were?

13

A You say prior to; you mean in the last 10 minutes,

14

or the last 10 weeks?

15

Q Anything that you used to refresh your recollection

16

prior to testifying.

17

A I reviewed very briefly a considerable amount of

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correspondence and so forth from my files that had been

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assembled by counsel.

20

When I said "very briefly," I mean I leafed

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through the pages. I looked at the minutes of some of the

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CAPCO executive committee meetings. I talked, of course,

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with our attorneys. And I asked just a few questions, but

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very few, of others inside our company to help refresh my

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recollections.

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to date on the unit they wanted to buy power in. If they want to be a 5 percent owner in the unit and some dollars have already been invested, I would expect them to pick up the 5 percent of the dollars invested with the interest on it.

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1 (Whereupon, the reporter read the
2 pending question, as requested.)

3 MR. LESSY: Let me rephrase it.

4 BY MR. LESSY:

5 Q If a utility were to come into CAPCO today --
6 let's say Detroit Edison fell out in Michigan and
7 said, I wan't CAPCO, everything. They came in and were
8 willing to pay fixed charges for, say, Saamis 7 and Eastlake
9 5 units which were installed seven or eight years ago.

10 Would you then be willing to give access or owner-
11 ship parts in those two units to the new members?

12 A I don't know whether we would or not. I think that
13 would take a lot of careful and deep study before we would know.

14 One of the important things with respect to
15 existing capacity, for example, as contrasted with projected
16 capacity is it is built, known and we know what the costs are.

17 With the prospective there are many uncertainties,
18 et cetera.

19 It is one thing prospectively to come in from the
20 very beginning and take all of the risks of ownership in a
21 unit. It is something else to wait until the unit is
22 successfully operated and say, okay, now I will take a piece
23 of the unit. Now, that I know it is successful, et cetera.

24 All of the risk has been taken by the present
25 owners and whether we would be willing to sell part of those

bw.

1 what are the benefits of making the sale? Those are
2 all things you have to define and quite clearly before you
3 could answer the question of whether we would be willing to make
4 the sale or not.

5 Q If one of the municipal electric systems wanted
6 to come in to a unit that was two-thirds under construction,
7 do you feel it would be necessary to sell part of CEE
8 share on a profit basis or just on a cost recovery basis?
9 Say 30 megawatts?

10 A I don't see that the situation would be any
11 different if it were a municipal than if it were Detroit
12 Edison. There has got to be a benefit in it to us of the
13 transaction or why should we make it.

14 Q Well, if you -- say the municipal electric
15 system came in for 30 megawatts of a plant that was two-thirds
16 under construction, and you recovered all of your costs.

17 What else would there be to base your profit on?
18 If you fully recovered your costs, what would you want to base
19 your profit on?

20 A The illustration is so strange to me that I
21 just really don't know how to answer it. In any transaction,
22 if I was building an apartment building, and somebody came
23 along and said, I would like to buy a suite of the
24 condominiums, what would you base your selling price on, other
25 than cost and why wouldn't you be willing to

1 A You can treat them as one system if they are one
2 system. But if you just took the personnel that now work
3 for each of the various municipalities and put them
4 together in one room, that wouldn't make one engineering
5 force. If they are one system, you could treat them as
6 one system. If they are really several, you have to treat
7 them that way. I can't imagine, for example, that they
8 could send a representative to the executive committee ready
9 to commit Painesville, Cleveland, and whatever other entities.
10 I can't concede that Cleveland can send a representative
11 to the executive committee authorized to commit
12 Cleveland.

13 It is really incomprehensible to me that
14 anybody could come to these meetings ready to commit all
15 of those cities.

16 Q Supposing they agreed to have an engineering
17 firm represent their interests and this engineering
18 firm could bind them as much as your CAPCO representatives could.
19 They were pooling their resources. Wouldn't that be one
20 way to do this feasibly?

21 MR. BUCHMANN: I assume you are not asking the legal
22 question as to whether Ohio municipalities can
23 delegate such power to an engineering firm?

24 THE WITNESS: Anything is possible, but the case
25 you are hypothesizing sounds so hypothetical that I can't

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A Yes.

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Q Do you know when the fuel loading for Davis-Besse

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is planned?

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A Fuel loading is planned this fall.

5

Q Would the --

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A Early fall. Late September or early October.

7

I don't know exactly but that is about when.

8

Q Would the participation of the Municipal

9

Electric Light Plant in these nuclear units on the terms

10

proposed by CEI be more beneficial to CEI than if the Municipal

11

Light Plant became a member of CAPCO?

12

A Would they be more beneficial to CEI than if they

13

became a member of CAPCO? In terms of straight dollars

14

I don't think there would be very much difference. There are

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all these complexities of membership that do concern us.

47 16

Q In terms of those complexities, which would be

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more beneficial?

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A In terms of the complexities it would be more

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beneficial if CAPCO were not enlarged by adding anybody. The

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present CAPCO Committee structure, number of members is

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already difficult enough. So in terms of complexity, we would

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be better off if they would buy the power or make some other

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arrangements, short of membership in CAPCO.

24

Q I believe you indicated in response to a question

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by Mr. Carno that there are more companies committed to

ar?

1 Q Did you review anything in the way of documentary
2 materials other than your own files?

3 A Well, it was material that had been assembled
4 for me by counsel, and it was material which either I
5 wrote or received a copy of. So presumably it came from
6 my files. Although it is possible that some of the material
7 from my files had been thrown away and this was a copy from
8 somebody else's files.

9 I didn't get it from my files. I got it from
10 counsel. But it was material which I had seen before.

11 Q You mentioned the existence of memoranda
12 concerning nonCAPCO executive meetings of CAPCO personnel
13 with respect to MELP's request for a CAPCO membership; is
14 that correct?

15 A I'm not quite sure I understand. You mean
16 meetings of the chief executives at times other than
17 the regular executive committee meetings?

18 Q I'm not sure what your testimony was. In
19 response to Mr. Hjelmfelt's questioning, you indicated you
20 had reviewed one or more memoranda concerning discussions
21 by CAPCO personnel of the City's request for CAPCO member-
22 ship.

23 Is that a correct summary of your testimony?

24 A You mean Cleveland or do you mean Pittcairn?

25 Q I mean the City of Cleveland.

1 executives as such, I'm not quite clear. The general tenor
2 of the thing, it seems to me, was that Duquesne was considering
3 whether to join with us or with APS, rather than whether
4 APS should join the CAPCO group.

5 But you are sort of asking me to recall what
6 Duquesne was thinking and doing, and that is a little hazy.

7 Q You have no personal recollection, then, of
8 CAPCO meetings or meetings of representatives of the
9 companies which ultimately formed CAPCO where APS participa-
10 tion was discussed?

11 A Not very clearly. It may or may not have been.
12 I certainly have no clear recollection of it.

13 Q When CEI approached the PJM pool, what method
14 of reserve calculation was the PJM pool using?

15 A It was a relatively simple method. I don't
16 know whether it was equal percent reserve or not, but it was
17 a relatively simple method.

18 It was nothing as intricate as what CAPCO is now
19 using.

20 Q Sir, you have testified that CAPCO utilizes
21 compulsory arbitration to resolve differences. What would be
22 the scope of that agreement? What differences could be
23 resolved by compulsory arbitration?

24 A The contract provides for it. It has never
25 been called into play, but the kind of things one might

1 expect there to be differences on would be the results of a
2 one-system study of what is the right kind of capacity, size,
3 type location, et cetera. Or as I mentioned, the number
4 of times we have changed the situation.

5 I talked about the need for flexibility because
6 of changed circumstances where the contract originally
7 envisioned doesn't fit the circumstances you find yourself
8 in because of an unforeseen situation.

9 If we were not able to agree on a solution to
10 that kind of problem, this could be taken to arbitration.

11 Q Does that represent another alternative to with-
12 drawal or agreement?

13 A Yes, it does.

14 Q Is the provision for compulsory arbitration still
15 in effect today?

16 A Yes.

17 Q Sir, could you tell us the impact that compulsory
18 arbitration would have upon what you previously described
19 as a veto power of one member over the others' actions?

20 A Well, it certainly does constitute an alternative.
21 And the parties who were trying to move or take action could
22 go to arbitration as an alternative to withdrawal or
23 reforming the pool in some other way, or something of that
24 sort.

25 When I was listing alternatives, you are correct,

1 I should have included it.

2 Q Can a company that doesn't like the rule of
3 compulsory arbitration still withdraw from CAPCO?

4 A Yes.

5 Q What triggers that compulsory arbitration
6 mechanism? Can one party individually request it?

7 A I believe so, although this hasn't been used and
8 it was a long time back. It is not a part of the contract
9 that I'm right close on. But I believe that one party can
10 request it. You can certainly review the contract, and it
11 speaks for itself.

12 Q When did CEI approach PJM? Do you recall?

13 A It would have been after the Seneca Plant went
14 into operation. Seneca is the jointly-owned plant with
15 Pennsylvania Electric Company. And before we joined the
16 CAPCO pool.

17 It would have been 1963, '64, possibly early
18 1965.

19 Q What was the state of technology in terms of the
20 largest scale unit that could be built at that time?

21 A About 900 megawatts. I think Con Edison may
22 have, probably did by that time, have their 1000 megawatt unit,
23 which was the biggest in the world, and many people thought
24 too large. I think 900 was the largest that anybody
25 else had committed.

1 Q I believe you testified in response to one of
2 Mr. Hjelmfelt's questions that extra capacity brought
3 into CAPCO would not adversely affect the other members of
4 CAPCO; is that correct?

5 A Yes, that's right.

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1 Q How would you go about bringing in that capacity
2 to CAPCO?

3 A Well, I think his hypothetical example was, if
4 we went jointly with somebody else outside of CAPCO and
5 committed a unit there itself, and then came to CAPCO and
6 said we have this capacity, I think that is what we were
7 referring to by bringing it into CAPCO.

8 Q Would you be credited for that capacity by CAPCO?

9 A Well, that is the question. I might illustrate,
10 if I may, with another example that is more real than
11 hypothetical, and that is the situation some years ago when
12 we purchased a power plant, an existing operating power
13 plant from the Union Carbide Corporation, about 200 megawatts
14 or so.

15 At the time, we did it unilaterally, and we didn't
16 ask CAPCO if it was all right for us to buy this plant.

17 We did come to CAPCO to discuss the question of
18 how we would get credit for it. There again, we needed
19 give-and-take flexibility, because that isn't provided for
20 in the memorandum of understanding either.

21 What was finally worked out, in essence, was that
22 to the extent that CAPCO was made long by this extra
23 capacity, we would not get credit for it. When the time
24 arrived when CAPCO needed additional capacity, we would then
25 start taking credit for it, we would start using it, make

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1 it available to CAPCO and CAPCO would give us credit for it.
2 That was the result of a sort of ad hoc working out. There is
3 nothing in the memorandum of understanding that actually
4 deals with how you handle that kind of situation nor in any
5 of the other contracts.

6 That is an unforeseen item where the parties
7 got together and said, well, how is the best way to deal
8 with this?

9 Q Let's go back to Mr. Hjoimfelt's hypothetical.
10 If you came to CAPCO with 400 megawatts of power which
11 you acquired as your share of half of a joint project of
12 somebody outside of CAPCO, would that result in the other
13 CAPCO members having to take a larger share out of the
14 next unit than they would have otherwise, if they agreed to let
15 that 400 megawatts be credited to your company?

16 A If they agreed to credit it to our company, then,
17 of course, by crediting to our company, they credited it to the
18 total CAPCO Pool, as well, and the result would be the inverse
19 of what I was discussing with the Chairman about Duquesne
20 Light and a reduced load.

21 In this case the result of extra capacity for DNY and
22 CAPCO pool, would be that the next unit would be smaller
23 or later.

24 Q What if the next unit was imminent, that one
25 would assume if one was coming in with 400 megawatts in
hand. In other words it couldn't be rescheduled or revised

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1 to any appreciable difference?

2 A The operation of the buy-sell arrangement that we
3 do in July of each year for the following year, has a lot
4 of factors in it.

5 We have talked about some of them. Another of
6 the factors in there is if the pool is long we don't change
7 the allocation from what it was originally.

8 So if this excess capacity, this 400 megawatts
9 makes the pool long, that it has more capacity than needed,
10 we wouldn't make the buy-sell calculation and, therefore, it
11 would have no effect. If the pool needed the capacity,
12 then we would make the buy-sell calculation and the people would
13 be adjusted.

14 If they need the capacity and there is not
15 enough to go around anyway, people would get more than they
16 otherwise have.

17 If they need capacity, they would welcome more than
18 they otherwise would have added.

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a.11 Q Assuming the pool is long and you end up with the
2 400 megawatts, how would you provide the reserves for that
3 400 megawatts? Would that be provided by CAPCO reserve-
4 sharing, or would that be your independent obligation?

5 A That would be our independent obligation.
6 We would have to have adequate CAPCO reserve, not counting
7 this excess capacity, I believe.

8 One of the difficulties I have here is that we
9 have -- we are to hypothesize that I'm guessing what the
10 other CAPCO parties would or wouldn't agree to under the
11 circumstances.

12 When you compound too many of these guesses, it
13 gets to the point where it is hard to answer the question
14 when it is that hypothetical. That is my difficulty.
15 I'm trying to guess. I can't tell you what the contract
16 provides, because the contract doesn't provide for the
17 situation that we are trying to discuss.

18 Q Again assuming you are long and -- when I say
19 "you," I mean CAPCO. Assuming CAPCO is long and you come in
20 with the 400 megawatts and they let it in, doesn't that
21 have the effect of -- absent the agreement you spoke of
22 concerning the buy-sells -- doesn't that have the effect
23 of increasing the members' participation in subsequent units
24 and further increasing their reserve obligation for those
25 units?

1 A By subsequent units, you mean units that are
2 committed subsequently?

3 Q No, I mean units that are presently committed
4 to come on line subsequently?

5 A Absent the buy-sell, that is before we had the
6 buy-sell arrangement, adding or subtracting capacity had no
7 effect on anybody else at all.

8 We had committed the capacity and that is what
9 you got. And whether you had more or less capacity wouldn't
10 affect the other companies at all.

11 As a matter of fact, the fact that it didn't was one
12 of the reasons some of the CAPCO parties wanted to have some-
13 thing like the buy-sell arrangement. They said it should
14 affect them somehow.

15 Q Can you tell us generally which years CAPCO
16 has actually been short and which years it has actually
17 been long since 1967?

18 A That data is available in many of our studies.
19 I'm not sure I can go back over the nine intervening
20 years and recall which are which. There are too many
21 numbers in there. I can't do it from recollection. It is
22 available in studies that have been done.

23 Q Is it possible for you to say that there were a
24 span of specific years in which CAPCO was short out of that
25 period?

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1 A There were a few years when we hurried to put in
2 what we called short lead time capacity in order to avoid
3 being short, or in order to minimize the shortage.

4 Those years, I think, would have been in the
5 early '70s.

6 CHAIRMAN RICLER: We are rehashing what he said
7 this morning too much, I think, right here. It seems to me
8 the last couple of questions and answers confirmed for the
9 second time his direct testimony.

10 MR. CHARNO: I'm sorry, Mr. Chairman. I was
11 attempting to get beyond and see if there was any recollec-
12 tion of factual material.

13 BY MR. CHARNO:

14 Q If at the time the CAPCO agreement was being
15 negotiated, CAPCO had been on notice that the City of
16 Cleveland would seek an interconnection agreement from
17 CEI, would that have had any effect upon your testimony that
18 CAPCO really didn't give particular attention to the
19 possibility of the City of Cleveland's membership in
20 CAPCO at that time?

21 A I have difficulty, really have difficulty with
22 the kind of question that says if something had been
23 different in 1967, would the discussion have been different.

24 I gess if that is the essence of the question,
25 the answer is it probably would have. The whole thing was

1 a difficult and complex negotiation that involved all kinds
2 of considerations. The parties were not as close together
3 as they are now, and now we have lots of differences of
4 opinion, et cetera.

5 So I guess if you insert some other factors
6 into the thing, it would have affected the answer. But to
7 go anything beyond that, and say how would have it, et
8 cetera, would be awfully conjectural.

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1 Q You did testify, did you not, that one of the
2 primary reasons you did not consider MELP as a possible
3 participant in CAPCO is because they weren't interconnected
4 with any of the CAPCO companies?

5 A Yes, that is right.

6 Q So that if that circumstances were changed or
7 expected to be changed, would it be safe to assume that you
8 would give more serious consideration to their membership?

9 A Certainly, if they had asked to be a member, we
10 would have considered it. Yes.

11 Q You testified this morning that the studies run
12 by CAPCO showed very large reserves would be required on the
13 MELP system. First, let me ask you, who ran those studies
14 that you are referring to?

15 A The Planning Committee of CAPCO, which is
16 basically made up of one of the system planning people from
17 each of the companies.

18 Q What was the reason that such large reserves
19 would be required on the MELP system?

20 A Primarily because of the large size of their
21 units, particularly their large unit in relation to load,
22 and also because of the forced outage rates that we assumed.
23 We didn't have data so we had to assume what the forced
24 outage rates would be based on general knowledge, best judgment
25 of our system planning people.

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1 Q Would the application of the formula at that
2 time have had a similar effect on Duquesne Light?

3 A Yes, to a lesser degree. Their unit was large,
4 as a percentage of their load also, so it would have similar
5 effect, though not as marked.

6 Q Do you recall whether Duquesne Light, in fact,
7 was impacted in the manner that you have just indicated
8 by its participation in CAPCO, or whether some alternative
9 arrangement was adopted?

10 A The fact was that at the beginning, and I think
11 virtually every year since, Duquesne Light's required reserve
12 under CAPCO as a part of their load was larger than the
13 other companies. I think they were the largest of any of
14 the four then, and almost every year.

15 Q Is that percentage as large as it would have
16 been calculated under the unadulterated formula that was
17 applied to the City of Cleveland in your early studies?

18 A What we were doing in our earlier studies was
19 testing the proposed P over N formula. So that the formula
20 was exactly the same. That is the formula we used in the
21 studies of possibility of Munk joining and the formula we used
22 in actually allocating among the others of us was the
23 same.

24 We did adopt that formula we were testing with.
25 The formula was the same. The numbers come out different for

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1 each company. One of the big factors is the ratio of the
2 largest unit to the system size. That was the most severe
3 in Duquesne's case, and they got the biggest reserve.

4 Muni would have been more severe and would have
5 gotten a larger reserve.

6 Q Is it your testimony that there was no modifi-
7 cation in the application of that formula in order to lessen the
8 burden upon Duquesne Light?

9
10 A In 1967, no.

11 I mean, yes, that is my testimony, in 1967.
12 Later this whole buy-sell thing developed partly as a result
13 of Duquesne's request. We are talking about the formula
14 we used and adopted in 1967. The formula was not modified
15 to lessen the burden on Duquesne Light.
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arl 1 Q Aren't there different ways to apply the P/M formula?
2 For example, by taking into account different
3 sizes and numbers of hypothetical units when applying
4 the formula?

5 A It is a very complicated formula. Yes, there
6 are different kinds of applications.

7 Q Do those have an impact upon the amount of
8 reserves that have to be carried?

9 A Yes.

10 Q Sir, you previously testified concerning the
11 ECAR formula for operating and spinning reserves. Could
12 you describe that formula for us?

13 A The ECAR formula, I'm not familiar with the
14 intricate details of it, but the basic concept, it breaks
15 operating reserve into two or three pieces.

16 One is a spinning reserve component, which is
17 to be available to be loaded -- actually operating on
18 the system. That is a straight percentage.

19 Then there is a percentage that is to make up for
20 the possible loss of generation on the system. And that
21 is not quite a straight percentage. It reflects the
22 unit sizes, et cetera, but it ends up being a relatively
23 small number, that is a couple of percent total.

24 Then there is a component which can be, which need
25 not be spinning. It can be in standby capacity that can be

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1 started within a certain period of time, 10 minutes, 20
2 minutes, or something like that, quick start capacity
3 which can be counted.

4 The sum of these three pieces is the total
5 operating reserve which turns out to be a number on the
6 order of 7 percent or so, very slightly on the basis of
7 some of the other considerations.

8 Q Is that percent more or less equal for the
9 different members of CAPCO?

10 A More or less, yes. ECAR applies it to CAPCO
11 as an entity from ECAR's point of view. But CAPCO does
12 divide the operating reserve more or less equally among
13 the companies, basically on the same formula.

14 Q And does it come out approximately 3 percent
15 spinning reserve and 6 to 7 percent operating reserve
16 throughout ECAR?

17 A Approximately, yes.

18 Q By the way, does ECAR have authority to require
19 anybody to carry these reserves?

20 A No. There is really no teeth in ECAR except
21 the moral persuasion of one's peers to say if you are not
22 measuring up to a fair standard, you ought to be; but they
23 have no teeth, no enforcement basis.

24 Q When you received the City of Cleveland's
25 request for membership in CAPCO, had you thought of reading

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1 the things requested being in the alternative rather than
2 as inconsistent with each other?

3 A That had occurred to me, yes.

4 As a matter of fact, I had suggested to our
5 people that we ought to consider it as an alternative, and
6 that as a matter of fact, all of the explicit's were probably
7 more likely to be more what they wanted than membership
8 in CAPCO. If you considered them as alternatives.

9 Q Are you aware of any request by CEI that MELP
10 request with specificity what it would like from either
11 CEI or the CAPCO members?

12 A I think we asked several times for them to be
13 more specific.

14 Q Are you aware of any request of that nature
15 prior to receiving their request for CAPCO membership?

16 A No, I think their request for CAPCO membership was
17 in essence the first time they requested more than the
18 emergency interconnection which we have been discussing and
19 finally resolved with the Federal Power Commission.

20 Q Is there any manner in which MELP would have
21 determined the inconsistency of their requests absent a
22 copy of the memorandum of understanding in their possession?

23 A They could have started out by talking with
24 somebody, ourselves, or somebody else who is a member of
25 CAPCO.

1 Q Would you say that CAPCO members are protected
2 against the risk of a decreasing load by virtue of their
3 membership in CAPCO?

4 A Oh, no.

5 Q Going back to your hypothetical with the
6 Chairman this morning, wouldn't, under the circumstances
7 of that hypothetical, Duquesne be protected against a
8 decreasing load in terms of having overbuilt generation?

9 A Duquesne would be protected only if the pool
10 were short. But not if the pool were long.

11 Q Is this then a method of spreading risk over
12 five companies as opposed to assuming it all unto one's
13 self? If all five go down in load, you are in trouble;
14 and if only you do, you are in good shape?

15 A If only you do and everybody else stays on
16 the button, you are in trouble. The only way you bail out,
17 if your load is less than forecast, is if somebody else has
18 more than he has forecast. You are not guaranteed a
19 mark if nobody needs to buy.

20 Q Are you aware of any request by MELP to
21 participate in CAPCO made during the pendency of the
22 proceeding before the Federal Power Commission?

23 A Before the Federal Power Commission, Muni
24 asking for membership in CAPCO?

25 Q Yes.

1 A I don't recall any such, no.

2 Q That question would be to give you a timeframe,
3 rather than suggest that such a request had been made
4 formally as part of the Federal Power Commission proceeding.
5 Is that how you understood the question?

6 A I don't recall any in that timeframe.

7 MR. BUCHMANN: You sure you are talking about
8 the right timeframe? When you talk about timeframe, we
9 still have something before the FPC.

10 THE WITNESS: Maybe I could make my answer
11 clearer by saying I don't recall a request for membership
12 in CAPCO before their letter of August 1973.

13 MR. CHARNO: Thank you.

14 BY MR. CHARNO:

15 Q Mr. Williams, would you say it is unfair or
16 inequitable to allow access by a nonCAPCO entity to
17 a single specific nuclear generating unit being planned
18 by the CAPCO pool?

19 A Would I say it was unfair or inequitable? You
20 mean unfair to the other CAPCO members?

21 Q Yes.

22 A Well, I think if you have a jointly-owned
23 facility, you can't agree that somebody else is going to --
24 you can't bring somebody else in without consultation
25 with the partners.

1 Q I don't think you have the thrust of my question.
2 What I am asking is whether it is inequitable or
3 unfair to allow access to a single specific nuclear unit
4 without requiring participation in all of the nuclear units,
5 or in all of the generating units.

6 CHAIRMAN RIGLER: Unfair to whom?

7 MR. CHARNO: To the CAPCO members.

8 MR. PERI: Mr. Charno, in your first question
9 you used the word "planning." If that is part of this
10 question, could you specify what stage of the planning you are
11 referring to in your question?

12 MR. CHARNO: I don't think I did use the term
13 "planning," and it is not part of this question.

14 THE WITNESS: The question of what is unfair
15 or inequitable to the CAPCO parties is hard to answer in
16 the abstract. Sometimes in our shop we have said in effect
17 if everybody agrees to it, it is fair; and if people fight
18 over it, it is not fair. That is an oversimplified
19 description.

20 To some extent, the attitude is a sort of thing. If
21 somebody wants 10 megawatts out of an 800 megawatt or 1200
22 megawatt unit, that doesn't affect anybody too much, so it is
23 not unfair to give it to them.

24 If somebody wants 1000 megawatts, that is un-
25 reasonable and would be unfair on its face.

1 In between depends on a lot of factors, but
2 mostly what the rest of CAPCO thinks in specific circum-
3 stances.

4 Q Did you testify this morning that fair and
5 equitable participation in CAPCO units required each CAPCO
6 member to participate in each unit?

7 A Yes, exactly.

8 Q What I'm asking is the converse. Should
9 picking and choosing be allowed, or would that be inequitable?

10 MR. BUCHMANN: By CAPCO members?

11 MR. CHARNO: Would it matter whether it was a
12 member or nonmember, who was picking or choosing?

13 THE WITNESS: The whole CAPCO arrangement is a
14 tremendous complex of different considerations and agreements,
15 and what-have-you. And as in any complex contract, when
16 the parties agree you have a fair contract, because every-
17 body agrees it is fair.

18 If you went back and said we like clauses 2, 5, 6,
19 and we will throw away the rest of the contract, that would
20 be unfair. That is picking and choosing.

21 If someone came along and said, "I would like to
22 take some of the benefits of CAPCO, but I don't want all
23 of them or the obligations," and so forth, picking and
24 choosing of that kind is unfair and inequitable, whether it
25 is by a CAPCO member or nonCAPCO member.

BY MR. CHARNO:

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1 Q Would it be your testimony, it would be fair for
2 someone seeking access to be required to take access in all
3 of the CAPCO units, and then again fair applies to existing
4 CAPCO members?

5 A What I think would be fair would be to take the
6 whole CAPCO agreement. As soon as you start picking and
7 choosing among the clauses, you get farther and farther
8 from what is fair and equitable.

9 If you are talking about taking a share of every
10 unit and agreeing to one-system planning and agreeing to
11 allocation by the P over N formula and agreeing to ownership
12 in the units and paying the bills as they come due and
13 compulsory arbitration, and all of the rest of the clauses
14 in the contract, if you take all of that and agree to all of
15 that, I think it is fair and equitable. As soon as you take
16 some of these out, you run the risk of not being fair
17 and equitable, because it is a whole contract package.

18 Some people like some clauses and others like
19 others. When you hammer out a negotiated contract, you get
20 something you accept in total, but don't necessarily
21 accept every section of.

22 Q Would it be safe to say, then, admission to the
23 CAPCO Pool for someone seeking nuclear access was more
24 equitable for existing CAPCO members than allowing the
25 chunk to be taken out of a specific CAPCO unit?

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1 MR. BUCHMANN: Can I have that read back?

2 (Whereupon, the reporter read the pending
3 question, as requested.)

4 THE WITNESS: The first part of that question I
5 had trouble with.

6 (Whereupon, the reporter reread the pending
7 question, as requested.)

8 CHAIRMAN RIGLER: I don't understand the question,
9 and Mr. Smith doesn't either.

10 BY MR. CHARNO:

11 Q Suppose we have a nonCAPCO entity which is
12 desirous of securing a part of a nuclear unit being built
13 by CAPCO. Which would be more equitable from the viewpoint
14 of CAPCO members? Bringing that entity into CAPCO or giving
15 that entity a chunk out of a specific nuclear unit?

16 A What would be more equitable for the
17 individual members of CAPCO, they would have to decide
18 for themselves. If what the party wanted was a chunk of
19 a particular unit and the size of the unit was small, it might
20 be a great deal simpler to say, all right, take the piece
21 of the unit, than to go all of the rest of the business.

22 And the equity may be substantially the
23 same in any case, if the size of the system and the size
24 of the unit is small enough. Trying to determine the difference
25 between the equities may not be as significant as to what is the

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1 practical answer to the request.

2 Q Doesn't that allow the nonCAPCO entity to skim the
3 cream off your coordinated development of generation, to
4 pick and choose the best units?

5 A Yes, it does, and it well may be that the more
6 equitable of all would be to tell the system to go ahead
7 and develop its own operations. That might be the most
8 equitable of all in the hypothetical situation you are
9 citing.

10 Q Are you aware of any facts upon which CEI might
11 have -- CEI personnel might have based a belief that MELP
12 would seek to avoid joining in the existing or projected
13 CAPCO coal-fire plants?

14 A Would you read that again, please?

15 (Whereupon, the reporter read the pending
16 question, as requested.

17 THE WITNESS: I talked about the difference
18 in fixed charge rate which would make a coal-fired plant
19 less desirable to MELP than a nuclear plant.

20 This certainly is a fact that would make me suspect
21 they would be less likely to ask for Membership in a coal-
22 fired plant.

23 BY MR. CHARNO:

24 Q Was that option ever discussed with them, to your
25 knowledge?

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A Not to my knowledge.

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Q Isn't it true that changes in what you have

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described as the typical behavior of the industry concerning

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wheeling have become -- have come about in ever-increasing

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frequency after the changes in technology which have allowed

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the building of larger scale generating units?

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A To my knowledge, the total amount of wheeling

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in the industry is still very small.

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By far the most common practice is to buy

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the power and resell it.

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arl 1 Q Isn't it true that that is changing? Are
2 you aware of more companies who have permitted themselves
3 to wheel today than eight years ago?

4 A Yes, I think that is true.

5 Q Sir, did you describe a process this morning where-
6 by CAPCO makes decisions with respect to the commitment
7 of future generation and transmission in principle, subject
8 to confirmation at the last possible minute from the
9 evaluation of the most recent possible data?

10 A Yes. Ordinarily we don't reach our decisions
11 until we have the last possible data. But we certainly do
12 study on a continuing basis and look ahead and what
13 the picture might look like next year or the year after
14 that.

15 Q You described it this morning as we think we
16 are going to do this in the future. We will actually commit
17 ourselves at the time we have the most recent data.

18 A Every year at least, sometimes more often, we
19 study what the load capacity situation looks like for the
20 coming 10, 15, 20 years. We will reach the conclusion
21 it looks like we need more capacity in year X. Then we will
22 say do we want to get into a detailed, careful study of year
23 X, and the possibilities of capacity, et cetera, at this
24 time, or is year X far enough away that we want to defer
25 such a study.

1 We discuss those kinds of things at least every
2 year, and sometimes more often than that.

3 Sometimes we will say it looks like that time is
4 close enough that we better be getting about a detailed
5 study. We will start a detailed study of coal vs. nuclear,
6 lake vs. river locations, et cetera, and out of that will
7 come more definitive studies.

8 Months will go by to do this. Then we will come
9 up with a conclusion, are we ready to decide what to do,
10 or shall we study more, or shall we wait until next
11 summer's peaks are over to see if we are growing at the
12 rate we think we are.

13 Then we come to a conclusion, we better decide
14 now to go with a unit in year X.

15 Have I been responsive to your question?

16 Q I think so.

17 You indicated this morning at one time CAPCO
18 decided to cancel Mansfield Unit No. 3. Then after
19 examining the cancellation costs, decided to put it in opera-
20 tion.

21 Why did you decide to cancel it?

22 A We decided to calcel it because it was part of
23 an overall review of capacity. We weren't far into the
24 engineering and design of the unit. It looked like the
25 total installed cost would be considerably more than we

1 thought it was. The economics looked as though one of the
2 best ways to save money in the total plan was to cancel the
3 unit.

4 You see, the motivation of this particular study
5 was to reduce capital costs because some of the companies
6 were having trouble raising the money.

7 All of us were having trouble, and some were having
8 more trouble. The objective of the study was how to
9 reduce the total capital flow.

10 It looked like the way to do it was make some
11 deferrals of units and cancel Mansfield 3.

12 After we got into it, we concluded we didn't
13 save as much money as we thought we would because of the
14 cancellation charges, so we reinstated Mansfield 3, and
15 we deferred other units to hold down costs.

16 Q When you originally did the study to determine
17 that you should cancel Mansfield 3, did you infer you should
18 defer some other units at that time?

19 A Yes.

20 Q What units were those?

21 A I have a table that lists this precisely. We --
22 I believe it was at that time that we slipped Perry 1 and 2.
23 And Beaver Valley 2.

24 I'm not sure about Mansfield 2. We may have
25 deferred Mansfield 2 in that study, too. I'm not sure.

1 Q Was there any reason that the conclusion of that
2 first study was to cancel the fossil unit and to defer
3 the nuclear units, rather than vice versa?

4 A The primary reason for that was the timing.
5 Mansfield 3 was at a point where we were going to begin
6 spending dollars in a big way on it.

7 Our objective was to save dollars in the early
8 stages. So that -- I'm trying to get the timeframe right
9 here. I think those studies were made at the end of '74
10 and early '75. Our objective was to reduce capital
11 expenditures in '75 and '76.

12 So we looked at the cash flow by units for --
13 all of the units for all of the years. We said, how can we
14 get the biggest dollars out of 1975, and the biggest dollars
15 for any unit, 1975, were Mansfield 3.

16 That was one of the main reasons because our
17 objective was reducing 1975 dollars.

18 Q What impact, if any, did the overall costs of
19 operation of the nuclear as opposed to coal units have in
20 those calculations?

21 A It was really quite a secondary consideration at
22 that particular study. Our real motivation was cash flow
23 dollars. And the operating economies were quite secondary.

24 Q You testified this morning that the December 7,
25 1973 meeting was called to deal with the then-current

1 situation. What did you have in mind by using that term?

2 A The status of the discussions with Cleveland Muni
3 and of their request for membership in CAPCO.

4 Q Was there any other subject discussed at that
5 meeting to the best of your recollection?

6 A It was about that time, and it may have been at
7 that same meeting, that we discussed this pending hearing.
8 That is the antitrust hearings before the Nuclear
9 Regulatory Commission.

10 I'm not sure whether that was on the agenda at that
11 same meeting or not. It must have been at about that time
12 that we were beginning to talk about response to that situa-
13 tion.

14 Q Sir, can you tell us the last time the CEI four-
15 megawatt unit was in operation for any purpose other than
16 testing?

17 A No, I don't know. That would be in our operating
18 records, but I haven't reviewed that.

19 Q Was it your testimony this morning that you
20 believed that CEI would wheel power out of Cleveland on
21 the same basis as it was willing to wheel power into
22 Cleveland?

23 A Yes, I said that was a personal opinion, not
24 based on any corporate discussion of the issue, even.

25 Q Now, with respect to wheeling power into MELP, did

1 you testify there was a first right of refusal by CEI?

2 A I said that we would be willing to wheel on the
3 same -- power to MELP, if the capacity were available to
4 us, on the same terms and conditions.

5 Q Well, the way you envision that it would give
6 you the right to first refuse that power before you wheel
7 it to MELP?

8 A That question hasn't actually been put to me that
9 way. I'm not sure what our position is on that point in
10 negotiations.

11 As I mentioned, I'm not personally involved in
12 these negotiations. I really don't know the answer to that
13 specific question in terms of what we have said or would say
14 in negotiations.

15 Q Is there a right of first refusal when you are
16 engaging in buy-sell transactions where you buy from one
17 party and sell to another party?

18 A You are talking about the typical, such as the
19 Ohio Power to CEI to PJM that we were talking about this
20 morning.

21 Q In this type of transaction, is there a right
22 of first refusal?

23 A Yes, there is.

24 Q Could somebody rely upon those buy-sell
25 transactions to provide an alternative source of firm

1 bulk power supply?

2 A Only if the contract provided for firm bulk power
3 supply. That is, you can make that kind of a transaction
4 as economy interchange or you can make it as emergency, or
5 you can make it as firm.

6 If you made it as a firm power contract, you
7 could rely on it as firm power.

8 If you made it as an economy transaction, you
9 couldn't rely on it as firm power.

10 Q This morning in response to a question from
11 the Board you indicated that you had not -- you, being CBE --
12 had not been requested to wheel between the City of
13 Painesville system and the MELP system.

14 Are you aware of any requests by either of
15 those entities that you file a schedule that would
16 require you to wheel if you have the capacity?

17 A From one system to the other?

18 Q In general.

19 A Cleveland Muni has asked us to wheel PASHY
20 power to it. I'm aware of that request. If that is the
21 kind of transaction you are referring to, yes, I am aware of
22 it.

23 Q I'm asking if you were aware of a request by
24 either or both Painesville or MELP that you file a transmis-
25 sion schedule which would commit you in principle to wheel

1 if you had capacity available at terms and conditions
2 which would be subject to regulatory approval?

3 A I thought I said yes specifically, I'm aware
4 that Muni has asked us to wheel PASNY power under those
5 terms.

6 Q Are you aware of any request by Painesville?

7 A No, I'm not.

8 Q Are you aware of a more general request by MELP
9 for wheeling than the request for wheeling of PASNY power?

10 A I think they have asked for wheeling on sort of a
11 general basis from anybody, anywhere they might want to wheel
12 from.

13 Q Would that be subject to the capacity
14 being available in your transmission system?

15 A I would presume so.

16 Q Why would you presume so, sir?

17 A Well, quite clearly, if the capacity is not
18 available, we wouldn't be able to do it. Of course, we
19 could build a line. But I'm not aware that they have made
20 any suggestion that we build any lines. They did at one time
21 propose they build lines out to some of our 345 kV sub-
22 stations, but I'm not aware that they had asked us to build
23 any lines.

24 So if we are not going to build any lines, we
25 have to have capacity available in order to wheel power over

1 the existing lines.

2 Q Has CEI ever offered to wheel power from
3 PASNY to MELP?

4 A No.

5 Q Earlier you said that in the transactions between
6 AEP, CEI to PJM, you all got benefits. What were the
7 benefits received by CEI in that type of transaction?

8 A The dollar benefits?

9 Q What was the measure of those benefits? Do you
10 recall?

11 A Generally speaking, we were talking about an
12 economy -- a pair of economy transactions. The AEP
13 costs were less than ours, and ours were less than PJM, then
14 the difference between AEP cost and our cost for generating
15 the next kilowatt hour would be split 50-50 between the two
16 parties.

17 They would get half the dollars and we would get
18 half the dollars of the dollars savings.

19 The next transaction between CEI and PJM, because
20 we would generate cheaper, we would split that difference
21 so that PJM got half the difference and CEI got half the
22 difference.

23 The total measure of the benefit to CEI of the
24 transaction would be half the difference between the AEP
25 and CEI cost, and half the difference between the CEI and

1 PJM cost.

2 There would be no transmission charge for this.

3 Q Mr. Williams, are you aware of any rule now, or
4 any time back in 1967, which used the largest single
5 down -- pardon me -- the largest single unit down concept
6 of fixing reserves?

7 A I'm not aware of any. Although there are a
8 number of pools which I don't know what their criteria is,
9 so there well may be some.

10 Q Is that primarily a method of determining
11 reserves for a single system?

12 A Yes. Although fewer systems are using that
13 kind of a method now than were using it say a quarter of a
14 century ago.

15 MR. BUCHMANN: I didn't catch the last few words.

16 THE WITNESS: I say fewer systems are using it now
17 than they were say using it a quarter of a century ago.

18 MR. CHARNO: I don't have anything further.

19 Thank you very much.

20 CHAIRMAN RIGLER: Let's take 10 minutes here.

21 (Recess.)

22 MR. BUCHMANN: Mr. Chairman, could the record
23 reflect that during the break we ascertained the documents
24 to which Mr. Williams had referred prior to his
25 examination, and I found out what he was talking about.

1 They are all exhibits in his case, and we have shown them
2 to Mr. Charno.

3 If Mr. Charno wishes to interrogate the witness
4 further on that, it is fine with me.

5 MR. CHARNO: The Department has no further
6 questions based on the documents.

7 BY MR. LESSY:

8 Q Mr. Williams, I have distributed and placed in
9 front of you during the break a document which is 16 pages which
10 bears the notation NRC Staff Exhibit 214.

11 The front sheet is a letter or memorandum
12 from Vaughn C. Bradford to Messrs. Rudolph, Arthur,
13 Mansfield, Semmier, S-e-m-m-l-e-r, and Davis.

14 It is followed by 15 pages of charts. We have
15 had some Xerox problems today. The letter and the 15 pages of
16 charts ought to be red-lined.

17 I will ask you to take a look at it and I will
18 ask you a few questions about it.

19 (The documents referred to were
20 marked Staff Exhibit 214,
21 for identification.)

22 MR. BUCHMANN: What did you red-line, Mr. Lessy?

23 MR. LESSY: All of it.

24 BY MR. LESSY:

25 Q This document sets forth the structure of the

1 CAPCO organization charts, according to the letter as of
2 October 1, 1973, or November 20, 1973.

3 In looking through the 16 pages, sir, I did not
4 find your name as a member of a committee or a group.
5 Am I correct in that?

6 A That's right.

7 Q Now as of today, can you tell us which
8 committees or groups you are a member of or an official CEI
9 delegate to?

10 A As of today, I'm the alternate to the executive
11 committee on the page 2 of 5 at the top. It reports in
12 1973 Rudolph, member, and R. H. Ginn, alternate. As of
13 today, I'm the alternate.

14 Q When were you so delegated or appointed?

15 A I was designated in that position at the
16 beginning of this year.

17 Q Would that be January of 1976? Is that what you
18 mean by the beginning of this year?

19 A Yes.

20 Q Now, all of the committees, as I read this, have
21 an asterisk in front of one member. In the case of 1973, at
22 least in the cast of the executive committee, it was Duquesne
23 Light, and the legal committee was CEI, indicates chairman.

24 What is your understanding of the function of the
25 chairman, if it is the same for each of the committees?

1 And if not, you can explain the difference.

2 A Basically the function of the chairman is to
3 call for the meeting, arrange for the details, and preside
4 at the meeting to keep it on an orderly basis.

5 In the case of the executive committee, the
6 Chairman also designates a secretary who records the minutes.
7 I'm not sure on the various other committees. Some of them
8 keep minutes and some don't. Some the Chairman writes the
9 minutes.

10 In the case of the executive committee, the
11 chairman designates a secretary.

12 Ordinarily it is a lawyer from his own company,
13 that is the typical arrangement.

14 Q So when you attended the executive committee
15 meetings for CEI, you were attending other than in the
16 capacity of either an official up to 1976, you were attending
17 other than in the capacity of an official designated or
18 as an official alternate designate; is that correct?

19 A That's correct.

20 MR. LESSY: I would like to move into evidence
21 Staff Exhibit 214 at this time.

22 CHAIRMAN RIGLER: Hearing no objection, we will
23 admit 214.

24

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1 (The documents previously
2 marked Staff Exhibit 214
3 for identification, were
4 received in evidence.)

5 BY MR. LESSY:

6 Q Now if another utility came into CAPCO today,
7 from CEI's point of view, wouldn't it be possible to start
8 that utility's financial obligations from the present or say
9 from 1975, and not to go back to its financial responsibility
10 for fixed charges, say, from 1967 or any other date?

11 A It would be possible, yes.

12 Q Would you be receptive or recommend going forward
13 on that basis?

14 MR. BUCHMANN: Could I hear the preceding
15 question, because I must have missed something.

16 (Whereupon, the reporter read from the
17 record, as requested.)

18 THE WITNESS: Certainly with respect to --
19 I'm not sure I understand the question. I said yesterday
20 because anything is possible. But in terms of causing a
21 value judgment, in terms of whether I would recommend it,
22 if you are talking about another entity that came in and
23 wanted to have a part of the output of a unit that is now
24 under construction, I certainly would not recommend doing
25 that unless the entity who came in was willing to pay the cost

BY MR. LESSY:

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2 Q With the same thought in mind, if a utility
3 were to come into CAPCO as a full member today, not picking
4 and choosing between particular units, what would be your
5 recommendation as to whether or not it would be necessary for
6 that utility to go back to say '67 to pick up the fixed
7 charges from that date or any other date in the interim?

8
9 A Are you suggesting that this utility would, when
10 he came in, be entitled to capacity in units now under
11 construction or only in future units that have not been
12 committed?

13 Q Let's do it with units under construction.

14 A If the units are under construction, and the money
15 has been spent, I would certainly expect him on joining to
16 pay his fair share of the dollars that have already been
17 spent.

18 If I am going to give up part of the capacity
19 that CEI already owns, I would expect to be paid for it.

20 Q If that entity were willing to pay its fair share of
21 ownership in units, say, in the early CAPCO units, say
22 Sammis 7 or Eastlake 5 and if it did pay its fair share,
23 do you feel that would be a reasonable method of allocating
24 the new structure?

25 MR. REYNOLDS: Let me have that back. I'm having
a hard time understanding the question.

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1 units I would be inclined to doubt it. Also, of course,
2 your question sort of surmises that Detroit to stay with
3 the illustration hasn't built any capacity of its own during
4 this time, which isn't a very good assumption.

5 If they would come in, they would probably
6 come in with enough capacity for now and they wouldn't
7 need the extra capacity in all of these old units.

8 Again, we have a very hypothetical and very
9 unlikely situation, but I think the answer is that we would
10 not be interested in selling out our interests in existing
11 operating units to Detroit Edison, if they came and they wanted
12 to join the pool.

13 Q The middle ground between that is where a unit is
14 two-thirds under construction. Suppose Detroit Edison
15 wanted a piece of a unit that was two-thirds under
16 construction and was willing to pay the costs.

17 Would you be willing to go forward on that basis?

18 A We would have to look first of all as to whether we
19 had the capacity available. It depends on how much Detroit
20 Edison needs or wants in these units. We have no look at
21 what is the benefit to us of this whole transaction. Because,
22 obviously, nobody is interested in selling assets that bear
23 costs. You are not in business to buy and sell assets at
24 costs.

25 So what do they want, have we got it for sale,

1 sell to a municipality at cost? Nobody does it that way. It
2 is kind of hard to hypothesize why we would want to -- what the
3 basis is under which we would sell a part interest, in what
4 we were building for our own purpose.

5 Q I thought you said you wouldn't want to sell owner-
6 ship in a seven-year old unit, because you couldn't
7 recover your cost. I used Samsis 7 or Eastlake 5. You
8 couldn't recover your costs with an older unit that has been on
9 line.

10 A No, I was saying we had taken a lot of risk to
11 get a unit whose costs were now known and we could see no benefit
12 and maybe a disadvantage to give up the capacity.

13 If we need the capacity, and we give it up,
14 we would have to buy it at higher cost, because of
15 inflation in a new unit.

16 Q Now, you are recovering your cost and a unit is two-
17 thirds under construction. Why wouldn't you be willing to
18 sell it on the basis of recovering your costs.

19 The financial risks would have been
20 recovered by the amount that you were paid.

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A They might or might not. You have taken some risks and some uncertainties. If the unit was going to be extremely expensive because of some unusual circumstance or if the project was going to have to be abandoned, to take an extreme case, then I presume this hypothetical municipality wouldn't be interested in buying a share of that one, but we would be stuck with it. We took some risks. The one that is three-quarters or two-thirds finished has some risk ahead of it, but it has some risks behind also.

I don't see any logical reason why we should sell it unless it is excess for us. I don't see any reason why anybody should sell at cost unless he wants to sell it. And generally speaking, if we sell them capacity today, we will have to buy something in the future at a higher cost because of inflation.

To sell you power now or to sell a municipality power now and buy some more in a future year at a higher cost, we would lose money.

Q If we were in excess capacity picture, would that change your answer?

A If we were in excess capacity, we would look at the economics over the life of the plant. We might want to give up the excess this year. We would have to study the cash flow and overall economics to determine whether

1 any given specific proposal was desirable or not.

2 Q Regarding economies of scale, you testified, I
3 believe, that AEP and the Michigan pool and PJM pool, as
4 well as CAPCO, are already large enough to enjoy all of the
5 economies of scale?

6 A Substantially, yes.

7 Q Where would that leave other utilities located in
8 the areas served by members of these pools in terms
9 of their access to economies of scale?

10 A Well, basically, that leaves them in the position
11 where the best way to get those economies is to deal with
12 the pools or the individual companies on some basis or
13 another.

14 Q Now with respect to participation by MELP or
15 Painesville in CAPCO, if those two entities joined together,
16 either as two or with others, as a group, and jointly share
17 the responsibilities of CAPCO membership, might that be a
18 way for the systems to practically participate in CAPCO?

19 A By jointly share their responsibilities, you
20 mean pool together and have one staff of people as
21 members of the various committees, and so on?

22 Q Also their engineering assets, their plants, their
23 economic -- their ability to finance, their personnel, just
24 treating them as one system, the way that Ohio Edison and its
25 subsidiary are.

1 conceive of it.

2 I can't imagine they could delegate it to an
3 engineering firm, and the engineering firm could speak for
4 all of them.

5 BY MR. LESSY:

6 Q Could they work together to fulfill things
7 jointly in organization?

8 A Yes.

9 Q And they might be able to combine their reserves?

10 A If they had a transmission network
11 connecting them.

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1 Q How about if they had wheeling connecting them?
2 Either wheeling or transmission?

3 A Whether the transmission network belongs to
4 them or somebody else, if the network exists, they could
5 pool the reserves among each other.

6 Q You testified, I believe, that the outage of
7 an 85 megawatt unit on MELP's system would impose a heavy
8 drain on the CAPCO Pool; is that correct?

9 A Well, I'm not sure whether that is
10 precisely what I said or not. What I meant was, it would take
11 from the CAPCO Pool a substantial portion of MELP's load.

12 That MELP would take a substantial portion of
13 their load from the pool. I think what I said was about
14 75 megawatts worth.

15 With a 100 megawatt load that is 75 percent of their
16 capacity.

17 Q Would that 75 percent of its capacity be a
18 drain on the CAPCO pool?

19 A Well, it would be a drain, but not a severe one
20 or not a serious one. CAPCO has got 75 megawatts,
21 obviously.

22 Q Do you know the installation sizes of some of the
23 individual short lead time capacity units that the CAPCO
24 companies have and are installing?

25 A The short lead time capacity have been

1 running -- we have bought multiple units in the range of
2 25, 35, 50 megawatts or more.

3 Q What do you mean by multiple units?

4 A Very often we decided to buy two units or three
5 units all in one decision.

6 Q Well, let's see, would each of the units be
7 25 megawatts?

8 A I think at one time CEI decided to build two, 25 and
9 another time someone decided to build three, 35.

10 Q Do you know of installation of CAPCO members of
11 seven megawatts of electromotive or diesel units in the SWP
12 program?

13 A I guess in the very earliest ones some of the
14 companies were still concerned about this black
15 capability that I was talking about. I mentioned we
16 had a four megawatt diesel for the purpose of starting the
17 Lakeshore Plant in case there was no power available.

18 Some of the companies decided it would be in their
19 own interest to have the short lead time capacity scattered
20 at the various plants, so they could do that black start
21 capability without the need for transmission. They bought
22 small units primarily for that reason.

23 Q Do you know which company this was?

24 A I believe Duquesne did that.

25 Q Now, under the CAPCO calculation, would these

1 small units be a credit to their capacity?

2 A Yes.

3 MR. LESSY: No further questions.

4 MR. BUCHMANN: I have a few questions.

5 REDIRECT EXAMINATION

6 BY MR. BUCHMANN:

7 Q Mr. Williams, shortly before lunch, you were
8 talking about equal percent reserve system as
9 contrasted to the P over N system you have used.

10 You said that P over N took into consideration a
11 number of items that the equal percent reserve system did not.
12 You referred to, for example, the size of generating capacity.
13 Why is the size of generating capacity pertinent in this
14 analysis at all?

15 A Well, in fact, if a unit that trips off, is in
16 trouble or a unit is taken off for maintenance or whatever, it
17 is, obviously, not available to serve the load.

18 If that unit is large, then the capacity that
19 is left is -- the capacity that is left is reduced
20 considerably.

21 If you just -- if you ignore that and say it doesn't
22 make any difference whether you take off ten megawatts, 95
23 megawatts or 1,000 megawatts, then you ignore the amount of
24 capacity you have left to serve your load and to help the
25 rest of the pool or conversely the amount of power you need to
take from the rest of the pool, in order to make yourself whole.

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1 Q You referred to the relative reliability of
2 the generating units. What does that have to do with it?

3 A If the unit is highly reliable, it is available
4 most of the time.

5 If its forced outage rate is high, or it is
6 unreliable, it is available much less.

7 Your ability to help the pool depends on the
8 capacity that is available.

9 Your need to call on the pool depends on the
10 capacity that is available.

11 Q Is it your suggestion or testimony that
12 equal percent reserve system does not take those things
13 into consideration?

14 A That is correct.

15 Q In the equal percent reserve computation, what
16 capacity were you referring to when you described that?

17 A The capacity is the installed capacity at the
18 time of the annual peak load.

19 Q Whether or not it is operating?

20 A Whether or not it is operating.

21 Q What if it is not capable of operating?

22 A The usual approach most companies follow,
23 again, we don't use it. The approach most companies follow
24 is if it is considered in commercial operation, then it is
25 counted. And, ordinarily, it is declared in commercial

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1 operation early in its life, shortly after it goes on and it stays
2 there until it is retired.

3 Once in awhile during a long outage a company
4 will take something out of commercial operation and
5 put it back in again.

6 But the basic test is installed capacity
7 or capacity that is in commercial operation according to
8 the companies own public declaration.

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arl¹ Q One of the things you spoke about was the fact,
2 I believe, you said that equal percent reserve method did not
3 consider the load on the other 364 days. What do you mean
4 by that?

5 A The percent reserve takes the installed capacity
6 minus the load on the peak day of the year, divided
7 by the load on the peak day of the year.

8 If on the other case of the year, the load is
9 nearly as much, to take the extremes, then your ability
10 to help the others is relatively small because you need it
11 for yourself.

12 If on the other days it is way down from the
13 peak load, you have a sharp peak and on the other days it is
14 considerably lower, then you have more available to help
15 other people during their situations.

16 Q Is that sort of thing taken into consideration
17 in the P/N analysis?

18 A Yes, it is.

19 Q You said you tested the P/N method by a variety of
20 cases including the City of Cleveland case. What did
21 that test tell you as far as the P/N formula was concerned?

22 A It showed that the P/N formula in fact produced
23 higher reserves for a system such as the City of Cleveland
24 that had at least one very large unit in relation to its
25 system load. Even the next three units are relatively large.

1 They are 25 megawatts compared to a 100 megawatt peak load.
2 That is a big unit. It showed their reserves would be
3 considerably higher than the reserves of the other CAPCO
4 members.

5 That is precisely what we thought was proper,
6 fair and equitable result.

7 Q You would have expected that result?

8 A That's right.

9 Q By the way, to your knowledge, has the City of
10 Cleveland asked for participation in a coal-fired unit of
11 the Illuminating Company or of the CAPCO system?

12 A No.

13 Q You testified in response to a question from
14 Mr. Hjelmfelt that membership in CAPCO, full membership
15 in CAPCO for the City of Cleveland, even if some of the
16 decisions made by CAPCO were not the optimum decisions
17 for the City, would be better for the City than if it
18 remained isolated.

19 Do I fairly summarize your testimony?

20 A Yes.

21 Q How would full membership of the City of
22 Cleveland in CAPCO compare with the effect on the City of
23 Cleveland of the offers which the Illuminating Company has
24 already made to them?

25 A The offers we have made would be much more

1 favorable to the City of Cleveland than full membership in
2 CAPCO.

3 Q You also indicated that you have capacity if Davis-
4 Besse and the Beaver Valley Unit comes on in early '77
5 or something like that?

6 A Yes.

7 Q What is the reason why you are in a hurry to get
8 the operating license for Davis-Besse 1?

9 A There is a very substantial economic benefit
10 of having that unit on the line. It is really in two parts.

11 If the initial kilowatts are made in 1976,
12 before December 31, there is a sizeable investment tax
13 credit accrues to the owners and sizeable is several
14 million dollars.

15 It is something in the range of \$6-8 million, more than
16 it would be if we waited to the year 1977 and got the
17 investment tax credit in 1977.

18 That is one important economic benefit.

eakl ; Q What is the other?

2 A The other is as soon as it comes on, it begins
3 displacing the coal cost to generate the kilowatt hours.

4 Q For your other units?

5 A For our other units. Nuclear power ---
6 nuclear fuel costs are less than the coal fuel costs. As
7 soon as the nuclear unit is on, we will back down the
8 coal-fired units. That difference alone in the cheaper
9 nuclear energy rather than the coal, will save the companies
10 and their customers about \$400,000 a year. Somewhere between
11 \$300,000 and \$400,000 -- I mean a day. It will save the company
12 and their customers between \$300,000 and \$400,000 a day.

13 In addition to that, we have the interest on the
14 construction dollars already invested. That interest runs
15 something like \$88,000 a day. So, these two factors added
16 together give you total costs of delay of the Davis-Besse
17 unit that runs over \$400,000 a day, a large part of which
18 will accrue directly to the customers because of the fuel
19 clauses. \$400,000 a day is a lot of money and that is what
20 we are concerned about.

21 MR. BUCHMANN: Thank you very much.

22 MR. REYNOLDS: I have one of two questions.

23 RECROSS EXAMINATION

24 BY MR. REYNOLDS:

25 Q You indicated, I believe, that Davis-Besse will
begin commercial operation in 1977?

eak3 1 wheeling today than there have been in the past. Do you know
2 why that is?

3 A I think the primary reason has been the impetus
4 by the Nuclear Regulatory Commission to require people
5 to wheel as a condition of licensing.

6 Q In your view, does that increase in wheeling relate
7 in any way to the technology that has led to larger-scale
8 generation?

9 A No, I don't think those are related at all.

10 CHAIRMAN RIGLER: Which companies have been required
11 to wheel as a condition of licensing by the NRC?

12 THE WITNESS: I am afraid, sir, I can't give you a
13 list but I certainly have the impression from talking with our
14 people that the -- that this has been a strong impetus.

15 I have the impression also that many companies
16 have agreed to wheel rather than adjudicate the question
17 because of the delay that the hearing process might require.

18 MR. SMITH: However, technology is an essential
19 aspect of it, isn't it? Normally, you would not have the
20 capacity which would require wheeling were it not for the
21 technology?

22 THE WITNESS: The way I interpreted his question
23 was that he was asking me whether there was something
24 in the technology now that is different than it was before
25 so many people began to wheel. As I see it, the trend toward

eak4 1 more wheeling has been relatively in the last several years
2 and the basic technology of transmission systems and the ability
3 to wheel and so forth, I don't think is any different now
4 than it was 20 years ago.

5 That is what I had in mind when I said in answer
6 to his question that technology really wasn't a factor in the
7 wheeling. We could have done the wheeling 20 year ago
8 technically, just as easy as we can today.

9 MR. SMITH: The technology which required on an
10 economic basis the formation of pools, when did that begin?
11 When was the onset of that?

12 THE WITNESS: Well, the pools have been forming
13 over a long period of time. The PJM pool was organized
14 40 years ago. But the economy of scale, that aspect we
15 were talking about earlier, probably has been an important
16 factor since the early 1950s, when CEI installed a 250 mega-
17 watt unit, its first in about 1954 or '55.

18 And at that time, for CEI, 250 was a large unit but
19 it was a lot more economical than two, 125s would have been.
20 The economy of scale concept was important more than 20
21 years ago.

22 MR. SMITH: With that developed a need for higher
23 capacity transmission and the need to gather loads?

24 THE WITNESS: YES.
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BY MR. REYNOLDS:

2 Q With this increased capacity, is there anything
3 that you know of that would suggest that the transmission of
4 the power should be done under a wheeling arrangement as
5 opposed to some other transmission arrangement that had
6 existed prior to the advent of wheeling?

7 MR. CHARNO: I object to that question unless
8 he specifies some other transmission arrangement. He hasn't
9 testified as to any other.

10 MR. BERRY: I object to the phrase "prior to the
11 advent of wheeling".

BY MR. REYNOLDS:

12 Q On a contractual buy-sell arrangement?

13 A I have already said that the ordinary, usual
14 kind of situation is for adjoining companies to buy and
15 sell with each other. If you want to carry it to a third party,
16 you buy from one and sell to the next. We have been doing
17 that for a long time. That is the typical, most common
18 practice. I don't see any reason why that isn't the
19 feasible practice today.

20 It is the feasible practice today. It is being done
21 all the time.

22 MR. REYNOLDS: Thank you.

23 MR. HJELMFELT: I have no further questions.
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25

arl 1 MR. CHARNO: I think I only have one.

2 BY MR. CHARNO:

3 Q Doesn't a request to participate in CAPCO
4 presuppose a request to participate in all of its
5 generating units, including the fossil units?

6 A I would think as in the cases we have been
7 talking about if someone came to us and said, "I want to
8 join CAPCO," I would have to sit down and say, "Let's be
9 sure I understand what you are saying, and that you under-
10 stand what CAPCO is."

11 I don't think you can presuppose anything
12 particular behind that. You have really got to sit down
13 and say, "What do you mean by joining CAPCO?"

14 MR. CHARNO: I have nothing further.

15 MR. LESSY: No further cross.

16 CHAIRMAN RIGLER: Thank you very much, Mr.
17 Williams.

18 (Witness excused.)

19 MR. BUCHMANN: I call Mr. Hauser.

20 CHAIRMAN RIGLER: Can we take a five-minute
21 break?

22 (Recess.)

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1 Whereupon,

2 DONALD HAUSER

3 was called as a witness on behalf of CEI and, having
4 been first duly sworn, was examined and testified as
5 follows:

6 MR. HJELMFELT: For the record, the City will
7 object to Mr. Hauser appearing as a witness, having
8 previously appeared as an attorney in these proceedings.

9 CHAIRMAN RIGLER: I believe the Board indicated
10 what the ruling would be the last time we discussed this
11 on the record. The objection is overruled.

12 DIRECT EXAMINATION

13 BY MR. BUCHMANN:

14 Q Would you state your name and address for the
15 record?

16 A Donald H. Hauser.

17 Q By whom are you employed?

18 A The Cleveland Electric Illuminating Company.

19 Q I didn't let you get your address in.

20 A 8300 Glen Oak Drive, Broadview Heights, Ohio.

21 My business address is 55 Public Square,
22 Cleveland, Ohio.

23 Q In what capacity are you employed by the
24 Illuminating Company?

25 A As general attorney.

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1 Q How long have you been with the Illuminating
2 Company?

3 A 25 years, this week.

4 Q Which day, precisely?

5 A The 30th.

6 Q Would you briefly trace your employment history
7 with the Illuminating Company?

8 A I started with the general legal staff of the
9 Illuminating Company as associate counsel.

10 Then counsel.

11 Senior counsel in 1957.

12 I became general supervising attorney of the
13 claims section in the Illuminating Company.

14 In 1964, I became managing attorney of the
15 legal department of CEI.

16 And then in 1972, I became corporate
17 solicitor.

18 And then in 1975, I became general attorney.

19 Q What are your responsibilities as general
20 attorney?

21 A To provide, either through the use of attorneys
22 employed directly by the company or through the utilization
23 of attorneys in law firms, not directly employed by CEI
24 to provide the legal representation for the company and
25 the legal advice and consultation required by the officers

1 and employees of CEI to carry out their respective
2 responsibilities.

3 Q Am I correct in assuming you are a member
4 of the bar of the Supreme Court of Ohio?

5 A Yes, I am.

6 Q Mr. Hauser, have you in your various capacities
7 at the Illuminating Company had occasion to become familiar
8 with the dealings between the Illuminating Company and the
9 City of Cleveland?

10 A Yes, I have.

11 Q When did that -- when did you start
12 participating in those dealings, if you did?

13 A Well, almost from the beginning of my employment
14 with CEI.

15 However, the heaviest concentration of my
16 responsibilities and activities involving the relationship
17 of CEI and the City of Cleveland and its Municipal Light
18 Plant would be somewhere around 1964 or '63, in that area.

19 Q And has your participation in those dealings
20 been continuous since that time?

21 A Yes, it has.

22 Q Mr. Hauser, are you familiar with the dealings,
23 if I may use that word, between the City of Cleveland and
24 the Illuminating Company with respect to interconnection?

25 A Yes, I am.

1 Q And the two systems are presently interconnected,
2 are they not?

3 A They are.

4 Q When was that interconnection complete?

5 A That was completed and first energized in
6 May of 1975.

7 Q When did you first become involved in any dealings
8 with the City with respect to an interconnection?

9 A The first time that representatives of the
10 City of Cleveland approached CEI with regard to an inter-
11 connection was early in 1969.

12 Q Who were the representatives of the City of
13 Cleveland which were involved in that approach?

14 A Mr. Stefanski who was the director of utilities.
15 As these initial discussions or requests were pursued and
16 negotiations took place, people like Arnold Turkel
17 of the City of Cleveland was involved, and Mr. Ericson,
18 Mr. Bednar, Mr. Gulia, G-u-l-i-a. Mr. Kapitan,
19 K-a-p-i-t-a-n.

20 Q Who were these people?

21 A Mr. Stefanski was the director of utilities, the
22 position Mr. Kuduki presently has.

23 Mr. Turkel was a professional engineer, and also
24 I believe his title at that time was executive commissioner
25 of utilities.

1 Mr. Ericson was a professional engineer who
2 consulted with the City of Cleveland.

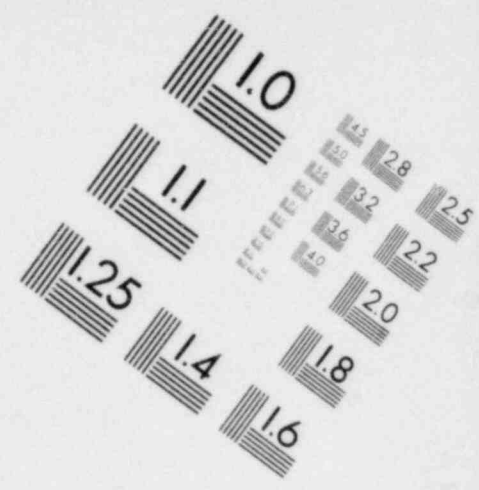
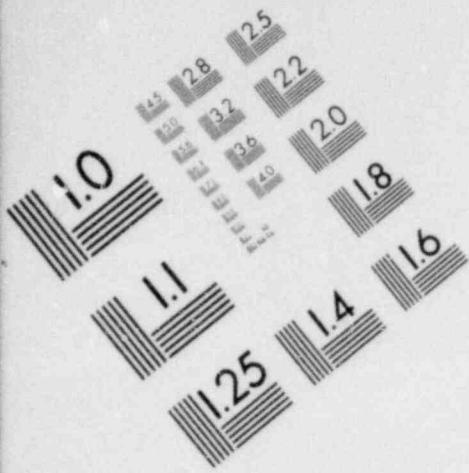
3 Mr. Bednar was also an engineer.

4 Also a name I didn't mention before was Mr.
5 Matthews, who was a long-time employee of the
6 Municipal System, and was at that time in a supervisory
7 capacity.

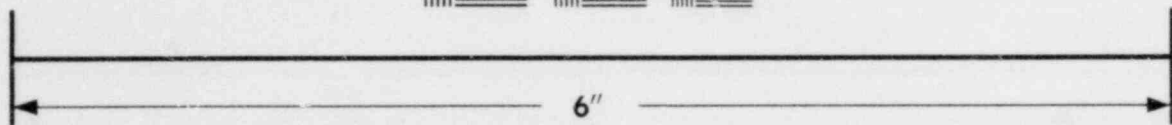
8 I'm not sure exactly what his title was.

9 Q You mentioned Mr. Kapitan. Who was he?

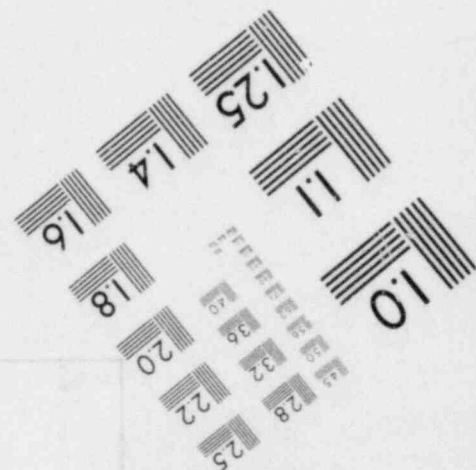
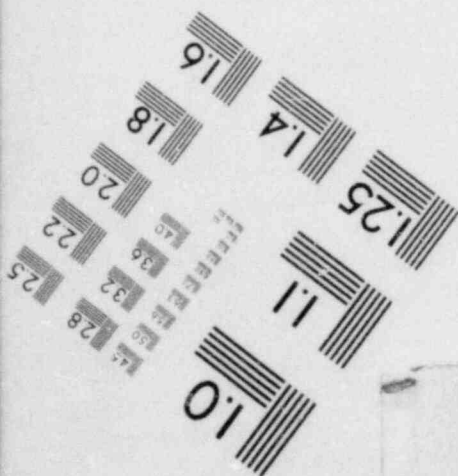
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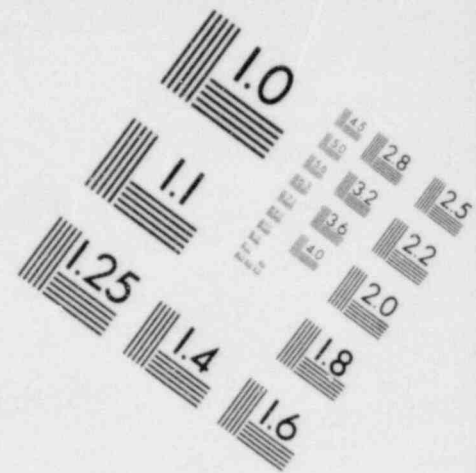
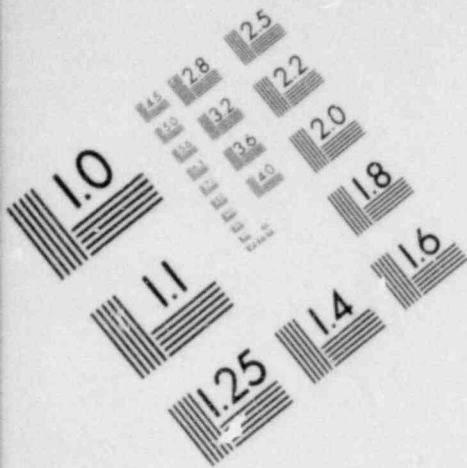


**IMAGE EVALUATION
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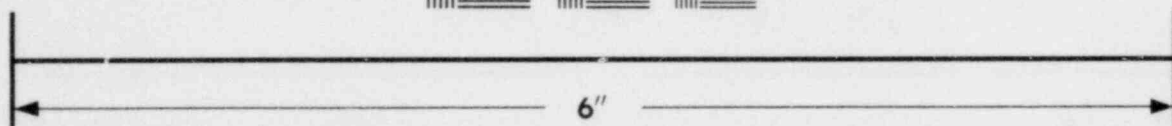


MICROCOPY RESOLUTION TEST CHART

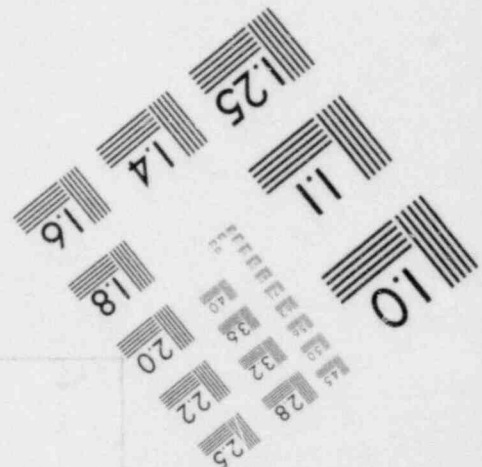
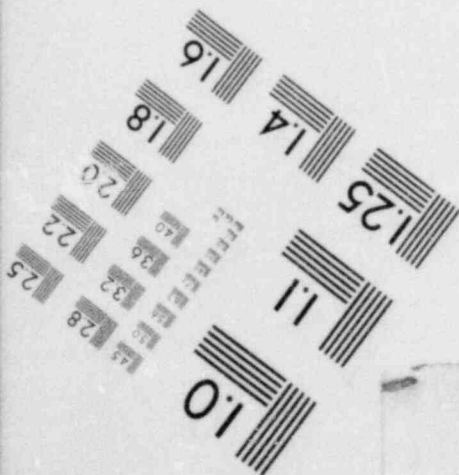




**IMAGE EVALUATION
TEST TARGET (MT-3)**



MICROCOPY RESOLUTION TEST CHART



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1 A Mr. Kapitan was a lawyer in the law department
2 of the City of Cleveland.

3 Q Prior to the time you are talking about, early
4 1969, had the Illuminating Company ever approached the
5 City to go in the opposite direction with respect to
6 an interconnection?

7 A Yes, we had on a number of occasions proposed
8 an interconnection between the two systems.

9 Q I presume no interconnection resulted?

10 A No interconnection resulted. In fact, there were
11 quite a number of people associated with the municipal
12 light plant that opposed an interconnection on the ground
13 that it should remain as an isolated system and that the
14 interconnection with CEI would mean the end of the municipal
15 system.

16 I might say that these sentiments continued
17 even after -- well, even after discussions began in '68 with
18 regard to an interconnection and, in fact, as late as April
19 of 1975, right about the time we had an agreement ready for
20 execution.

21 There was some thoughts expressed in the utilities
22 committee of counsel that they should not enter into an
23 interconnection agreement with CEI.

24 Q Now you say the City first approached you, going in
25 that direction, in early 1969. What was the request made by the

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1 City?

2 A The request initially by the City was to provide
3 some temporary service to them while they did certain work
4 on several of their units to install air pollution control
5 equipment, precipitators and this type of thing.

6 Q I see.

7 And what happened? What did you do?

8 A Well, the -- our engineers got together with
9 their engineers and technical people and into the summer of
10 1969, they worked out a system that turned out to be the
11 transfer of certain loads.

12 We later did refer to it as load transfer
13 service. Then toward the fall of '68, really not much
14 happened until during the Holidays in 1969, Christmas,
15 New Years time, the municipal system had a serious system
16 outage and then these plans that were developed for the
17 period in which precipitators and other air pollution
18 control equipment was to be installed were dusted off to
19 provide in the shortest possible time some assistance to
20 the customers of the municipal light plant.

21 Q What do you mean in the shortest possible time?

22 A As I say, this outage occurred between
23 Christmas and New Years. And we were able to energize the
24 load transfer points early in February of 1970.

25 I might say that this was part of a three-phase

bw3 1 program. Phase one was a temporary load transfer service.
2 Phase 2 was to be a firmer load transfer arrangement and
3 Phase 3 was to be a permanent interconnection between the
4 two systems.

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al:1 Q Why go through these steps? Why not go directly
r1 2 to a permanent interconnection?

3 A A permanent interconnection was not possible in
4 the time required. At that time the lead time on equipment
5 for a permanent interconnection was something in the order
6 of two years, 30 months, something like that.

7 Q And the lights were already out?

8 A That's correct.

9 Q How did the load transfer system work, and I
10 don't mean from an engineering thing, but how was it actuated?

11 A Well, at different spots on the systems of both
12 utilities, a CEI supply, or let's say a cable would be
13 connected to a cable of the Municipal System serving, for
14 example, a substation.

15 Then through appropriate switching that
16 municipal substation would be supplied by CEI rather than
17 by the Municipal System.

18 Q Now how did you know -- the City didn't use
19 the load transfer service 100 percent of the time, did it?

20 A When the load transfer transfers were
21 effective, they would utilize that service until they would
22 be disconnected at some time.

23 Q That is the point I want to get to. How did you
24 know when the City wanted to use the load transfer service?
25 What happened?

1 A They would -- their operating personnel would
2 call operating personnel of CEI to arrange for the load
3 transfers one way or the other. Either to CEI, or from
4 CEI back to MELP.

5 Q And do you know, how were these requests made?
6 We have to have it right away, or was there any lead time
7 on these things?

8 A In most cases there was lead time. For example,
9 the initial energizing of the load transfer service, and
10 this was true throughout the period that load transfer
11 service was provided.

12 Q Actually, when the transfer was made, this
13 requires a disconnecting of one system and then a
14 connecting of the other, does it not?

15 A That's correct.

16 Q That results in an outage, if that is the right
17 word, to the customer?

18 A That's correct.

19 Q Do you have records which would indicate the
20 licensing of time that those outages would last?

21 A Yes. And also the City kept records of the
22 times of the outages. In most cases, the outage would be
23 in the area of a minute. Sometimes less, and sometimes a
24 few seconds more.

25 Q There is testimony in this record that when the

1 City operating people contacted the CEI operating people, the
2 latter would contact you.

3 A Yes.

4 Q Could you tell us the reason for that?

5 A Again we are talking about a period from February
6 of 1970 until May of 1975. There were a number of
7 reasons:

8 One, we were involved in litigation at least
9 since 1971, and this involved a number of forms involving
10 CEI and the City of Cleveland and the Municipal System.

11 Secondly, in addition to the responsibilities
12 that I had in that litigation, I was the coordinator of
13 day-to-day activities involving CEI and the City of
14 Cleveland.

15 Of course, very important were the orders of the
16 Federal Power Commission that established at least from early
17 1972 the standards and criteria pursuant to which the
18 service was provided.

19 Before that date, it was provided to letter
20 agreement with the City of Cleveland which was supplemented
21 and which had been filed with the Federal Power Commission
22 and became FPC No. 7.

23

24

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S51
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1 Q That is a CEI tariff designation?

2 A That is correct.

3 Q Having given us that background, why did you want
4 to have people call you when the City requested a load
5 transfer?

6 A To make certain that CEI did comply with the
7 standards and criteria for providing that service
8 and that it complied with the orders of the Federal Power
9 Commission and secondly, to make certain that the City
10 of Cleveland was also abiding by first the contract and
11 then later, the orders of the Federal Power Commission.

12 Q Can you give me some idea of the standard and
13 criteria you are talking about?

14 A Well, principally, it was whether or not the
15 municipal system could handle its own load on the one
16 hand and whether CEI from its standpoint and its customer's
17 standpoint, provides the service requested.

18 Q Now, during that period also, did you have any
19 labor difficulties on the CEI system?

20 A Yes. Beginning in May of 1973 and particularly
21 through, I think it was September 22 of '73, we had a strike
22 of our bargaining unit personally. That is approximately 2900
23 out of 4900 employees.

24 During this period, the system was operated by non-
25 bargaining unit people or supervisory and what we refer to as

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1 classified employees. During this period of time, was the
2 first time that the procedure was set to talk to me first before
3 any load transfer service was provided or disconnected.

4 I had been called frequently before this period, but
5 during the period of the strike this procedure was
6 established.

7 I have learned in the course of the discovery
8 and the hearing process in these proceedings that a
9 number of our operating people understood that procedure
10 to be required both before and after the strike in 1973.

11 Q Why did you institute it during the strike?

12 A Well --

13 Q When you say institute you mean as a formal
14 procedure?

15 A It wasn't written down. It was established as
16 a procedure to be followed by everyone in the company who
17 was involved with the municipal light plant. As I said
18 before, we were operating our entire system with supervisory
19 personnel, most of whom had not done the type of work they
20 were called upon to do during this period of time.

21 Of course, in the strike, we had difficulties
22 with strikers and pickets at various locations.

23 They interfered with the operation of the system,
24 the access to its facilities. Also, regular rail shipments
25 at least to a good many of our plants we are disrupted so that
we had to take coal for an extensive part of this time from our

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stockpiles of coal.

And even when we are fully planned, taking coal out of the stockpile is not the easiest thing to do.

In other words, it is much better to rely on regular rail shipments or truck shipments of coal.

Also, even though we were buying as much power as we could, our stockpile of fuel was reduced at a number of our plants to a very low level.

ES51

arl 1 Q Like what do you recall?

2 A Like in one of the plants, as I recall, it was
3 down to 11 days. At another, maybe 13.

4 The Avon Lake Plant and the Ashtabula Plant, I
5 wouldn't say we were able to restore normal rail shipments,
6 but we didn't have the coal supply problems at those that we
7 had at the other two plants.

8 And, of course, during this period we were
9 interested in conserving, as I say, our manpower. We were
10 also interested in conserving our fuel supply, and to the
11 extent MELP could take care of their own requirements, we
12 thought they should.

13 Q By the way, what would you consider normal
14 fuel pile, or what did you consider it in those days?

15 A 60 days, and at one time it was 90 days, but 60
16 days.

17 Q In making the load transfers, how is the switching
18 done? Is it done from some central headquarters?

19 A No. Usually it requires -- let's say it is
20 directed from a central headquarters, both ours and the
21 Municipal System.

22 Both MELP and ours send crews to the field to make
23 switches at the appropriate locations to transfer load one
24 way or the other.

25 Q Did the Municipal System ever ask CEI, to your

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1 knowledge, to activate the load transfer points on which
2 occasion CEI refused?

3 A The answer is yes. This was extremely unusual,
4 but I can recall several occasions in which we refused to
5 do so.

6 Q Could you give me what would be the reason
7 for such a refusal?

8 A That we could not supply the service without
9 adversely affecting some of our firm power customers of
10 CEI?

11 Q Did you ever ask the municipality or advise the
12 municipality that you were going to terminate the load
13 transfer service on a given occasion when the City wanted
14 to continue it?

15 A Yes, we did.

16 Q Did that happen frequently?

17 A No, that was infrequent also.

18 Q What would be the reasons for that?

19 A One, we filed a notice of termination before the
20 Federal Power Commission.

21 There were -- we also advised them before we
22 filed that notice of termination that in April, I think, of
23 1971 that if they didn't pay the bills which they owed
24 us at that time, which were in excess of \$1 million, we were
25 going to terminate service.

1 Q Did they pay the bill?

2 A No.

3 Q Did you terminate service?

4 A No.

5 Q Why not?

6 A First of all, we filed a notice of termination
7 with the Federal Power Commission. That was extended for
8 periods of time during 1971 when we were attempting to
9 negotiate a settlement of the differences between the City
10 of Cleveland and ourselves with regard to various disputes among
11 them.

12 As I say, including the payments.

13 These negotiations, and the FPC Staff was involved
14 to a certain extent in these negotiations, were not successful
15 and finally in December of 1971 we did not extend our
16 notice of termination.

17 However, the Federal Power Commission did order a
18 five-months suspension of termination of the load
19 transfer service so it continued after that last date of
20 our notice of termination.

21 CHAIRMAN RIGLER: We will resume at 9:30
22 tomorrow morning.

23 (Whereupon, at 4:30 p.m., the hearing
24 was adjourned, to reconvene at 9:30 a.m.,
25 Tuesday, May 25, 1976.)