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BEFORE THE POLLUTION CONTROL BOARD
OF THE STATE OF ILLINOIS

7-19-78
POLLUTION CONTROL BOARD

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IN THE MATTER OF:)
)
PROPOSED DETERMINATION OF NO) No. PCB 78-61
SIGNIFICANT ECOLOGICAL DAMAGE)
FOR THE QUAD CITIES GENERATING)
STATION.)

July 19, 1978
10:00 a.m.

BEFORE: HEARING OFFICER ALAN B. MILLER.

The hearing in the above-entitled matter
convened pursuant to notice at Suite 300, 309 West
Washington Street, Chicago, Illinois.

PRESENT:

MESSRS. ISHAM, LINCOLN & BEALE, by:
MR. A. DANIEL FELDMAN,

appeared on behalf of the Petitioner;

HONORABLE WILLIAM J. SCOTT,
Attorney General of the State of Illinois, by:
MR. RUSSELL R. EGGERT,
Assistant Attorney General,

appeared on behalf of the Illinois
Environmental Protection Agency.

ALSO PRESENT:

MR. HAROLD BERNHARDT,
MS. ANN SELKOVITZ.

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I N D E X

<u>WITNESS</u>	<u>DX</u>	<u>CX</u>	<u>RDX</u>	<u>RCX</u>
THOMAS E. HEMMINGER				
By Mr. Feldman	9			
By Mr. Eggert		10		
WILLIAM W. SAYRE				
By Mr. Feldman	12			
By Mr. Eggert	15		16	
DONALD B. McDONALD				
By Mr. Feldman	18			
By Mr. Eggert		20		
WILLIAM M. LEWIS				
By Mr. Feldman	26			

E X H I B I T S

<u>Joint Number</u>	<u>MARKED</u>	<u>RECEIVED</u>
No. 1	6	6
<u>Petitioner's Number</u>		
No. 1	10	10
No. 2	15	15
No. 3	20	20
No. 4	27	27

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HEARING OFFICER MILLER: Appearing and present for Commonwealth Edison is Mr. A. Daniel Feldman, and for the Agency is Mr. Russell R. Eggert. And my name is Alan B. Miller, the Hearing Officer.

Mr. Feldman, there is no problem with the procedure that you suggested before we went on the record as long as Mr. Eggert has no objection, and he said he did not. But, to begin with, why don't you make a brief statement for the record in the nature of an opening statement and set the stage so that whoever is on the Board reading the transcript will not have to refer back to this file or back to that other file.

MR. FELDMAN: It is a proceeding filed by Commonwealth Edison under Rule 203(i)(5) of Chapter 3 of the Board's Rules and Regulations. That Rule requires a showing five years after a plant has gone into operation or five years after the regulation has gone into effect -- and in the case of Quad Cities, it's five years after the plant is in operation -- with respect to the likelihood of ecological damage resulting from the heated water discharge from the plant's cooling water system.

The Company's witnesses today are Mr. Thomas Hemminger, who is an employee of Commonwealth Edison

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1 and who has a sort of background statement outlining
2 the studies the Company has conducted during the last
3 five years.

4 And three gentlemen who have had extensive
5 contact with the Quad Cities Station and the biological
6 studies of its operation. First is Dr. William Sayre,
7 S-a-y-r-e, from the University of Iowa who has appeared
8 before the Board in other Quad Cities proceedings and
9 who with Dr. Jack Kennedy from the University of Iowa
10 is responsible for the design of the diffuser discharge
11 pipe in the Mississippi River.

12 Second is Dr. Donald B. McDonald of the
13 University of Iowa who is a Biologist who has
14 testified before this Board in earlier Quad Cities
15 proceedings and whose testimony will cover, in general,
16 the five years of biological monitoring.

17 The third is Dr. William Lewis, Southern
18 Illinois University, whose specialty is fish biology
19 and who will testify as to the general findings,
20 particularly with respect to fish, of the affect of
21 the heated water discharge at Quad Cities.

22 HEARING OFFICER MILLER: Okay. Mr. Eggert, would
23 you give us a little statement on behalf of the Agency?

24 MR. EGGERT: I have simply two observations to

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1 make, one of which is the Agency is not contesting the
2 sufficiency of the showings in this case. We do not
3 think that there will be, has been, or is likely to
4 be significant ecological damage from the Quad Cities
5 Station based upon the evidence which has been gathered
6 thus far, and we will not be presenting any testimony
7 today.

8 My second observation, and it is only that,
9 is that in the pleadings as they have been filed thus
10 far, there is reference, and in fact, there is a copy
11 of a 1972 agreement between Commonwealth Edison and
12 the Illinois Attorney General and various other parties
13 concerning the operation of the Quad Cities plant and
14 thermal discharge from it. My only observations, while
15 I think we would take issue with the characterization
16 of that agreement which was set forth in Commonwealth
17 Edison's report, I really don't think that it's at
18 issue here, and I think that the meaning and application
19 of that 1972 agreement will be resolved at some other
20 time in some other forum and not in this proceeding.
21 And, indeed, I think we will be submitting a stipulation
22 to that effect.

23 MR. FELDMAN: Why don't we put that in the record
24 now so the Board can see it early on?

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1 MR. EGGERT: We have a Stipulation which has been
2 signed by counsel for both parties.

3 (WHEREUPON, the document was
4 tendered to the Hearing Officer.)

5 THE HEARING OFFICER: All right. The Stipulation
6 which you have handed me will be marked as Joint
7 Exhibit No. 1 and will be entered into the record.

8 (WHEREUPON, said document was marked
9 Joint Exhibit No. 1, and received in
10 evidence.)

11 THE HEARING OFFICER: All right. Do you have any-
12 thing else to add in response to that?

13 MR. FELDMAN: Nothing at all, Mr. Hearing Officer,
14 and we're prepared to call our first witness.

15 I have two procedural questions, if I might,
16 before I call the first witness. They are: In Dr.
17 Sayre's testimony, there are both figures and tables.
18 I can convert all of those to Edison Exhibits 1 through
19 -- but I think it's sort of an exercise which only
20 messes up the record. If you have no objection, I
21 will be unlawyerlike and ask they be admitted as
22 figures and tables, just as if this were an academic
23 session rather than a formal hearing.

24 I also -- I have no particular preference

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1 about the form of the record. I can ask the Court
2 Reporter to copy the testimony, recopy it on her
3 machine and copy it into the transcript. It's not
4 terribly long. On the other hand, I can supply copies
5 and bind the pre-written copies of the testimony into
6 the record and not reproduce it. It's largely a matter
7 of how you like the record to look.

8 THE HEARING OFFICER: As I recall, in the proceed-
9 ings, the expense is the Petitioner's.

10 MR. FELDMAN: And Edison always looks to save
11 money.

12 THE HEARING OFFICER: I'm sure the decision-maker
13 will take judicial notice of that statement.

14 I don't see any problem with just appending
15 the typewritten copies of the testimony into the
16 record to save time and money. What I will ask is,
17 just to obviate the possibility of any confusion and
18 there being many sets of copies, the originals that
19 will go with the original transcript -- I want the
20 witnesses to initial all these pages of these.

21 MR. FELDMAN: Okay. I have a written copy, and
22 I will have that done after the hearing.

23 THE HEARING OFFICER: Fine. I think we're ready
24 to proceed. Call your first witness.

1 Before we went on the record, counsel for
 2 Petitioner and the Agency agreed that in the absence
 3 of any members of the public, the witnesses will be
 4 sworn and introduced and then will offer, or there will
 5 be offered, the typewritten statements of the witnesses
 6 to the Board in lieu of their reading the statements
 7 out loud.

8 Let me ask, at this time, are there any
 9 members of the public present?

10 I see none, and no one has responded to that
 11 question. We will proceed on this basis: If someone
 12 does show up, then, I think, from that point forward,
 13 we would be reading into the record orally the testi-
 14 mony.

15 Mr. Feldman, call your first witness, please.

16 MR. FELDMAN: Mr. Hemminger.

17 THE HEARING OFFICER: Would you be so kind as to
 18 swear the first witness, please?

19 (WHEREUPON, the witness was duly sworn.)

20 THOMAS E. HEMMINGER,
 21 called as a witness herein by the Petitioner, having
 22 been first duly sworn, was examined and testified as
 23 follows:
 24

DIRECT EXAMINATION

1
2 BY MR. FELDMAN:

3 Q Mr. Hemminger, I show you four typewritten
4 pages which have been marked as the "Statement of
5 Mr. Thomas E. Hemminger in Supprt of the Proposed
6 Determination of no Significant Ecological Damage for
7 Quad Cities Station," and they are dated July 19, 1978,
8 and ask if those pages were prepared by you and whether
9 they are your testimony today?

10 (WHEREUPON, the document was
11 tendered to the witness.)

12 BY THE WITNESS:

13 A Yes, they are.

14 MR. FELDMAN: I would ask, Mr. Hearing Officer,
15 that the four pages Mr. Hemminger has identified be
16 bound into the record as his direct testimony.

17 THE HEARING OFFICER: Mr. Hemminger, will you
18 state your name?

19 THE WITNESS: Thomas E. Hemminger.

20 THE HEARING OFFICER: Where do you reside?

21 THE WITNESS: In the State of Illinois, in New
22 Lenox.

23 THE HEARING OFFICER: Okay. That's enough of
24 that.

1 Do you have any comments, objections, or
2 questions?

3 MR. EGGERT: I have no objection to binding his
4 prepared testimony into the record. I do have a couple
5 of questions on cross-examination.

6 THE HEARING OFFICER: Fine. The typewritten
7 testimony of Mr. Hemminger --

8 Hemminger?

9 THE WITNESS: Hemminger.

10 THE HEARING OFFICER: -- Hemminger will be
11 accepted into the record. We will refer to it for
12 purposes of identification as Petitioner's Exhibit
13 No. 1.

14 Would you be kind enough to initial all the
15 pages on the bottom?

16 (WHEREUPON, the document was
17 tendered to the witness.)

18 (WHEREUPON, said document was marked
19 Petitioner's Exhibit No. 1, and received
20 in evidence.)

21 THE HEARING OFFICER: Mr. Eggert, proceed.

22 CROSS-EXAMINATION

23 BY MR. EGGERT:

24 Q Mr. Hemminger, in your prepared testimony,

1 there is a reference to high velocity discharge of
2 cooling water through the diffuser ports. It's in the
3 second paragraph of your prepared testimony.

4 Is the velocity of water discharged through
5 the diffuser ports greater than the normal river
6 velocity?

7 A Yes, it is.

8 Q And other factors being equal, what would
9 happen to the level of suspended solids carried by a
10 river when the velocity increases?

11 A When the velocity of the river increases,
12 the suspended solids loading may increase.

13 Q Has Edison undertaken any studies of whether
14 this, in fact, occurs or does not occur at Quad Cities
15 when the water is discharged out the diffuser ports?

16 A We've conducted chemical water studies at
17 the Quad Cities Station.

18 Q Have you studied the parameters of the
19 level of suspended solids?

20 A Yes, I believe we have.

21 Q What were the results of the studies?

22 A I'm not aware of any significant change in
23 the level of suspended solids loading in the Mississippi
24 River upstream or downstream of the Station.

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1 MR. EGGERT: No further questions.

2 THE HEARING OFFICER: Mr. Feldman, do you have
3 any?

4 MR. FELDMAN: You are excused, Mr. Hemminger.

5 Mr. Hearing Officer, the second witness is
6 Dr. William Sayre.

7 THE HEARING OFFICER: Mr. Sayre, will you come
8 forward, please?

9 (WHEREUPON, the witness was duly sworn.)

10 THE HEARING OFFICER: Would you state your name,
11 for the record, please?

12 THE WITNESS: William W. Sayre.

13 THE HEARING OFFICER: Where do you reside?

14 THE WITNESS: Iowa City, Iowa.

15 THE HEARING OFFICER: Okay.

16 WILLIAM W. SAYRE,

17 called as a witness herein by the Petitioner, having
18 been first duly sworn, was examined and testified as
19 follows:

20 DIRECT EXAMINATION

21 BY MR. FELDMAN:

22 Q Dr. Sayre, I show you a document consisting
23 of three pages of typewritten testimony and ten pages
24 of figures and tables relating to that testimony, as

1 well as a single-page resume, all of which have been
2 entitled "Hydraulic and Thermal Performance of Diffuser
3 Pipe System, Quad Cities Power Station, by William W.
4 Sayre," dated July 19, 1978.

5 Let me ask you about it in pieces.

6 Was the testimony on the first three pages
7 prepared by you?

8 (WHEREUPON, the document was
9 tendered to the witness.)

10 BY THE WITNESS:

11 A Yes, it was.

12 BY MR. FELDMAN:

13 Q Is it as true and correct today as it was
14 when you prepared it?

15 A Yes, it is.

16 Q Let me refer you to the next ten pages which
17 consist of figures labeled Fig. 1 through Fig. 7 and
18 Table 1 and ask you if each of those figures and that
19 table were prepared by you or under your supervision
20 or direction?

21 (WHEREUPON, the document was
22 tendered to the witness.)

23 BY THE WITNESS:

24 A Yes, they were.

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1 BY MR. FELDMAN:

2 Q And the resume which comprises the last page
3 is that resume of your prior experience?

4 A Yes. That's me.

5 MR. FELDMAN: Mr. Hearing Officer, I would ask
6 that the three pages of testimony and the resume be
7 bound into the record, and that the Exhibits which are
8 labeled Fig. 1 through 7 and Table 1 be admitted as
9 Exhibits in this proceeding.

10 THE HEARING OFFICER: Mr. Eggert?

11 MR. EGGERT: No objection.

12 THE HEARING OFFICER: All right.

13 MR. FELDMAN: Dr. Sayre is available for cross-
14 examination.

15 THE HEARING OFFICER: Dr. Sayre, would you initial
16 each page at the bottom?

17 THE WITNESS: Any particular place?

18 THE HEARING OFFICER: At the bottom.

19 (WHEREUPON, the document was
20 tendered to the witness.)

21 THE HEARING OFFICER: The report entitled "Hydraulic
22 and Thermal Performance of Diffuser Pipe System, Quad
23 Cities Power Station, by William W. Sayre," is hereby
24 admitted into and will be bound in the record of this

1 proceeding as Petitioner's Exhibit No. 2.

2 (WHEREUPON, said document was marked
3 Petitioner's Exhibit No. 2, and received
4 in evidence.)

5 THE HEARING OFFICER: Mr. Eggert --

6 MR. EGGERT: No cross-examination.

7 THE HEARING OFFICER: -- any cross-examination?

8 MR. EGGERT: No cross-examination.

9 THE HEARING OFFICER: Mr. Feldman?

10 MR. FELDMAN: It's very hard to go outside the
11 scope of cross without the cross, but I have one
12 question, if you will indulge me.

13 DIRECT EXAMINATION (Resumed)

14 BY MR. FELDMAN:

15 Q Given the full plant load of the diffuser
16 pipe in the Mississippi and the average velocity of
17 the Mississippi River, can you give us an estimate of
18 how much the operation of the diffuser pipe at full
19 plant load would have increased the velocity of the
20 river at a point, say, 500 feet downstream of the
21 diffuser pipe?

22 A Well, it would be by a very small amount.
23 You'd have to compute the added momentum of the plant
24 flow and add it to the river velocity. I'd have to go

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1 through and do calculations to do that.

2 But, I think, it's safe to say that it
3 would be difficult to pick it up by measure. It would
4 just be a few percent increase or less than 5 percent.

5 MR. FELDMAN: Nothing further.

6 THE WITNESS: And this would just be a local
7 increase in velocity, general increase.

8 MR. EGGERT: If I may, this has provoked me to
9 want to ask a couple of questions of this witness. I
10 may have been asking questions of the wrong witness
11 before.

12 CROSS-EXAMINATION

13 BY MR. EGGERT:

14 Q Assuming that the discharge of water out the
15 diffuser ports is a greater velocity than the normal
16 velocity of the river, would there be within the near
17 field from the diffuser pipe -- say, within the first
18 50 to 100 feet, would there be any increase in the
19 amount of suspended solids which would be carried?

20 A We considered this at the time that the
21 model sites for the diffuser pipes were done, one of
22 the considerations in which we based the 20 percent
23 upward angle of the diffuser ports. We conducted a
24 series of tests in which we sprinkled sand particles

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1 around the bed of the plume and found that the -- for
2 the design discharge conditions, there was minimal
3 movement of the sand particles on the bed of the plume
4 when we had the jets inclined at that angle, a minimal
5 disturbance at the bed of the river, and almost a
6 minimal disturbance at the water surface.

7 Q Since the time that the design studies were
8 done, have there been any studies done on the river
9 itself?

10 A To my knowledge, no. Any influence that
11 this might have been on the suspended solids -- is that
12 what you're asking -- upstream and downstream?

13 Q Yes.

14 A To my knowledge, no.

15 MR. EGGERT: No further questions.

16 MR. FELDMAN: No redirect.

17 THE HEARING OFFICER: Thank you very much. You
18 are excused.

19 Mr. Feldman, would you like to call your
20 next witness?

21 MR. FELDMAN: Mr. Donald B. McDonald.

22 (WHEREUPON, the witness was duly sworn.)

23 THE HEARING OFFICER: Would you state your name
24 and address for the record?

1 THE WITNESS: Donald B. McDonald, Iowa City, Iowa

2 THE HEARING OFFICER: Go ahead, Mr. Feldman.

3 DONALD B. McDONALD,

4 called as a witness herein by the Petitioner, having
5 been first duly sworn, was examined and testified as
6 follows:

7 DIRECT EXAMINATION

8 BY MR. FELDMAN:

9 Q Dr. McDonald, I show you a document consist-
10 ing of a cover page entitled "Testimony of Donald B.
11 McDonald regarding Ecological Effects of Operation of
12 the Quad Cities Station, Before the Illinois Pollution
13 Control Board," dated July 19, 1978, consisting of
14 six typewritten pages, having appended thereto a
15 resume of your experience which is five pages long,
16 and ask you if that document was prepared by you?

17 (WHEREUPON, the document was
18 tendered to the witness.)

19 BY THE WITNESS:

20 A Yes, sir, it was.

21 BY MR. FELDMAN:

22 Q Is that the testimony which you would give
23 in this proceeding today if you were to be orally
24 examined?

1 A Yes, it is.

2 MR. FELDMAN: Mr. Hearing Officer, I would ask
3 that the Court Reporter mark this document of Dr.
4 McDonald's Petitioner's Exhibit No. 3 and that the
5 testimony and resume of Dr. McDonald be so marked and
6 be admitted as Petitioner's Exhibit No. 3.

7 THE HEARING OFFICER: Mr. Eggert?

8 MR. EGGERT: I have a couple of questions for
9 this witness.

10 THE HEARING OFFICER: Do you have any objections?

11 MR. EGGERT: No objection. I'm sorry.

12 THE HEARING OFFICER: All right. Have Dr.
13 McDonald initial at the bottom each page of that
14 Exhibit, please.

15 (WHEREUPON, the document was
16 tendered to the witness.)

17 THE HEARING OFFICER: The "Testimony of Donald B.
18 McDonald regarding Ecological Effects of Operation of
19 the Quad Cities Station," the typewritten testimony
20 dated July 19, 1978 and initialed by Dr. McDonald is
21 hereby admitted and will be bound in the record as
22 Petitioner's Exhibit No. 3.

23 Would you, please, mark this accordingly?
24

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1 (WHEREUPON, said document was marked
2 Petitioner's Exhibit No. 3, and received
3 in evidence.)

4 THE HEARING OFFICER: Mr. Eggert, you may cross-
5 examine.

6 MR. EGGERT: Thank you.

7 CROSS-EXAMINATION

8 BY MR. EGGERT:

9 Q In the course of your study of the effects
10 on the fish and lower biota population in the river
11 from the Quad Cities Station, during portions of the
12 time period that this study was undertaken, the plant
13 was operating either partially or completely on an
14 open cycle mode, was it not?

15 A Yes, sir.

16 Q When the plant is operated partially or com-
17 pletely open cycle as opposed to closed cycle on the
18 spray canal, more water is withdrawn from the
19 Mississippi for cooling purposes than there purportedly
20 is in the closed cycle?

21 A That is correct.

22 Q Is there any difference in the degree of
23 entrainment or impingement on the biota population
24 when the plant is withdrawing more water from the

1 Mississippi as opposed to when it's withdrawing very
2 little or none?

3 A Yes. Obviously, since you would entrain a
4 larger amount of water, you would entrain more
5 organisms during open cycle operation. There is im-
6 pingement, but it's not directly proportional as in
7 the case of entrainment.

8 Q Have you done any measure or calculations
9 of the differences in entrainment with the plant
10 operating open or partially open cycle as opposed to
11 closed cycle?

12 A Yes, we have.

13 Q What were the results of that operation?

14 A We did find a higher percentage of the river
15 organisms being entrained during open cycle than during
16 closed cycle. However, the percentage entrained was
17 not as great as that of impingement; was not sufficient
18 to affect the ecology of the river downstream from the
19 station.

20 Q What percentage was entrained? What did you
21 find?

22 A Well, this would vary.

23 Q Under varying modes, of course.

24 A It would depend, of course, on the amount of

1 water being pumped through the plant, and also, of
2 course, on the river flow. Probably, the greatest
3 period occurred during low flow periods during the
4 late summer and fall of '76 and '77 when the river was
5 below seven day ten-year low flow. I can't recall the
6 exact percentages that were present at that time, but
7 the high values, high percentage values, occurred in
8 this short period of time.

9 Normally, under average flow conditions and
10 concentrations, the percentage of the river flow that
11 goes through the plant is quite low.

12 Q Is the aquatic biota population evenly dis-
13 tributed across the river?

14 A No. There you get a patchy distribution of
15 all of the floating organisms throughout the river.

16 Q And is there any general pattern with the
17 distribution of population at the point of the Quad
18 Cities Station?

19 A In the course of the biological studies of
20 phytoplankton and zooplankton populations, then we
21 simply saw what you might say is a random distribution,
22 a patchy distribution. In the case of floating fish
23 larvae, we did find a somewhat higher concentration
24 along the Illinois shore.

1 Q That's along the side which the Quad Cities
2 Station is located on?

3 A That is correct.

4 Q Did you find any variation in the distribu-
5 tion of fish or larval fish in the river during
6 different periods of the year?

7 A Yes, sir. Very definitely. You get --
8 depending on the species of fish, you get spotting and
9 drifting of the larvae in various periods of time.
10 Like saaa, for example, have the highest percentage
11 in the drift in early spring. Another is the drum
12 who spawn pretty much through to summer periods and
13 have peaks of drift through the summer and extended
14 periods of drift, where others have very short periods
15 of drift.

16 Q And would the organisms having extended
17 periods of drift, particularly those throughout the
18 summer -- would those tend to congregate through the
19 eastern bank of the river?

20 A As I recall, yes. In the case of the drum
21 larvae, I believe, yes. We found a greater density of
22 these along the Illinois shore.

23 MR. EGGERT: Thank you. No further questions.

24 THE HEARING OFFICER: Mr. Feldman, do you have any

1 further questions?

2 REDIRECT EXAMINATION

3 BY MR. FELDMAN:

4 Q What's the dominant fish species in that
5 pool of the Mississippi River?

6 A Gizzard shad.

7 Q By total weight or total numbers, what
8 percentage of the entrained fish -- what percentage
9 of the fish entrained by the Station's operation are
10 comprised of gizzard shad?

11 A Entrained? I don't recall right now.

12 Q Is it in excess of 75 percent?

13 A Entrained -- yes, sir, I believe it is.

14 MR. FELDMAN: I have nothing further.

15 THE HEARING OFFICER: Dr. McDonald, would you
16 define for us entrainment?

17 THE WITNESS: Yes, sir. Entrainment occurs when
18 water from the river passes through the condensers of
19 the plant, and entrained organisms then would be the
20 organisms in the water which pass through the plant's
21 cooling system.

22 THE HEARING OFFICER: What happens to the
23 organisms during the voyage?

24 THE WITNESS: It varies depending on the type of

1 organism, on the temperature of the water, both the
2 increase in temperature that they are subjected to and
3 the maximum temperature. Many organisms survive
4 entrainment, especially during lower temperature
5 periods. Others are killed, and generally, phytoplank-
6 ton and zooplankton survive quite well at lower
7 temperatures. Fish larvae tend to be killed due
8 largely to the mechanical action.

9 THE HEARING OFFICER: Would you define impingement?

10 THE WITNESS: Impingement occurs when larger
11 organisms, chiefly fish, are trapped on the traveling
12 screens that prevent the entrance of debris into the
13 traveling plant.

14 THE HEARING OFFICER: Thank you. You may step
15 down.

16 Your next witness?

17 MR. FELDMAN: This is the last witness, Dr.
18 William Lewis.

19 THE HEARING OFFICER: Step forward, please.

20 Would you swear in the witness, please?

21 (WHEREUPON, the witness was duly sworn.)

22 THE HEARING OFFICER: Would you state your name
23 and address for the record, please?

24 THE WITNESS: William M. Lewis, Carbondale,

1 Illinois.

2 THE HEARING OFFICER: Mr. Feldman, go ahead.

3 WILLIAM M. LEWIS,

4 called as a witness herein by the Petitioner, having
5 been first duly sworn, was examined and testified as
6 follows:

7 DIRECT EXAMINATION

8 BY MR. FELDMAN:

9 Q Dr. Lewis, I show you a document which is
10 entitled "Testimony by Dr. William M. Lewis Before
11 the Illinois Pollution Control Board in the Matter of
12 Proposed Determination of No Significant Ecological
13 Damage for the Quad Cities Generating Station," which
14 should bear but does not the date of July 19, 1978,
15 consisting of four pages of testimony and 17 pages of
16 Curriculum Vitae and ask you if that document was
17 prepared by you?

18 (WHEREUPON, the document was
19 tendered to the witness.)

20 BY THE WITNESS:

21 A Yes, sir.

22 BY MR. FELDMAN:

23 Q And is that the testimony which you would
24 give in this proceeding if it were to be given orally?

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1 A Yes, sir.

2 MR. FELDMAN: Mr. Hearing Officer, I ask that the
3 document be marked Petitioner's Exhibit 4 and that the
4 testimony and the attached Curriculum Vitae be admitted
5 into evidence as Exhibit 4.

6 THE HEARING OFFICER: Mr. Eggert, do you have any
7 objection?

8 MR. EGGERT: No objection.

9 THE HEARING OFFICER: Dr. Lewis, if you would be
10 so kind as to initial each of the pages of this at
11 the bottom, and why don't you also date it under the
12 heading with today's date, July 19, 1978.

13 (WHEREUPON, the document was
14 tendered to the witness.)

15 THE HEARING OFFICER: The document which has just
16 been referred to as the "Testimony by Dr. William M.
17 Lewis Before the Illinois Pollution Control Board,"
18 et cetera, dated July 19, 1978 and initialed at the
19 bottom, each page by Dr. Lewis, is hereby admitted as
20 Petitioner's Exhibit No. 4. Will the Court Reporter
21 please mark that.

22 (WHEREUPON, said document was marked
23 Petitioner's Exhibit No. 4, and received
24 in evidence.)

1 THE HEARING OFFICER: Mr. Eggert, do you have any
2 cross-examination?

3 MR. EGGERT: No cross-examination.

4 MR. FELDMAN: I'm not sure that the record shows
5 the admission of that testimony into the record,
6 Mr. Hearing Officer.

7 THE HEARING OFFICER: I think I did, but I'll say
8 it again, if you like.

9 What has been marked as Petitioner's Exhibit
10 No. 4 is hereby admitted into the record and will be
11 bound with it.

12 Okay. Anything further?

13 MR. FELDMAN: I have nothing further, Mr. Hearing
14 Officer.

15 HEARING OFFICER MILLER: Would you care to make a
16 brief closing statement which might include what
17 Petitioner is seeking?

18 MR. FELDMAN: The proceeding, Mr. Hearing Officer,
19 filed under Rule 203(i)(5) is presented, as I can
20 conceive it, chiefly for the education of the Pollution
21 Control Board; that is, it's a proceeding to determine
22 whether the predictions made by a variety of witnesses
23 some six years ago in proceedings before this Board
24 have, in fact, been borne out by the evidence which has

1 been gathered in the succeeding six years. I think
2 the net of the testimony that the predictions have
3 turned out to be correct.

4 I suspect, however, that we ought to detail
5 that. We ought to state that in somewhat greater
6 detail than I am able to do at the moment. It may well
7 be wise, depending on what the Attorney General's
8 desires are, to arrange a briefing schedule so we can
9 summarize the record for the Pollution Control Board
10 by an index of what we found.

11 THE HEARING OFFICER: Mr. Eggert?

12 MR. EGGERT: Could we pursue this discussion
13 off the record for a moment?

14 THE HEARING OFFICER: Sure. Off the record.

15 (WHEREUPON, discussion was had
16 off the record.)

17 MR. FELDMAN: Mr. Hearing Officer, I think,
18 perhaps, I have overdone the situation, that Edison
19 ought not to file a brief in this situation, especially
20 in view of the fact that the Petition itself or
21 Petition for Determination under Rule 203 comes in the
22 form prescribed by the Board procedural rules and
23 serves as a convenient summary of the underlying
24 data which these witnesses reviewed in preparing their

1 testimony, and perhaps then the Petition can serve as
2 sort of an index to the conclusions expressed in this
3 record.

4 THE HEARING OFFICER: Thank you. I regret if I
5 put you on the spot for a closing statement.

6 Anything further, Mr. Eggert?

7 MR. EGGERT: I have nothing.

8 THE HEARING OFFICER: I notice two persons
9 besides counsel not witnesses, and I would like to get
10 their names.

11 MR. BERNHARDT: Harry Bernhardt.

12 THE HEARING OFFICER: And Mr. Bernhardt, who do
13 you work for?

14 MR. BERNHARDT: Commonwealth Edison.

15 MS. SELKOVITZ: Ann Selkovitz, S-e-l-k-o-v-i-t-z.

16 THE HEARING OFFICER: What is your role here
17 today?

18 MS. SELKOVITZ: Paralegal for Mr. Feldman.

19 THE HEARING OFFICER: There being nothing further
20 offered by either counsel and no other members of the
21 public having showed up, this hearing is closed.

22 (WHICH WERE ALL THE PROCEEDINGS HAD AT
23 THE HEARING OF THE AFORE-ENTITLED CAUSE
24 ON THIS DATE, JULY 19, 1978.)

Wolfe, Rosenberg and Associates
Chicago, Illinois • 782-8087

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1 STATE OF ILLINOIS)
)SS:
2 COUNTY OF C O O K)

3 I, PATRICIA M. McCORMICK, a Certified
4 Shorthand Reporter of the State of Illincis, do hereby
5 certify that I reported in shorthand the proceedings
6 had at the hearing aforesaid, and that the foregoing
7 is a true, complete and correct transcript of the
8 proceedings of said hearing as appears from my steno-
9 graphic notes so taken and transcribed under my
10 personal direction.

11
12 *Patricia M. McCormick C.S.R.*
13 _____
14 Certified Shorthand Reporter

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24 C.S.R. Certificate No. 84-1345.

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