

1 BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

2

3 IN THE MATTER OF:)

)

4 CENTRAL ILLINOIS LIGHT COMPANY,)

)

5 Petitioner,)

)

6 -vs-) PCB 99-80

) (Variance - Air)

7 ILLINOIS ENVIRONMENTAL)

PROTECTION AGENCY,)

8)

Respondent.)

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The following is the transcript of a
13 hearing held in the above-entitled matter, taken
stenographically by Jennifer E. Johnson, CSR, a
14 notary public within and for the County of Tazewell
and State of Illinois, before Amy L. Jackson,
15 Hearing Officer, at the Peoria County
Courthouse, 324 Main Street, Room 4-A, on the 9th
16 day of March, 1999 A.D., commencing at the hour of
approximately 10:11 a.m.

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1 PRESENT:

HEARING TAKEN BEFORE:

2 ILLINOIS POLLUTION CONTROL BOARD
600 South Second Street, Suite 402
3 Springfield, Illinois 62704
(217) 524-8507
4 BY: MS. AMY L. JACKSON

5 APPEARANCES:

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BY: MS. RACHEL DOCTORS, ESQUIRE

13 ILLINOIS ENVIRONMENTAL PROTECTION AGENCY MEMBERS

14 PRESENT:

15 Mr. Robert J. Kaleel
Mr. Matthew L. Will
16 Mr. Wayne O. Kahila, P.E.

17 ALSO PRESENT:

18 Mr. Robert M. Bisha, Central Illinois Light Company
Mr. John M. Planck, Central Illinois Light Company
19 Mr. John E. Shrock, QST Environmental

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L.A. REPORTING
(312) 419-9292

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1 HEARING OFFICER JACKSON: My name is Amy
2 Jackson, and I am the Hearing Officer for the
3 Illinois Pollution Control Board. It is Tuesday,
4 March 9th, 1999. This is PCB 99-80, Central
5 Illinois Light Company versus Illinois Environmental
6 Protection Agency.

7 In this case, CILCO is seeking a variance from
8 the sulfur dioxide emissions limits set forth in 35
9 Illinois Administrative Code 214.141. At this time,
10 it does not appear that there are any members of the
11 public present. However, I have left notice with
12 the clerk outside our conference room that if any
13 members of the public do show up, they are to be let
14 into this room.

15 All right. Before we begin, and for those
16 of you who may not be familiar with the Board's
17 procedures, I want to briefly explain how this
18 process works. First of all, I want you all to know
19 that it is the Board and not me that will make a
20 final decision in this case. My job as a Hearing
21 Officer requires that I conduct the hearings in an
22 orderly manner and to insure that we have a clear
23 record of the proceedings for the Board to review
24 and make a determination.

1 It is also my responsibility to assess the
2 credibility of any witnesses testifying today, and I
3 will do so at the conclusion of these proceedings on
4 the record.

5 At times, I may ask for clarification for the
6 record or ask questions of any witnesses when I
7 believe there's information that's necessary to the
8 Board's clear understanding of this matter. The
9 Board's procedural rules do allow for members of the
10 public to participate by making statements on the
11 record; and any member of the public that does make
12 a statement on the record is subject to
13 cross-examination by counsel.

14 Finally I want to caution everyone that a Board
15 hearing is very much like being in court, and I
16 expect everyone to act appropriately and with proper
17 decorum; and I don't expect that to be a problem
18 today.

19 At this time, I'll ask the parties to make
20 their appearances for the record beginning with the
21 Petitioner.

22 MR. FALETTO: Yes. My name is John Faletto.
23 I'm a lawyer with the law firm of Howard & Howard;
24 and we're here on behalf of Central Illinois Light

1 Company.

2 HEARING OFFICER JACKSON: Also with you,

3 Mr. Faletto, is?

4 MS. JAGIELLA: Diana Jagiella. I'm also with

5 Howard & Howard here on behalf of CILCO.

6 HEARING OFFICER JACKSON: Thank you. And for

7 the Agency?

8 MS. DOCTORS: My name is Rachel Doctors, and

9 I'm with the Illinois Environmental Protection

10 Agency.

11 HEARING OFFICER JACKSON: At this time, I'll

12 ask counsel if you have any preliminary matters that

13 we need to discuss on the record?

14 MR. FALETTTO: I don't think we have any issues,

15 do we?

16 MS. DOCTORS: No.

17 HEARING OFFICER JACKSON: Okay. I do have one

18 thing that I want to remind the parties of. And

19 this may be brought out in testimony; and if it is,

20 just let me know. In some of our pre-hearing

21 conversations, we talked about the fact that the

22 petition contains the dates of a variance beginning

23 with January 1st of 1999. We were concerned that

24 CILCO was seeking a retroactive application of this

1 variance, and I want to make sure that that's either
2 brought out or just clarified at this time on the
3 record that that is not, in fact, what CILCO is
4 seeking.

5 MS. JAGIELLA: That's correct. CILCO is not
6 seeking retroactive relief.

7 HEARING OFFICER JACKSON: So the dates -- if a
8 variance is granted, what would the dates be that
9 CILCO is seeking?

10 MS. JAGIELLA: The date the Board approves the
11 variance request.

12 HEARING OFFICER JACKSON: And then five years
13 from that date?

14 MS. JAGIELLA: No. I think in the testimony
15 that will be clarified, that --

16 MR. FALETTO: I'll clarify it in opening
17 statement, too.

18 MS. JAGIELLA: Right. That there are specific
19 deadlines; and it is no longer five years. So we
20 can explain it now on the record, or do you want to
21 wait until we actually get into the testimony?

22 HEARING OFFICER JACKSON: If you're going to
23 cover it in testimony, that will be fine.

24 MR. FALETTO: It's actually also in the Board's

1 -- or the Agency's recommendation.

2 MS. DOCTORS: Right. And in the letter that's
3 attached to my recommendation from the
4 Petitioner.

5 HEARING OFFICER JACKSON: Okay. Very good. I
6 just wanted to make sure we did that on the record.

7 All right. Does the Petitioner have any
8 opening statements?

9 MR. FALETTO: Yes, I have a brief opening
10 statement. Again, this is John Faletto on behalf of
11 CILCO. And I'm here with Diana Jagiella, my
12 co-counsel in this matter.

13 First of all, we have some photographs of the
14 power plant. Exhibit A is a close-up shot of the
15 E.D. Edwards generating station. And Exhibit B is a
16 shot taken from actually the Pekin bridge that I
17 took a couple years ago; and this is -- shows the
18 rural nature of the area where the E.D. Edwards
19 generating station is located. And you can see the
20 stacks -- it's not particularly clear -- and you can
21 see the Illinois River which runs along the power
22 plant. Those are marked Exhibits A and B
23 respectively, and copies have been provided to
24 counsel and a copy for the record as well.

1 You'll hear some references today which I want
2 to clarify. One is CILCO, which refers to Central
3 Illinois Light Company. Another is Edwards or
4 Edwards station which refers to the E.D. Edwards
5 generating station located in -- just south of
6 Peoria in Bartonville. Units -- you'll see
7 testimony of units, which refers to -- typically is
8 referring to the boilers. There's three coal-fired
9 boilers at the power plant. And SO₂ which is, of
10 course, an abbreviation for sulfur dioxide. Those
11 are references that you'll hear through the course
12 of certainly CILCO's witnesses and probably the
13 Agency's witnesses as well that -- to clarify for
14 the record.

15 We have three witnesses today. The first is
16 Robert M. Bisha, who is CILCO's Director of
17 Environmental Services and Compliance. Mr. Bisha's
18 testimony will include background information about
19 CILCO and Edwards station, the regulations
20 applicable to SO₂ emissions from Edwards boilers, an
21 overview of the operational flexibility requested in
22 the variance and the associated benefits, if the
23 Board grants a variance.

24 Our second witness is John Planck, seated next

1 to Diana. John is CILCO Supervisor of Fuel
2 Procurement. His testimony will cover the types of
3 coal, costs, and quantities used at Edwards station,
4 the future costs and availability of low sulfur
5 coals, the economic impact of limiting unit two to
6 only low sulfur coal.

7 And then our third and final witness will be

8 Mr. John M. Shrock. Mr. --

9 MR. SHROCK: John E.

10 MR. FALETTO: John E. Did I say M.?

11 MR. SHROCK: Yes.

12 MR. FALETTO: I'm sorry. Picked that up from
13 him. John E. Shrock, who is QST Environmental,
14 Manager of Air Resources division in the
15 Gainesville, Florida, office. And Mr. Shrock's
16 testimony will cover the results of a study which
17 was commissioned by CILCO demonstrating there would
18 be minimal to no adverse impact on air quality if
19 unit two were allowed the operational flexibility
20 requested in the variance petition as well as the
21 current attainment status of the Peoria metropolitan
22 area with the sulfur dioxide National Ambient Air
23 Quality Standards, or N.A.A.Q.S.
24 The regulatory requirements applicable to SO₂

1 emissions from Edwards station are summarized here
2 in Exhibit C. This is a chart that was also
3 included in CILCO's petition for variance. As you
4 can see, boiler one is subject to a sulfur dioxide,
5 SO₂, emission limit of -- I'll try not to block that
6 -- 6.6 lb/MM Btu of heat input capacity. This is a
7 production-based limit which limits SO₂ emissions
8 based on the amount of coal utilized in the boiler.

9 These emission limits have also been
10 incorporated into the March 20th of 1995 operating
11 permit which has since been superseded by the Clean
12 Air Act Permanent Program, or CAAPP, application
13 filed by CILCO with the Agency. This emission limit
14 comes from a regulation, 35 Illinois Administrative
15 Code, Section 214.561; and the reference, the
16 abbreviation, is 35 IAC, Section 214.561. That's
17 boiler number one.

18 Boiler number two at Edwards has a much more
19 stringent emission limit on SO₂ at 1.8 lb/MM Btu,
20 and that emission limit is -- comes from the
21 regulation at 35 Illinois Administrative Code,
22 Section 214.141.

23 Unit three or boiler number three is subject to
24 the same emission limits as boiler number one, the

1 6.6 lb/MM Btu; and, again, that is also derived from
2 35 Illinois Administrative Code, Section 214.561.

3 More important is a plant-wide emission limit
4 on SO₂ emissions that establishes a pounds per hour
5 or short-term limit on SO₂ emissions of 34,613
6 pounds per hour on a 24-hour average basis. This is
7 applicable to all three boilers, so you can almost
8 think of it as a cap on the power plant.

9 The variance relief being requested is
10 operational flexibility for boiler number two; and
11 basically the concept would be an increase in the
12 allowable SO₂ emissions from boiler number two
13 offset by concurrent decreases in emissions from
14 boiler number one and boiler number three. No
15 single unit would emit higher than 6.6 lb/MM Btu,
16 and the facility would maintain compliance with the
17 plant-wide emission limit. Basically we're only
18 talking about boiler number two and the 1.8 lb/MM
19 Btu in terms of actual relief from a regulatory
20 limit. SO₂ controls on all three boilers are by
21 fuel; in other words, the sulfur content of the fuel
22 is how SO₂ emissions are controlled.

23 In order to maintain compliance with the 1.8
24 lb/MM Btu, CILCO is required to burn a low sulfur

1 coal in unit number two. Factors supporting or what
2 we hope will be demonstrated -- okay. Yes,
3 basically the emission limit being requested in the
4 variance would be a 4.71 lb/MM Btu averaged over all
5 three units with no unit emitting higher than 6.6.
6 I -- thanks, Diana. I went over that, glossed over
7 that one.

8 What we hope to show today and through other
9 submittals in the record and all the evidence
10 admitted in this proceeding is the factors
11 supporting the need for variance relief. And I have
12 listed them here in the Exhibit D. The first is the
13 excess fuel cost for utilizing low sulfur coal in
14 unit two. That's primarily because low sulfur coal
15 is much more expensive -- and you'll hear testimony
16 on that -- than a mid to high sulfur coal. Second,
17 the increased cost for managing a separate coal type
18 exclusively for unit two. The unit two can only
19 burn the low sulfur coal, while the other two
20 boilers can burn a mid to high sulfur coal.

21 The economic disincentive to utilize the most
22 efficient boiler: What that factor is, boiler
23 number two is the most efficient boiler at Edwards
24 station; in other words, it can extract more energy

1 from the same amount of coal or fuel that's burned.
2 It's not -- and you would expect that boiler to be
3 utilized more than the others because it produces
4 energy and, consequently, electric power more
5 efficiently. But it's not because unit two is more
6 expensive to run because the low sulfur coal is more
7 expensive coal.

8 The next factor would be the unavailability in
9 the future of low sulfur Illinois coal as well as
10 the increased cost -- in addition to the costs, the
11 extra costs already incurred by CILCO for low sulfur
12 coal exclusively for unit two, the increased costs
13 expected for having to go to out-of-state low sulfur
14 coal suppliers.

15 Then we have Phase Two of the Clean Air Act
16 Acid Rain Program applicable to Edwards station on
17 January 1st of the year 2000. This is a program
18 where a number of utilities are required to reduce
19 their SO₂ emissions nationwide. CILCO's Phase Two
20 compliance strategy is not finalized at this time
21 because of some uncertainty. Number one is
22 uncertain availability, as well as cost, of low
23 sulfur coal as demand for that fuel increases. Over
24 2,000 new units will be required to reduce emissions

1 under this Phase Two program of the Acid Rain
2 Program. It's expected -- and you'll hear testimony
3 on this -- that that demand or -- in order to
4 comply, it will create a demand for low sulfur coal,
5 which is a very common way for utilities to reduce
6 the SO₂ emissions off the stack. So that's as
7 demand increases under Phase Two.

8 In addition, there's uncertainty at the present
9 time about the availability and cost of SO₂
10 allowances. An allowance is authorization to emit
11 one ton of sulfur dioxide; and that's through the
12 federal U.S. E.P.A. Acid Rain Program, which is
13 fleshed out in the implementing federal
14 regulations. So the cost of those, when these
15 additional units come in in Phase Two, is a
16 tremendous uncertainty.

17 The additional factors are electric utility
18 deregulations in Illinois which is -- which is
19 coming and will be implemented in the coming years,
20 which does affect CILCO, which requires basically
21 the utility to control its costs and to reduce
22 costs. So at the same time that we have the acid
23 rain compliance requirements forcing increased costs
24 -- or probably forcing increased costs, we have, at

1 the same time, electric utility deregulation which
2 forces cost control to maintain cost competitiveness
3 with the other utilities.

4 Unit two operational: This is probably the
5 most important factor, is that the unit two
6 operational flexibility can be achieved with no
7 adverse air quality impact. You will hear testimony
8 on this as well. The current status of the Peoria
9 metropolitan area is an attainment status with the
10 National Ambient Air Quality Standard for sulfur
11 dioxide, which means that the air quality that is in
12 this area has a lower concentration than the
13 standard which was set to protect human health and
14 the environment.

15 Secondly, QST's ambient air quality impact
16 analysis demonstrates protection of the SO₂ National
17 Ambient Air Quality Standard even with the
18 operational flexibility being requested in this
19 variance proceeding.

20 The scope of the relief requested -- and we've
21 touched on this a little bit so I won't belabor it.
22 Unit -- first of all, there would be unit-based SO₂
23 emission limits. There would be -- of 4.71 lb/MM
24 Btu of heat input averaged over all three boilers;

1 second, there would be a maximum limit of 6.6 lb/MM
2 Btu for each boiler which is essentially the same as
3 what unit one and unit three are subject to at the
4 present time; and the plant-wide SO₂ emission limit
5 remains in place. No change in the short-term pound
6 per hour limit, the 34,613 pounds per hour limit on
7 all three boilers.

8 Compliance with the conditions of the variance
9 or these emission limits which would be -- which
10 would result in granting of the variance would be
11 monitored through the existing continuous emission
12 monitoring system in place at Edwards station; and
13 reporting would also be done through that system and
14 that would be used to demonstrate compliance.

15 Through the -- through consultation with
16 Illinois Environmental Protection Agency,
17 specifically their counsel, Rachel Doctors, we've
18 also discussed some conditions that were recommended
19 by the Agency and which CILCO has agreed to abide
20 by. First is the variance relief, if granted, would
21 last until January 31st of the year 2002 unless
22 CILCO elects to pursue site-specific permanent
23 relief, and then until July 31st of the year 2003.

24 Semiannual reporting to the Agency on the cost

1 and availability of SO₂ allowances and the cost and
2 availability of low sulfur coal: These are the --
3 these are the areas of uncertainty regarding CILCO's
4 Phase Two compliance under the Phase Two Acid Rain
5 Program which affects whether really site-specific
6 permanent relief would be the more appropriate
7 relief being requested from the Board of whether it
8 should proceed as a variance.

9 Also, an interim report would be made on Phase
10 Two compliance strategy and notification to the
11 Agency by January 31st of the year 2002 of an intent
12 to seek permanent relief.

13 The conclusion: What are the consequences of
14 the Board's decision to grant this variance? I
15 think it's important to remember that the same
16 aggregate SO₂ emission would be coming from Edwards
17 station; the same pounds per hour limit would remain
18 in place. But grant of the variance relief would
19 eliminate millions of dollars of economic hardship
20 and a future increase in that economic hardship when
21 low sulfur Illinois coals are no longer available;
22 would allow increased use of CILCO's most efficient
23 boiler at the Edwards station, and would allow
24 continued use of Illinois coals; would also allow

1 CILCO to develop its Phase Two acid rain strategy to
2 both achieve compliance as well as remain cost
3 competitive under utility deregulation with minimal
4 effect on air quality and no adverse impact on the
5 National Ambient Air Quality Standard for SO₂.

6 Thank you very much. Yes, that's a good
7 point. Diana has mentioned, when we mention low
8 sulfur coal, that refers to a concentration of
9 sulfur in the coal sufficient to maintain the 1.8
10 lb/MM Btu emission limit currently imposed on unit
11 two. And typically that's somewhere around a one
12 percent sulfur content; maybe a couple tenths
13 higher, but not much higher. So right around a one
14 percent sulfur content.

15 Thank you, Diana.

16 HEARING OFFICER JACKSON: Thank you,
17 Mr. Faletto.

18 Ms. Doctors, does the Agency have an opening
19 statement?

20 MS. DOCTORS: I would like to hold my opening
21 statement until after the witnesses -- his witnesses
22 have testified.

23 HEARING OFFICER JACKSON: Very good.
24 Mr. Faletto, you may call your first witness.

1 MR. FALETTO: Yes. Our first witness will be
2 Mr. Robert M. Bisha. And as mentioned, we --
3 Mr. Bisha is the -- is CILCO's Director of
4 Environmental Services and Compliance. We have
5 prepared written testimony for Mr. Bisha; and at
6 this time, I think the parties have agreed that we
7 would read the testimony into the record.

8 Rachel, that's appropriate?

9 MS. DOCTORS: Correct.

10 MR. FALETTO: Good. We'll go ahead and do that
11 and then allow for any questions after he's
12 completed reviewing -- or reading his testimony into
13 the record.

14 HEARING OFFICER JACKSON: Okay. Very good. I
15 do want to mark his written testimony as an exhibit.

16 MR. FALETTO: Okay. We can do that then. I
17 think we're up to --

18 MS. JAGIELLA: "G".

19 HEARING OFFICER JACKSON: "H".

20 MR. FALETTO: No. We're up to "H". That one
21 has to be changed.

22 MS. JAGIELLA: So this will be "H".

23 MR. FALETTO: Bob, you have a copy -- a true
24 and correct copy of that? We'll go ahead, and if we

1 have no objection from the Agency, we will submit

2 that for admission into the record.

3 MS. DOCTORS: There's no objection.

4 HEARING OFFICER JACKSON: Do you want to move

5 that your other exhibits be admitted at this time as

6 well?

7 MR. FALETTO: Yes, I would like to move that

8 they be admitted as well.

9 HEARING OFFICER JACKSON: Any objection?

10 MS. DOCTORS: No.

11 HEARING OFFICER JACKSON: Okay. Petitioner's

12 Exhibits A, B, C, D, E, F, G, and H are so admitted

13 into the record.

14 MS. DOCTORS: This is part of it, too?

15 MR. FALETTO: Right, that's part of it as

16 well.

17 HEARING OFFICER JACKSON: Thank you.

18 MR. BISHA: All set?

19 HEARING OFFICER JACKSON: Yes. You may

20 proceed.

21 MR. ROBERT M. BISHA: My name is Robert M.

22 Bisha. I've been employed by Central Illinois Light

23 Company, CILCO, in the Environmental Affairs

24 department since 1980. I'm currently the Director

1 of Environmental Services and Compliance for CILCO.

2 I've held this position since 1996.

3 My responsibilities include development and
4 implementation of the environmental-related
5 programs, insuring compliance with environmental
6 laws and regulations, and supervising six members of
7 the environmental services and compliance
8 department.

9 I have a Bachelor of Science degree in
10 meteorology from the State University of New York at
11 Oswego. I've worked in the field of meteorology as
12 an air pollution engineer prior to joining CILCO.

13 CILCO is an electric and natural gas utility
14 located in Central Illinois. CILCO's electric
15 production facilities consist of two generating
16 stations, the Duck Creek generating station near
17 Canton, Illinois, and the Edwards station in
18 Bartonville, Illinois. CILCO provides electric and
19 gas service to approximately 172,890 residential
20 customers and to 170 industrial customers. CILCO's
21 electric and gas service territory includes multiple
22 counties in Central Illinois.

23 Edwards station is located on the Illinois
24 River in the Peoria major metropolitan area. 142

1 people are employed at Edwards station, which is
2 staffed 24 hours per day, seven days per week. The
3 Edwards station consists of three boilers and
4 attendant-generating units referred to as boilers or
5 units. All three units are coal fired. Units one
6 and two discharge through a common stack 503 feet in
7 height. Unit three discharges through a separate
8 stack also 503 feet in height. The combustion
9 exhaust gasses from all three boilers are ducted
10 through electrostatic precipitators which are
11 designed to remove particulate matter prior to
12 releasing the exhaust gasses through the stacks.

13 In recent years, CILCO has installed
14 state-of-the-art equipment on all three boilers to
15 reduce the emissions of nitrogen oxides, or NOx,
16 equipment commonly referred to as low NOx burners.
17 In addition, CILCO has installed and is operating
18 continuous emission monitoring systems, C.E.M.S., or
19 CEMS, on all three units which directly measure
20 sulfur dioxide -- SO2 -- NOx, and opacity contained
21 in the exhaust gasses.

22 Boilers number one and three are subject to a
23 sulfur dioxide emission limit of 6.6 lb/MM Btu
24 pursuant to 35 Illinois Administrative Code, Section

1 214.561. Boiler number two is subject to a sulfur
2 dioxide emission limit of 1.8 lb/MM Btu pursuant to
3 Illinois -- 35 Illinois Administrative Code, Section
4 214.141. Emissions from all three boilers
5 collectively are subject to an overall plant-wide
6 SO₂ emission limit of 34,613 pounds per hour
7 established to insure protection of the National
8 Ambient Air Quality Standards for SO₂ under 35
9 Illinois Administrative Code 214.561. These
10 standards are summarized in the chart in my written
11 testimony and were also included as Exhibit A
12 earlier.

13 MR. FALETTO: Actually, I think that was
14 Exhibit C, but that's fine.

15 MR. ROBERT BISHA: C?

16 MR. FALETTO: Yes.

17 HEARING OFFICER JACKSON: That's correct.

18 MR. ROBERT BISHA: Okay. CILCO elected to
19 request relief from the 1.8 lb/MM Btu limit
20 applicable to Unit 2 after recognizing that relief
21 from the unit would reduce the economic hardship
22 caused by purchasing more expensive low sulfur coal
23 and allow increased purchases of Illinois coal with
24 no adverse impact to the environment. Through its

1 variance petition, CILCO is requesting an average
2 station-wide emission limit of 4.71 lb/MM Btu over
3 all three boilers, not to exceed 6.6 lb/MM Btu in
4 any one boiler. CILCO seeks to increase the SO₂
5 emission limit applicable to boiler number two by
6 reducing the SO₂ emission limit applicable to
7 boilers number one and three. CILCO's obligation to
8 comply with all other SO₂ emission limitations would
9 remain unchanged. CILCO would still be subject to
10 and maintain compliance with the 34,613 pounds per
11 hour SO₂ emission limit imposed on all three units
12 under 35 Illinois Administrative Code, 214.561.

13 To maintain compliance with the 1.8 lb/MM Btu
14 limit applicable to boiler number two, CILCO must
15 purchase expensive low sulfur coal. The variance
16 relief will provide CILCO the flexibility to utilize
17 blended coal and/or mid range sulfur coals in boiler
18 number two. This flexibility will result in fuel
19 cost savings and promote future purchases and use of
20 the Illinois coal. CILCO anticipates it would save
21 up to 4 million dollars annually through lower fuel
22 costs. CILCO would also save administrative costs
23 as a result of the variance relief.

24 There are increased ancillary costs associated

1 with the exclusive use of low sulfur coal in boiler
2 two. CILCO's operating costs are higher due to the
3 need to maintain separate coal stockpiles and coal-
4 handling equipment for this separate pile. In
5 addition, there are increased costs associated with
6 negotiating and monitoring coal supply and
7 transportation contracts for the low sulfur coal.
8 CILCO would also save money through greater use
9 of boiler number two, which is a more efficient
10 boiler. The unit two boiler has the highest
11 generating cost because of the higher cost of low
12 sulfur coal needed to meet the 1.8 lb/MM Btu SO₂
13 emission limit. Unfortunately, as explained below,
14 unit two is the most efficient boiler at Edwards and
15 would be operated at a greater capacity but for the
16 excessive fuel cost.

17 The 1998 heat rates for the three units are:
18 For unit one, 10,643 Btu's per kilowatt hour; for
19 unit two, 9,806 Btu's per kilowatt hour; and for
20 unit three, 9,862 Btu's per kilowatt hour.

21 Heat rate is our measure of fuel efficiency or
22 fuel economy, much like miles per gallon measures
23 fuel economy in an automobile. The lower the heat
24 rate, the more efficient the boiler. This means it

1 takes less coal in a more efficient boiler to
2 produce the same kilowatt hours of electricity.
3 While the differences in heat rate between the three
4 units may seem small, on an annualized basis, unit
5 number two's lower heat rate translates into
6 significant savings. For example, producing 1.25
7 billion kilowatt hours in each boiler would require
8 608,421 tons of coal in boiler one; similarly, it
9 would require 560,573 tons of coal in boiler two;
10 and it would require 563,725 tons of coal in boiler
11 three. Thus, producing the same amount of energy
12 requires 47,848 more tons of coal in boiler one than
13 in boiler two, and 3,202 more tons of coal in boiler
14 number three than in boiler number two.

15 Assuming the same type of coal was burned in
16 each boiler, at \$28 per ton, the savings from using
17 boiler two over boiler three would be \$89,000 --
18 \$89,656. The savings from using boiler two over
19 boiler one would be \$1,339,742. The benefits of
20 using a more efficient boiler can also be
21 illustrated by looking at the kilowatt hours
22 produced in each boiler from the same amount of
23 coal. Unit two will produce more kilowatt hours
24 than unit one or three from the same amount of

1 heating value of coal. On an annual basis, unit two
2 can produce significantly more kilowatt hours from
3 the same amount of coal. For example, combusting
4 one million tons of the same coal in each boiler
5 would produce the following kilowatt hours: In unit
6 one, 2.05 billion kilowatt hours; in unit two, 2.23
7 billion kilowatt hours; and in unit three, 2.21
8 billion kilowatt hours. Thus, the use of the more
9 efficient boiler number two would produce
10 approximately 20 million more kilowatt hours from
11 the same amount of coal than boiler three.

12 The excess costs incurred by CILCO to fuel
13 boiler two with low sulfur coal presents an
14 unreasonable hardship, given that the operational
15 flexibility requested in the variance will not
16 result in an adverse environmental impact. CILCO --
17 CILCO also anticipates the operational flexibility
18 created by the variance would result in future
19 purchases of an additional 500,000 tons of Illinois
20 coal per year. CILCO elected to pursue this
21 operational flexibility through a variance under
22 Section 35 to 38 of the Illinois Environmental
23 Protection Act, rather than seek permanent site-
24 specific relief because the variables affecting

1 CILCO's fuel strategy in the year 2000 and beyond --
2 in other words, after the Acid Rain Program --
3 cannot be determined with certainty at this point.
4 Edwards station is subject to the Acid Rain Program,
5 Phase Two, beginning January 1st, 2,000. CILCO was
6 required to obtain an Acid Rain Program, Phase Two
7 permit for Edwards pursuant to Section 39.5 of the
8 act. Permit was issued on September 23rd, 1997, and
9 is effective on January 1st, year 2000. Under Phase
10 Two of the Acid Rain Program, CILCO will either have
11 to limit its SO₂ emissions to 18,792 tons per year
12 by purchasing low sulfur coal or purchasing
13 additional SO₂ allowances necessary to meet
14 production demands pursuant to 40 CFR, Part 73.10.
15 In the alternative, or as a compliance
16 alternative, it could also install a scrubber system
17 to control SO₂ emissions, but such a system could
18 not be operational by January 1st, year 2000. The
19 strategy selected by CILCO will be largely dependent
20 on the cost and availability of low sulfur coal
21 versus the cost and availability of allowances
22 versus the cost and cost effectiveness of control
23 technology.
24 In general, demand for Acid Rain Program SO₂

1 allowances and low sulfur coal is likely to increase
2 significantly with the entry of approximately 2200
3 affected units into the Phase Two, the Acid Rain
4 Program, beginning January 1st, 2,000. The markets
5 are expected to be initially volatile.

6 Moreover, there is limited historical
7 experience in these markets to predict the impact of
8 such demand on price or availability of SO₂
9 allowances and low sulfur coal. This lack of market
10 uncertainty weighs -- of market certainty weighs in
11 favor of a variance requested this time. To do
12 otherwise could unnecessarily waste forward
13 resources establishing a permanent site-specific SO₂
14 limit, only to have the limit become unattainable,
15 as a practical matter, over the initial period of
16 time.

17 Compliance with the applicable 34,613 pound per
18 hour limit will be computed on a daily basis from
19 the average emission rate on that date. The
20 following calculation will be used to verify
21 compliance with the three-unit average limit of 4.71
22 lb/MM Btu. And essentially the calculation is
23 included in the testimony; that's a weight average
24 calculation.

1 CILCO has installed and is operating SO2
2 C.E.M.s on all three units pursuant to the Acid Rain
3 Program. CILCO will also monitor SO2 emissions to
4 insure compliance with all applicable limits.
5 C.E.M.s data will verify compliance with the
6 station-wide average limit as well as all other
7 applicable SO2 emission limitations.

8 As a condition of approving the requested
9 variance relief, CILCO has agreed to provide
10 periodic updates on the key variables that affect
11 the variance relief. CILCO will provide periodic
12 reports to I.E.P.A. semiannually for two years
13 beginning December 2000. The reports will discuss
14 the current cost of Acid Rain Program SO2
15 allowances, the current cost of low sulfur coal, and
16 a discussion of limited availability of SO2
17 allowances or low sulfur coal, if there is any. If
18 approved by the Illinois Pollution Control Board,
19 the variance would be effective until February 28th,
20 year 2002, unless CILCO files a petition for site-
21 specific relief by this date. The variance would
22 remain in effect for another eighteen months until
23 July 31st, 2003, if CILCO files a site-specific
24 petition for relief by the February 28th, 2002,

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1 date.

2 As an additional condition, on approval of the
3 requested variance relief by January 31st, 2001,
4 CILCO will provide an interim report evaluating the
5 feasibility of various strategies for complying with
6 the Phase Two of the Acid Rain Program, including
7 use of various types of coal with purchases of SO₂
8 allowances or with installation of a scrubber or
9 other desulfurization technology. CILCO will notify
10 I.E.P.A. by January 31st, 2002, whether it will
11 request permanent site-specific SO₂ emission
12 relief. If, on January 31st, year 2002, CILCO
13 determines there is no basis to pursue site-specific
14 relief, the variance will terminate.

15 I have reviewed the potentially applicable
16 federal regulations and provisions of the Clean Air
17 Act and have determined that the requested relief,
18 use of high sulfur coal in Edwards unit number two,
19 would not be -- would not be inconsistent with any
20 federal law or regulations. The operational change
21 in utilizing a different quality of coal in Edwards
22 unit two is expressly exempt from applicability of
23 the new source performance standards, 40 CFR, Part
24 60, even though there could be an increase in the

1 hourly SO2 emission rate.

2 The federal regulations at 40 CFR, 60.14

3 specifically exclude from the scope of a regulated

4 modification uses of an alternative fuel or raw

5 material if the facility was designed to accommodate

6 that alternative fuel or raw material. Edwards unit

7 two was designed to combust higher sulfur coal, and

8 no physical changes will be required to do so upon

9 the Board's grant of the requested relief.

10 The operational change in utilizing a different

11 quality coal in Edwards unit two is similarly exempt

12 from the applicability of the federal Prevention of

13 Significant Deterioration, P.S.D., requirements set

14 forth in 40 CFR, Section 52.21, and ad-- and

15 administered by the Illinois E.P.A. pursuant to

16 40 CFR, 52.738.

17 The federal regulations specifically exclude

18 from the scope of a regulated modification uses of

19 an alternative fuel that the facility was designed

20 to accommodate and which was not prohibited under

21 any P.S.D. permit. Edwards unit two was designed to

22 utilize a higher sulfur coal, was constructed prior

23 to the P.S.D. permitting program, and has not

24 otherwise become subject to the P.S.D. regulations.

1 Furthermore, there will not be a modification
2 because the operational change will not cause a
3 significant net increase in any regulated
4 pollutant. The operational change in utilizing a
5 different quality coal in Edwards unit two would not
6 be subject to the National Emission Standards for
7 Hazardous Air Pollutants, 40 CFR, Part 61, or the
8 National Emissions Standards for Hazardous Air
9 Pollutants for Source Categories, 40 CFR, Part 63.
10 The operational change in utilizing a different
11 quality of coal in Edwards unit two will not be
12 inconsistent with CILCO's obligations under the Acid
13 Rain Program implemented through 40 CFR, Part 72
14 through 78. Granting the requested relief will not
15 conflict with CILCO's obligation to obtain an
16 operating permit, which includes the acid rain
17 requirements, to hold sufficient SO₂ allowances for
18 actual SO₂ emissions, to operate C.E.M.s, to
19 accurately monitor and report actual SO₂ emissions,
20 and prepare and submit all required data and
21 reports.
22 Granting the variance relief requested would
23 not constitute a delay in compliance order as that
24 term is defined in 40 CFR, 65.01, and ambient air

1 quality impact analysis of the proposed increase in
2 unit number two flexibility demonstrates full
3 protection of the primary and secondary National
4 Ambient Air Quality Standards for SO₂.

5 And that concludes my testimony.

6 HEARING OFFICER JACKSON: Thank you very much.

7 Is there any cross-examination for this witness?

8 MS. DOCTORS: I have a couple of clarifying
9 questions, Mr. Bisha.

10 CROSS-EXAMINATION

11 BY MS. DOCTORS:

12 Q. On page four of your testimony, you're
13 talking about 1.25 billion kilowatt hours. Is that
14 a typical annual production rate?

15 A. That was used as an example for all three
16 boilers. That might be typical for unit two.

17 Q. Okay. How does that compare when you --
18 on the next page you talk about 2.05 billion
19 kilowatt hours?

20 A. That is based on burning one million tons
21 in any given boiler; and these three boilers are all
22 of a different size --

23 Q. Okay.

24 A. -- so it's probably not realistic. You

1 could burn a million tons in all of these boilers.
2 But for illustration purposes we wanted to show
3 that. Typically, CILCO will generate in the
4 neighborhood of 5 to 6 billion kilowatt hours in a
5 year.

6 Q. Okay. I wanted to -- I asked the question
7 to get an idea of what the scope of the savings was
8 at the bottom of page four.

9 On page five, you indicate that you will be
10 purchasing an additional 500,000 tons of Illinois
11 coal. Is that in addition to what you're currently
12 purchasing, or is that in lieu of having to go out
13 of state to purchase low sulfur coal if the variance
14 was not granted?

15 A. I believe that would be replacement coal
16 after the low sulfur coal would be depleted. And I
17 think that will probably be addressed in
18 Mr. Planck's testimony.

19 Q. Okay. On page six, you indicate there's
20 2200 effected units going to Phase Two. How many
21 companies -- how many companies, approximately; do
22 you know?

23 A. I think it's in the neighborhood of 100,
24 maybe 120.

1 Q. And then I have one last -- just a
2 clarifying question. On page eight, you indicate
3 that the variance will be effective until February
4 28th, 2002; and I believe under Mr. Faletto's
5 opening and our agreement per letter that the
6 variance is effective through January 31st of 2002,
7 at which time you give notice; and then it would be
8 extended, and you have till February 28th to file.

9 A. I'm not sure why the difference of
10 apparently one month. Is that what we're talking
11 about?

12 Q. Yeah.

13 A. I'm not sure why there's a difference in
14 one month, if it makes a difference. Maybe we can
15 change that.

16 MS. JAGIELLA: I think the testimony is just a
17 little -- is slightly ambiguous in one sentence.
18 There's no dispute that if CILCO elects not to
19 pursue site-specific relief, the variance terminates
20 January 31st. If it elects to pursue permanent
21 site-specific relief, the variance -- they will have
22 until February 28th to file that petition, and then
23 the variance relief would continue for eighteen
24 months until July 31st, 2003, to allow that

1 proceeding to resolve itself through. So I think
2 it's just -- I think the testimony doesn't say that
3 it continues to February 28th even if they decide
4 not to pursue site-specific relief. But it's
5 ambiguous enough in one sentence that it could be
6 interpreted that way.

7 So just for the record, there's no dispute on
8 that.

9 HEARING OFFICER JACKSON: So notice would have
10 to be given to the Agency, though, by January 31st,
11 2002, if you do intend to seek site-specific
12 rulemaking?

13 MS. JAGIELLA: That's correct.

14 MR. FALETTO: Right.

15 HEARING OFFICER JACKSON: But then the petition
16 would not actually have to be filed until the
17 February 28, 2002, date?

18 MR. FALETTO: Correct.

19 MS. JAGIELLA: Right.

20 MR. BISHA: That is -- yes.

21 HEARING OFFICER JACKSON: Okay. Thank you.

22 MS. DOCTORS: That's all the questions I have.

23 HEARING OFFICER JACKSON: Does that conclude
24 the testimony of this witness?

1 MR. FALETTO: That concludes the testimony for
2 Mr. Bisha. And I would move for admission of his --
3 of the written testimony into the record.

4 HEARING OFFICER JACKSON: It's already
5 admitted.

6 MR. FALETTO: We did that already. Just wanted
7 to make sure.

8 HEARING OFFICER JACKSON: Thank you.

9 MR. FALETTO: Great. Thanks, Bob.

10 Our next witness will be Mr. John M. Planck,
11 who is CILCO's Supervisor of Fuel Procurement. We
12 have marked his written testimony as Exhibit I.

13 John, you have a correct copy of that?

14 MR. PLANCK: I do.

15 MR. FALETTO: We would like to have him read
16 his written testimony into the record as well.

17 MS. JAGIELLA: Do you have an "I"?

18 HEARING OFFICER JACKSON: I don't have
19 "I".

20 MR. FALETTO: I have right it right here. Do
21 you have a copy of his testimony?

22 MS. DOCTORS: Yes.

23 MR. FALETTO: Okay. Great. I would move for
24 admission of that testimony into the record at this

1 time.

2 HEARING OFFICER JACKSON: Any objection?

3 MS. DOCTORS: No objection.

4 HEARING OFFICER JACKSON: Thank you. Exhibit I

5 is so admitted.

6 Mr. Planck, you may proceed.

7 MR. JOHN M. PLANCK: My name is John M. Planck,

8 and my business address is 300 Liberty Street,

9 Peoria, Illinois, 61602. I am a graduate of Bradley

10 University with a Bachelor of Science degree in

11 electrical engineering.

12 I have been employed by Central Illinois Light

13 Company for over thirty years. I began my

14 employment with CILCO in the Electric Engineering

15 department, holding several positions within that

16 area. I subsequently held positions of Staff

17 Engineer in Energy Supply, Supervisor of Maintenance

18 at Duck Creek and E.D. Edwards station, Supervisor

19 of Special Projects, and Manager of Plant

20 Engineering. I am currently the Supervisor of Fuel

21 Procurement for the company. I report to the

22 Director of Fuel, Ash, and Material Handling.

23 My primary responsibilities are to procure all

24 energy-producing fuels, excluding natural gas, and

1 the transportation of these fuels for CILCO's Duck
2 Creek and E.D. Edwards stations. I have worked in
3 the fuels area for over ten years.
4 CILCO's fuels cost will be significantly lower
5 if the relief requested in the variance petition is
6 granted. The estimated fuel cost savings set forth
7 in the petition were prepared under my supervision
8 and direction. Annual coal usage for Edwards
9 station unit one and three typically averages 1.2
10 million tons. CILCO currently utilizes a blend of
11 primarily Illinois mid to high sulfur coals in unit
12 one and three. These coals typically have an
13 approximate 3 percent sulfur content which insures
14 compliance with the 6.6 pounds of SO₂ per million
15 Btu limit on SO₂ emissions from units one and three
16 specified at 35 Illinois Administrative Code,
17 214.561. Annual coal usage per unit two typically
18 averages one-half million tons of low sulfur coal.
19 Unit number two is currently limited to the use
20 of low sulfur coal to maintain compliance with the
21 1.8 pounds of SO₂ per million Btu limit for unit two
22 specified by 35 Illinois Administrative Code,
23 214.141.
24 References in my testimony to the term "low

1 sulfur coal" means coal with a sulfur content low
2 enough to insure compliance with the 1.8 lb/MM Btu
3 SO₂ emission limit. CILCO currently purchases low
4 sulfur coal for boiler number two from the Rend Lake
5 Coal Mine in Southern Illinois to insure compliance
6 with the 214.141 emission limit. Less coal is used
7 in unit two due to the higher fuel cost for the low
8 sulfur coal required to achieve compliance with the
9 1.8 lb/MM Btu SO₂ emission limit.

10 CILCO has been notified by the owner of Rend
11 Lake Coal Mine that the Rend Lake low sulfur coal
12 will not be available in the year 2000. Once this
13 occurs, CILCO will be unable to purchase Illinois
14 coal and satisfy the 214.141 limit. Due to its
15 higher sulfur content, most Illinois coal cannot be
16 combusted in unit number two in compliance with the
17 1.8 lb/MM Btu SO₂ emission limit imposed by
18 214.141. As a result, CILCO would have to purchase
19 low sulfur coal from outside of Illinois.

20 The delivered cost of non-Illinois low sulfur
21 coal is more expensive than the comparable low
22 sulfur Rend Lake, Illinois, coal. Although low
23 sulfur coal is available in several U.S. locations,
24 due to freight costs and combustion characteristics,

1 it is only economically feasible for CILCO to
2 purchase low sulfur coal from Indiana, eastern
3 Kentucky, and southern West Virginia mines.
4 My department assisted in preparation of the
5 charts below which illustrate the potential fuel
6 cost savings associated with the variance relief.
7 The figures in the chart are based on an assumed
8 annual fuel consumption in unit two of one-half
9 million tons, per ton cost based on the published
10 spot market prices including 6-1/4 percent tax and
11 freight for Illinois mid to higher sulfur coal, and
12 Indiana, eastern Kentucky, and southern West
13 Virginia low sulfur coal, and per ton cost based on
14 actual prices currently paid by CILCO for Illinois
15 low sulfur coal.

16 Based on this comparison, as illustrated by the
17 chart in the petition and in my written testimony,
18 it costs CILCO approximately 4 million dollars more
19 annually to fuel boiler number two with low sulfur
20 Illinois coal than it would to fuel boiler number
21 two with Illinois mid to high sulfur coal. Once
22 Illinois low sulfur coal is no longer available, it
23 is expected to cost CILCO between 5 million and
24 10 million dollars more annually to fuel boiler

1 number two with non-Illinois low sulfur coal than it
2 would to fuel boiler number two with Illinois mid to
3 high sulfur coal.

4 I'd like to explain and clarify information in
5 the chart. And I am working on the assumption
6 everybody has the chart that's referred to in my
7 testimony?

8 HEARING OFFICER JACKSON: I believe everyone
9 does.

10 MR. JOHN M. PLANCK: The first two line items
11 are provided in this particular chart to identify
12 the cost, our average cost of Illinois high sulfur
13 and Illinois mid sulfur coals. And as I've earlier
14 testified, we burn -- we're proposing burning --

15 MS. DOCTORS: Excuse me one second. I believe
16 Mr. Wayne Kahila doesn't have a copy, so it will be
17 confusing.

18 MR. FALETTO: Okay. I think we have the only
19 copy.

20 MS. JAGIELLA: I thought we brought another
21 copy.

22 MR. FALETTO: Is that a set right there?

23 MS. DOCTORS: Yes. Thank you.

24 MR. ROBERT BISHA: This is another set

1 here.

2 MR. FALETTO: Okay. Thank you.

3 HEARING OFFICER JACKSON: Okay. Everyone has a
4 copy now of the chart? All right. You may proceed.

5 MR. PLANCK: Thank you. As I was earlier
6 stating, the first two line items in the chart
7 identify the two types of Illinois coal, mid sulfur
8 and high sulfur coal, that would go into the blend
9 that we could burn on unit two if we were to achieve
10 the variance as requested.

11 And you can see, with high sulfur coal we're
12 talking \$24 a ton; mid sulfur coal, \$25 a ton. And
13 we're indicating there the annual cost of those
14 fuels would be 12 million dollars for the high
15 sulfur; and if you were using all mid sulfur, it
16 could be 12.5. Because we're going to blend, the
17 cost would be somewhere between the 12 and the 12.5
18 million dollars.

19 We're comparing that to -- we're talking about
20 the Illinois low sulfur coal that we presently burn
21 in unit two; that's at \$32 a ton delivered into the
22 station and that cost is, for the half a million
23 tons, 16 million dollars. So you can see there the
24 difference between what we're proposing and what

1 we're presently doing would range between 3-1/2 to
2 4 million dollars, be the price differential between
3 those two fuel types.

4 In the year 2000 when we're no longer able to
5 secure the existing Illinois low sulfur coal that
6 we're using, we would have to go either to Indiana
7 -- which we've shown on the chart here. And if
8 you'll notice, there's two different sulfur
9 percentage ranges, and we've shown those because
10 there was an inadvertent error made in the original
11 exhibit -- I think it was 3 -- in our petition. And
12 one of my people picked up the wrong line item; and
13 they picked up the line item for Illinois low sulfur
14 coal -- actually, it's a mid sulfur coal at 2.5
15 percent. It should have been the Illinois low
16 sulfur coal that we're showing at the 1.2.

17 MS. JAGIELLA: Indiana.

18 MR. JOHN M. PLANCK: Excuse me, the Indiana,
19 that's correct, that I'm showing at 1.2 percent.
20 That is the correct coal type that we would be
21 using; and as a matter of fact, we have used that
22 coal previously in that, so we are familiar with the
23 supply and the cost associated with it.

24 You can see it's \$38 a ton; so for a half a

1 million tons, that would be 19 million dollars for
2 that coal. And, again, if you compare that back to
3 what we're proposing under the variance, the
4 potential savings would be between 6-1/2 and
5 7 million dollars. If you look at the east Kentucky
6 low sulfur, that's more expensive; and the southern
7 West Virginia low sulfur, again, much more
8 expensive. So the obvious choice would be the
9 Indiana over either one of those two.

10 But if you did have to go to those because that
11 was the only supply available, then you're looking
12 at potential cost differential of 9 to -- up to 10
13 million dollars spread between those two fuels,
14 so --

15 HEARING OFFICER JACKSON: Let me ask a quick
16 question to clarify. You're indicating as far as
17 the Indiana low sulfur coal, you would not be using
18 the 1.25?

19 MR. PLANCK: We would not. That is not a
20 compliance coal.

21 HEARING OFFICER JACKSON: Okay.

22 MR. PLANCK: Would not meet the -- would not
23 meet the requirements.

24 HEARING OFFICER JACKSON: That's included in

1 this chart just to clarify the -- the mistake in the
2 petition?

3 MR. PLANCK: The mistake that was made when
4 they pick -- if you look in Exhibit -- I believe
5 it's 3, the proper numbers are in there; they just
6 simply picked off the wrong line.

7 HEARING OFFICER JACKSON: I see it in the
8 petition. It's on page seven.

9 MS. JAGIELLA: Yes.

10 HEARING OFFICER JACKSON: First chart. Okay.
11 Thank you very much.

12 MR. FALETTO: It is Exhibit 3 of the petition.

13 HEARING OFFICER JACKSON: Very good. Please
14 continue.

15 MR. PLANCK: This fuel cost illustration is, in
16 part, based on published spot market prices of the
17 Illinois mid to high sulfur and non-Illinois low
18 sulfur coal. My department did not use CILCO's
19 actual fuel cost except for the delivered cost of
20 the Rend Lake low sulfur coal because, one, actual
21 costs are subject to coal and transportation
22 contract confidentiality clauses; two, CILCO did not
23 have contracts in place to provide such costs at the
24 time the petition for variance was prepared; and

1 three, the difference in cost savings between
2 published spot market prices for non-Illinois low
3 sulfur coal and Illinois mid to high sulfur coal and
4 contract prices CILCO can obtain is not that
5 significant.

6 I have reviewed the approach used by the
7 Illinois Environmental Protection Agency to estimate
8 the potential cost savings. The I.E.P.A. relied on
9 prices supplied, published by the U.S. Department of
10 Energy which are based on the average cost of all
11 coal types from a region for spot market and
12 contract coal cost. Based on this approach,
13 I.E.P.A. estimates CILCO would save between
14 1.6 million and 4 million dollars through the
15 variance relief. The cost savings estimates by
16 CILCO and I.E.P.A., which rely on various published
17 prices, are both reasonable approaches. However,
18 based on the actual coal prices CILCO has been able
19 to negotiate in the past and the contract fuel costs
20 CILCO expects to negotiate, the actual coal cost
21 savings will be closer to the 4 million dollars
22 annually than to the 1.6 million.

23 I am also responsible for providing fuel cost
24 information for development of an acid rain strategy

1 for compliance with the federal Clean Air Act. To
2 date, I have been unable to advise CILCO with
3 certainty whether it will be cheaper after
4 implementation of Phase Two of the Acid Rain Program
5 on January 1 of 2,000 to buy SO₂ allowances and
6 operate under the terms of the requested variance
7 relief or to purchase low sulfur coal. This is due
8 to expected uncertainty in the cost and availability
9 of low sulfur coal.

10 Low sulfur coal is currently very expensive,
11 and supplies are not unlimited. Once Phase Two of
12 the Acid Rain Program become -- became -- becomes
13 effective, there is likely to be increased demands
14 for low sulfur coal. This demand should cause the
15 price of low sulfur coal to escalate. Unless low
16 sulfur coal becomes cheaper than it is now, which is
17 unlikely, it will probably be more cost effective to
18 purchase SO₂ allowances and operate Edwards station
19 in compliance with the SO₂ emission limits published
20 or established by the variance. While this appears
21 to be a likely scenario, it will be impossible to
22 predict with any certainty until the effect of Phase
23 Two of the Acid Rain Program on the low sulfur coal
24 market is actually observed.

1 That concludes my testimony.

2 HEARING OFFICER JACKSON: Thank you. Any
3 cross-examination?

4 MS. DOCTORS: Just a couple questions.

5 CROSS-EXAMINATION

6 BY MS. DOCTORS:

7 Q. What is the typical term of a coal
8 contract like the one you have with Rend Lake -- not
9 that one in particular, but how long do your coal
10 contracts usually last for?

11 A. At the present time, we're entering into
12 only one-year agreements.

13 Q. Is that shorter than they've been in the
14 past?

15 A. Yes.

16 Q. In the past, how long have these contracts
17 gone for?

18 A. Probably typically be more like three
19 years.

20 Q. Just for the record, can you explain what
21 it means to use the spot market price?

22 A. Spot market pricing is what coal is
23 currently being offered either by the coal companies
24 directly through solicitation or in published

1 indices that are prepared in the industry and that
2 are tracking what coal prices are and that, given
3 the various types and regions. But it's intended to
4 be purchases of coal for a short duration, typically
5 less than a year. It may be for a shorter time
6 frame, as a single trainload of coal for a month, or
7 it could be multi-months; but it's typically
8 considered less than a year.

9 Q. So do spot market prices tend to be higher
10 than prices that can be negotiated by contract?

11 A. They -- they could be higher or lower. At
12 the present time, we're typically finding spot
13 prices are maybe slightly lower than contract. When
14 you get into a contract of a long duration, there's
15 uncertainty involved. Both the purchaser and the
16 supplier have uncertainty as to where the future
17 prices may be, and so they both will have a tendency
18 trying to hedge; and as a consequence of that,
19 typically a long-term contract will typically have
20 higher pricing in it than spot pricing.

21 Q. What are the prices for western coal?

22 A. Western coal itself -- are you talking
23 coal, the commodity price itself?

24 MS. DOCTORS: Is that your question?

1 MR. KALEEL: Low sulfur western coals.

2 MR. PLANCK: FOB mine? The price of coal, or
3 are you talking about delivered into the station?

4 MR. KALEEL: Delivered into the station.

5 MR. PLANCK: Delivered into the station. We
6 really haven't visited any prices recently for
7 western supplies. We cannot burn western coal in
8 our units. Our boilers aren't designed for burning
9 that. We tried to burn it back in the Seventies
10 with terrible results; and it de-rates our units,
11 causing us to get much lower capabilities out of
12 them.

13 And so, as a consequence, we have not obtained
14 coal pricing; so I really cannot tell you what
15 current price would be delivered into the station.

16 Q. Is there a material difference, is that
17 what the issue is with western coal? You're saying
18 you can't use it?

19 A. In the quality?

20 Q. In the quality.

21 A. Yes, yes.

22 Q. Can you just briefly explain what the
23 problem is?

24 A. It's a very low Btu fuel. It -- the ash

1 characteristics are such that in many instances it
2 has a much higher level of sodium in the ash.
3 Sodium causes -- can cause problems either with your
4 precipitators or with the ash formation within the
5 boiler itself that causes the ash to accumulate.
6 You can't remove it from the furnace walls as
7 well as the back passes of the boiler, and it
8 literally -- our experience was that it literally
9 plugged the boiler up to the point where we could no
10 longer move the combustion gasses through the unit.
11 That's probably one of the major problems with
12 it.

13 Q. So you would need a different boiler
14 design to use western coal?

15 A. We -- we would need to modify our boilers
16 significantly, yes, to try to successfully boil.

17 Q. Okay. And then what percent -- I realize
18 that the exact cost of transportation and so forth
19 is covered by a confidentiality clause, but roughly
20 what percentage of your costs are due to
21 transportation?

22 A. For which supply, because they do vary.

23 Q. For your low sulfur.

24 A. The present supply that we're using?

1 Q. Yes.

2 A. Probably the percentage of freight to the
3 overall cost is -- gotta stop and think -- it's
4 probably about a seventh of the cost, one-seventh,
5 whatever percentage that is.

6 Q. And assuming that the western coal could
7 be burned in your boiler, what percentage of the
8 transportation costs would the total -- of the total
9 would that be?

10 A. It would probably be about 80 percent.

11 MS. DOCTORS: That's all the questions I have.

12 Thank you.

13 HEARING OFFICER JACKSON: I do have a couple of
14 questions myself, kind of following up on that. In
15 the petition you indicate that you cannot provide
16 the Board with the actual price per ton of the
17 Illinois low sulfur coal because that's subject to a
18 confidentiality clause in your contract?

19 MR. PLANCK: Uh-huh.

20 HEARING OFFICER JACKSON: Is that correct?

21 MS. JAGIELLA: Let me clarify. Actually, no,
22 the actual total delivered cost of the Illinois low
23 sulfur coal is in the petition. We're using that
24 actual number. The numbers we're not using are mid

1 to high Illinois or non-Illinois low sulfur coal.

2 HEARING OFFICER JACKSON: Okay.

3 MR. PLANCK: And we just didn't provide the
4 breakdown of that particular one to --

5 HEARING OFFICER JACKSON: Right. I guess maybe
6 what I'm getting at is the price not delivered of
7 the low sulfur Illinois coal. If you'd take out the
8 tax and take out the freight, I don't believe that
9 price was in the petition.

10 MS. JAGIELLA: No, it wasn't.

11 MR. PLANCK: No.

12 HEARING OFFICER JACKSON: Okay. That's the
13 price that's subject to the confidentiality clause,
14 correct?

15 MR. PLANCK: Yes, as would be the freight cost
16 itself. Both the railroads are concerned about
17 having their freight rates divulged, as are the coal
18 -- coal company for the price of coal.

19 HEARING OFFICER JACKSON: Okay. So with that
20 understanding, my question is, how does the actual
21 price per ton, without tax and without freight, of
22 the Illinois low sulfur coal compare -- I mean, it's
23 less than the total cost, the total cost being \$32
24 per ton, correct?

1 MR. PLANCK: Right.

2 HEARING OFFICER JACKSON: How does that compare
3 to the actual price per ton of the non-Illinois low
4 sulfur coal, not including tax and not including
5 freight?

6 MR. PLANCK: On a per ton basis, it will be
7 slightly higher than the Indiana, and it will be
8 somewhat lower than the Kentucky, east Kentucky, and
9 the West Virginia.

10 HEARING OFFICER JACKSON: And how does it
11 compare to the mid to high Illinois sulfur coal?

12 MR. PLANCK: The combination, it would be
13 slightly higher.

14 HEARING OFFICER JACKSON: The low sulfur coal
15 would be higher?

16 MR. PLANCK: Yes.

17 HEARING OFFICER JACKSON: Okay. Then you
18 mentioned that right now the contracts you're
19 entering into are for shorter terms. Why is that?

20 MR. PLANCK: We have found that the pricing on
21 the spot market and up to a year is more favorable
22 than to attempt to enter into a long-term.

23 Plus, at the present time, since we don't
24 really know yet how we want to proceed into the year

1 2000, under Phase Two what -- what particular fuel
2 types we're going to be using. We didn't want to
3 commit to coals and that. So we made sure that all
4 of our fuel contracts for this year terminate at the
5 end of this calendar year so that we have the
6 flexibility to then proceed with whatever fuel type
7 we need in the year 2000.

8 HEARING OFFICER JACKSON: So that was a
9 decision that CILCO made rather than the coal
10 companies, to make the contracts for shorter terms?

11 MR. PLANCK: Yes, that was a CILCO decision.

12 HEARING OFFICER JACKSON: Okay. Then -- I
13 think you might have already answered this, but just
14 to clarify, in response to a question by Ms. Doctors
15 you indicated that the long-term contract prices
16 tend to be higher than the spot market prices; and
17 the short-term contracts like you're in now would
18 tend to be lower than the spot market prices?

19 MR. PLANCK: No. The -- the short term and
20 spots are one and the same. There's -- they're --
21 if I led you to believe those are different pricing,
22 they are not. That's the same. That's what we've
23 been calling spot. Short term is spot. Longer than
24 a year, we would consider that a long-term type

1 contract arrangement.

2 HEARING OFFICER JACKSON: Okay. Thank you.

3 Those are the only questions I had.

4 Anything else for this witness?

5 MR. FALETTO: We have nothing further.

6 HEARING OFFICER JACKSON: Okay. Thank you,

7 Mr. Planck.

8 MR. FALETTO: Our last -- or our third witness

9 and our last witness is John E. Shrock with QST

10 Environmental. Mr. Shrock is Manager of the Air

11 Resources Division for the QST Gainesville office.

12 We would mark his testimony, guess we're at

13 Exhibit J.

14 Rachel, do you have a copy of his testimony?

15 MS. DOCTORS: Yes, I do. Thank you.

16 MR. FALETTO: Mr. Shrock, do you have a true

17 copy of your testimony?

18 MR. SHROCK: Yes.

19 MR. FALETTO: And we would ask at this time, if

20 there are no objections, to admit -- move to admit

21 the testimony -- his written testimony into the

22 record of this proceeding.

23 HEARING OFFICER JACKSON: Ms. Doctors, does the

24 Agency have any objection?

1 MS. DOCTORS: No.

2 HEARING OFFICER JACKSON: Okay. Exhibit J is
3 so admitted.

4 Mr. Shrock, you may proceed.

5 MR. JOHN E. SHROCK: Okay. My name is John E.

6 Shrock. I'm employed by QST Environmental in

7 Gainesville, Florida. I currently hold the position

8 of Manager of the Air Resources Division. My

9 education includes a Bachelor's degree in physics

10 and a Master's degree in environmental science from

11 Indiana University.

12 Approximately half of my 22 years of air

13 quality experience were with the state regulatory

14 agency where I performed and reviewed numerous air

15 dispersion modeling studies. I have also managed a

16 large number of air permitting projects for a wide

17 range of industries, many of which have included

18 demonstrations of compliance with Ambient Air

19 Quality Standards based on dispersion modeling.

20 QST was retained by the Central Illinois Light

21 Company, CILCO, to determine the air quality impact

22 of increased operational flexibility for boiler

23 number two at the E.D. Edwards electrical generating

24 station in Bartonville, Illinois. The increased

1 operational flexibility would allow the use of
2 higher sulfur coal in boiler number two while
3 maintaining compliance with the current plant-wide
4 sulfur dioxide emission limit.

5 The proposed change in fuel quality does not
6 involve an increase in facility SO₂ emissions or
7 constitute a major modification and would not be
8 subject to new source review. However, because the
9 three units in the two stacks at the Edwards station
10 are not identical, there existed the possibility of
11 a NAAQS air quality change under some meteorological
12 conditions. Therefore, QST designed a study of the
13 ambient air quality effects resulting from proposed
14 variance relief to determine whether changes in air
15 quality would be acceptable and would not threaten
16 the National Ambient Air Quality Standard for SO₂.

17 The study designed by QST was based on a
18 conservative air dispersion modeling approach
19 utilizing an assumed or artificial plant
20 configuration that would result in the maximum air
21 quality impact. Only instances when a significant
22 impact was produced was the proposed change
23 considered. According to the Code of Federal
24 Regulations, CFR 51.15 -- 165, a major source or

1 major modification will be considered to cause or
2 contribute to a violation of a National Ambient Air
3 Quality Standard when such source or modification
4 would, at a minimum, exceed the significance levels
5 at any locality that does not or would not meet the
6 applicable national standard.

7 The significance levels for SO₂ are defined as
8 five micrograms per cubic meter over any 24-hour
9 period, 25 micrograms per cubic meter over any
10 3-hour period, and one microgram per cubic meter
11 annual average.

12 Under my supervision, QST utilized
13 state-of-the-art, Agency-approved dispersion
14 modeling methodology to predict the SO₂
15 concentrations that could result from the additional
16 operating flexibility being requested by CILCO. The
17 modeling analyses proceeded with substantial input
18 from my E.P.A. technical staff, particularly in
19 defining the emissions inventory of other SO₂
20 sources to be included in the modeling study, and
21 incorporating background SO₂ concentrations which
22 represented the additional SO₂ emissions from small
23 sources such as motor vehicles, commercial
24 incineration, fires, and transport of SO₂ from

1 outside of the Peoria area.

2 In addition, QST's modeling methodology assumed
3 operating conditions at Edwards station with the
4 variance relief and conditions that would result in
5 the highest ground level SO₂ concentrations.

6 QST's ambient air quality impact analysis
7 follow the straightforward two-step process: First,
8 QST identified all instances where the difference in
9 the existing and proposed operation of CILCO Edwards
10 unit two would result in a recognizable effect on
11 air quality; second, QST examined whether the NAAQS
12 for SO₂ would be exceeded at any time or at any
13 location where the worst case modeling predicted a
14 recognizable effect.

15 The results of QST's study and analysis were
16 set forth in a report dated December 9, 1998,
17 entitled Air Quality Demonstration in Support of a
18 Variance to Burn Higher Sulfur Coal at Unit Two of
19 the Edwards Station, hereafter referred to as air
20 quality report. The QST study and analysis were
21 completed with my involvement and under my direct
22 supervision, and the air quality report was prepared
23 under my direct supervision. A true and correct
24 copy of the air quality report was attached to

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1 CILCO's petition for variance as Exhibit 5.
2 A principle task in the ambient air quality
3 impact analysis was the development of the emissions
4 inventory. In addition to the Edwards station,
5 other point sources of SO₂ were included in the
6 modeling study. The other sources were selected
7 based on their size and proximity to the Edwards
8 station, according to the Illinois Environmental
9 Protection Agency guidelines. Other sources of SO₂
10 which were not directly modeled were accounted for
11 in the background estimate. The current facility
12 emissions cap of 34,613 pounds per hour will remain
13 in place under the terms of the proposed variance
14 relief because modeling indicated that stack one,
15 serving unit one and two, has slightly poorer
16 dispersion characteristics than stack two, serving
17 unit three. Emissions from unit one and two were
18 maximized based on 6.6 lb/MM Btu input rate.
19 The balance of the emissions, 4,613 pounds per
20 hour, were assigned to unit three, corresponding to
21 2.762 lb/MM Btu. Exhaust gasses from unit one and
22 two are routed through stack number one, and those
23 from unit three are routed through stack number
24 two. C.D.M. data collected in 1997 for each of the

1 units were used to develop a relationship between
2 load, exhaust, gas, temperature, and flow rate for
3 each stack.

4 Standard Glen air regressions were performed on
5 the data to allow estimations of temperature and
6 flow rates under a variety of load conditions.

7 Projections were made of temperature and flow rates
8 for various load conditions for each unit. The
9 standard flow rates were corrected to actual
10 conditions, and the temperature values were
11 converted to degrees Kelvin. Several load
12 combinations for unit one and two were used to
13 calculate the resulting flow rate and temperature
14 values for stack number one. The flow rates and
15 stack diameters, 21 feet for stack one, and 25 feet
16 for stack two, were used to calculate the stack gas
17 exit velocities.

18 Other SO₂ emission sources: Data for modeling
19 the other sources were supplied by the I.E.P.A. and
20 consisted of the following: One, hourly and annual
21 emission inventory system information; and, two, an
22 input file from the Pekin Energy Modeling Study.
23 Source selection was based on the I.E.P.A. screening
24 method for emission inventory sources, also referred

1 to as the Q equals 10D method. For this procedure,
2 if the source submission rate, Q, in tons is less
3 than 10 times the distance, D, in kilometers from
4 the source of interest -- which it was the Edwards
5 station -- it may be excluded from the modeling
6 study. However, any source within five kilometers
7 must be included regardless of the emission rate.

8 E.I.S. information supplied by I.E.P.A.
9 included 104 sources, including the three CILCO
10 Edwards station boilers. Of these, 37 sources did
11 not meet the 10D greater than Q criteria and were
12 thus considered in the modeling. Three additional
13 sources that met the 10D greater than Q criteria
14 were also included since they are within five
15 kilometers of the Edwards station.

16 The I.E.P.A. also provided QST with
17 supplementary information in the form of an input
18 file used in a recent modeling study for the Pekin
19 energy facility. The information in this file was
20 considered better for modeling purposes and take
21 precedence over the E.I.S. when there was conflict.
22 This resulted in some parameter changes as well as
23 the elimination of a source. A total of 41 sources,
24 including the three Edwards station units, were

1 included in the SO₂ emission inventory for the
2 modeling study.

3 Modeling methodology overview: The methodology
4 used in this study was consistent with the U.S.
5 Environmental Protection Agency modeling guidance as
6 contained in 40 CFR, 51, Appendix W. The most
7 recent version -- versions of E.P.A. Screen and
8 Industrial Source Complex -- I.S.C. -- Three models
9 were used in this analysis. Screen Three was used
10 to determine the worst case load condition. Screen
11 three incorporates a range of possible
12 meteorological conditions appropriate for this
13 simplified analysis. I.S.C. Three is a refined
14 dispersion model capable of evaluating many sources
15 and receptor points simultaneously. The short-term
16 version of I.S.E. Three, which requires hourly
17 meteorology, was used to calculate the hourly
18 concentrations needed for evaluating significance
19 and compliance with the NAAQS.

20 Meteorological data processed for input to the
21 I.S.C. Three model was supplied by I.E.P.A. Five
22 separate years, 1987 through 1991, were used in the
23 modeling. The data were based on hourly surface and
24 twice-per-day upper air observations at the Peoria

1 airport. An extensive receptor grid of over 1,195
2 points was developed for the modeling. A receptor
3 is a geographic location at which the model
4 calculates concentration. Receptor spacing was one
5 kilometer in the vicinity of Edwards station and
6 other nearby and larger sources. At the further
7 edges of the modeled area of the receptor, spacing
8 was increased to two kilometers. The receptor
9 elevations were determined from examination of
10 7.5-minute series U.S. Geological Survey maps. The
11 elevation assigned to each receptor was the highest
12 elevation encountered in a sector as defined by
13 current E.P.A. modeling guidance.

14 The Edwards station is defined as a rural
15 source, according to E.P.A. modeling guidance, which
16 relies on land use classifications within a three-
17 kilometer radius to make the determination. Since
18 many of the other sources and most of the modeling
19 domain are rural, based on this classification
20 scheme, the modeling was performed using the rural
21 dispersion coefficients for all sources.

22 In addition to the contribution to air quality
23 from the modeled sources, a reasonable estimate of
24 the impact of sources not included in the modeling

1 was made for the comparison to the NAAQS for SO₂.
2 These include many small sources such as cars,
3 heating units, commercial incineration, fires, and
4 transport of SO₂ from beyond the Peoria area. The
5 Pekin monitor was selected as being reasonably
6 representative of the modeling domain for the
7 purposes of developing the background SO₂ values for
8 use in this study. The I.E.P.A. supplied a file of
9 hourly SO₂ concentrations collected at the Pekin
10 monitoring site during 1997. Hourly observations
11 from the Peoria airport of wind direction and other
12 meteorological parameters for the same year were
13 obtained from the National Climatic Data Center.
14 The wind directions were matched with the SO₂
15 monitored values. The data included times when the
16 monitor was being impacted by sources included in
17 the modeling. To avoid double-counting, those
18 monitor values were eliminated. The directions from
19 sources to the monitor were determined, and SO₂
20 background concentrations were interpolated for wind
21 directions within 10 degrees of a modeled source.
22 The hourly maximums ranged from 42 to 472 micrograms
23 per cubic meter. The hourly averages ranged from
24 8 to 18 micrograms per cubic meter with an overall

1 average of 13 micrograms per cubic meter.
2 Worst case load determination: The conditions
3 of the proposed variance relief would allow each
4 unit at Edwards station to emit SO₂ up to the rate
5 of 6.6 lb/MM Btu. However, since the hourly
6 emissions cap of 34,613 pounds per hour would be
7 maintained, it would not be possible for all three
8 units to operate simultaneously at full load with
9 the higher lb/MM Btu emission rate. In other words,
10 a higher emission rate from one unit must be offset
11 by a reduced emission rate from one or both of the
12 remaining units.

13 In an attempt to limit the analysis to a
14 manageable number of combinations, it was necessary
15 to determine the load condition that would result in
16 the highest ground level SO₂ concentration from the
17 plan. E.P.A.'s Screen Three model was used to
18 predict hourly concentrations of SO₂ that would
19 result from a variety of load conditions. Screen
20 Three incorporates a full range of meteorological
21 conditions to produce predicted hourly ground level
22 concentrations. Three load conditions -- 100, 75
23 and 50 percent -- were run for each boiler. The
24 highest concentration, 502 micrograms per cubic

1 meter, resulted from the operation of all three
2 boilers at full load. Therefore, 100 percent load
3 operations for all boilers was considered to be the
4 worst case condition for this study.

5 To demonstrate that CILCO's proposed variance
6 would not result in an adverse air quality impact,
7 QST's analysis utilized the following two-step
8 process: Identify all instances where the
9 difference in the existing and proposed operations
10 would result in a significant impact; and, secondly,
11 assure that a violation of the SO₂ NAAQS would not
12 be predicted to occur at any time or location when
13 the Edwards station was impacting significantly.

14 Modeling was conducted to determine if any
15 significant impacts would occur as a result of the
16 proposed variance. As previously discussed, the
17 significant SO₂ impact is defined in this study as a
18 difference in contribution between the existing and
19 proposed conditions that is greater than
20 5 micrograms per cubic meter over a 24-hour
21 averaging period, 25 micrograms per cubic meter over
22 a 3-hour averaging period, and 1 microgram per cubic
23 meter over the annual averaging period. The degree
24 of significance was determined by modeling the

1 existing and proposed source conditions at CILCO
2 Edwards station and computing the difference. This
3 was accomplished in the model by running the
4 existing condition as a negative -- as negative
5 emission rates and the proposed condition as
6 positive emission rates; thus, the concentrations
7 predicted at each receptor represent the net
8 increase or decrease resulting from the change in
9 operation. These modeling results indicated that
10 876 of the 1,195 receptors never had an increase
11 greater than 5 micrograms per cubic meter in any
12 24-hour period over the five model years.
13 Similarly, 628 receptors were identified that never
14 had an increase greater than 25 micrograms per cubic
15 meter in any 3-hour period. These receptors were
16 removed from further study, leaving 319 receptors to
17 be analyzed for the 24-hour averaging period and 567
18 receptors for the 3-hour averaging period. There
19 were no instances of the annual significance level
20 being exceeded.
21 Further analyses were conducted to determine if
22 there were any periods in which a predicted,
23 significant increase resulted from the proposed
24 change in CILCO operations -- I'm sorry, resulting

1 from the proposed change in CILCO operations
2 corresponded with the predicted exceedence of the
3 NAAQS.

4 Comparison with 3-hour NAAQS: For the 3-hour
5 averaging period, only 1,177 significant events were
6 predicted. 99.993 percent of events were not
7 significant. Of the significant events, the highest
8 total model concentration was 465 micrograms per
9 cubic meter. The 3-hour background concentration
10 developed from a 1997 Pekin monitor data for that
11 event was 13 micrograms per cubic meter.

12 During -- using this as a conservative
13 background number would result in a predicted
14 concentration of 478 micrograms per cubic meter
15 which is well below the standard of 1300 micrograms
16 per cubic meter. Therefore, it can be concluded
17 that there are no predicted exceedences of the
18 3-hour Ambient Air Quality Standard for SO₂ during
19 which the proposed change in Edwards station
20 operations results in a significant impact.

21 For the 24-hour averaging period, only 439
22 significant events were predicted. 99.98 percent of
23 the events were not significant. The highest model
24 concentration of 271 micrograms per cubic meter was

1 predicted to occur in 1989. The background air
2 quality value of 12 micrograms per cubic meter was
3 computed for this event, resulting in a total
4 predicted concentration of 283 micrograms per cubic
5 meter. This is well below the 24-hour Ambient Air
6 Quality Standard for SO₂ of 365 micrograms per cubic
7 meter.

8 Similar to the analysis for the 3-hour
9 standard, it can be concluded that there are no
10 predicted exceedences of the 24-hour Ambient Air
11 Quality Standard during which the proposed change in
12 the CILCO Edwards station operations results in a
13 significant impact.

14 In April 1995, the E.P.A. redesignated Peoria
15 and Tazewell Counties back to attainment status for
16 the primary and secondary SO₂ National Ambient Air
17 Quality Standards, 60 Federal Regulation 16.996. In
18 returning this area to attainment status, the E.P.A.
19 recognized the substantial SO₂ emission reduction
20 achieved through federally-enforceable restrictions
21 and permanent source closures. The redesignation
22 was based on dispersion modeling completed in 1986
23 to support I.E.P.A.'s data implementation plan,
24 submittal, and the lack of any monitored exceedence

1 since 1977. The dispersion modeling which
2 demonstrated attainment was based on a -- on a
3 number of major SO2 emission sources that have been
4 permanently shut down or controlled. In its
5 decision, U.S. E.P.A. noted actual SO2 emissions in
6 1993 from point sources remained at less than
7 23 percent of the allowable emissions that were
8 modeled in the attainment demonstration in a 1986
9 submittal.

10 As demonstrated by QST's analyses, there would
11 be no predicted exceedences of the 3-hour, 24-hour,
12 or annual NAAQS for SO2 that would result from the
13 additional operating flexibility CILCO is requesting
14 in this petition. Even assuming worst case
15 conditions and maximum allowable power generation,
16 there would be no adverse effect on air quality by
17 relaxing the current unit-based emission limitation
18 for Edwards unit two, primarily because any SO2
19 emission increase from unit two is fully offset by
20 the emissions decreases from unit one and three
21 necessary to maintain the plant-wide SO2 emission
22 limitation.

23 HEARING OFFICER JACKSON: Ms. Doctors, do you
24 have any cross-examination?

1 MS. DOCTORS: Just two clarifying questions.

2 MR. SHROCK: Uh-huh.

3 CROSS-EXAMINATION

4 BY MS. DOCTORS:

5 Q. Were the models run in the regulatory
6 mode? In other words, were input options set at the
7 regulatory default?

8 A. Yes, they were.

9 Q. And second, was downwash from the Edwards
10 station considered, meaning do the stacks meet or
11 exceed the height needed to avoid downwash?

12 A. The stacks are greater than two and a half
13 times any building tier height.

14 Q. Okay.

15 A. So downwash wasn't needed to be
16 considered.

17 MS. DOCTORS: Thank you.

18 HEARING OFFICER JACKSON: Okay. Let's go off
19 the record for one second.

20 (A discussion was held off the record.)

21 HEARING OFFICER JACKSON: As I just advised the
22 parties off the record, I had neglected to have the
23 witnesses sworn in before they read their testimony
24 into the record; so we will now, at this point, have

1 the court reporter swear the three CILCO witnesses
2 in. And then before the Agency begins their
3 testimony, we will do the same for the Agency
4 witnesses.

5 (Whereupon, Mr. Bisha, Mr. Planck, and Mr.
6 Shrock were duly sworn in by the court reporter.)

7 HEARING OFFICER JACKSON: Thank you very much.

8 All right. Before we finish with the CILCO
9 witnesses, I do have a couple follow-up questions.
10 And I wasn't sure which individual would be best to
11 answer the questions; so I will just direct them to
12 the CILCO witnesses, and whichever one feels best
13 qualified can answer. Is that acceptable?

14 MS. JAGIELLA: Yes.

15 HEARING OFFICER JACKSON: Okay. First of all,
16 this refers back to page three of your petition.
17 You indicate that you would immediately experience a
18 cost savings of 4 million dollars annually if the
19 variance is granted through lower fuel costs, and
20 that this would allow for the purchase of additional
21 tons of Illinois coal; and then there would be an
22 additional cost savings of one million dollars as a
23 result of that.

24 My question is, this additional one million

1 dollars of cost savings, is that attributable to the
2 purchase of the additional 500,000 tons of Illinois
3 coal, or is that in addition to the 4 million cost
4 savings annually? If you can just explain that a
5 little bit further?

6 MR. BISHA: I think John will address that.

7 HEARING OFFICER JACKSON: Okay.

8 MR. PLANCK: Yeah, I'm not really understanding
9 the question, so --

10 HEARING OFFICER JACKSON: There's a couple of
11 figures in there, 4 million dollar annual savings,
12 and then a one million dollar savings. And the
13 Board wanted some clarification as to whether that
14 one million dollar figure is in addition to the
15 4 million; and if so, what exactly is that
16 attributable to?

17 MS. JAGIELLA: I think the original for -- let
18 me -- then you tell me, John. The original -- if
19 you look at the chart in the petition and you look
20 at the original cost comparison, which is Illinois
21 mid to high sulfur coal with the cost of Illinois
22 low sulfur coal, you will see that that's about a
23 4 million dollar difference.

24 The additional one million dollars here, I

1 think that it is trying to encapsulate that
2 difference between additional out-of-state low
3 sulfur coal in comparison to the Illinois mid to
4 high sulfur coal, in that one year that it would be
5 at least an additional million dollars.

6 I think that what that was attempting to
7 capture was that second comparison between Illinois
8 mid to high and non-Illinois low sulfur coal.

9 MR. FALETTO: In the future years.

10 MR. PLANCK: If you go to the chart again that
11 I had in my testimony, you saw that there was a
12 significant difference between the 3-1/2 to
13 4 million dollars that we had with the present fuel
14 supply and what we were proposing; and then after
15 the year 2000, the three different types of fuel
16 supplies that we would have to go to --

17 HEARING OFFICER JACKSON: Uh-huh.

18 MR. PLANCK: -- if we didn't have the variance
19 and that. And so when we say at a minimum, it was
20 definitely at a minimum because we were jumping up
21 to, you know, 6, 7, up to 10 million dollars
22 potentially that you could be looking at. So we
23 were just saying, at a minimum, if you have to go
24 out of state for your supply in the year 2000, your

1 costs are going to increase above the 4 million by
2 at least -- at least another million.

3 MS. JAGIELLA: I think CILCO's testified -- and
4 I think it's in the petition, too -- that based on
5 their analysis of their actual costs, the real cost
6 savings will be about 4 million dollars, taking into
7 account everything, including what the actual
8 contract costs would be.

9 So maybe that's the most simple way to look at
10 it, rather than trying to -- I think this was an
11 attempt to capsulize something incrementally that
12 maybe is more confusing than just using the chart.

13 HEARING OFFICER JACKSON: Okay. That helps.
14 Next question then. In the petition, you also state
15 that you cannot provide at this time a plan for full
16 compliance because you've not yet finalized your
17 Acid Rain Program strategy; you don't know what's
18 going to happen with that. Since the Acid Rain
19 Program strategy does have to be in place by
20 January 1 of the year 2000, would it be appropriate
21 for the Board to require CILCO, if this variance is
22 granted, to --

23 MS. JAGIELLA: I'm sorry. Go ahead.

24 HEARING OFFICER JACKSON: -- to provide to the

1 Board or to the Agency a plan for full compliance in
2 the year 2000?

3 MS. JAGIELLA: I think that that reference to a
4 not -- plan not for full compliance didn't go to the
5 Acid Rain Program itself. CILCO has to comply; and
6 that what we proposed was a plan for compliance in
7 terms of the variance, and that their compliance
8 plan for the Acid Rain Program is not part of the
9 compliance plan under this variance.

10 I probably haven't said that very well. Would
11 you like to articulate it any better?

12 MR. FALETTO: Probably should have --

13 MR. PLANCK: In the testimony, I was just
14 simply saying that how we do it hasn't been
15 finalized. We will certainly comply. There is no
16 -- that is not an issue. You know, we will
17 certainly comply. It's just how we're going to do
18 it in terms of the combination of fuels and SO₂
19 credits is still the outstanding issue; and so we
20 can certainly go into the year 2000 and still not
21 have that finalized, but we'll be in compliance. We
22 will use a combination of fuels and SO₂ credits;
23 certainly be in compliance at all times, but we want
24 to see what's going to happen in the market.

1 HEARING OFFICER JACKSON: I think our concern
2 was that, in the regulations, a petitioner for a
3 variance is required to provide the Board with a
4 plan for compliance once the variance expires. What
5 are the plans to come into compliance at that
6 point?

7 And it was not clear in the petition that that
8 was set forth or that you were even able to do that
9 at this time because of this future uncertainty.

10 MS. JAGIELLA: Our attempt was to address that
11 in that follow-up letter.

12 HEARING OFFICER JACKSON: Okay. That's getting
13 to my next question then. That was clarified in the
14 dates that we talked about earlier, that by January
15 31st of 2002, you will either allow the variance to
16 expire or you will notify the Agency that you'll
17 plan to seek site-specific rulemaking? Those would
18 be the plans for compliance?

19 MS. JAGIELLA: Right. Right.

20 HEARING OFFICER JACKSON: Okay. Very good.
21 Ms. Doctors, did you have something you wanted to
22 add?

23 MS. DOCTORS: I was just going to maybe
24 articulate the Agency's understanding that the acid

1 rain issues were separate from this variance
2 proceeding; that they have a federal requirement and
3 a state permit for the Acid Rain Program where it's
4 taken care of in -- I think it also has to do with
5 the -- they're allowed to do the true-up at the end
6 of the period, the end of the -- there's a true-up
7 period. At that point, if they need to purchase
8 additional allowances or whatever, they will. So
9 that's why it makes sense for them not to know
10 today. But in the future, if they need to buy more
11 allowances or do something differently, they -- it's
12 a little different than our standard regulation.

13 HEARING OFFICER JACKSON: Okay.

14 MS. DOCTORS: I don't know if that helped
15 either.

16 HEARING OFFICER JACKSON: That does. That
17 helps to clarify. And these questions may actually
18 go back to Mr. Bisha. At one point in your
19 testimony, you indicated that there were some
20 administrative costs that you would also be saving
21 if the variance were granted. Were those
22 administrative costs specifically set forth in your
23 testimony? I can find --

24 MR. BISHA: No, I don't believe we quantified

1 them. We just qualitatively discussed the fact that
2 separating two different types of coal, buying,
3 transporting, managing two different types of coal
4 does lead to additional administrative costs.

5 HEARING OFFICER JACKSON: Are you able to give
6 a quantitative?

7 MR. BISHA: I'm not sure if we can or not
8 today.

9 MR. PLANCK: In terms of dollars?

10 HEARING OFFICER JACKSON: Yes.

11 MR. PLANCK: No, I really don't -- I'd be
12 hesitant to -- we had never broken it out that way.

13 HEARING OFFICER JACKSON: Okay.

14 MR. PLANCK: We know that they exist because we
15 know we have to go to special effort, take special,
16 extra time, what have you, to do it so we know the
17 cost exists. We just never attempted to put an
18 actual number to it.

19 HEARING OFFICER JACKSON: Okay. And then I'm
20 not sure if it's explained anywhere -- and this is
21 just to clarify for the Board -- what is a kilowatt
22 hour? Can you explain that?

23 MR. BISHA: The kilowatt is essentially 1,000
24 watts of electricity, and you would expend that over

1 one hour's time. That's how much energy you would

2 use over a period of time.

3 HEARING OFFICER JACKSON: Then one more. This

4 was in -- let's see -- Mr. Shrock's testimony. You

5 referred to Screen Three.

6 MR. SHROCK: Yes.

7 HEARING OFFICER JACKSON: Is that an acronym

8 for something?

9 MR. SHROCK: That's the name of the screening

10 model. It's a simplistic model that runs assumed

11 meteorological conditions that cover a range of what

12 you would probably find anywhere. And it -- you can

13 give it a -- it will find the maximum point

14 downwind, the maximum impact point for you. It's a

15 typical tool that you use before you get into the

16 refined air dispersion models.

17 HEARING OFFICER JACKSON: Okay. So that's a

18 standard?

19 MR. SHROCK: Yeah, it is. It's in the U.S.

20 E.P.A. modeling guidance and referred to as a

21 guideline model.

22 HEARING OFFICER JACKSON: Okay. Those were all

23 the follow-up questions I had then.

24 Does CILCO have any other witnesses or anything

1 else to present at this time?

2 MR. FALETTO: No. That concludes our witness
3 testimony. I don't think we have anything else to
4 clarify.

5 Any other witnesses want to clarify anything?

6 HEARING OFFICER JACKSON: Okay.

7 MR. BISHA: I guess I had one afterthought. I
8 think Rachel had asked how many companies were
9 subject to the acid rain, and I initially thought
10 100. I think it's probably more like in the order
11 of 300, not that that's significant.

12 MS. DOCTORS: Okay. Thank you.

13 HEARING OFFICER JACKSON: Thank you. All
14 right. Why don't we go off the record for a
15 second.

16 (A discussion was held off the record.)

17 HEARING OFFICER JACKSON: We were just off
18 the record briefly, and there was a short discussion
19 between Petitioner and the Agency regarding the
20 compliance plan. And I believe CILCO would like to
21 make a clarification in that regard.

22 Mr. Faletto?

23 MR. FALETTO: The clarification is in how
24 the --

1 MS. JAGIELLA: It's not in the
2 letter.

3 MR. FALETTO: -- emission limit is -- it's not
4 in that letter. Yes, it's actually a clarification
5 as to the compliance plan and some conditions that
6 were recommended by the Agency. It does appear in
7 Bob's -- is that your testimony?

8 MR. BISHA: Yeah.

9 MR. FALETTO: -- testimony of Robert Bisha, and
10 it is the -- the average SO2 emissions for all three
11 boilers as a group shall not exceed 34,613 pounds
12 per hour on a 24-hour average basis computed daily.
13 That's the clarification. And clarification is that
14 CILCO would agree to that or has --

15 MS. DOCTORS: Yes, correct.

16 MR. FALETTO: -- previously agreed to that
17 condition of the variance.

18 HEARING OFFICER JACKSON: Where is that in
19 Mr. Bisha's testimony?

20 MR. FALETTO: That's what I'm trying to
21 find.

22 MS. DOCTORS: It's on page twelve of our
23 recommendation, if that's helpful.

24 MR. FALETTO: No, it's actually -- it's in the

1 Agency's recommendation for a recommendation to the
2 Board to approve the variance which was filed --
3 well, it's in the record -- February 4th. Maybe it
4 isn't in your testimony. I may have misspoke. It
5 may not be in Bob's testimony.

6 MR. BISHA: Yeah, on page seven, at the top, I
7 stated, compliance with the applicable 34,613 pounds
8 per hour limit will be computed on a daily basis
9 from the average emission rates on that date. I
10 think the clarification on that would be computed
11 daily.

12 HEARING OFFICER JACKSON: Okay.

13 MS. DOCTORS: Thank you.

14 HEARING OFFICER JACKSON: Just so we're
15 perfectly clear, the compliance plan, the conditions
16 that are included in the Agency recommendation,
17 that's something that CILCO is agreeing to, each of
18 those conditions?

19 MS. JAGIELLA: Yes. Yes.

20 HEARING OFFICER JACKSON: Okay. I think that
21 will be clear for the Board. Thank you.

22 Now we'll proceed with the Agency case.

23 Ms. Doctors.

24 MS. DOCTORS: I have a very short opening.

1 First, I would like to introduce the people I have
2 with me. I have Robert Kaleel, who's Manager of our
3 Modeling Section in our Air Quality Planning
4 Division, or section, I guess. It Bureau of Air.
5 We've got divisions, too. We also have with us Matt
6 Will, who works in the Modeling section, and Wayne
7 Kahila, who's our Field Inspector for this
8 facility.

9 Today Rob will be testifying, as he worked
10 closely with CILCO on helping them to develop
11 appropriate modeling strategy and reviewed the air
12 quality and supervised -- helped review and
13 supervise the preparation of the Agency's
14 recommendation in this case.

15 The company is requesting a variance from
16 Section 214.141, the 1.8 lb/MM Btu for boiler number
17 two. And based on the modeling and showing no air
18 quality -- or minimal air quality impact, the
19 regulatory uncertainty, the cost savings to the
20 company, the Agency is recommending the granting of
21 this variance based on the compliance plan as it's
22 been clarified in CILCO's letter and the Agency's
23 recommendation. The letter is attached to the
24 recommendation; it's dated January 1st -- I mean

1 January 26, 1999. But the recommendation for the
2 compliance -- the compliance plan -- I'm really
3 making this confusing -- is actually, in fact, in
4 the Agency's recommendation and summarized in
5 Petitioner's Exhibit -- is it G? G. Exhibit G.

6 MR. FALETTO: Correct.

7 MS. DOCTORS: -- with the clarification that we
8 had about the daily basis computed for example the
9 24-hour.

10 So with that, I would like -- I'm ready for Rob
11 Kaleel to testify.

12 HEARING OFFICER JACKSON: Okay. Please call
13 your first witness.

14 (Whereupon, the witness was duly sworn by the
15 court reporter.)

16 MS. DOCTORS: And can we mark this as
17 Exhibit K, his -- a copy of his --

18 HEARING OFFICER JACKSON: Actually, why don't
19 we do Respondent's Exhibit 1 if you want.

20 MS. DOCTORS: Okay. Respondent's Exhibit 1.

21 HEARING OFFICER JACKSON: Is this the
22 original?

23 MS. DOCTORS: I've got multiple copies, so I
24 don't know what the original is.

1 HEARING OFFICER JACKSON: Okay. The witness
2 has been sworn in, so you may begin.

3 MR. ROBERT J. KALEEL: Okay. My name is Robert
4 Kaleel. I'm the Manager of the Air Quality Modeling
5 Unit in the Division of Air Pollution Control,
6 Bureau of Air, at the Illinois Environmental
7 Protection Agency, or just Agency. I have been
8 employed by the Agency for eighteen years in the
9 areas of air quality modeling, planning, and
10 regulatory development. I've also worked for
11 private consulting companies in the fields of air
12 pollution modeling and permitting.

13 I have a Bachelor of Science degree in
14 meteorology from Northern Illinois University.

15 In my current position at the Agency, I am
16 responsible for overseeing the development of
17 dispersion modeling analyses to support various
18 regulatory proposals, including the underlying
19 sulfur dioxide regulations affected by this variance
20 petition.

21 For the matter before us today, I have
22 supervised the Agency's review of the technical
23 information provided by the Central Illinois Light
24 Company, or CILCO, in support of this variance

1 petition, including the air quality modeling and
2 cost impact analyses. The purpose of my testimony
3 today is to explain the basis for the Agency's
4 recommendation in support of this variance request.

5 CILCO has applied for a variance to modify the
6 current air operating permit for its Edwards
7 station, which is located near Pekin, to allow
8 greater operational flexibility. This facility is
9 equipped with three coal-fired electrical-generating
10 units. Sulfur dioxide, or SO₂, emissions from units
11 one and three are currently limited to 6.6 lb/MM
12 British thermal units, or pounds per MM Btu of heat
13 input, while the SO₂ emissions from unit two are
14 limited to 1.8 lb/MM Btu. These limits are
15 contained in 35 Illinois Administrative Code,
16 Section 214.141 and Section 214.561 respectively.
17 Thus, unit two is restricted to burning low sulfur
18 coal, while units one and three are allowed to burn
19 coal with a higher sulfur content.

20 Furthermore, the Edwards plant is also subject
21 to a facility-wide SO₂ emission limit of 34,613
22 pounds per hour. CILCO will continue to comply with
23 this current plant-wide emission limit. CILCO has
24 submitted an air quality analysis that demonstrates

1 that the air quality in the Peoria region will not
2 be adversely affected if this petition is granted.
3 The proposed change in operations does not involve
4 an increase in emissions or constitute a major
5 modification and is not subject to new source
6 review.
7 To insure that the proposed change would not
8 affect air quality, the Agency requested that CILCO
9 prepare an analysis to evaluate these changes
10 relative to the National Ambient Air Quality
11 Standards, or N.A.A.Q.S., for SO₂. The N.A.A.Q.S.
12 for SO₂ were established to protect the health and
13 welfare of all citizens. There are actually three
14 such standards for SO₂ which are designed to provide
15 protection from both long- and short-term
16 exposures. The short-term limits are 365 and 1300
17 micrograms per cubic meter for 24-hour and 3-hour
18 averaging times respectively. The short-term limits
19 can be exceeded once per year at any given location
20 without violating this standard. The long-term
21 limit, which is expressed as an annual average, is
22 80 micrograms per cubic meter. The annual limit can
23 never be exceeded.
24 CILCO employed QST Environmental of

1 Gainesville, Florida, to perform the air quality
2 analysis. The air quality analysis entitled Air
3 Quality Demonstration in Support of a Variance to
4 Burn Higher Sulfur Coal in Unit Two of the Edwards
5 Station was submitted in December 1998 as part of
6 the petition for variance. The Agency has reviewed
7 all the modeling analyses provided by CILCO and has
8 determined that the study adequately demonstrates
9 that the SO₂ emission changes requested by CILCO
10 will not cause or contribute to violations of the
11 national and state air quality standards.

12 QST Environmental used a state and federally
13 approved regulatory air quality simulation model to
14 address the impacts from the facility. All modeling
15 inputs utilized in the study were based on Agency
16 and U.S. E.P.A. recommendations, including the use
17 of five continuous years of local meteorological
18 data recorded by the National Weather Service at the
19 Peoria airport. The study incorporated emissions
20 from the Edwards station and other industrial
21 facilities in the area based on data provided by the
22 Agency.

23 Impacts from upwind background sources were
24 also accounted for based on the most recent ambient

1 monitoring data collected by the Agency at its
2 monitoring station in Pekin. The modeling analysis
3 shows that under certain meteorological conditions,
4 the proposed emission changes at the Edwards station
5 could -- can potentially cause short-term impacts
6 that the Agency considers to be significant. For
7 example, the change in emission at Edwards is shown
8 by the study to potentially cause a net increase of
9 ground level 3-hour average SO₂ concentrations as
10 high as 93 micrograms per cubic meter.

11 However, this impact, when added to the impact
12 of all other sources in the area, result in a total
13 concentration of 376 micrograms per cubic meter
14 which is well below the 3-hour standard of 1300
15 micrograms per cubic meter. Thus, the air quality
16 standard is still protected even during potential
17 worst case conditions. It is the Agency's
18 conclusion that the air quality demonstration
19 provided by CILCO in support of this variance
20 request is adequate to demonstrate that the air
21 quality standards for SO₂ will not be exceeded as a
22 result of the proposed emission changes at the
23 Edwards station.

24 In consideration of a variance, the Board is

1 required by Section 35(a) of the act to determine
2 whether a petitioner would suffer an arbitrary and
3 unreasonable hardship if required to comply with the
4 Board's regulation. The Edwards station is
5 currently complying with the applicable SO2 rules
6 through the purchase of low sulfur coal. CILCO
7 could also comply by installing a scrubber on unit
8 two at the Edwards station. A scrubber would
9 require a capital investment on the order of
10 40 million dollars or more and have an estimated
11 annualized cost of \$350 per ton of SO2 removed over
12 its operating life. However, CILCO has shown that
13 continued compliance will be an unreasonable
14 hardship. Its in-state supplier of low sulfur coal
15 does not expect to be able to continue supplying low
16 sulfur coal in sufficient quantities beyond the
17 current calendar year. According to CILCO, the
18 increased cost of purchasing out-of-state low sulfur
19 coal is between 4 and 10 million dollars per year
20 based on spot market prices. Low sulfur coal is
21 more expensive than mid to high sulfur coal, and the
22 price of low sulfur coal is expected to rise when
23 the Acid Rain, Phase Two Program becomes effective
24 since there will be more sources vying for a limited

1 supply. The mid and high sulfur coals are still
2 available from in-state suppliers.
3 CILCO is still evaluating the best means for
4 complying with the requirements of the Acid Rain
5 Program, Phase Two, which becomes effective by the
6 year 2000. CILCO has not yet determined whether it
7 will be more economical to switch coal suppliers,
8 purchase allowances, or install and operate a
9 scrubber. Even if it is more economical to operate
10 a scrubber as a long-term compliance strategy, it
11 will require several years to design, finance, and
12 install.

13 It is important to consider that the Acid Rain
14 Program will result in substantial reductions of SO₂
15 emissions from the Edwards station beginning in the
16 year 2000. It should be noted that although the
17 Agency agrees that there is a significant potential
18 hardship in requiring CILCO to continue to comply,
19 it believes that CILCO may have overestimated the
20 savings by only using spot market prices. The
21 Agency believes the savings from grant of this
22 variance to be more on the order of 1.6 to 4 million
23 dollars, which is still a substantial savings. The
24 Agency's estimates were based upon data from the

1 U.S. Department of Energy's quarterly energy report
2 which averages the historical spot market price of
3 coal with that purchased via contract.

4 CILCO anticipates -- and the Agency agrees --
5 that the future cost of low sulfur coal may rise due
6 to the expected increase in demand for low sulfur
7 coal as a result of the Acid Rain Program. CILCO
8 has requested the opportunity to evaluate this cost
9 against the availability and cost of allowances and
10 the cost of installing a scrubber. At the Agency's
11 request, CILCO has reduced its request to limit the
12 term of the variance from five years to two years
13 unless it elects to pursue more permanent relief in
14 the form of a site-specific rule than three and a
15 half years. The Agency, therefore, agrees that
16 while the cost of compliance is uncertain, the
17 estimates indicate that the hardship is arbitrary
18 and unreasonable in light of modeling demonstrating
19 minimal air quality impact and the fact that there
20 have been no violations of the SO₂ N.A.A.Q.S. in the
21 Peoria area in more than twenty years.

22 This concludes my testimony.

23 HEARING OFFICER JACKSON: Thank you,
24 Mr. Kaleel. Any cross-examination?

1 MR. FALETTO: We don't have any questions for
2 the witness.

3 HEARING OFFICER JACKSON: Okay. Very good. I
4 do have a couple of questions of my own. First of
5 all, looking at the Agency recommendation on page
6 five, paragraph fourteen, the second sentence
7 reads: "It will either have to limit its SO2
8 emissions through fuel selection," and then it looks
9 like there's a word missing. What word should be in
10 there?

11 MS. DOCTORS: Oh, my goodness. I don't know.

12 HEARING OFFICER JACKSON: Is it "to," limit its
13 fuel selection to?

14 MS. DOCTORS: Yes.

15 HEARING OFFICER JACKSON: Okay. Thank you.
16 Next question. And this is regarding the avoided
17 fuel cost estimates that CILCO is propounding that
18 and that the Agency believes may be somewhat
19 exaggerated.

20 MR. KALEEL: Uh-huh.

21 HEARING OFFICER JACKSON: Is there any way for
22 the parties to agree on what the actual avoided fuel
23 cost savings will be?

24 MR. KALEEL: I think --

1 MR. PLANCK: In looking at the source that they
2 were using, I mean, it's a perfectly valid source.
3 But the Department of Energy, what they do is they
4 -- if you take a region, like Indiana, let's say,
5 they give you the published prices for spot, and
6 then they give you the published prices for
7 contract.

8 What they don't tell you in there is that
9 included in either one of those categories they are
10 combining or averaging high sulfur coal, mid sulfur
11 coal, and low sulfur coal. So the average that
12 you're seeing in there is an average over many types
13 of coals over -- with a wide variety of pricing. So
14 that's why our numbers won't agree with their
15 numbers because we were looking specifically at high
16 sulfur coal only from those regions and based on our
17 knowledge of the coal prices in those areas.

18 HEARING OFFICER JACKSON: You mean low sulfur
19 coal?

20 MR. PLANCK: Excuse me, low sulfur, yes.

21 HEARING OFFICER JACKSON: Okay. Then my
22 question for Mr. Kaleel then, do you agree with
23 CILCO's interpretation of those estimates?

24 MR. KALEEL: I think I agree with that. I

1 think I should point out that, you know, the Agency
2 has to rely on published figures. Our issue was
3 relying -- CILCO had relied strictly on the spot
4 market price; and our understanding has been -- and
5 there's been some testimony to the contrary, but our
6 understanding has been that companies that enter
7 into a contractual arrangement can oftentimes
8 realize cost savings. And because those contracts
9 typically are confidential, the Agency has to rely
10 on published information. That's what we did.

11 But we don't totally dispute the numbers that
12 CILCO provided. We used the methodology that we
13 used because it was readily available to you.

14 HEARING OFFICER JACKSON: Okay. The Agency's
15 position would then be that the -- instead of just
16 the one figure that CILCO is presenting, there may
17 be more of a range --

18 MR. KALEEL: Right.

19 HEARING OFFICER JACKSON: -- of cost savings?

20 MR. KALEEL: Yes.

21 HEARING OFFICER JACKSON: Okay. But you don't
22 dispute the fact that the price savings or the cost
23 savings may, in fact, be 4 million dollars?

24 MR. KALEEL: We don't dispute that, and we

1 agree that those are substantial cost savings.

2 HEARING OFFICER JACKSON: Okay. This was an
3 issue that we discussed in one of our pre-hearing
4 conference calls regarding the SIP revision?

5 MS. DOCTORS: Yes.

6 HEARING OFFICER JACKSON: The Agency had
7 believed that a SIP revision would be required. And
8 initially, in CILCO's petition, there was a
9 statement that a SIP revision would not be needed.
10 It's my understanding that the parties have
11 discussed this, and that CILCO believes that if, in
12 fact, a SIP revision is needed, all the information
13 necessary for that has been included in the
14 petition.

15 My question for the Agency is, do you agree
16 that all the necessary information is in this
17 petition if a SIP revision is, in fact, necessary?

18 MS. DOCTORS: We have all -- the company has
19 provided all the information, plus the Board
20 opinion. We need the Board opinion and the
21 transcript and the public hearing notices. It has
22 been provided for us to do a SIP revision, and we --
23 I'm willing to explain on the record why we believe
24 a SIP revision is necessary if you would like,

1 but --

2 HEARING OFFICER JACKSON: It would probably be
3 helpful for the Board to hear the Agency's position
4 on that.

5 MS. DOCTORS: Right. Let me see how I
6 explained it before. But right now, this area is
7 under a maintenance plan, that they have attained
8 the standard. And they're under a federal -- we've
9 got a federally enforceable maintenance plan, and
10 one of the provisions of the maintenance plan is
11 that we will continue to enforce the current
12 regulation.

13 Given that we're -- we would not be enforcing
14 the current regulation because we've agreed do a
15 variance, we need to, in effect, amend that
16 maintenance plan through a SIP revision. I think
17 that's the simplest way there is to explain it.

18 And also, if we didn't amend the SIP revision,
19 the company potentially is subject to enforcement by
20 U.S. E.P.A. of the 2.141 limit of 1.8 lb/MM Btu.
21 That's not fair, given that we've agreed that this
22 is okay to do.

23 HEARING OFFICER JACKSON: You believe right now
24 you have all the information that you need to do

1 that revision?

2 MS. DOCTORS: Yes.

3 HEARING OFFICER JACKSON: Okay.

4 MR. FALETTO: Probably to clarify it, all the
5 information, not just in the petition, but in the
6 record for the variance that would provide that
7 information.

8 MS. DOCTORS: The whole record.

9 MR. FALETTO: I say the Board's -- the whole
10 record, because I think you asked whether it was all
11 in the petition.

12 HEARING OFFICER JACKSON: I did.

13 MR. FALETTO: I think it would be the record as
14 well as the Board's opinion.

15 HEARING OFFICER JACKSON: Okay. Very good.

16 MR. FALETTO: Could we go off the record?

17 HEARING OFFICER JACKSON: Certainly.

18 (A discussion was held off the record.)

19 HEARING OFFICER JACKSON: After a brief
20 discussion off the record, we're back on, and I just
21 have a couple of more very short questions to
22 clarify of the Agency witness.

23 During Mr. Bisha's testimony, I believe, he
24 indicated that if the variance is granted or -- the

1 proposal for the variance would be exempt from the
2 N.S.P.S. requirements. Do you agree with that?

3 MR. KALEEL: We do agree with that.

4 HEARING OFFICER JACKSON: Okay. He also
5 mentioned that it would be exempt from the federal
6 P.S.D. requirements. Does the Agency agree with
7 that?

8 MR. KALEEL: We also agree; there's not a
9 significant emissions increase as a result of this.
10 We agree with that.

11 HEARING OFFICER JACKSON: Okay. Then same
12 thing for the NESHAP requirements?

13 MR. KALEEL: Yes, we agree with their position
14 on that.

15 HEARING OFFICER JACKSON: Okay. Finally, then,
16 Mr. Bisha indicated that the proposal, if granted,
17 is not inconsistent with the obligations -- CILCO's
18 obligations under the Acid Rain Program. And does
19 the Agency agree with that statement?

20 MR. KALEEL: I'm not sure I followed your
21 question. I'm sorry.

22 HEARING OFFICER JACKSON: Okay.

23 MS. DOCTORS: Yes, the Agency agrees that what
24 they proposed to do is not inconsistent with Acid

1 Rain because they're committed to being --

2 MR. FALETTO: Right.

3 MR. KALEEL: Okay.

4 MS. DOCTORS: -- in compliance. And I would

5 like to clarify. The NESHAP, right now there is no

6 NESHAP that particularly applies to this. We're

7 expecting some NESHAPs to come out in the future

8 that may affect certain boilers; and then at that

9 time, they would have to do what was federally

10 required to come into compliance. So this variance

11 wouldn't affect a future regulation in that area.

12 HEARING OFFICER JACKSON: Okay. All right.

13 Very good. Those were the only questions I had.

14 Do we have anything else? I believe the Agency

15 had some written testimony from another witness that

16 is not present today?

17 MS. DOCTORS: Yes. Mr. Troy Poorman is sick,

18 and I would like to have his testimony -- his short

19 testimony is being admitted simply to show that we

20 reviewed our permits, we -- for their CAAPP

21 application and their Acid Rain application, and

22 they have, indeed, submitted the proper applications

23 and obtained the proper permits from the Agency. So

24 as part of our review, we did review the permits.

1 HEARING OFFICER JACKSON: Okay. And the Board
2 rules require that if written testimony is being
3 admitted at hearing, the witness is actually present
4 for cross-examination. The witness is not present.

5 Does CILCO have any objection on the record to
6 the introduction of this written testimony?

7 MS. JAGIELLA: No.

8 MR. FALETTO: We have no objection.

9 HEARING OFFICER JACKSON: Okay. What I would
10 ask, just so we can make sure all of our "T"s are
11 crossed and our "I"s are dotted, is that the Agency
12 file an affidavit from Mr. Poorman indicating that
13 this is -- that this is his testimony since he's not
14 here to be sworn in, in person. And if you could do
15 that by the end of this week, that would be
16 acceptable. And we'll mark this as Respondent's
17 Exhibit Number 2.

18 Are these the only exhibits that the Agency
19 will be introducing?

20 MS. DOCTORS: Yes.

21 HEARING OFFICER JACKSON: Would you like to
22 move to introduce them into the record at this
23 time?

24 MS. DOCTORS: Yes.

1 HEARING OFFICER JACKSON: Any objection from

2 CILCO?

3 MR. FALETTO: No objections.

4 HEARING OFFICER JACKSON: Okay. Respondent's

5 Exhibits 1 and 2 are admitted into the record.

6 Anything else at this time? Closing

7 statements? Any other witnesses? Rebuttal from

8 CILCO?

9 MR. FALETTO: We'll waive any closing argument.

10 MS. DOCTORS: We also waive.

11 HEARING OFFICER JACKSON: Okay. And then on

12 the record, I do want to reiterate that because of

13 the decision deadline in this case, the parties have

14 agreed previously to waive any post-hearing briefs.

15 Is that still agreeable to everyone?

16 MS. DOCTORS: Correct.

17 MS. JAGIELLA: Yes.

18 HEARING OFFICER JACKSON: Okay. I also want to

19 note then that there were no members of the public

20 that joined us at any time during the proceedings

21 this morning. If any members of the public wish to

22 submit written comments to the Board, they must be

23 submitted by the end of this week, which is March

24 12th -- Friday, March 12th, five p.m. to the Board's

1 office in Chicago.

2 All right. On the record, then, I also am
3 required to make a statement as to the credibility
4 of witnesses testifying today. Based on my legal
5 judgment and experience, I have found that all of
6 the witnesses are credible, and credibility should
7 not be an issue for the Board to consider in
8 rendering an opinion on this variance petition.

9 Anything else?

10 MS. DOCTORS: Nothing from the Agency.

11 HEARING OFFICER JACKSON: Okay. We're
12 concluded. It is 12:30, March 9th. Thank you all.

13 (Proceedings concluded.)

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3 STATE OF ILLINOIS :

: SS

4 COUNTY OF PEORIA :

5 I, JENNIFER E. JOHNSON, Certified
Shorthand Reporter, Registered Merit Reporter, in
6 and for the County of Tazewell, State of Illinois,
do hereby certify that the foregoing transcript of
7 proceedings is true and correct to the best of my
knowledge and belief;

8

That I am not related to any of the
9 parties hereto by blood or marriage, nor shall I
benefit by the outcome of this matter financially or
10 otherwise.

11

12

JENNIFER E. JOHNSON
Certified Shorthand Reporter
Registered Merit Reporter
Notary Public, State of
Illinois at Large

15

16 My Commission expires April 18, 2001.
(License #084-003039)

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