

1 investment strategy. Whether it was generation or
2 environmental controls or other investment decisions, the
3 utility typically just made those decisions and did not
4 seek input from not only the regulators but also the
5 community and the customers and all the constituents that
6 might be impacted.

7 So one of our first objectives was to not
8 do it the traditional way, was to get out and get public
9 opinion, do the seminars that Mr. Riggins mentioned
10 earlier, hold a workshop-type proceeding and invite people
11 in to get their input into what our five-year and even
12 ten-year strategy on investment is.

13 The other motivation we had in taking this
14 process is utilities, when they're planning, they have to
15 plan five years, even ten years out, and there's -- there
16 wasn't under the traditional mechanism any means to gather
17 that input and at the same time give the investment
18 community, creditors and shareholders and even customers
19 any assurance that this would actually occur. So our
20 second objective was to what I like to call get out of the
21 gate.

22 We had been informed by credit rating
23 agencies that if we were to announce a major capital
24 investment program such as a coal unit, we would be
25 downgraded immediately, and the downgrade would be based

1 upon the lack of assurance that the unit would not be
2 deemed imprudent at some point in time once it's
3 completed, whether it was the right decision to make,
4 whether the alternatives were fully evaluated.

5 So given that and the substantial amount
6 of capital that we would have to raise to build the plant,
7 we could not even make the decision to do what is in the
8 best interests of our customers, which we felt was to
9 build a coal unit, initially.

10 And I can also say that, as we went through
11 this scenario planning process, we had been discussing a
12 coal unit for some time, but we hadn't even thought
13 outside the box in terms of what other things do we need
14 to consider. As we went through that planning process, we
15 added the environmental aspects of the investment and we
16 added the wind aspect of the investment, and the demand
17 response and efficiency.

18 We didn't have exactly how much and what
19 magnitude all those components should be in the plan. We
20 wanted public input on that aspect, but we knew in the
21 scenario planning process, we didn't want to depend on
22 coal only or wind only or efficiency only. We wanted to
23 have some balance in our portfolio.

24 Having said all that, once the plan was in
25 place and we got the investment strategy, the next step

1 was, well, how do we implement it, knowing that right out
2 of the gate, we're dead? If we don't have a regulatory
3 plan, if we don't have some assurance for the investors
4 and the creditors that we can do this and have some
5 reasonable assurance that we will get it recovered in
6 rates and the rates would be just and reasonable, then we
7 would get downgraded.

8 So there's really two components, coming up
9 with the investment strategy, then coming up with a
10 regulatory plan that the perception would be, yes, this is
11 a forward-looking plan, the regulators or the signatory
12 parties recognize the importance of credit quality, they
13 recognize the importance of condensing rate case schedules
14 to get the cash sooner than traditional process. All of
15 these factors were necessary in order to actually move
16 forward.

17 And I think it's been an invaluable process
18 that we've gone through. My only regret is that it's
19 taken as long as it has. We initially anticipated this
20 would go much quicker. But I can also say some of that
21 was our own fault from the standpoint of changing budgets
22 and getting into cycles, that sort of thing.

23 And the other point I would make is, it's
24 the first time we've ever done anything like this.
25 Naturally many of the parties were reluctant initially,

1 and continued to be reluctant throughout some of the early
2 stages of the workshops. And I think as we work through
3 it and continued to worked through it, people got a little
4 more comfortable and recognized that it just is not
5 possible to do it the old way, at least not in KCPL's
6 case.

7 That's a long answer. I'm sorry for the
8 length, but I hope I was responsive to the question.

9 Q. Well, thank you for that, but I'm
10 interested in that and also several other things, is
11 looking for innovative ways to look at this process, and
12 what you've said that and what everybody's -- most
13 everybody's signing on, in your own heart do you think
14 it's a good balance for the public interest, this plant?

15 A. I think it is a very good balance. I can
16 tell you that I was speaking to a group a couple of weeks
17 ago and I brought up the benefit of the plans between what
18 I like to call the three legs of the stool, customers, the
19 shareholders and the creditors, and listed the benefits
20 under each of those three segments. And there's
21 substantial benefit for every segment.

22 And I can also say that if I were to ask
23 our board of directors, they would say the shareholders'
24 leg is shorter, and if I ask the Office of Public Counsel,
25 they would likely say the customers' leg is shorter, and

1 the same on the creditors' side.

2 But when you look at the plan in total, I
3 think it's a very balanced plan, and I think anyone
4 interested can say, well, I'm getting this, but I wish I
5 had that.

6 Now, to give you a couple of examples, the
7 way we constructed the amortization, that will benefit
8 customers in the long run because it will be a reduction
9 in the rate base and a reduction of the plant cost. On
10 the other hand, by doing it, we're getting the cash that
11 will enable us to meet our credit ratios. That gives the
12 creditors comfort that they're in good shape. It provides
13 some assurance to shareholders that if you maintain good
14 credit quality, you're not likely then to go bankrupt. So
15 it will help shareholders from that aspect.

16 On the other hand, one piece that we gave
17 up in that was, we are able to collect allowance for funds
18 used during construction, which is essentially a return
19 prior to the plant coming into service. So we would
20 actually book that as an increase in earnings, and that
21 then increases the cost of the plant over time so that
22 when it actually goes into rate base, it's going in at a
23 higher value. A benefit to customers, we reduce that.

24 We reduced it 125 basis points initially in
25 Missouri. Subsequently, we increased that to 250 basis

1 points on the Iatan plant. So in effect, what that does
2 is it lowers the cost of the plant for customers once the
3 plant comes online.

4 What it does to shareholders is it lowers
5 our earnings during the construction period, but that also
6 provides shareholders with the -- with the view that once
7 all of this investment is in place and comes into service
8 and you actually start earning a return on it, our
9 earnings will be greater in the future, even though
10 customers benefit.

11 So there's always -- in our discussion of
12 the plan, there was always in mind balancing the interest
13 of all three components. I think it's -- it's a very
14 balanced approach.

15 Q. Chris, the third and last question. What
16 do you say to your critic that say there's a better way to
17 skin this cat and that you could add more wind, you could
18 look at efficiency a lot harder than you-all have? Can
19 you honestly say here today that you-all have put forth
20 your best effort and the state-of-the-art thinking in
21 putting down Iatan 2? Have you given the public and your
22 critics the best that you-all are thinking that you have
23 on this process?

24 A. I believe we have, and would also point out
25 that through the workshop process, this was an aberration,

1 and we took into account those various interests. The
2 level of efficiency and demand response was a negotiated
3 level. It wasn't something we necessarily proposed.
4 Whether that level can be increased or decreased, and
5 various parties have various positions on that, the way
6 we've set the programs up is essentially a two to
7 three-year pilot, and if those programs turn out to be
8 extremely successful, we can ramp them up.

9 With wind, we initially were proposing
10 200 megawatts of wind, one that would come online in '06,
11 one in '08. Through the collaborative process, it was
12 determined that, well, wind is a good resource but it has
13 some issues, and the issues may be greater than we think.
14 They may be less than we think, but let's put the first
15 100 megawatts in and get some upgrading experience, tie it
16 into our system, match it with our load shape and see how
17 it works before we even commit to the second
18 100 megawatts.

19 So I think the company has been committed
20 to a variety of sources, but to say that wind and/or
21 efficiency can replace the need for base load generation
22 within this five-year time frame I just don't think is
23 realistic given the issues with those type of sources.

24 The other thing we looked at, and we
25 discussed it in the workshops, is this is not just a

1 five-year resource plan that we looked at. It's a ten
2 year. There are other issues beyond this five years that
3 increased efficiencies or increased wind potential could
4 impact our decisions in that next five years.

5 So doing them now is a good positive step,
6 and potentially we have to spend \$350 million sometime in
7 the next five-year period, 2010 to 2015, potentially to
8 upgrade our old 50-year-old Montreal station, which is
9 roughly 450 megawatts to 480 megawatts. So starting now
10 with efficiency and starting now with wind may give us
11 more options in that second five years than we would have
12 otherwise.

13 COMMISSIONER APPLING: Thank you very much,
14 sir.

15 JUDGE PRIDGIN: Commissioner, thank you
16 very much. I don't believe I have any questions. Let me
17 see if we have any recross. Go down the list here,
18 starting with AmerenUE, Mr. Lowery?

19 MR. LOWERY: We have no questions.

20 JUDGE PRIDGIN: Thank you. Trigen,
21 Mr. DeFord?

22 MR. DeFORD: No questions, your Honor.

23 JUDGE PRIDGIN: Thank you. No questions.
24 Aquila?

25 MS. WHEELER: No questions.

1 JUDGE PRIDGIN: Thank you. Empire?

2 MR. COOPER: I have a few, your Honor.

3 JUDGE PRIDGIN: Mr. Cooper.

4 RECROSS-EXAMINATION OF MR. COOPER:

5 Q. Mr. Giles, just to finish fleshing out one
6 item related to the various preferred partners, I think
7 you talked about both minimum amounts and preferred
8 amounts for several of the partners. I represent Empire.
9 I think you referred to Empire's minimum amount in its
10 letter of intent to be 100 megawatts, correct?

11 A. Correct.

12 Q. Does Empire also have a preferred amount
13 expressed in that letter of intent?

14 A. Yes. That preferred amount's
15 150 megawatts.

16 MR. COOPER: Thank you.

17 JUDGE PRIDGIN: Mr. Cooper, thank you.
18 MJMEUC, Mr. Kincheloe?

19 MR. KINCHELOE: I don't have any further
20 questions. I just want to state for the record, we'd have
21 no objection, in fact would invite Kansas City Power &
22 Light to offer our letter of intent into evidence. And I
23 might just make a comment in reaction to earlier questions
24 that the Municipal Commission would have a substantial
25 flexibility in terms of the ability to accommodate

1 megawatt allocations above 100 megawatts, at least up to
2 130 or so range, and above that would probably depend on
3 when we would discover the availability and what terms it
4 might be.

5 And I -- as the Judge knows, or perhaps a
6 previously assigned judge knows; I was originally assigned
7 to be out of state today, and I do need to leave the
8 state, so I will ask to be excused.

9 JUDGE PRIDGIN: Mr. Kincheloe, thank you.
10 Ford and MIEC have waived cross-examination.

11 Praxair, Mr. Conrad?

12 MR. CONRAD: Just one area, Judge.

13 RECROSS-EXAMINATION BY MR. CONRAD:

14 Q. Mr. Giles, are you familiar with the
15 terminology supercritical?

16 A. Yes.

17 Q. What does that mean to you, sir?

18 A. The -- what it means to me is the
19 temperature, the boiler pressure in a boiler is higher
20 than a non-supercritical boiler, and essentially it's an
21 efficiency means. There's a cost, of course, involved,
22 but it basically increases the efficiency of the unit.

23 Q. Would you be -- in that context, would you
24 be able to in a general sense address and connect that up
25 with the size of the unit?

1 A. The best I can do is to say that with the
2 unit that we're looking at, it is the -- it will be a
3 supercritical. That's what we're intending to do. You
4 may have to ask John Grimwade where that size breakdown is
5 as to when do you go to supercritical. I'm not -- I'm not
6 sure.

7 Q. Would you agree it has something to do with
8 the efficiency as related to the size of the unit?

9 A. Yes.

10 MR. CONRAD: Judge, thank you. I believe
11 that's all.

12 JUDGE PRIDGIN: Mr. Conrad, thank you.
13 On behalf of the Department of Natural Resources?

14 MS. VALENTINE: No questions, your Honor.

15 JUDGE PRIDGIN: Thank you.

16 On behalf of the Office of Public Counsel, Mr. Dandino?

17 MR. DANDINO: No questions, your Honor.

18 JUDGE PRIDGIN: Thank you. On behalf of
19 the Staff?

20 MR. DOTTHEIM: No questions.

21 JUDGE PRIDGIN: Thank you.

22 Jackson County has not appeared.

23 On behalf of the U.S. Department of Energy?

24 MR. PHILLIPS: Yes, I had one or two.

25 RE CROSS-EXAMINATION BY MR. PHILLIPS:

1 Q. This is in regard to -- you made a
2 correction in regard to an answer of a question I gave you
3 relative to the earlier amortizations?

4 A. Right.

5 Q. And I think in your corrected answer you
6 stated that those amortizations would end in the context
7 of the next rate case?

8 A. Correct.

9 Q. Do you have an idea as to what the
10 aggregated amount of those amortizations would be on some
11 fixed date as of today or earlier?

12 A. I believe as of today it's roughly
13 \$30 million.

14 Q. So the \$30 million in the next rate case
15 would be an offset to rate base; is that correct?

16 A. That's correct.

17 MR. PHILLIPS: Thank you. That's all I
18 have.

19 JUDGE PRIDGIN: Mr. Phillips, thank you.
20 On behalf of Concerned Citizens of Platte County and
21 Sierra Club, Ms. Henry?

22 MS. HENRY: I'm not sure if this has been
23 done already, but I would like to know if the Commission
24 would take judicial notice of the proceedings in the EW
25 case in the workshop proceedings. There's three

1 transcripts and they're filed. Does anyone have
2 objections to that? Are they considered already to be
3 part of this case, or will the Commission take judicial
4 notice of them?

5 JUDGE PRIDGIN: I'm not seeing any
6 objection or any comment. I mean, we cert-- the
7 Commission will take judicial notice of its own file,
8 certainly.

9 MS. HENRY: Okay.

10 MR. CONRAD: Technically, it would be
11 administrative notice, Judge.

12 JUDGE PRIDGIN: Correct.

13 MS. HENRY: Am I correct that the only
14 things there would be the -- I believe the three
15 transcripts of the presentations that were made on the
16 record, so essentially we're looking at counsel's
17 statements.

18 JUDGE PRIDGIN: I would have to look at
19 that to be sure. I mean, I would certainly rely on the
20 parties, and I'm seeing some head shaking. I would want
21 to review the docket entry, but I assume that's correct.

22 MR. CONRAD: It's not my recollection that
23 we had sworn testimony of those proceedings, as I recall.
24 Subject to that, we don't have any objection.

25 JUDGE PRIDGIN: All right. Seeing no

1 further cross, any redirect?

2 MR. FISCHER: Just briefly, your Honor.

3 Can I do it from here to speed it along?

4 JUDGE PRIDGIN: Certainly.

5 REDIRECT EXAMINATION BY MR. FISCHER:

6 Q. Mr. Giles, there were some questions about
7 the KEPCO interest that is being discussed. Do you recall
8 if Kansas City Power & Light also filed in this proceeding
9 a copy of the Kansas Stipulation & Agreement that was
10 entered into in Kansas?

11 A. We did, yes.

12 Q. Does that Stipulation & Agreement also
13 refer to partnership issues?

14 A. Yes, it does.

15 Q. Could you just explain briefly what that
16 paragraph would indicate? And I guess I could actually
17 just ask the Commission to take official notice of page 12
18 of the Kansas stipulation that we filed, but --

19 A. Essentially the Stipulation & Agreement in
20 Kansas expressed an interest in, I think, quote, a concern
21 of the potential partners in the Iatan 2 unit, and the
22 requirement was that all the potential partners be treated
23 fairly and equitably, and I believe there was also a
24 provision that would say that the Commission could
25 disallow some costs if, as a result of these partners,

1 that the cost of the plant increased.

2 MR. FISCHER: May I approach the witness?

3 JUDGE PRIDGIN: You may.

4 BY MR. FISCHER:

5 Q. I'll just give you a copy of that stip to
6 refresh your memory about what it said.

7 A. Yes. Essentially, it states exactly as I
8 had paraphrased. The only exception would be that --
9 specifically language that says that we commit to the fair
10 and objective evaluation of all proposals for such
11 participation, including any proposal submitted by Kansas
12 utilities.

13 Q. Thank you. And Commissioner Appling asked
14 you regarding the collaborative process as a whole, does
15 KCPL have an evaluation of how well this process worked in
16 the end?

17 A. Yes. I believe it worked extremely well,
18 and the ultimate test to me is, of course, we still need a
19 Commission order approving the stipulation, but the
20 ultimate test is whether we can move forward or not with
21 our investment strategy, and I think, given the
22 stipulation and the Commission approval, we will be able
23 to do that.

24 I should also add that subsequent to filing
25 the stipulation in the Missouri jurisdiction, I was able

1 to attend several meetings for a week in New York, talking
2 with different constituencies, including investors and
3 creditors. During those meetings it was uniformly
4 expressed what a substantial move this was in terms of
5 thinking out of the box and giving creditors and investors
6 the assurance that the decisions we were about to make in
7 the 1.3 billion roughly dollars we're going to invest,
8 that the collaborative process we had enjoined in coming
9 to this agreement gave them comfort.

10 Q. Did KCPL consider the ideas and suggestions
11 of other parties in that process and incorporate those
12 into your recommendations?

13 A. We did. For example, two particular ones I
14 can think of, we had not initially contemplated including
15 the environmental equipment at the existing Iatan unit.
16 We did that in suggestion from some of the other parties.

17 We also, as I mentioned in response to
18 Commissioner Appling's questions, had initially considered
19 200 megawatts wind and dropped that to 100, subject to
20 evaluation before we do the next 100. We also agreed in
21 the stipulation to evaluate Missouri wind sites, and that
22 evaluation is to be completed by the end of the year, so
23 there's a potential that the second 100 megawatts could be
24 wind in Missouri.

25 Q. And with regard to the regulatory plan

1 itself, were there other areas that you've taken into
2 account the position or thoughts of the other
3 collaborative participants?

4 A. Substantial -- we have substantially from
5 the standpoint of both the AFUDC component, the
6 amortization was actually a suggestion from other parties.
7 We did not come up with that on our own initially. So
8 yes, there was a lot of give and take and a lot of
9 suggestions as to how to make this work.

10 MR. FISCHER: Your Honor, with that, that's
11 all I have. Thank you very much.

12 JUDGE PRIDGIN: Mr. Fischer, thank you.
13 Let me see if we have any further questions from the
14 Bench.

15 (No response.)

16 JUDGE PRIDGIN: I'm seeing no desire to
17 have questions. Mr. Giles, thank you very much for your
18 testimony. You may be excused.

19 This looks to be a rather logical time to
20 break for lunch. The Commission has an agenda meeting at
21 12:30. We will endeavor to resume at 1:30, depending on
22 how late their agenda runs. I'll ask the parties to be
23 ready to go at 1:30 and I understand somebody -- correct
24 me if I'm wrong -- we need to get Mr. Helming on and
25 Ms. Wright on. They need to testify today; is that

1 correct?

2 MR. FISCHER: Your Honor, could I ask --

3 JUDGE PRIDGIN: Yes.

4 MR. FISCHER: -- of the parties whether
5 there are any questions of Lori Wright? It may be that we
6 can just introduce her testimony and dismiss her if there
7 aren't any questions.

8 JUDGE PRIDGIN: Certainly.

9 MR. FISCHER: Or if the Commission has
10 questions for her, she deals with the pension issue, the
11 FAS 87 issues.

12 MR. DOTTHEIM: No questions from the Staff.

13 MR. CONRAD: Judge, subject to the terms of
14 the proffered stipulation, joint recommendation, we will
15 not have any.

16 MR. DANDINO: We have no questions.

17 MR. PHILLIPS: We have none.

18 MS. HENRY: We have none.

19 MR. FISCHER: I would ask, then, that she
20 be permitted to be dismissed from the proceeding. I'll
21 introduce her testimony after the break.

22 JUDGE PRIDGIN: That's perfectly fine with
23 me. I'm assuming there are no questions from the Bench
24 and that all the parties would agree that her prefiled
25 testimony would be admitted. All right. Ms. Wright may

1 then be excused, and we will resume with Mr. Helming at
2 roughly 1:30.

3 Thank you. We are off the record.

4 (A BREAK WAS TAKEN.)

5 (EXHIBIT NO. 2 WAS MARKED FOR
6 IDENTIFICATION BY THE REPORTER.)

7 JUDGE PRIDGIN: We're ready to go back on
8 the record. I understand, if I'm not mistaken, that we're
9 going to not have any cross-examination of KCP&L's witness
10 Lori Wright and that, Mr. Fischer, you just plan to offer
11 her prefiled testimony?

12 MR. FISCHER: Yes, your Honor. I've had
13 her direct marked as Exhibit 2, and I would ask that it be
14 admitted into the record without her taking the stand at
15 this time.

16 JUDGE PRIDGIN: Any objections?

17 MR. CONRAD: No objection.

18 MR. FISCHER: Your Honor, I also over the
19 lunch hour have made copies of the letters of intent
20 related to the Missouri potential partners, and I've got
21 the acquiescence of the Missouri potential partners to
22 introduce it under a highly confidential label. I'd like
23 to do that. I would point out that the Kansas entity has
24 not been -- we haven't been able to contact them. So that
25 letter of intent is not included here.

1 JUDGE PRIDGIN: And I guess I'd leave it up
2 to you, Mr. Fischer. Would you rather wait and contact
3 them and just do this as late filed? I mean, it doesn't
4 have to be done today. Obviously it needs to be done.

5 MR. FISCHER: Whatever is your preference.
6 I thought the Commissioners might want to look at it and
7 have an opportunity to talk about it, but it doesn't
8 matter to me.

9 JUDGE PRIDGIN: Okay. We can certainly
10 take that as a highly confidential exhibit. Did you -- we
11 can call that Exhibit No. 3. I don't know how many pages
12 you have or what.

13 MR. FISCHER: That's fine. It's all in one
14 envelope as one exhibit.

15 JUDGE PRIDGIN: All right. And,
16 Mr. Fischer, for the record, would you mind just briefly
17 identifying what that Exhibit No. 3 is.

18 MR. FISCHER: Yes. These are --

19 JUDGE PRIDGIN: Could you go back to the
20 mic, please, so we can pick that up on the record? I
21 apologize.

22 MR. FISCHER: These are the letters of
23 intent that were discussed in the testimony today of Chris
24 Giles related to the Missouri potential partners, and a
25 cover letter on each of these that clarifies to some

1 extent the nature of the agreements. And they are
2 considered highly confidential and we'd ask that it be
3 protected under the Protective Order.

4 They are -- in the case of Aquila, there's
5 a June 16 letter of intent, and then a June 22nd follow-up
6 letter. And for the Empire District Electric Company, we
7 have a June 10 letter of intent, with a follow-up letter
8 on June 22nd. And for the Missouri Public Utility
9 Alliance, Missouri Joint Municipal Utility Commission,
10 there's a letter dated June 10, followed by a follow-up
11 letter on June 22nd.

12 JUDGE PRIDGIN: I'll label that as Exhibit
13 No. 3 for identification purposes.

14 (EXHIBIT NO. 3 WAS MARKED FOR
15 IDENTIFICATION.)

16 JUDGE PRIDGIN: Do we have any objections?
17 (No response.)

18 JUDGE PRIDGIN: All right. Hearing none,
19 let me be sure that the record is clear. Exhibit No. 2 is
20 the prefiled testimony of Lori Wright from KCP&L, and
21 that's admitted into evidence.

22 (EXHIBIT NO. 2 WAS RECEIVED INTO EVIDENCE.)

23 JUDGE PRIDGIN: Exhibit No. 3 are the
24 letters of intent that Mr. Fischer has just described.
25 Those are highly confidential, and those are admitted into

1 evidence as Exhibit No. 3.

2 (EXHIBIT NO. 3 WAS RECEIVED INTO EVIDENCE.)

3 JUDGE PRIDGIN: As I understand the
4 parties' needs for the schedule, we're going to go out of
5 order and then take Mr. Helming from Concerned Citizens of
6 Platte County and the Sierra Club.

7 MR. FISCHER: That's my understanding as
8 well. I would inquire, though, there are a number of
9 witnesses that no one has indicated to me there are any
10 cross of. I might just inquire whether at some point
11 today we could have those released. They would be Michael
12 Cline, who was the financial modeling witness, and Ed
13 Blunk, who does the sulfur dioxide management program,
14 Bill Herdegen, who does the distribution acid management
15 program.

16 If no one has questions for them, I would
17 ask that they be released and we can introduce their
18 evidence in the record without them taking the stand.

19 MS. HENRY: We have cross-examination for
20 Michael Cline, but not the others.

21 JUDGE PRIDGIN: Any other thoughts from
22 counsel?

23 MS. HENRY: You said Herdegen and Blunk; is
24 that right?

25 MR. FISCHER: Yeah, Bill Herdegen.

1 MR. DOTTHEIM: Staff has no cross for
2 Mr. Herdegen or Mr. Blunk.

3 JUDGE PRIDGIN: Any other have any cross
4 for witnesses Blunk or Herdegen?

5 MR. CONRAD: We do not, Judge, subject to
6 the Stipulation & Agreement.

7 JUDGE PRIDGIN: Mr. Fischer, if you want,
8 we can label their testimony, give them -- see if I can
9 find Mr. Herdegen's and Mr. Blunk's. Let me label
10 Mr. Blunk's as Exhibit No. 4 for identification purposes,
11 Mr. Herdegen as Exhibit No. 5 for identification purposes.

12 (EXHIBIT NOS. 4 AND 5 WERE MARKED FOR
13 IDENTIFICATION BY THE REPORTER.)

14 JUDGE PRIDGIN: And, Mr. Fischer, I assume
15 you're offering those?

16 MR. FISCHER: Yes, I would offer those at
17 this time.

18 JUDGE PRIDGIN: Any objections?

19 (No response.)

20 JUDGE PRIDGIN: Hearing none, Exhibit No. 4
21 for identification purposes, the direct prefiled testimony
22 of Mr. Blunk from KCPL, is admitted into evidence, and
23 that's Exhibit No. 4.

24 (EXHIBIT NO. 4 WAS RECEIVED INTO EVIDENCE.)

25 JUDGE PRIDGIN: The direct testimony for

1 Bill Herdegen from KCP&L is labeled as Exhibit No. 5, and
2 that is also admitted into evidence.

3 (EXHIBIT NO. 5 WAS RECEIVED INTO EVIDENCE.)

4 JUDGE PRIDGIN: Exhibits 4 and 5 are
5 admitted without objections, and those witnesses may be
6 excused.

7 Any other housekeeping matters before
8 Mr. Helming?

9 MR. FISCHER: We'll distribute the highly
10 confidential exhibits to counsel, but otherwise we have
11 nothing else.

12 JUDGE PRIDGIN: All right. Anything else
13 from counsel?

14 (No response.)

15 JUDGE PRIDGIN: Hearing nothing, I don't
16 believe he's prefiled testimony, so, Ms. Henry, if you
17 wanted to approach and, Mr. Helming, if you wanted to come
18 forward and be sworn, please.

19 (Witness sworn.)

20 JUDGE PRIDGIN: Thank you very much, sir.
21 If you would, please have a seat.

22 And, Ms. Henry, whenever you're ready.

23 TROY HELMING testified as follows:

24 DIRECT EXAMINATION BY MS. HENRY:

25 Q. Please state your name.

1 A. Troy Helming, H-e-l-m-i-n-g.

2 Q. And what is your address?

3 A. 8448 Summit Street, Lenexa, Kansas 66215.

4 Q. Where have you studied, Mr. Helming?

5 A. I got my business degree from the
6 University of Kansas, although I'm not sure I should be
7 admitting that out loud so close to Columbia here, and
8 I've studied in the industry and grew up in the home of a
9 top-known economist, my father.

10 Q. And where do you work now?

11 A. I'm the CEO of Krystal Energy Corporation
12 in Lenexa, Kansas.

13 Q. What does your company do?

14 A. We sell residential and commercial wind,
15 solar and hydrogen products, and then we develop utility
16 scale wind farms from proceeds.

17 Q. And how did you learn to do what you do?

18 A. Well, I actually started out in the
19 telecommunications field. I left AT&T and started a
20 telephone company and had it for nine years. But I grew
21 up and my dad built his dream home. It's about a
22 7,500 square foot home and it had a solar system, a solar
23 shed out back, and it was cutting our energy consumption
24 by approximately 60 percent. So I was always interested
25 in renewable energy.

1 In 1998 I read an article about a
2 government study that said the three windiest states in
3 this nation, Kansas, Texas and North Dakota, had enough
4 wind potential, theoretically, to power the entire
5 country. It got my attention. I have always been -- my
6 dad is a die-hard Republican, about as conservative as
7 they come, and my mother is a very liberal Democrat, so
8 I'm kind of somewhere in the middle.

9 And I thought that the wind energy industry
10 would be both a profitable industry and a growth industry,
11 as well as something that would be obviously doing the
12 right thing and doing something good for the planet, good
13 for the environment. So that's how I got my start, and I
14 started a wind development company in 1999.

15 Q. Maybe you should spell the name of your
16 company.

17 A. Krystal is spelled with a K, K-r-y-s-t-a-l,
18 Energy Company -- or excuse me -- Corporation.

19 Q. And what does your company do in regard to
20 wind energy?

21 A. We develop wind energy projects. The
22 parent company, Krystal Energy, develops wind energy
23 products and we sell the wind energy into the power grid.
24 We also provide consulting service for utilities around
25 the world who want to compare the price of wind versus

1 other forms of generation, primarily fossil and thermal
2 plants. So we provide those consulting services, also
3 wind energy consulting services. And then we do have a
4 residential division, as I mentioned, that sells renewable
5 energy products and energy-efficient appliances and things
6 like that.

7 Q. Could you give us some examples of places
8 you've sold your products?

9 A. We have customers in 48 states, in
10 17 countries, and that's for the residential side. The
11 commercial side, we've done wind energy consulting in
12 Illinois, Kansas, Texas, Colorado, and Jamaica, Dominican
13 Republic, Panama, the Bahamas, Curacao and a few other --
14 I know I'm forgetting a few other countries.

15 Q. So what would be an example of a
16 consultation you've done? Who would be a client and what
17 would you advise that client?

18 A. Primarily we look at their load generation,
19 their portfolio and what their needs are, and compare that
20 to a potential wind energy project by studying the wind
21 resource in the region or in the country, the area, and
22 applying a prospective load curve of the wind to their
23 load curve, and then giving that analysis in the hopes
24 that they would decide to move forward with a wind energy
25 project, and that we would be in the driver's seat

1 potentially when that -- when they bid for such a project.

2 Q. And then if your company wins the bid, what
3 does that mean?

4 A. We turnkey the project. We build, own and
5 operate with the partners that we have. I've had a number
6 of partnerships throughout the years. Currently we have a
7 partnership with the world's largest power engineering
8 firm by many metrics, that's Black & Veatch, to do a lot
9 of wind development engineering. And we would then, you
10 know, outsource the rest of it. We purchase the equipment
11 from one of the dozen or so wind turbine manufacturers,
12 install it, and then operate it and maintain it.

13 Q. And what size wind plants has your company
14 built or contracted?

15 A. Yeah. We -- let's see. Total of about
16 200 megawatts in -- outside of the U.S, over the last
17 24 months, in various stages, either we've acquired or
18 provided consulting on. A previous company that I owned
19 got contracts for over 300 megawatts of wind projects. We
20 didn't actually build any through that company, but our
21 partner, Padoma Wind Power in San Diego, has built
22 approximately 1500 megawatts in wind energy generation,
23 and we were actively involved with those -- many of those
24 projects, and learned from the ground up how to develop a
25 wind project.

1 The Padoma, Padoma Wind Power, they are the
2 former executives of Seawest Wind Power, which is one of
3 the oldest and most successful wind power development
4 companies in the world.

5 **Q. And have you published any books or**
6 **articles?**

7 A. I have. I've published a book just
8 recently in March called The Clean Power Revolution, and
9 it describes how to convert America to essentially
10 100 percent clean power in ten years, potentially, and
11 save the U.S. economy \$20 trillion. It focuses mostly on
12 wind and hydrogen, and there are over 230 footnotes in the
13 book and took about three years of research. I've also
14 published a number of articles, I can't remember even
15 remember all of them, but in numerous publications.

16 **Q. And have you given any speeches on the**
17 **subject?**

18 A. I have. I've been a keynote speaker for
19 wind energy at various energy conferences in about a dozen
20 states over the last three years.

21 **Q. When a company calls your company, does the**
22 **first company to call you to ask for help, do they have an**
23 **energy demand in mind that they need and then they're**
24 **seeking advice and comparing technology?**

25 A. Yeah. Often they either are looking for

1 additional power or they're looking to potentially save
2 money on energy, and that's why they want to explore wind
3 as a potential option. And it's not, you know, the
4 appropriate solution in every case, but in most cases wind
5 can be a more economic solution to an energy generation
6 portfolio.

7 Q. Have you ever compared the costs of coal
8 plants versus wind power plants?

9 A. Yes, many times.

10 Q. And in what context have you made those
11 comparisons?

12 A. Well, I actually first learned of
13 coal-fired generation at a conference about four years
14 ago. There was some studies being done by a U.S. DOE lab,
15 Sandia National Labs, as well as National Renewable Energy
16 Laboratory, and at that time they were talking about wind
17 and coal being integrated into the same system. It was
18 being done in various parts of the world, and including
19 here in North America.

20 So at that time I took an interest in that,
21 and we started taking a look at some of the clients over
22 the years that have asked us to do that analysis, and
23 we've probably -- I'm guessing maybe six to ten times
24 we've performed that study.

25 Wind is generally more expensive than

1 existing coal-fired generation, but in almost every case
2 I've seen -- in fact, every case I've seen, it's less
3 expensive than new coal-fired generation. So you have to
4 look at a lot of different factors. Wind isn't the
5 end-all/be-all solution, but it certainly deserves a lot
6 of attention in the -- in any analysis
7 of -- in my opinion of what a utility might look for or an
8 industrial customer because it is so cost effective.

9 Q. Could you be more specific about the actual
10 comparisons you've done of some coal plants versus solar
11 plants?

12 A. Yeah, I can. I have a financial model that
13 I prepared. I didn't put a whole lot of time into it, but
14 I do have a financial model that I believe you have a copy
15 of that I'd like to go through today in my testimony, that
16 does give a specific comparison of wind versus coal in the
17 case of Kansas City Power & Light.

18 And again, I approached this from a
19 balanced perspective. I want to look at both from the
20 economic and environmental perspective. And I think my
21 main purpose here is to educate the Commissioners, as well
22 as anybody else who might be here, about the difference
23 between wind and coal and try to compare apples to apples,
24 and so that's what the attempt at the model is -- has
25 done.

1 Q. And are there wind plants that produce the
2 energy that an 800 to 900 megawatt coal plant would
3 produce?

4 A. No, none that exist today, although in the
5 last 30 days two plants were announced in Great Britain
6 that would both -- one of them is about 1000 megawatts,
7 one of them is about 1500 megawatts in Great Britain. And
8 there's a proposed 3000 megawatt project in North and
9 South Dakota that has not been approved, or financing is
10 not in place yet.

11 But no, today in the U.S. or anywhere in
12 the world, there's not a plant big enough to provide the
13 same amount of kilowatt hours that an 800 megawatt or 850
14 megawatt coal plant would provide.

15 Q. And did you become familiar with KCP&L's
16 plan to construct a new coal-fired plant commonly known as
17 Iatan 2?

18 A. Yes, I did become familiar with it.

19 Q. Did you perform some studies pursuant to
20 that?

21 A. Yes, I did.

22 Q. What information did you use to make your
23 studies?

24 A. I used a lot of industry information that
25 I've learned over the -- over the last few years. I also

1 used publicly available information from the Department of
2 Energy, the Energy Information Administration, and some of
3 the information that I've received that was publicly
4 available over the last several months as a result of this
5 process. And I have to say that one of the things that
6 really prompted me to get involved in this process is I
7 received this brochure in the mail. It was a bill insert,
8 and quite frankly, it offended me.

9 There were a number of sections in here
10 that are, in my opinion, gross misrepresentations of fact.
11 So that prompted me to want to get involved and try to
12 make sure that the facts were being presented fairly so
13 that the Commissioners could make a fair decision.

14 **Q. Who did that insert come from?**

15 A. Kansas City Power & Light.

16 **Q. And it was -- it contained information**
17 **about what?**

18 A. About this process. It had two inserts.
19 It was a notice of public hearing on the five-year
20 construction plan, and then just kind of a marketing
21 brochure that, you know, is fairly well done, but it had a
22 few things that I was very disappointed and, like I said,
23 offended to read.

24 **Q. Is anyone paying you to be here today?**

25 A. No. I'm paying all of my own expenses.

1 Q. And did anyone pay you to conduct studies
2 of Iatan 2?

3 A. No.

4 MS. HENRY: I would like to ask that the
5 chart that Mr. Helming referred to be marked as an
6 exhibit. I'm going to pull it out. I'm going to show it
7 to Mr. Fischer here, Mr. Zobrist, pages 1 and 2 of the
8 charts that I e-mailed you in response for a request for
9 production of documents.

10 MR. ZOBRIST: Thank you.

11 MS. HENRY: May I approach the witness?

12 JUDGE PRIDGIN: You may.

13 MS. HENRY: Actually, I guess I would like
14 to get this marked as a numbered --

15 JUDGE PRIDGIN: We'll call that Exhibit
16 No. 6.

17 MS. HENRY: Okay.

18 (EXHIBIT NO. 6 WAS MARKED FOR
19 IDENTIFICATION BY THE REPORTER.)

20 BY MS. HENRY:

21 Q. And I'll hand Mr. Helming this and ask him
22 to identify it. Can you see this?

23 A. Yeah, I see it.

24 Q. What is it?

25 A. Yeah, that's the Excel spreadsheet that I

1 put together to make this comparison and to do the
2 analysis that I'm going to be discussing today. So --

3 Q. And what is this second page?

4 A. The second page describes the expected
5 health costs of fossil fuel pollution as it relates to the
6 ratepayers in Kansas City and citizens in Kansas City.

7 Q. Now, because the numbers are not as large
8 as I thought they would be, I have copies that he can
9 identify also, which I can hand out so it would be easier
10 to follow if you have numbers to see. It's the same
11 thing, but he could identify this and tell you what that
12 is.

13 A. Yeah, it's the same exhibit.

14 Q. I would propose -- I would propose putting
15 this somewhere where he can point to it to talk about it,
16 but if anybody would like a paper copy to follow along
17 because the numbers aren't huge, I've got these.

18 MS. HENRY: Want to pass them out? Would
19 you-all like copies also? If you want to put up page 1
20 first, whichever is easier.

21 BY MS. HENRY:

22 Q. I would like to ask Mr. Helming, how do you
23 recognize this exhibit?

24 A. By the numbers that are shown. I created
25 it.

1 Q. And when did you make it?

2 A. The first version I made back in March, and
3 I've updated it with more current numbers that I received
4 from, like I said, public information. And I think this
5 version was created about a week ago, maybe a week and a
6 half.

7 Q. And how accurate is this reproduction?

8 A. Looks like it's exact, 100 percent.

9 MS. HENRY: I would like to ask Mr. Helming
10 to explain the calculations made on this chart. I think
11 it will flow more smoothly if he's allowed to speak and
12 explain them, rather than if I ask a question about each
13 number on it.

14 MR. ZOBRIST: Well, I am going to object to
15 the extent it calls for a narrative, but I guess I'll wait
16 to see how it develops.

17 THE WITNESS: All right. Well, I'll try to
18 be brief. I'm certainly not going to go through every
19 number here.

20 MR. ZOBRIST: Well, your Honor, I would
21 like to hear a question.

22 JUDGE PRIDGIN: That's fine. I'll sustain
23 the objection, Ms. Henry. Can you ask him questions?

24 MS. HENRY: You're right. It was a
25 narrative. It was just to help make it go more smoothly.

1 BY MS. HENRY:

2 Q. Could you explain what's under Iatan 2 coal
3 plant, and it says capacity?

4 A. Okay. It says 850 megawatts in capacity.

5 Q. And the installed cost figure?

6 A. That actually refers to cells at the bottom
7 of the page that show the percentage owned by Kansas City
8 Power & Light. I used 500 megawatts down below, and
9 assuming a total cost for not only the plant but the
10 additional three -- you know, the improvements, the energy
11 efficiency and the wind, because it's my assumption that
12 those would not be performed, would be unlikely to be
13 performed without Iatan 2 being approved, I used a figure
14 of 1.3 billion.

15 And then, of course, I used a percentage.
16 If 500 of the 850 megawatts is owned by Kansas City
17 Power & Light, that's 58.8 percent, which means of the
18 associated total cost of all of the investment,
19 58.8 percent is 776 million, so that's the Kansas City
20 Power & Light cost, but the total project is back up here
21 at the top under installed cost.

22 MS. HENRY: Can you all see Mr. Helming has
23 also brought a red light so he can point at the right
24 part, and then, if you need to, you can follow on your
25 chart where he's talking about. And -- you can't see it?

1 Maybe if you could hold the red light an
2 extra second until the people focus on where it is on the
3 part and then talk about that number. He's been talking
4 about something at the top of the chart and something at
5 the bottom of the first page.

6 THE WITNESS: All right. So --

7 MR. CONRAD: Your Honor, the red light is
8 particularly helpful to those of us in the back.

9 THE WITNESS: I'll just walk down.

10 MS. HENRY: Walk up here and look at it.
11 Would you like to do that?

12 MR. CONRAD: I don't think there's enough
13 room.

14 BY MS. HENRY:

15 Q. Okay. We'll keep going. Under homes
16 powered, you inserted a figure. Could you explain that?

17 A. Yes. From I believe it was an article in
18 the Kansas City Star, it was estimated that the -- that it
19 would power approximately 700,000 homes.

20 Q. And the assumed kilowatt hour per home per
21 month?

22 A. That's the amount of kilowatt hours per
23 home per month assumed here in the Kansas City area, and
24 that's based on figures from the Department of Energy.

25 Q. And the change in residential electric

1 rates?

2 A. This shows the increase of rates, including
3 the expected increase for the five-year construction plan
4 and a fuel adjustment charge that I believe will more than
5 likely be inevitable, not just to Kansas City Power &
6 Light but to every utility in the United States sometime
7 in the next five to ten years..

8 Q. And so then you arrived at a figure of cost
9 per megawatt?

10 A. Correct. 1.5 million per megawatt,
11 approximately, and -- yes.

12 Q. And how did you arrive at that figure?

13 A. Just based on the cost of the plant, total
14 cost of the plant of 1.3 billion divided by the capacity
15 of 850 megawatts.

16 Q. Okay. And the cost per megawatt in
17 millions?

18 A. Yeah, correct. It's just an extrapolation
19 of the same number rounded up.

20 Q. The average nationwide residential electric
21 bill in 2001?

22 A. Again, from the Department of Energy, it
23 was \$104. That was the latest information available from
24 the Energy Information Association.

25 Q. And the average annual increase in electric

1 **rates?**

2 A. There are a number of studies that I can
3 refer to, if necessary, later. I don't have them all
4 memorized but -- over the years that show that electric
5 rates on average rise between 2 and 3 percent per year in
6 the U.S. I have to applaud. Some of our local utilities,
7 including Kansas City Power & Light have some of the
8 lowest rates in the nation, but I'm just using average
9 assumptions here.

10 Q. And the average nationwide residential
11 electric bill in 2010?

12 A. That figure is just drawn from -- if you
13 see the lines moving across from 2001 to 2025, for the
14 next 20 years -- actually from now, the next 20 years, it
15 just pulls the figure from the year 2010, what the average
16 electric rate would be, assuming a 2 percent annual
17 increase.

18 Q. Okay. And so the figures go from 2001,
19 start at what figure and end at what figure?

20 A. Starts at \$104 and it ends in 2025 at 167
21 per month for the average electric bill.

22 Q. And this is with or without wind?

23 A. This is without wind.

24 Q. And then you compared with the nationwide
25 residential electric bill?

1 A. Well, we've already talked about that.

2 Q. Okay.

3 A. I added the electric bill impact.

4 Q. And so you came up with the electric bill
5 impact to the Kansas City area customers, which ranges
6 from -- do you want to tell them what it ranges from?

7 A. Sure. There's no change in the years 2005,
8 '06, '07 and '08, but in 2009 -- and this version actually
9 has the increase of 17.5 percent all in one year, which is
10 unlikely, but I believe it would be 3 to 5 percent per
11 year over a five-year period of time in terms of increased
12 rates. A more current model that I have in my laptop
13 shows that. Anyway, that reflects the average of the 15
14 to 20 percent expected rate increase during those years.

15 And then in 2015 it begins the 2 percent
16 increase in the fuel adjustment charge, and I also believe
17 that carbon emission taxes are inevitable. In fact, just
18 last week the Senate passed a renewable portfolio
19 standard. It hasn't passed the House yet, but it's
20 inevitable in my opinion that by the year 2010 to 2015, we
21 will see carbon taxes. So both of those are
22 conservatively included at 2 percent per year.

23 Q. So the top is showing -- can you summarize
24 what the top part is showing?

25 A. Sure. The top portion essentially says

1 status quo if Kansas City Power & Light moves forward with
2 Iatan 2, this is what the impact will be to the average
3 electric bill for Kansas City ratepayers.

4 Q. And that figure is reflected in the last
5 line of the top part -- sorry -- the electric bill impact
6 line?

7 A. Correct. Correct.

8 Q. Okay. And then moving down to the second
9 part where it says wind farm, could you explain what
10 capacity factor assumed means?

11 A. Okay. A wind farm operates under a
12 capacity factor, which means the wind doesn't blow all the
13 time. I'll use an example for clarification. If it's a
14 100 megawatt wind farm, 43 percent capacity factor means
15 it produces 43 megawatts on average. At some moments it
16 will produce zero. At some moments it will produce the
17 full 100 megawatts. But on average throughout the year,
18 it would produce 43 megawatts. That's what capacity
19 factor means.

20 And for central and western Kansas,
21 43 percent capacity factor is a realistic assumption for a
22 modern wind farm, not one that was built prior to 2003.

23 Q. But for other states it would be a
24 different factor?

25 A. It would be very similar in Oklahoma and

1 the Texas Panhandle and west Texas and in eastern
2 Colorado. The high great plains area of this part of the
3 world is considered some of the top -- Saudi Arabia of
4 wind, if you will. Some of the top wind resource in the
5 world is western Kansas, eastern Colorado.

6 Q. So then you put in a number into homes
7 powered?

8 A. Correct. I used the same number of homes
9 powered. What I'm trying to accomplish here is how many
10 wind farms or wind turbines would need to be constructed
11 to create or generate the exact same number of kilowatt
12 hours that Iatan 2 would potentially generate.

13 Q. That's what the second part of the chart is
14 showing, the wind farm part?

15 A. Correct.

16 Q. And so you put in the number for kilowatt
17 hours per month per home?

18 A. Correct. The same number from above to
19 keep it consistent.

20 Q. And the kilowatt hours per year needed?

21 A. Assuming that there are 700,000 homes,
22 using 753 kilowatt hours per month, you need a total of
23 6.3 billion kilowatt hours per year or 6.3 million
24 megawatt hours per year of energy.

25 Q. Okay. And then you came to the size of

1 **wind farm needed?**

2 A. Correct. We backed into that number based
3 on the number of kilowatt hours needed or megawatt hours
4 needed, and the capacity factor dictates that to produce
5 the exact same number of kilowatt hours as Iatan 2,
6 1680 megawatts worth of wind would need to be constructed
7 for an apples-to-apples comparison.

8 Q. And you came up with a cost per megawatt of
9 wind farm in millions?

10 A. Yeah. It's a million dollars a megawatt.
11 Today it would be a little higher, because all of the
12 large wind turbine manufacturers are sold out and, in
13 fact, I think part of the plan for Kansas City Power &
14 Light is to get the first 100 megawatts up by 2006. That
15 may be possible, but it's probably unlikely unless orders
16 have already been placed for turbines because most of the
17 manufacturers are sold out. As a result, the prices are a
18 little higher.

19 But for a project of this size, if you were
20 to actually build 1600 megawatts of wind, it would
21 probably be lower because of economies of scale. It would
22 probably be approximately 925 to \$935,000 per megawatt.

23 Q. And what are you using to base that number
24 on?

25 A. My experience in the industry, quotes from

1 manufacturers and projects that we have been involved in
2 or have been a consultant on in some form or fashion. So
3 I've been looking at wind energy project costs for the
4 last six years.

5 Q. And so you came to the installed cost?

6 A. Correct. Of \$1.68 billion, which is
7 \$361 million more than the entire Iatan 2 project with the
8 associated other investments being proposed.

9 Q. To get to the installed cost, you're
10 thinking one wind plant or more than one wind plant?

11 A. You certainly wouldn't want one wind plant.
12 The nice thing about wind is it's very predictable, but as
13 Mr. Giles said in his earlier testimony, wind has issues.
14 And I agree with his statement. It does. I would also
15 say that so does nuclear, so does natural gas, so does
16 coal. All forms of generation have issues, and one of the
17 primary issues for wind is you can't tell Mother Nature
18 when to start blowing the wind.

19 So as a result you would want to have
20 diversified distribution of the wind energy project. So
21 it would more than likely be at least four to eight
22 separate wind projects, if you were actually going to
23 build 1600 megawatts of wind.

24 Q. So the figure in the installed cost
25 reflects four to eight wind plants?

1 A. Correct.

2 Q. Okay. And then you came up with the
3 additional cost of wind versus Iatan 2. Can you explain
4 that?

5 A. Yeah. It's -- the initial installed cost
6 for wind is more. It's 1.6 million versus 1. -- excuse
7 me -- 1.6 billion versus 1.3.

8 Q. Do you want to point to the figures you're
9 referring to to make that comparison, and hold it for a
10 second.

11 A. So 1.68 billion to build enough wind farms
12 to create the same amount of energy that Iatan 2 would
13 create, which costs 1.31 billion.

14 Q. And so you come down to that negative
15 number, which is in a lighter gray shade?

16 A. Correct.

17 Q. And you get to the average annual increase
18 in electric rates with wind. Can you explain that number?

19 A. I will. That is, in effect, a baseline
20 that you could use, and it's compared to up above where it
21 shows a 2 percent -- excuse me -- a 2 percent annual
22 increase in electric rates without wind. We're assuming a
23 1 percent increase in rates with wind. It's lower
24 because, if you think about it, what's the fuel cost for a
25 wind farm? Obviously it's zero. And the operation and

1 maintenance for a wind farm is very, very low, generally
2 less than 15 to 20 percent of the total revenues received
3 by the wind farm.

4 And the life of a modern-day wind turbine
5 is about 50 years, 5-0, so it can last as long or longer
6 potentially than a coal plant, depending on the O&M
7 agreement with the coal plant and how well it's
8 constructed and so forth.

9 But the assumption of 1 percent increase
10 per year, I'm trying to be conservative. In many, many
11 cases, including in Texas, which has been the leading
12 state in the last five years in adding new wind
13 generation, they've added over \$1.5 billion of new wind
14 generation in Texas so far this decade. And there are
15 many cases documented where actual energy rates are either
16 remaining stable or dropping as a result of increased
17 injection of wind energy into the total generation
18 portfolio.

19 Q. And what causes those rates to drop?

20 A. Because the fuel cost for wind is zero and
21 the operation costs are so low, once it's built, of course
22 you have the cost to amortize the wind project and the
23 financing costs, although many times that is actually
24 borne by merchant wind developers, but once it's actually
25 built there is very little operating costs versus the

1 volatility of natural gas and/or rising fossil fuel
2 prices. In this case, if we're comparing Iatan 2, rising
3 coal.

4 And last year we set records. Appalachian
5 coal increased by 28 percent and Powder River Basin coal
6 from Wyoming increased by approximately 9 percent. And
7 the train, train companies that actually move the coal
8 around the country doubled their tariff for moving coal
9 around the nation. So the cost of delivering coal and
10 burning it actually went up fairly dramatically in 2004,
11 and it doesn't appear that that's going to see any relief
12 any time in the near future, if ever.

13 So I believe this figure of 1 percent per
14 year is very conservative. I could actually make a number
15 of arguments and back them up if that figure was zero
16 percent per year.

17 **Q. And the change in residential electric**
18 **rates?**

19 **A.** All right. We're assuming down here that
20 there's zero percent increase, and that, again, compares
21 to up above where we had the rate increase for Iatan 2.
22 Again, this is if we went 100 percent wind as opposed to
23 Iatan 2, to meet the same amount of kilowatt hours. So we
24 have no impact on electric rates and no impact on fuel
25 adjustment charge and/or carbon taxes that would be

1 forthcoming in this region.

2 Q. And the electric bill impact to Kansas City
3 area customers?

4 A. That simply takes the same figure from 2005
5 from up above, \$113 for the average electric bill, and
6 what it does is it shows an increase of 1 percent per
7 year. It goes out to the year 2025. So by the year 2025,
8 the average Kansas City ratepayer will be paying \$137 per
9 month for their electricity versus \$243 per month if we
10 have Iatan 2.

11 Q. So that's a difference of how many dollars
12 there?

13 A. \$106 per month or more than, I guess,
14 \$1,200 per year. 1,344, I guess it would be.

15 Q. And the --

16 A. 1,272.

17 Q. The total monthly change for the average
18 Kansas City area customer?

19 A. Yeah, that's -- what I just described there
20 is -- okay. I see. Yeah. Now we're down here. The
21 total monthly change for those years is \$968 over a
22 20-year period, or 48.48 per year in terms of an increase.
23 And then if you -- the next line, if you add all of the
24 customers, it's just the same thing but multiplies it by
25 the 700,000 -- or excuse me -- from 2005 to 2025, it's the

1 annual change, meaning every customer in -- you know, the
2 700,000 customers would be paying \$580.94 more per year on
3 average throughout those 20 years for their electricity if
4 Iatan 2 were to go forward using these underlying
5 assumptions, of course.

6 And that's a total of \$11,000 of increased
7 cost over a 20-year period, and that's no -- doesn't take
8 into account net present value of the dollars or any
9 adjustments for inflation.

10 Q. So the figure 968, is that connected to --
11 is that a comparison of coal versus wind?

12 A. Yes, it is.

13 Q. And explain it one more time, how you got
14 to 968 there.

15 A. Okay. That's the amount per month increase
16 over the course of a year. So from 2005 to 2025 -- excuse
17 me. That's the average -- that's the average monthly
18 increase over the course of 20 years. So that's kind of a
19 confusing number. The figure to the right, \$48.41, is
20 easier to get your arms around. That's the average
21 increase in the monthly bill per year. So if my bill's
22 \$100 today, by going forward with Iatan 2, my bill would
23 go up to 148.41 on average between now and the year 2025.
24 And then the figure 968 just multiplies that by -- you
25 know, by the 20 years.

1 Q. And the total cost of increased energy
2 bills to Kansas City area customers due to Iatan 2 figure?

3 A. That huge figure is \$8.1 billion of
4 increased costs. And essentially all that does is that
5 multiplies that figure of \$11,619 of average increase that
6 ratepayers will have to pay over the next 20 years as a
7 result of not using wind, and it multiplies it by the
8 total number of customers. And that figure is, of course,
9 quite large, \$8.1 billion of additional costs to the
10 Kansas City area ratepayers.

11 Q. If Iatan 2 is built?

12 A. Correct.

13 Q. Instead of wind?

14 A. Correct.

15 Q. And the health care costs, does that bring
16 us to the next page? Would it be easier to explain the
17 next page first or not?

18 A. Yes, it would.

19 Q. So we're moving on to the second page of
20 the handout right now, and then we're going to go back to
21 the end of the first page.

22 A. All right. I believe I have the sources
23 listed. Yes. This version does have the sources. Okay.
24 So what we've done here is --

25 MR. ZOBRIST: Your Honor, I'm going to

1 interpose an objection at this time. I believe there is
2 no foundation for this witness to give testimony
3 concerning estimated health costs of burning fossil fuels.
4 There has been some foundation laid by virtue of the
5 witness' experience in the wind industry, but I see
6 absolutely no either educational, professional or other
7 experience in the medical fields, the health care fields,
8 and I object to any further testimony on that topic.

9 JUDGE PRIDGIN: Ms. Henry?

10 MS. HENRY: May I ask him what -- if he has
11 ever done studies like this before or what his experience
12 is?

13 JUDGE PRIDGIN: You may ask.

14 BY MS. HENRY:

15 Q. Mr. Helming, have you ever -- have you ever
16 compared health costs, and how did you learn how to use
17 health costs?

18 A. I have. It's actually a big part of the
19 research that is coming out into the press today. The
20 public awareness of health care costs due to pollution
21 from a variety of sources, including power plants, is
22 coming out.

23 Every week there's new studies and new
24 articles, so I actually spent the three years of research
25 to write my book, that was a fairly large percentage of

1 research that I did was to find those studies and talk to
2 some of the physicians and so forth that wrote them, or
3 the foundations and so forth that funded the studies or
4 put them together.

5 And I took the ones that I felt were the
6 most realistic and the most mainstream and I included them
7 in my book, and all of the sources are listed. And I have
8 copies of those complete studies in my files. Some of
9 them I've read multiple times and they're simply referred
10 here in my book, and also I've looked at four of them for
11 this particular demonstration.

12 Q. And what book are you talking about?

13 A. The Clean Power Revolution.

14 MS. HENRY: Okay. And I believe I referred
15 you to that, Mr. Zobrist and Mr. Fischer, to his book.

16 BY MS. HENRY:

17 Q. And in your book you've looked at health
18 care costs?

19 A. Extensively, yes.

20 Q. And you've looked at costs in the United
21 States in your book?

22 A. I have.

23 Q. And have you done studies like the one you
24 conducted for KCP&L before?

25 A. For my book, yes. Not that I've been paid

1 to do, but as a volunteer, yes, I have done similar
2 studies, and that's why -- actually one of the reasons
3 that motivated me to actually write the book, because the
4 word needs to get out.

5 JUDGE PRIDGIN: I will overrule the
6 objection just so we're clear on the record.

7 Ms. Henry, you can continue.

8 BY MS. HENRY:

9 Q. Okay. Could you explain what you're trying
10 to do in this section with the heading, total nationwide
11 estimated health cost of burning coal and fossil fuels?

12 A. Okay. The environmental pollution from
13 mercury, lead and cadmium, according to the -- I can't
14 read the writing up there -- the Center for Children's
15 Health and the Environment, Mount Sinai School of
16 Medicine, the Department of Community Preventive Medicine,
17 there's several studies there, but they estimate that the
18 cost is \$55 billion per year or 3 percent of total health
19 care costs due to pollution from mercury, lead and
20 relating childhood cancer, developmental disorders and
21 neurobehavioral disorders. 55 million a year times 20
22 years is \$1.1 trillion total.

23 So what I've done here to figure it, that's
24 1.1 trillion divided by 20, so we have a figure per year.
25 We'll get down what the impact is to Kansas City area

1 average citizen here in a moment. But that source talks
2 about, you know, lead, mercury and so forth.

3 And there's arguments to be made where does
4 the lead come from, where does the mercury come from? And
5 there are a number of studies out there that show that the
6 power plant, the electric utility industry is responsible
7 for approximately two-thirds of all airborne mercury,
8 which becomes methyl mercury and has been linked to autism
9 and Alzheimer's and a number of other ailments.

10 But this particular study goes into more
11 detail on those, but there are large sources of heavy
12 metals, including mercury and lead, that are a direct
13 result of power plant pollution, and that is measured and
14 it's available publicly. It's available from the U.S.
15 government.

16 Q. And the figure under the heading asthma,
17 could you explain that figure?

18 A. Okay. Asthma cases have increased
19 substantially in the U.S. in the last two decades. In
20 1990 the cost to the economy was estimated to be
21 \$6.2 billion. In 1998, it was estimated to be
22 \$11 billion. And a leading if not the primary cause of
23 asthma is air pollution. There's a lot of studies that
24 support that.

25 The cost has -- assuming -- in this figure

1 I'm assuming that the cost has not risen at all from 1996
2 and that there are no additional asthma cases, both of
3 which are unrealistic. So I made a mistake, I didn't put
4 the right number. It's too conservative, but I'd rather
5 err on the side of being conservative, but the figure is
6 \$11 billion per year in direct asthma costs. It probably
7 should be closer to 16 to 20 billion, but we'll stay with
8 the 11 billion.

9 Q. And where did you get this '96 figure?

10 A. The Department of Health and Human Services
11 and the Action Against Asthma Strategic plan, May of 2000.

12 Q. And the costs related to skin cancer, could
13 you explain that?

14 A. Sure. As the ozone hole becomes larger and
15 larger, the skin cancer rates in North America have been
16 increasing significantly. They grew by 6 percent per year
17 in the '70s, and skin cancer cases increased by 56 percent
18 over a recent ten-year period in North America. This is
19 according to the American Cancer Society, the book Natural
20 Capitalism, and Planet Earth, a German Aerospace Center
21 and the Union of Concerned Scientists Report, is where the
22 information comes from.

23 The cost estimated for the U.S. economy
24 from the Center for Disease Control is \$189 billion per
25 year. Skin cancer is one of the most common forms of

1 cancer, so approximately 10 percent of that cost was used
2 for this figure, which is \$18 billion per year. And,
3 again, from the CDC in Atlanta. Let's see, and that's not
4 relevant. Okay.

5 Q. And the chronic obstructive pulmonary
6 disease figure, where did you get that?

7 A. All right. That figure comes from the
8 American College of Chest Physicians in the year 2000, The
9 Economic Burden of COPD, Obstructive Pulmonary Disease by
10 Sean Sullivan, Ph.D., Scott Ramsey, M.D., Ph.D. and
11 Todd A. Lee, a pharmacologist. And in this study they
12 determined that 1993 costs for COPD was 24 billion and
13 respiratory cancer 25 billion. Those figures have more
14 than tripled today, according to the study. Again, that
15 was 1993. This study took place in 2000.

16 And I made another mistake. I used the old
17 figures from 1993, so again, these are way too
18 conservative, but they make the point just fine as they
19 are. But the greatest source of air pollution by far is
20 from power plants; approximately, as I mentioned,
21 two-thirds of the mercury, approximately a third of the
22 carbon dioxide, two-thirds sulfur dioxide and one-third of
23 nitrogen oxides come from the electric utility industry.
24 So approximately one-third of the cases of COPD are
25 linked, at least indirectly, to air pollution from burning

1 fossil fuels. So that suggests a cost of 325 billion over
2 20 years.

3 Q. And what do these totals represent? What
4 are the total costs and what do they represent?

5 A. Adding up the four primary health care
6 costs, just add them up, it represents to the U.S.
7 economy, the U.S. nation, about \$100 billion per year in
8 total health care costs as a direct result of fossil fuel
9 pollution.

10 Q. And then you did a 20-year comparison?

11 A. Correct. Yeah. And then it's over the
12 next 20 years as well, and that assumes, of course, that
13 health care costs don't increase at all. And we all know
14 that health care costs are going up double digits per
15 year, at least 8 percent a year on average, so it does
16 assume no additional increase and no additional incident
17 of these illnesses.

18 Q. And that total will be what number?

19 A. \$2 trillion approximately.

20 Q. And moving on to the cost of premature
21 deaths?

22 A. Well, I left that blank and made a note
23 that it's impossible to quantify, but MSNBC last fall said
24 that 24,000 Americans die prematurely as a direct result
25 of fossil fuel pollution.

1 MR. ZOBRIST: Your Honor, I move to object,
2 and I apologize. I didn't want to interrupt the witness,
3 but I move to strike that. We're not here to requote
4 broadcasts on MSNBC. At least above we had scientific
5 journals, apparently. But I move to strike that answer.

6 JUDGE PRIDGIN: Sustained. It is stricken.

7 BY MS. HENRY:

8 Q. And the estimated cost of future litigation
9 to be borne by utilities?

10 MR. ZOBRIST: Your Honor, I object to that.
11 The witness is not an economist, he is not a lawyer,
12 certainly, and there is no basis for him to express an
13 opinion as far as estimated cost of future litigation to
14 be borne by utilities.

15 MS. HENRY: I'd like to hear where he got
16 the figure from, what was his source.

17 JUDGE PRIDGIN: I'll let him answer.

18 THE WITNESS: Okay. I am not an attorney,
19 certainly. I am a clean power economist, and the figure
20 comes from estimated legal costs from a case filed last
21 summer. Eight state attorneys general plus the City of
22 New York have filed lawsuits against Great Lakes Utilities
23 to force them to lower power plant pollution, and the
24 estimated litigation from that lawsuit and others that are
25 expected to follow, a study was done to come up with a

1 half a million dollars. And that's actually a different
2 section of my book. I can quote the source.

3 MS. HENRY: Yes, please quote the source.

4 I didn't want you to think he got it from
5 me. I'm not telling him the cost of litigation.

6 THE WITNESS: Union of Concerned
7 Scientists.

8 BY MS. HENRY:

9 Q. And they summarized the cost of this
10 attorney generals case?

11 A. They estimated over the next, yeah, 20
12 years that the litigation cost would be somewhere between
13 a quarter of a -- a quarter of a trillion dollars to a
14 billion, so I actually went with half a billion dollars.

15 MR. ZOBRIST: Your Honor, I renew my
16 objection. It appears we have triple hearsay. We have a
17 Union of Concerned Scientists study that is quoted by a
18 number of attorneys general, which do not include Missouri
19 Attorney General Jay Nixon, suing a number of utilities,
20 none of which do business in Missouri, and Mr. Helming's
21 conclusion, and I object, that lacks foundation.

22 JUDGE PRIDGIN: Ms. Henry?

23 MS. HENRY: I would just like to -- if you
24 sustain it, I would just like to say that his testimony
25 would be an offer of proof. He's -- he's quoting from the

1 book he wrote. He's here for you to cross-examine about
2 what he put in the book, so --

3 JUDGE PRIDGIN: I'll overrule.

4 BY MS. HENRY:

5 Q. And then when you go to the U.S. population
6 figure, what were you coming up with there in U.S.
7 population?

8 A. Well, it's hard to judge what the average
9 population will be between now and the year 2025, but I
10 picked a number of 300 million, which is probably fairly
11 reasonable, and then beneath that the Kansas City metro
12 area population of approximately 2 million of people that
13 could be potentially affected by the emissions from this
14 Iatan 2 power plant which represents 0.67 percent of the
15 total nation's population that could be affected.

16 Q. And how did you get that figure of
17 2 million?

18 A. Just divided into 300 million.

19 Q. And the percent of national cost borne by
20 the KC metro area?

21 MR. ZOBRIST: Your Honor, I -- sorry. Go
22 ahead.

23 MS. HENRY: I was going to say, will you
24 read the figures and explain them?

25 MR. ZOBRIST: Your Honor, I object to

1 any further testimony. It's not been shown that the
2 witness -- shown that the witness is either a statistician
3 or a mathematician. He may have taken high school
4 arithmetic like I did, and I don't doubt that the
5 arithmetic is correct, but I don't believe there's any
6 basis for him to express an opinion as far as dangers to
7 the Kansas City metropolitan area.

8 JUDGE PRIDGIN: Ms. Henry?

9 MS. HENRY: I would like to ask him if he's
10 done these studies before or seen them done about national
11 costs, and what studies enable him to make this
12 computation.

13 THE WITNESS: Well, first of all, I would
14 suggest that common sense would tell us that if the whole
15 nation, as we've proven earlier, is picking up a tab of
16 \$100 billion a year in the health care costs and the
17 Kansas City area represents about two-thirds of a percent,
18 then it would be a reasonable assumption to assume that
19 we're going to pick up two-thirds of a percent in total
20 health care costs. To support that, there are a number of
21 studies actually being done right now.

22 Unfortunately, because the public awareness
23 of the damage to health care from fossil fuel pollution is
24 just now becoming more ubiquitous, the studies are
25 underway, and the ones that I'm aware of that are being --

1 that are taking place are not yet completed.

2 But again, common sense, which is not very
3 common, would tell us that again we can make that
4 inference, and quite frankly, there's evidence to support
5 that people who live in metropolitan areas bear a
6 disproportional increased burden on health care costs as a
7 result of additional pollution for those who live in urban
8 areas versus those who live in more rural areas.

9 So the Kansas City metro area, I believe
10 this figure would be conservative if you take the
11 0.67 percent of the total health care cost.

12 MR. ZOBRIST: Your Honor, I would renew my
13 objection. The witness has apparently conceded that this
14 is personal opinion, it is based upon his view of what
15 common sense is. It is not based on any professional
16 expertise or professional qualification.

17 JUDGE PRIDGIN: I'll overrule.

18 BY MS. HENRY:

19 Q. I was -- where did you get the figure from
20 for total cost of health care for the nation? Is that one
21 of these figures, sir, and where did you get it?

22 A. Which --

23 Q. Is that you what meant by U.S. -- okay.
24 When you get to percent of national cost borne by the KC
25 metro area, where is the figure showing the national

1 costs, and how did you get it?

2 A. Well, it's up above in the double
3 underlined section. Add that to the --

4 Q. Oh, okay. You're going back to what you
5 had above?

6 A. Yes, to what I had above, and then you take
7 0.67 percent of that, and that reaches \$13 trillion over
8 20 years, over \$668 million per year borne by the Kansas
9 City area.

10 Q. Okay. So you're taking the figure and
11 dividing it by the percent of the population. And then
12 the number of coal plants in the KC metro area, where did
13 you get that?

14 A. I got that information actually from the
15 Sierra Club. They told me there were nine coal plant in
16 the Kansas City area. And then I looked it up myself, and
17 from what I could ascertain, that appeared to be an
18 accurate number.

19 Q. So how did -- what is the figure of health
20 care costs per coal plant and how did you arrive at that?

21 A. Very simply just divided the total cost
22 borne by the Kansas City metro area by nine, because
23 the -- you know, to divide the power plant pollution and
24 to try to establish an amount per coal plant, and that's
25 shown there on health care costs per coal plant.

1 Q. And what is it?

2 A. It's \$1.485 trillion over 20 years or
3 74 -- excuse me, billion dollars -- or 74 million per year
4 per coal plant.

5 Q. And the health care costs per person?

6 A. Divided by the 700,000 is \$37 per month per
7 person in health care costs as a direct result of coal
8 plants here in the Kansas City area.

9 Q. What number did you use to divide that?

10 A. Divided -- 74 million divided by 700,000
11 ratepayers discussed for Iatan 2 -- I'm sorry. I could
12 check my computer. I actually think -- or I think the
13 division was the Kansas City metro area.

14 Q. May he refresh his recollection for a
15 moment with his computer?

16 A. I just did it in my head. It is the
17 2 million Kansas City metro area.

18 Q. So the health care cost per person comes to
19 how much?

20 A. \$37 per person per month or \$743 per year
21 as a direct result of each coal plant.

22 Q. And then you take these health care costs,
23 and you go back to page 1 where you've inserted them into
24 the section under wind farm, could you explain the figure
25 there, health care costs per KCPL customer that would be

1 **avoided?**

2 A. Certainly. We take the exact same number
3 from before, the \$1.48 billion, and that was the figure
4 from the health care costs per coal plant, and anyway,
5 that's where the number comes from.

6 Q. And what did you do with -- explain the
7 last three lines of this total cost -- health care costs
8 and total costs. How did you use those figures?

9 A. Okay. The total cost, which is the double
10 underlined, is \$9.2 billion. It includes the 1.4 billion,
11 which is the health care costs over 20 years of the coal
12 plants to the Kansas City area, and then we added that to
13 the 8.1 billion right above of the increased cost to the
14 Kansas City ratepayers as a result of Iatan 2 in the form
15 of increased energy bills, monthly energy bills because of
16 the higher cost of operation and fuel cost and so forth
17 that we discussed earlier.

18 And then we subtracted the \$361 million
19 higher wind farm cost, because again, the wind farm costs
20 more initially to build, but less over time to operate.
21 So we -- it's the 8.1 billion plus the 1.485 billion minus
22 the 361 million to arrive at the 9.25 billion figure.

23 Q. And that's the cost of Iatan 2 to the
24 Kansas City customers?

25 A. Correct.

1 MS. HENRY: Okay. I move to have Exhibit 6
2 entered into evidence.

3 MR. ZOBRIST: Objection, lack of
4 foundation.

5 JUDGE PRIDGIN: I'll overrule. Exhibit
6 No. 6 is admitted.

7 (EXHIBIT NO. 6 WAS RECEIVED INTO EVIDENCE.)

8 MR. ZOBRIST: Your Honor, just to clarify,
9 does that include 6A and 6B?

10 JUDGE PRIDGIN: Yes, I just had that
11 labeled as Exhibit 6, that two-page chart, so yes, that
12 would include both.

13 MR. ZOBRIST: Just for the record, my
14 objection is to both pages.

15 JUDGE PRIDGIN: I understand. Thank you.

16 BY MS. HENRY:

17 Q. So, Mr. Helming, what is your opinion of
18 how much it would cost KCPL and ratepayers if KCPL
19 constructs a new coal-fired power plant, as opposed to
20 building wind plants?

21 A. A lot. Obviously, the analysis I just went
22 through, although some of the underlying assumptions you
23 can argue that they could be modified one way or the
24 other, no matter how you slice it, it's going to cost
25 Kansas City ratepayers a lot more to build a new coal

1 plant than if we were to build a lot more wind energy
2 generation.

3 Q. And what's your opinion about how much it
4 would cost Kansas City Power & Light ratepayers in health
5 care costs for Kansas City Power & Light to construct a
6 new coal-fired power plant?

7 MR. ZOBRIST: I just want to again object
8 to lack of foundation.

9 JUDGE PRIDGIN: Overruled.

10 THE WITNESS: It would cost specifically
11 \$9.2 billion of increased costs over the next 20 years if
12 Iatan 2 were to move forward instead of building
13 1600 megawatts of new wind energy generation.

14 BY MS. HENRY:

15 Q. And how much would it save the ratepayers
16 if they built -- not talking about health care costs, but
17 how much would it save the ratepayers if they built wind
18 plants instead of Iatan 2?

19 A. I can answer that in probably two ways. I
20 think it's also important to consider -- and I'll quote
21 Mr. Giles. He gave some excellent testimony earlier. His
22 example of the stool with three legs, we should consider
23 customers, shareholders and creditors he said, and I agree
24 with that. However, I would like to make his stool a
25 little more sturdy and add a fourth leg, and we should

1 take care of our environment, planet earth as well. We
2 should consider not only customers, shareholders and
3 creditors, but our home on planet earth.

4 And to that end, the cost to not only the
5 ratepayers but also to Kansas City Power & Light
6 shareholders, I believe that a much more profitable use of
7 investment dollars would be to build the wind farm. And I
8 do have some proposed solutions for a possible compromise,
9 but -- you know, if anyone would be interested. But
10 anyway, the cost for a new coal plant would probably
11 deliver energy somewhere around 3.5 to 4 cents per
12 kilowatt hour by most estimations, most parts of the
13 country.

14 I haven't seen any specifics for Iatan 2.
15 A new wind plant energy could be delivered to Kansas City
16 Power & Light on a wholesale basis at around 2 cents,
17 perhaps below 2 cents, as long as the wind project was at
18 least 150 megawatts to 200 megawatts in size. So as a
19 result, the lower cost of energy on a kilowatt hour basis
20 would actually be beneficial to both the shareholders of
21 Kansas City Power & Light as well as ratepayers, because
22 those savings could be potentially passed on to ratepayers
23 or it would prevent the increased costs of a coal plant,
24 as I've indicated previously.

25 Q. And how did you get to the figure that a

1 **wind plant would cost 2 cents per kilowatt hour?**

2 A. I've actually been a party to -- my company
3 has signed, executed power purchase agreements from a
4 number of wind energy projects. Right now, in fact last
5 week, we just signed two more 30-year power purchase
6 agreements. And I've seen dozens of signed power purchase
7 agreements, and I've also talked to a number of people in
8 the industry. The average going rate now for a large
9 utility scale wind farm is anywhere from 1.5 to 2.5 cents
10 per kilowatt over a 15 to 30-year period of time.

11 Q. **Could you tell us about your clients that**
12 **you've seen these purchased power agreements with?**

13 A. No, unfortunately, I can -- let's see. I'm
14 bound by confidentiality on most of them. I can give a
15 couple -- I can give lots of examples of others that I'm
16 not bound by confidentiality on, if you would like.

17 Q. **Give us one.**

18 A. All right. One, let's see, OMPA, Oklahoma
19 Municipal Power Authority in Oklahoma. They are buying
20 power from me, I believe it's 150 megawatt wind farm that
21 was built last year in Oklahoma, and their rate is
22 1.85 cents per kilowatt hour.

23 Q. **And what would be your recommendations for**
24 **Kansas City Power & Light?**

25 A. Well, there's -- in terms of as a

1 compromise?

2 Q. In terms -- if they came to you as a
3 client, what would you advise them, and in terms of a
4 compromise both?

5 A. Okay. Yeah, I've given a lot of thought to
6 this actually since I last testified with a couple of the
7 Commissioners. And recommended strategy is five-fold. I
8 would actually recommend that the Commission approve a
9 coal gasification plant of 1200 megawatts, a larger plant.
10 I'd recommend a larger -- at least 1200, maybe
11 1600 megawatt coal gasification plant at the same site
12 that Iatan 2 is being proposed.

13 Although the cost of coal gasification can
14 be higher, in some cases 15 to 20 percent higher, because
15 it would be larger Kansas City Power & Light would enjoy
16 more economies of scale and would be able to pass -- to
17 lower those costs. So approve that plant.

18 It would also have minimal emissions. As
19 we know, gasification has minimal emissions. I would
20 implore Kansas City Power & Light to continue to move
21 forward with three other components to their plan, which
22 would be energy efficiencies, lowering emissions of Lacine
23 and the other plants, and moving forward with wind energy.

24 Although I would have one caveat to that
25 is, let's make sure that the emissions control systems are

1 working as they're supposed to on Hawthorn and Lacine and
2 any of the other power plants before they would be allowed
3 to move forward on the gasification plant.

4 And then I would say of the 12 to 1600
5 megawatts, leave 400 megawatts open if possible for a
6 merchant plant. I'm not sure if the ratepayers would be
7 allowed to finance that portion if part of it is used for
8 a merchant plant. Either that or bring more partners to
9 sell additional power to the program. The larger gas
10 plant would be more efficient, it would have a faster ramp
11 up and ramp down time speed, scale on and off more
12 quickly, and that's important. And I'll tell you why in a
13 moment.

14 The second part to this would be begin with
15 not 100 megawatts of wind, but begin with 400 megawatts.
16 And let me say why. The Senate, as I mentioned earlier in
17 my testimony, last week passed a national renewable
18 portfolio standard, which if it makes it through the House
19 and is signed into law by President Bush would require
20 every publicly traded utility, or every IOU, investor-
21 owned utility, to scale up to 10 percent of their
22 generation would have to come from a renewable source by
23 the year 2020.

24 Well, if we assume Kansas City Power &
25 Light has a 4000 megawatt base load, 10 percent of that is

1 400 megawatts. Well, if you think about it, that's not
2 the amount that that wind farm will produce. If it's at a
3 40 percent capacity factor, it's going to produce 160
4 megawatts. So to meet that RPS by the year 2020 -- and
5 that's a long time, but to meet it, you would need to
6 have -- you would need to create 4,000 -- or excuse me --
7 400 megawatts would be 10 percent, and to create
8 400 megawatts of actual base load -- not base load but
9 actual generation, you would need to have 1000 megawatts
10 of wind to meet the RPS standard.

11 MR. ZOBRIST: Your Honor, I'm going to
12 object to any further testimony. The disclosure that we
13 received in this case was that Mr. Helming would offer an
14 opinion on the costs of building a new coal-fired plant.
15 That was the first one. The second one had to do with the
16 pollution from the United States, I think his words are
17 addiction to fossil fuel.

18 There was no disclosure that he was going
19 to offer recommendations or go on in this sort of future
20 discussion of what Congress might do and other sorts of
21 things. I believe it's beyond the scope of his disclosure
22 as an expert witness in this case.

23 JUDGE PRIDGIN: Sustained.

24 MS. HENRY: Okay. I have no further
25 questions.

1 JUDGE PRIDGIN: Ms. Henry, thank you. Let
2 me see what kind of cross-examination we have. From
3 AmerenUE, Mr. Lowery?

4 MR. LOWERY: No questions.

5 JUDGE PRIDGIN: Trigen, Mr. DeFord?

6 MR. DeFORD: No questions.

7 JUDGE PRIDGIN: Jackson County is not here.
8 Department of Energy, Mr. Phillips?

9 MR. PHILLIPS: Yes, we have a few.

10 CROSS-EXAMINATION BY MR. PHILLIPS:

11 Q. Hi, Mr. Helming. My name is Paul Phillips,
12 and I'm representing U.S. DOE today. And in your exhibit,
13 which you have a copy behind you and then we have this
14 printed-out part, you seem to have a lot of blank space at
15 the top and at the bottom on both pages, and yet I will
16 have to say the font on page 2 has to the smallest font
17 that I've ever seen --

18 A. I apologize.

19 Q. -- in any exhibit, and perhaps you could
20 have used a little more space there.

21 One of your statements in regard to page 1
22 was that the source of your -- of your number of 753, do
23 you see that at line, I think it's 4?

24 A. Yes.

25 Q. You said the source of that was DOE?

1 A. Uh-huh.

2 Q. And when you say DOE, can you tell me
3 specifically from what publication you obtained that or
4 data request or data response?

5 A. You know, I can't. There's so many of them
6 that I see, DOE, both DOE and EPA. I could certainly find
7 it. I know where it is. I could get it to you later, but
8 I don't have that memorized.

9 Q. No, that's not necessary. You say there's
10 so many, so many reports. How many do you review on an
11 annual basis of these reports?

12 A. Quite a few, because we have a residential
13 division in our company that is an Energy Star partner
14 with your organization, Department of Energy and EPA. As
15 a result, we sell a number of energy efficient products
16 and services. So we take a look at average electric bills
17 very often, and we look at a lot of those reports.

18 Q. And are these public reports?

19 A. Yes.

20 Q. You didn't obtain this information by a
21 voyeur request, did you?

22 A. No.

23 Q. And in regard to your next number here,
24 which is the 104 number, that's the average nationwide
25 residential electric bill, you said that came from EIA; is

1 that correct?

2 A. Yes.

3 Q. And was that from a public publication?

4 A. It was their website.

5 Q. Their website?

6 A. Yes.

7 Q. And was that a public website?

8 A. Yes.

9 Q. You don't have to have a password or
10 anything?

11 A. No, you do not.

12 Q. You have a capacity factor here for the
13 wind farm of 43 percent, but I don't see capacity factor
14 for Iatan 2, the coal plant. Do you know what that would
15 be?

16 A. I was assuming, to be generous, 100 percent
17 with 85 percent availability.

18 Q. Okay. And then I think you also testified
19 that there are four or six wind farms that would create
20 this amount of power at a capacity factor of 43 percent;
21 is that correct?

22 A. Correct.

23 Q. Let me ask you, would the four or five wind
24 farms provide sufficient diversity of energy supply to
25 provide the same total capacity factor as Iatan 2?

1 A. Yes, it could.

2 Q. Notwithstanding that you say 43 percent is
3 what is the capacity factor?

4 A. If you have enough in terms of producing
5 the same number of kilowatt hours, yes, it could do that.
6 And there are also ways now to firm the wind and provide
7 base load wind output.

8 Q. Let me ask you on page 2 where you were
9 talking about medical numbers, and this is skin cancer
10 down here, the number that you have there, 360 -- is that
11 billion?

12 A. Trillion.

13 Q. Trillion, 360 trillion, is that the
14 summation of each of these studies that you have listed
15 here?

16 A. I'm sorry. That's billion. You're right.
17 Summation, yeah? You mean of all the studies listed for
18 skin cancer?

19 Q. Yeah, all the studies listed. So one study
20 has one number, another study has another number, and you
21 aggregated those?

22 A. It's an average actually.

23 Q. It's an average?

24 A. Yes.

25 Q. Do you know when the USA Today technical

1 staff engaged in their study? You have them referenced
2 there.

3 A. For skin cancer?

4 Q. Yes.

5 A. September 2003.

6 Q. And so you're representing to this
7 Commission that the USA Today technical staff conducted a
8 study and that study was issued in September 28th of 2003,
9 in which it made some sort of finding relative to skin
10 cancer?

11 A. It was published in the USA Today, and the
12 title of it is, Antarctica Ozone Hole Gets Larger. The
13 USA Today didn't actually perform the study.

14 MR. PHILLIPS: Okay. Thank you. That's
15 all we have.

16 JUDGE PRIDGIN: Mr. Phillips, thank you.
17 Any questions from Aquila?

18 MS. WHEELER: No.

19 JUDGE PRIDGIN: No questions from Aquila.
20 From Empire?

21 MS. CARTER: No.

22 JUDGE PRIDGIN: From Praxair, Mr. Conrad?

23 MR. CONRAD: Judge, again, to save time,
24 I'll try to stay here.

25 CROSS-EXAMINATION BY MR. CONRAD:

1 Q. Sir, I'm looking at 6B, which is page 2.

2 A. Okay.

3 Q. You indicate there are nine coal plants in
4 the KC metro area?

5 A. Correct.

6 Q. Could you list those for me, please?

7 A. I don't have them memorized. I could get
8 it to you later, if you like.

9 Q. I'm asking you now, do you know where they
10 are?

11 A. Let's see. I know Lacine, Hawthorn,
12 Jeffrey Energy Center, Iatan 1. Those are the only ones I
13 know off the top of my head.

14 Q. You list -- you started your list with
15 Lacine?

16 A. Uh-huh.

17 Q. You consider Lacine to be in the KC metro
18 area?

19 A. When the prevailing wind comes from the
20 south to southeast and Lacine is located to the south to
21 southeast of the Kansas City metro area, yes, I do.

22 Q. When the prevailing wind is from the west,
23 would you consider Denver to be in the Kansas City
24 metropolitan area?

25 A. No.

1 Q. Why, if your test is wind?

2 A. It's too far away.

3 Q. Okay. So you don't consider Lacine to be,
4 then, too far away?

5 A. Correct.

6 Q. How about Jeffrey Energy Center? Do you
7 know where Jeffrey Energy Center is located?

8 A. Yeah. It's not far from Topeka, if I
9 remember correctly.

10 Q. Do you know where it is located with
11 respect to Topeka?

12 A. I've been there, but it's been too long.

13 Q. You listed a total of four out of nine.
14 Where are the other five?

15 A. I don't remember.

16 Q. So here today you don't remember; is that
17 correct?

18 A. Yep, that's correct.

19 Q. On the bottom of page 1 there's a note,
20 transmission costs may be slightly higher for wind. Do
21 you see that?

22 A. I do.

23 Q. What does slightly higher mean?

24 A. Well, that depends. Depends on how far
25 away it is and the transmission capacity that exists in

1 the system where the wind farm is built, if upgrades need
2 to be made downstream or upstream and substations. There
3 are a lot of different variables there. But generally for
4 a wind project, those costs are included in a power
5 purchase agreement in the wholesale price of the power
6 delivered to the end user.

7 Q. We'll get to that. Did you do a study of
8 the transmission costs for the -- your proposed siting of
9 wind?

10 A. No, because I'm not involved in --

11 Q. That's all. I didn't -- you've answered my
12 question.

13 Now we'll go to the second part. Most of
14 these costs are absorbed. Do you see that phrase?

15 A. I do.

16 Q. What is meant by most?

17 A. Well; just what it says, that most of those
18 costs would be absorbed. So if any transmission upgrades
19 were necessary to build a new wind project, more than
20 likely they would be included in the cost of energy
21 delivered to whoever buys the wind energy.

22 Q. The next two lines appear to be quotes; am
23 I correct?

24 A. It appears to be quotes, correct.

25 Q. Who is Charles E. Gillam?

1 A. He was someone that testified -- yeah,
2 there it is. These were notes I was taking at a previous
3 meeting in the Kansas City area. He's a physician at the
4 University of Kansas Medical Center, and this was
5 information that he gave under oath in testimony at a
6 previous meeting.

7 Q. At a previous meeting of what?

8 A. Regarding this process where Commissioner
9 Gaw and Commissioner Murray, I believe, or Appling were in
10 attendance.

11 Q. Is he here today?

12 A. No, he's not.

13 MR. CONRAD: Your Honor, despite the fact
14 that 6A has been admitted, I would move to strike those
15 two lines on the basis that it's blatant hearsay.

16 THE WITNESS: That's fair.

17 MR. CONRAD: That's all I have. Thank you.

18 JUDGE PRIDGIN: Thank you. Objection is
19 sustained on those two lines.

20 Any questions from Missouri Department of
21 Natural Resources, Ms. Valentine?

22 MS. VALENTINE: No questions.

23 JUDGE PRIDGIN: Office of Public Counsel,
24 Mr. Dandino?

25 MR. DANDINO: No questions, your Honor.

1 JUDGE PRIDGIN: Thank you. Staff of the
2 Commission?

3 MR. DOTTHEIM: Yes, a few questions.

4 COMMISSIONER GAW: I have a question first,
5 Judge, before you leave that subject on the two lines that
6 were just referred to. Are those quotes out -- were those
7 quotes out of hearing that was held in Kansas City?

8 THE WITNESS: Yes. I mean, that's where I
9 got them and wrote them down. Actually, it is a mistake.
10 I didn't mean to leave them in there.

11 COMMISSIONER GAW: Well, I just want to
12 clarify whether or not this is in the record already in
13 another location.

14 THE WITNESS: Yes, they are.

15 MS. HENRY: It would be.

16 COMMISSIONER GAW: So it is in the record.
17 I just want to make sure that I understand.

18 MR. ZOBRIST: Well, Commissioner Gaw, if I
19 could make a point of clarification.

20 COMMISSIONER GAW: Sure.

21 MR. ZOBRIST: The gentleman that I
22 understand testified, and it was, I believe, at the --
23 this was Mr. Gillam that was at the Platte City hearing,
24 and I don't believe he was a physician. Maybe I'm
25 mistaken, but at any rate, his testimony does begin on

1 page 6 of the transcript. Of course, that is part of the
2 record in this case.

3 THE WITNESS: That's right.

4 COMMISSIONER GAW: I just want to make sure
5 I was following what was going on.

6 MS. HENRY: So they don't need to be
7 stricken from this?

8 COMMISSIONER GAW: I'm assuming the Judge
9 has already --

10 JUDGE PRIDGIN: I've already sustained an
11 objection. If somebody's already testified in the local
12 public hearing, it's already in the record as testimony
13 from that hearing.

14 I'm sorry. Mr. Dottheim?

15 CROSS-EXAMINATION BY MR. DOTTHEIM:

16 Q. Good afternoon, Mr. Helming.

17 A. Good afternoon, Mr. Dottheim.

18 Q. I'd like to refer you to your Exhibit 6.

19 A. All right.

20 Q. And on the first page for the wind farm,
21 you have capacity factor assumed. That 43 percent
22 capacity factor, that's not the accreditation factor, is
23 it?

24 A. No.

25 Q. Are you familiar with the Southwest Power

1 Pool?

2 A. I am.

3 Q. Could you identify what is the Southwest
4 Power Pool?

5 A. It's a NERC region, I believe, is what they
6 call it, but it encompasses the Texas panhandle, most of
7 Oklahoma and Kansas, parts of Arkansas, and I think parts
8 of -- and Missouri and I think parts of maybe another
9 state or two, Louisiana, and it is a federal
10 quasi-governmental agency that has system operators that
11 manage transmission systems.

12 Q. Do you know whether it is a regional
13 transmission organization?

14 A. An RTO? I believe it's merging with MISO
15 as an RTO. My engineers that work for me know the details
16 on that a lot better than I do.

17 MR. DOTTHEIM: At this time I'd like to
18 have marked as an exhibit, I think it's Exhibit 7, a
19 Southwest Power Pool document titled Wind Power Capacity
20 Accreditation White Paper, and it bears a date of
21 September 29, 2004.

22 JUDGE PRIDGIN: We'll label that as Exhibit
23 No. 7 for identification purposes.

24 (EXHIBIT NO. 7 WAS MARKED FOR
25 IDENTIFICATION BY THE REPORTER.)

1 MR. DOTTHEIM: May I approach the witness?

2 JUDGE PRIDGIN: You may.

3 CHAIRMAN DAVIS: Judge, just a point of
4 clarification. I see Mr. Dottheim with an enormous stack
5 of documents. Does that mean we all get one?

6 MR. DOTTHEIM: Yes.

7 CHAIRMAN DAVIS: Thank you, Mr. Dottheim.

8 JUDGE PRIDGIN: Mr. Dottheim, whenever
9 you're ready.

10 BY MR. DOTTHEIM:

11 Q. Mr. Helming, I've handed you a copy of what
12 has been marked as Exhibit No. 7. Is that document titled
13 Wind Power Capacity Accreditation White Paper prepared by
14 Southwest Power Pool Generation Working Group, published
15 September 9, 2004, latest revision September 29, 2004?

16 A. It is.

17 Q. And it at least is presented on Southwest
18 Power Pool stationery or letterhead?

19 A. Yes.

20 Q. And I'd like to direct you to a number of
21 pages in this document. If I could direct you to the
22 first page, the very first paragraph which says,
23 background, which states in part, the Generation Working
24 Group, paren, GWG, was assigned the task of determining
25 how much capacity credit a wind turbine should receive for

1 serving load in determining an entity's planning capacity
2 margin, as well as for load flow model building purposes.

3 Did I read that correctly?

4 A. You did.

5 Q. I'd like to also direct you on that same
6 page to -- there's a listing of participants. I'd like to
7 direct you to the first paragraph. It's the last sentence
8 in that paragraph. And the National Renewable Energy
9 Laboratory is listed as guests actively participating in
10 many of the meetings. Did I read that accurately?

11 A. You did.

12 Q. Can you identify what is the National
13 Renewable Energy Laboratory?

14 A. Yeah. They are a Department of Energy
15 laboratory based in Colorado that does government research
16 on various forms of renewable energy.

17 Q. I'd like to next direct you to page 2,
18 criteria, and I'm going to read in part, early in the
19 process the GWG discussed some criteria to follow. Bullet
20 point 1, the capacity credit rating for wind should be
21 comparable to the methodology of assigning capacity
22 ratings to thermal units during peak load periods. It
23 should neither favor nor be an obstacle for wind.

24 Did I read that accurately?

25 A. You did.

1 Q. I'd like to direct you to the third bullet
2 point, second sentence, which states, the capacity value
3 would be for long-term planning margin calculation and not
4 operational uses.

5 Did I read that accurately?

6 A. Yes.

7 Q. I then would like to direct you to the
8 three paragraphs on the -- on that page, the last three
9 paragraphs, which state the reliability and dependability
10 of wind generator equipment was not a question. The wind
11 capacity question relates to the intermittent and
12 unpredictable nature of wind for long-range planning
13 purposes. The largest challenge is estimating what the
14 wind speed will be for long-range planning capacity.

15 In rating other thermal units, one has a
16 predictable and reliable fuel source. Wind speed is
17 intermittent and unpredictable in nature, especially when
18 one looks over the long-term planning horizon, as is
19 required to determine planning capacity margin.
20 Additionally, it varies greatly from geographic location
21 to location and varies in speed at different elevations.
22 All these factors contribute to what degree reliable
23 capacity from wind can be included.

24 Wind speed in the SPP has a negative
25 correlation with respect to load. When SPP loads are at

1 their highest, winds are typically at a minimum. The GWG
2 was concerned that if a single value from historic wind
3 production was used, it would not fairly represent wind.
4 Additionally, thermal units are represented by rating at
5 the exact peak load hour.

6 Did I read that correctly?

7 A. Yes.

8 Q. Okay. I'd like to direct you to page
9 No. 3. I'd like to direct you to the third paragraph,
10 which states, the GWG was advised that the financial
11 institutions wanted a minimum of five years of wind speed
12 at a site near the proposed site and one year of wind
13 speeds at the proposed site, which would then be converted
14 into estimated energy production using the manufacturer's
15 proprietary formula. This was needed for the financial
16 institutions to lend funds on the potential venture.
17 Therefore, it was determined to initially use a minimum of
18 five years of data for evaluation of the capacity of wind.

19 Did I read that accurately?

20 A. Yes.

21 MR. DOTTHEIM: At this time, I'd like to
22 offer Exhibit 7 into evidence.

23 MS. HENRY: I object. The entire report is
24 hearsay.

25 JUDGE PRIDGIN: Mr. Dottheim?

1 MR. DOTTHEIM: Mr. Helming has identified
2 the Southwest Power Pool as an electric reliability
3 council. I think he's also identified the Southwest Power
4 Pool as covering the three states that involve the -- or
5 that I think he's characterized as the most windiest
6 states, Kansas, Texas, and Oklahoma.

7 THE WITNESS: North Dakota's actually a
8 little windier than Oklahoma.

9 MR. DOTTHEIM: This is an official document
10 of the Southwest Power Pool. I think to assert that this
11 is hearsay, Exhibit 6 contains little more than what I
12 assume, based on Ms. Henry's objections, she would readily
13 admit is hearsay.

14 JUDGE PRIDGIN: I'll overrule. Exhibit
15 No. 7 admitted.

16 (EXHIBIT NO. 7 WAS RECEIVED INTO EVIDENCE.)

17 BY MR. DOTTHEIM:

18 Q. Mr. Helming, are you aware of what any
19 other Missouri electric utility is presently doing in
20 regards to wind?

21 A. The only -- I have no personal knowledge.
22 This I'll admit is hearsay, but I have heard from
23 industry -- people in the industry that I believe it's AEC
24 or one of the associated electric coops in Missouri's is
25 purchasing some wind energy from Iowa, and I believe that

1 Empire Electric District is buying energy from a
2 150 megawatt wind farm to be built in Kansas that's being
3 built right now, if I understand it correctly, at a site
4 that I'm very familiar with.

5 Q. You mentioned Empire. Do you know whether
6 Empire is -- presently has a green power tariff?

7 A. I'm unaware.

8 Q. Are you familiar with what is at times
9 referred to as a green power tariff?

10 A. No, not by the context that you might mean.

11 MR. DOTTHEIM: I'd like to have marked for
12 purposes of identification as Exhibit 8 two pages, tariffs
13 of Empire District Electric Company bearing the title
14 Experimental Green Power Schedule Rider EGP.

15 JUDGE PRIDGIN: I'll label that as Exhibit
16 No. 8 for identification purposes.

17 (EXHIBIT NO. 8 WAS MARKED FOR
18 IDENTIFICATION BY THE REPORTER.)

19 MR. DOTTHEIM: May I approach the witness?

20 JUDGE PRIDGIN: You may.

21 Mr. Dottheim, whenever you're ready.

22 BY MR. DOTTHEIM:

23 Q. Mr. Helming, I don't want to interrupt your
24 review of that document. Have you had a chance?

25 A. I've scanned it, yes.

1 Q. Are you familiar with electric utility
2 tariff sheets?

3 A. No. I'm very familiar with green power
4 certificates, but not tariff sheets.

5 Q. That document shows that the bottom date of
6 issue March 4, 2004, and date effective April 3, 2004,
7 does it not?

8 A. Yes, it does.

9 Q. And under the heading availability, top
10 third of the page --

11 A. Uh-huh.

12 Q. -- appear the sentences, this schedule is
13 available to customers receiving service under any
14 company's electric rate schedules who voluntarily sign an
15 experimental green power, paren, EGP, close paren, service
16 application and agreement and order to support alternative
17 renewable, paren, green power, close paren, resources such
18 as wind, solar or biomass. This experimental program may
19 be discontinued any time after two years from the
20 effective date below subject to notification by the
21 company.

22 Did I read that accurately?

23 A. Yes.

24 MR. DOTTHEIM: At this time I'd like to
25 offer Exhibit 8 into evidence.

1 JUDGE PRIDGIN: Any objections?

2 MR. CONRAD: Your Honor, just to inquire,
3 is this a document that's currently on file with the
4 Commission?

5 MR. DOTTHEIM: Yes.

6 MR. CONRAD: Of which administrative notice
7 might properly be taken?

8 MR. DOTTHEIM: Yes, official notice could
9 be made of this document. In fact, I could actually cite
10 to the Commission, not immediately off the top of my head,
11 a case where the Commission has ruled that it will take
12 administrative notice, official notice of tariff sheets in
13 effect on file with the Commission.

14 JUDGE PRIDGIN: Any objection?

15 (No response.)

16 JUDGE PRIDGIN: Hearing none, Exhibit No. 8
17 is admitted into evidence.

18 (EXHIBIT NO. 8 WAS RECEIVED INTO EVIDENCE.)

19 BY MR. DOTTHEIM:

20 Q. Mr. Helming, I think you've indicated that
21 you're not aware of what any other electric utility in the
22 state of Missouri is doing in relation to wind power. Do
23 I recall that correctly?

24 A. More or less.

25 Q. I'm sorry. I think you did indicate in

1 regards to one company some information that you thought
2 you recalled.

3 MR. DOTTHEIM: At this time I'd like to
4 have marked as Exhibit 9 a multi-page document that is
5 filed in Case No. ER-2004-0570. It's titled Stipulation &
6 Agreement as to certain issues.

7 JUDGE PRIDGIN: I'll label that as Exhibit
8 No. 9.

9 (EXHIBIT NO. 9 WAS MARKED FOR
10 IDENTIFICATION BY THE REPORTER.)

11 MR. DOTTHEIM: And it has on it a date of
12 December 22, 2004.

13 JUDGE PRIDGIN: Mr. Dottheim, I don't want
14 to interrupt your train of thought, but do you know about
15 how much more time you'll have to question this witness?
16 I'm just looking to take a break for our court reporter.

17 MR. DOTTHEIM: Yes, I would think maybe
18 20 minutes or half an hour.

19 JUDGE PRIDGIN: Let me go ahead and let you
20 finish with that exhibit, and then I think we'll take a
21 break.

22 Mr. Dottheim, whenever you're ready, sir.

23 BY MR. DOTTHEIM:

24 Q. Mr. Helming, I'd like to direct you to
25 page 3 of that document that's been marked as Exhibit 9,

1 in particular to paragraph 10. Paragraph 10 states, wind
2 assessment, the parties agree that Empire will make a
3 one-time expenditure in an amount of no less than \$80,000
4 within a year of the effective date of the order approving
5 the Stipulation & Agreement in order to perform an
6 assessment of wind energy resources in or near its
7 Missouri service territory at sites determined in concert
8 with the Department of Natural Resources Energy Center and
9 other interested signatories.

10 Empire will obtain access to two wind
11 assessment locations in or near its service territory and
12 Empire will contract with consulting meteorologists or the
13 University of Missouri-Columbia atmospheric sciences
14 department to install wind measuring equipment and
15 evaluate data collected at levels between 15 meters up to
16 and including 100 meters above ground level for the
17 ultimate purpose of producing site-specific measurements
18 that can be used to quantify the wind resources in
19 southwest Missouri.

20 Mr. Helming, did I read that paragraph --

21 A. Yes.

22 Q. -- correctly?

23 I have a copy of the Commission's Report
24 and Order in that case, Case No. ER-2004-0570, and I'm not
25 going to have that marked as an exhibit, but I'm going to,

1 if I may approach the Bench -- excuse me -- approach the
2 witness, give Mr. Helming a copy of the entire order, and
3 concurring dissenting opinions and direct him to a page in
4 that order. And I have a copy for his counsel of the
5 selected pages.

6 JUDGE PRIDGIN: You may approach.

7 BY MR. DOTTHEIM:

8 Q. Mr. Helming, I'd like to first direct you
9 to the page immediately following the cover where it shows
10 a table of contents, and then I'd like to direct you to
11 the Findings of Fact. There's a line item there, these
12 settled issues, page 30, and then I'd like to direct you
13 under the Conclusions of Law, there's also a line entry
14 there, the settled issues, page 55. And I'd like to
15 direct you to pages 55 and 56.

16 A. Okay.

17 Q. Okay. On page 56, the last sentence
18 before -- the last paragraph before the large bold face
19 type, it is therefore ordered, there is the sentence, the
20 Commission has reviewed the stipulations and agreements
21 filed in this case and is of the opinion that they are
22 just and reasonable and should be approved.

23 Did I read that correctly?

24 A. Yes.

25 MR. DOTTHEIM: At this time I'd like to

1 offer Exhibit 9 into evidence.

2 JUDGE PRIDGIN: Any objections?

3 (No response.)

4 JUDGE PRIDGIN: Hearing none, Exhibit No. 9
5 is received into evidence.

6 (EXHIBIT NO. 9 WAS RECEIVED INTO EVIDENCE.)

7 JUDGE PRIDGIN: At this time, I know we're
8 in the middle of a witness and it's a little awkward, but
9 I did want to take a break. I'm showing the time on the
10 clock back there to be roughly 3:38. I would like to
11 resume -- yes?

12 MR. CONRAD: Could you spend maybe one
13 minute more before we move too far past this?

14 JUDGE PRIDGIN: Okay.

15 MR. CONRAD: In response to Commissioner
16 Gaw's questions and I believe some of the colloquy about
17 these quotations at 6A that you struck, I have located
18 them. They do not appear in the transcript of the Platte
19 City hearing. They do, however, appear in what was
20 denominated as Exhibit 1 that was presented by Charles E.
21 Gillam in the third paragraph of that exhibit, page 1.

22 And I'll just -- just so they're in
23 context, quote, this Commission has all the pollution data
24 associated with these plants. It has been given to you by
25 other organizations such as the Sierra Club. And then the

1 quote that was extracted inaccurately on the witness'
2 exhibit appears.

3 So to the question it being in the record,
4 it would appear at that location, but Mr. Gillam
5 identifies himself as being a participant in the
6 Sustainable Sanctuary Coalition, a rapidly growing
7 organization of churches within the Kansas City area, and
8 I believe the witness represented that he was a medical
9 doctor.

10 I will leave it to your Honor to look at
11 this exhibit and evaluate whether it is in medicalese.
12 Thank you.

13 JUDGE PRIDGIN: That was Exhibit No. 1 from
14 the Platte City local hearing?

15 MR. CONRAD: Yes. It bears a file stamp of
16 June '03.

17 JUDGE PRIDGIN: All right. Mr. Conrad,
18 thank you.

19 Anything else for the record before we go
20 on break?

21 (No response.)

22 JUDGE PRIDGIN: All right. I'm showing the
23 time now to be 3:40 on the clock at the back of the room.
24 Let's try to resume at 5 'til 4. We're on break.

25 (A BREAK WAS TAKEN.)

1 JUDGE PRIDGIN: We're ready to go back on
2 the record. Mr. Dottheim, I apologize for interrupting
3 you in the middle of your cross-examination. If I
4 understand correctly, Mr. Helming, we need to finish him
5 today.

6 MR. DOTTHEIM: Yes. In fact, I understand
7 Mr. Helming has got a speaking engagement this evening, so
8 I will try to move on. May I approach the witness?

9 JUDGE PRIDGIN: You may.

10 BY MR. DOTTHEIM:

11 Q. I have a copy of the Commission's
12 April 13th, 2004 Order Approving Stipulation & Agreement
13 in Case No. ER-2004-0034 involving Aquila, Inc.
14 Mr. Helming, I'd like to direct you to a couple of pages.
15 I'd like to direct you to page 5, and also attached to the
16 document is a Unanimous Stipulation & Agreement that I
17 want to refer you to page 7.

18 A. All right.

19 Q. On page 5 appears at the very top of the
20 paragraph under the heading weatherization, the first
21 sentence states, Aquila agrees that prior to January 1,
22 2005, it will supply through shareholder funds a one-time
23 funding of \$75,000 to conduct tall tower wind assessments
24 as described in the direct testimony of Missouri
25 Department of Natural Resources witness Anita Randolph.

1 Did I read that accurately?

2 A. Yes.

3 Q. And then I'd like to direct you to the
4 document behind that, which is the Unanimous Stipulation &
5 Agreement, and I'd like to direct you to page 7, where
6 there is a heading before paragraph 11, the
7 weatherization. And I'd like to direct you to sentences 2
8 and 3 in paragraph 11, which state, Aquila agrees that it
9 will supply through shareholder funds a one-time funding
10 of \$75,000 to conduct tall tower wind assessments as
11 described in the direct testimony of MDNR Witness Anita
12 Randolph to be initiated on or before January 1, 2005.
13 Aquila agrees to work with the MDNR to apply for any
14 federal grant opportunities that become available.

15 Did I read that accurately?

16 A. Yes.

17 MR. DOTTHEIM: I'd like to ask that the
18 Commission take official notice, administrative notice of
19 its order approving the Stipulation & Agreement in Case
20 No. ER 2004-0034.

21 JUDGE PRIDGIN: That is so noted.

22 Mr. Dottheim, do you have the date?

23 MR. DOTTHEIM: Yes. I'm sorry. It's
24 April 13, 2004 is the date of the Order Approving
25 Stipulation & Agreement.