



**BEFORE THE PUBLIC SERVICE COMMISSION
STATE OF MISSOURI**

**IN THE MATTER OF A PROPOSED EXPERIMENTAL
REGULATORY PLAN OF KANSAS CITY POWER & LIGHT
COMPANY**

Case No. EO-2005-0329

**HEARING (RECONVENED)
VOLUME 8
JULY 12, 2005**

ORIGINAL

FILED

JUL 15 2005

*Missouri
Public Service Commission*

OFFICES MISSOURI ■ ILLINOIS ■ KANSAS

HEADQUARTERS: 711 NORTH ELEVENTH STREET, ST. LOUIS, MISSOURI 63101

800.280.3376

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

TRANSCRIPT OF PROCEEDINGS

Hearing (Reconvened)

July 12, 2005

Jefferson City, Missouri

Volume 8

In The Matter of a Proposed)
Experimental Regulatory Plan of)
Kansas City Power & Light) Case No.
Company) EO-2005-0329

RONALD D. PRIDGIN, Presiding,
Regulatory Law Judge,
STEVE GAW,
ROBERT M. CLAYTON, III,
LINWARD "LIN" APPLING,
Commissioners.

REPORTED BY:
Jennifer L. Leibach, RPR, CCR(T)
MIDWEST LITIGATION SERVICES

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A P P E A R A N C E S

LARRY W. DORITY, Attorney at Law
JAMES M. FISCHER, Attorney at Law
FISCHER & DORITY, P.C.
101 Madison Street, Suite 400
Jefferson City, Missouri 65101
(573) 636-6758

AND

CURTIS BLANC, Attorney at Law
1201 Walnut, 20th Floor
Kansas City, Missouri 64108
(816) 556-2483

FOR: Kansas City Power & Light

KATHLEEN HENRY
GREAT RIVERS ENVIRONMENTAL LAW CENTER
705 Olive Street, Suite 614
St. Louis, Missouri 63101
(314) 231-4181

FOR: Concerned Citizens of Platte County and
Sierra Club

DEAN COOPER
BRYDON, SWEARENGEN & ENGLAND, P.C.
P.O. Box 456
Jefferson City, Missouri 65102
(573) 635-7166

FOR: The Empire District Electric Company

KARA VALENTINE
Jefferson Building
12th Floor
P.O. Box 176
Jefferson City, Missouri 65102
(573) 751-0763

FOR: Missouri Department of Natural Resources

1 PROCEEDINGS

2 JUDGE PRIDGIN: We're on the record. Good
3 afternoon, we're resuming the case in EO-2005-0329 in the
4 matter of the proposed experimental regulatory plan of Kansas
5 City Power & Light Company. We are back on the record for
6 the Commission to cross-examine some staff witnesses. If I
7 could, I would like to get oral entries of appearance from
8 the counsel who are present, beginning with Staff, please.

9 MR. DOTTHEIM: Steven Dottheim, Post Office
10 Box 360, Jefferson City, Missouri, 65102, appearing on behalf
11 of the Staff of the Missouri Public Service Commission.

12 JUDGE PRIDGIN: Mr. Dottheim, thank you. On
13 behalf of KCP&L, please.

14 MR. FISCHER: Let the record reflect the
15 appearance of James M. Fischer, Larry Dority, and Curtis
16 Blanc on behalf of Kansas City Power & Light, and our
17 addresses are listed on the written entries.

18 JUDGE PRIDGIN: Mr. Fischer, thank you. On
19 behalf of the Office of Public Counsel, please.

20 MR. DANDINO: Thank you, your Honor. Michael
21 Dandino, Office of the Public Counsel, Post Office Box 2230,
22 Jefferson City, Missouri, 65102, representing the Office of
23 Public Counsel and the public.

24 JUDGE PRIDGIN: Mr. Dandino, thank you. On
25 behalf of the Concerned Citizens of Platt County and Sierra

1 Club, please.

2 MS. HENRY: Kathleen Henry, Great Rivers
3 Environmental Law Center, 705 Olive Street, Suite 614,
4 St. Louis, Missouri, 63101, for Sierra and Concerned
5 Citizens. And I'm wondering if you knew the screen was off.

6 JUDGE PRIDGIN: I did not know that. Thank
7 you. Let me e-mail, and see if we can't get that taken care
8 of. Thank you. Is it just completely blank?

9 MS. HENRY: It's dark.

10 JUDGE PRIDGIN: Thank you, Ms. Henry. Any
11 other counsel needing to enter an appearance. Mr. Cooper?

12 MR. COOPER: Dean Cooper from the law firm of
13 Brydon, Swearingen & England, PC, PO Box 456, Jefferson City,
14 Missouri, 65102, appearing on behalf of the Empire District
15 Electric Company.

16 JUDGE PRIDGIN: Mr. Cooper, thank you. Ms.
17 Valentine.

18 MS. VALENTINE: Thank you. Kara Valentine
19 with the Missouri Department of Natural Resources, my office
20 is in the Jefferson Building, 12th floor. Thank you.

21 JUDGE PRIDGIN: Ms. Valentine, thank you. Any
22 other counsel here?

23 All right. What I want to do, unless I have
24 suggestions from other counsel, we did resume so that the
25 Commission could cross-examine some staff witnesses, and I

1 believe we will begin with Ms. Mantle from Staff, unless the
2 parties alert me to another schedule that they need to
3 follow.

4 MR. DOTTHEIM: Ms. Mantle is available, as are
5 Mr. Warren wood, Mr. Henry Warren, Mr. David Elliott.
6 Depending on what questions the Commission may have, based on
7 its order of reconvening hearing, they should be able to
8 respond to those questions, and Mr. Shallenberg is also
9 available this afternoon to address, in particular, process
10 and policy, and he also served in a general facilitator role
11 while we were in the -- in the workshops in particular.

12 JUDGE PRIDGIN: All right. Mr. Dottheim,
13 thank you. In that case, Ms. Mantle, if you would come
14 forward to be sworn. And Mr. Dottheim, if I could get to lay
15 a foundation for Ms. Mantle, then we'll subject her to
16 cross-examination.

17 Ms. Mantle if you'll raise your right hand to
18 be sworn, please.

19 (THE WITNESS WAS SWORN.)

20 JUDGE PRIDGIN: Thank you very much. If you
21 would, please, have a seat. Mr. Dottheim, when you're ready.

22 MR. DOTTHEIM: Ms. Mantle was identified in
23 the Staff's prehearing brief as one of the Staff members who
24 would be available and could answer questions from -- from
25 the Commission, in particular on resource plan, monitoring

1 customer programs, the demand response, efficiency and
2 affordability of programs, integrated resource planning in
3 Chapter 22.

4 So as to move things along, we prepared for
5 each of the witnesses that we thought might be called this
6 afternoon, several pages which list their education,
7 employment history, work activity, while in employ at the
8 Commission; in particular, cases that they've submitted
9 testimony in. And we have such a document for Ms. Mantle. I
10 would suggest that rather than go through that, maybe the
11 best thing to do is to mark that as an exhibit.

12 JUDGE PRIDGIN: Mr. Dottheim, I think that I'm
13 up to Exhibit 47. If counsel is aware of otherwise, please
14 let me know, but that's how I have it marked.

15 MR. FISCHER: Your Honor, I know I filed a
16 late-filed, posthearing exhibit, which I don't know for sure
17 if it was given a number or not, but I assumed it was 46, I
18 believe.

19 JUDGE PRIDGIN: I think that's right, so I
20 think we're up to 47. All right. If you could label that as
21 47.

22 MR. DOTTHEIM: Okay. May I approach the
23 witness?

24 JUDGE PRIDGIN: You may.

25 (STAFF EXHIBIT NO. 47 WAS MARKED FOR

1 IDENTIFICATION BY THE COURT REPORTER.)

2 DIRECT EXAMINATION

3 QUESTIONS BY MR. DOTTHEIM:

4 Q. Ms. Mantle, have you had an opportunity to
5 look at what has been marked as Exhibit 47?

6 A. Yes, I have.

7 Q. And is Exhibit 47 a listing of your education,
8 employment history, work activity while in the employ of the
9 Missouri Public Service Commission?

10 A. Yes, it is.

11 Q. Is the information therein true and correct to
12 the best of your knowledge and belief?

13 A. Yes, it is.

14 MR. DOTTHEIM: I would offer Exhibit 47 and
15 tender Ms. Mantle for examination from the bench.

16 JUDGE PRIDGIN: Okay. Mr. Dottheim, thank
17 you. Any objections to Exhibit 47? Hearing none, Exhibit
18 No. 47 is admitted into evidence. Let me see if we have any
19 questions from the bench. Commissioner Gaw?

20 COMMISSIONER GAW: Thank you, Judge.

21 QUESTIONS BY COMMISSIONER GAW:

22 Q. Good afternoon.

23 A. Good afternoon.

24 Q. Let me thank the parties, first of all, for
25 allowing me to have additional time here. I apologize for

1 any inconvenience that this has caused anyone. It -- I -- I
2 have just -- I have questions, basically as has been outlined
3 in the order, but what I would like, first, is Ms. Mantle, if
4 you could tell me what areas that you have -- you have
5 focused on in this case in general, and I'll try to stay
6 within that. If not, you can refer me to whoever it is that
7 may be more appropriate to answer questions.

8 A. I was staff facilitator for, I think it was
9 Group A, that looked at the demand side, management side, and
10 the resource planning area in this -- in the KCP&L EW-2005, I
11 believe it was 0596. So I coordinated, along with Tim Rush
12 of KCP&L, the meetings that we had in those areas. And then
13 also I was staff person responsible for looking at the DSM
14 programs, the customer programs. That would include the
15 demand response programs, the energy efficiency programs, and
16 the affordability programs. I wrote up the questions that we
17 sent and asked KCP&L regarding those programs, and did some
18 review of those programs along with Glen Carlson of Staff
19 also looked at some of those programs, but I was primarily
20 responsible for looking at those.

21 Q. Okay. Thank you. In regard to -- to what you
22 examined and what you did, did you prepare or study load
23 forecasts for KCP&L?

24 A. I did -- I was at the meeting where they
25 talked about the load forecast. I did write up some of the

1 questions that was asked of KCP&L, looked at some of those
2 responses, passed those responses onto Henry Warren. He did
3 the review. He and another staff member, George Jaclonsy
4 [ph. sp.], who's leaving the Staff within a week, reviewed
5 those responses.

6 Q. We better get him quick, then, hadn't we?

7 A. Well, Henry's here to be asked the questions.
8 George is a new member of the Staff. He was learning about
9 forecasting, so Henry Warren is a Staff member who has the
10 most background in forecasting here at the Commission, so he
11 would be the person to ask those questions, so ...

12 Q. How much of the load forecasting information
13 did you have access to and did you examine yourself?

14 A. I reviewed it, but I didn't get in depth into
15 it, Henry did look at it in depth.

16 Q. Were there documents that staff prepared as a
17 result of examining what is likely to be the load going into
18 the future and the resources to serve that load?

19 A. Staff did begin a staff report on the resource
20 plan. Because of the pays of this project and how fast
21 things were changing, we were constantly getting updated
22 documents from KCP&L. We were constantly discovering new --
23 they were constantly bringing new things to us.

24 We would ask a question, get information, then
25 have to ask more questions, and things were evolving at a

1 pace that -- it was hard to keep that Staff document
2 up-to-date. The initial deadline was to have that Staff
3 document done in October, and I was trying to keep -- get
4 that report done, and the information just kept changing so
5 quickly that we were never able to completely get that Staff
6 report done. We instead changed our emphasis to trying to
7 get the stipulation and agreement done, so that Staff
8 document never did get completed. We have a draft of it, but
9 we never did get the report done.

10 Q. What kind of information does the draft have
11 within it?

12 A. A basic review of what the Staff looked at,
13 and some of the problems we encountered when we were going
14 through that.

15 Q. Have you -- do you have a working knowledge of
16 what those findings were?

17 A. It would be the -- I do.

18 Q. Okay. Give me -- and were there any -- were
19 there any graphs or anything prepared with regard to load and
20 available generation to serve load that you would have
21 prepared or examined as a part of the inquiry?

22 A. The -- as far as the only graphs that were in
23 there were the load and the forecasted load that has been
24 entered as an exhibit here. I'm not for sure what the
25 exhibit number was. It was entered as an exhibit by KCP&L.

1 We did not do an independent forecast.

2 Q. You did not?

3 A. No, sir, we did not.

4 Q. Did you examine the information upon which
5 that graph was prepared to determine whether or not Staff
6 believed that it was accurate?

7 A. I will have to let Henry Warren answer that
8 question.

9 Q. Okay.

10 A. Because he did look at that.

11 Q. Okay. Did you examine the load growth that
12 Warren Wood had earlier testified to that has occurred over
13 the last several years as a part of your role in the process?

14 A. Henry, again, did that work.

15 Q. Okay. Do you know what assumptions were made
16 in regard to load forecasts and generation available for that
17 load as to availability of units to KCP&L to serve load going
18 into the future?

19 A. No. Staff member David Elliott looked at the
20 supply side resources and what they used in their ...

21 Q. Is he available, did you say?

22 A. He is also available. He looked at not only
23 what their current supply side resources are, but what
24 resources they looked at for in the future to fill their
25 needs in the future.

1 Q. Okay. Do you know what the conclusions of
2 those examinations were or would Mr. Elliott have that
3 information better?

4 A. He would be able to answer those questions for
5 you.

6 Q. Okay. In regard to -- to the demand side of
7 the equation, what -- what assumptions were made in regard to
8 the determination of the need for additional generation as to
9 the reduction in demand as a result of any efficiency
10 programs that might be adopted by KCP&L as a result of the
11 nonunanimous stipulation?

12 A. Initially, KCP&L, their first plan that they
13 presented to the participants showed -- included no energy
14 efficiency programs at all. They had some demand response
15 programs, but no energy efficiency programs.

16 Q. Okay. And in regard to Staff's conclusion to
17 sign on to the stipulation, what assumptions did Staff make
18 as to the reduction and potential load that would have
19 otherwise been there without the efficiency programs?

20 A. The stipulation and agreement requires KCP&L
21 to take a closer look at those reductions before funds can be
22 spent for energy efficiency programs.

23 Q. So would it be fair to say that Staff did not
24 make any specific assumptions as to the amount of reduction
25 because of those programs that are contemplated in the

1 stipulation?

2 A. I was very uncertain as to the assumptions
3 that KCP&L put into their analysis because of how quickly
4 they did their analysis.

5 Q. Okay.

6 A. That left me very cautious as to their
7 estimates.

8 Q. Ms. Mantle, if -- it strikes me that you're
9 suggesting that things were fairly rushed, particularly last
10 Fall in regard to your ability to analyze numbers and facts
11 that were submitted to you by KCP&L. Am I accurate that --
12 with that statement?

13 A. Yes, you are.

14 Q. In regard to Staff signing on to the
15 stipulation without -- with your comfort level being at that
16 -- at that level that just described, what -- what did you
17 rely on in order to -- to sign on to the stipulation as being
18 in the -- as being appropriate in the public interest?

19 A. The stipulation has an advisory group for
20 energy -- well, for all the demand side programs. But in
21 particular for the energy efficiency programs, we have an
22 advisory group consisting of the signatory parties. And for
23 the energy efficiency programs, KCP&L will have to go back
24 and reevaluate those programs. We will have meetings where
25 they will show us better analysis of those programs where

1 they will go more in-depth and go back and relook at those
2 programs to better -- or at least show us how they've
3 integrated that really into their resource planning program
4 process.

5 Q. Okay.

6 A. And there's also -- we can go back after
7 they've spent the money and they have to show us that they've
8 done a good job with those programs themselves after they
9 have implemented any programs.

10 Q. Okay. But in regard to determining how that
11 relates to the time frame in which to build a coal-fired
12 plant or the decision to build it at all, you can't testify
13 as to how -- how that relates to how these energy efficiency
14 programs relate to the need for the plant by a certain date
15 and how they -- how they relate to one another?

16 A. It is my opinion that KCP&L could not get any
17 energy efficiency programs going to -- in just -- in a manner
18 to impact a coal plant within five years.

19 Q. Okay. Now, if -- if that's -- that's based
20 upon your belief that the energy efficiency programs would
21 not have significant enough impact to impact a conclusion
22 that the coal plant should be built. Am I right?

23 A. That's correct.

24 Q. So -- but in regard to the initial assumption
25 made in that question, that there is a need for the coal

1 plant, the processing of information by Staff to come to the
2 conclusion that the coal plant was needed by that date, that
3 information would have been processed by Henry Warren and
4 David Elliott?

5 A. That is correct.

6 Q. Anybody else?

7 A. Well, -- and that decision would have also --
8 David Elliott and Henry Warren would have taken that
9 information, of course, to our Division Directors. And as a
10 Staff, we make that decision together.

11 Q. Okay. And so who ultimately would have been
12 responsible for the decision of Staff to sign on to the
13 stipulation on -- in this case?

14 A. It would have been the Division Directors:
15 Bob Shallenberg, Wes Henderson at the time, Dan Joyce.

16 Q. Did you have a role and a specific
17 recommendation in regard to signing off on the stipulation?

18 A. I believe I had input to it, but they made the
19 decision.

20 Q. And your input in regard to -- to that would
21 have been specifically about what portion of the agreement,
22 if that's fair to characterize that as your input?

23 A. I think my input probably was overall, because
24 I do -- had overall -- not only did I have oversight over the
25 DSM area, but because I was reviewing all the resource

1 planning processes and my background in resource planning,
2 I've seen the forecast of all the utilities in the state
3 through the resource planning process. And my background in
4 resource planning, I believe I had input as to, you know, how
5 I felt about the resource plan of KCP&L, and whether it was
6 valid in comparison to the other resource plans of the
7 utilities, and what I've seen in my 20-some years in resource
8 planning here at the Commission.

9 Q. Okay. And was your -- was your input, your
10 recommendation, consistent with the Staff signing this
11 document?

12 A. Yes.

13 Q. All right. Based upon that, what is it in --
14 what you reviewed that Henry Warren and David Elliott found
15 that drew you to the conclusion that this -- the building of
16 this coal plant was an appropriate thing under the terms of
17 the stipulation based upon the -- your load forecast and
18 demand -- demand from the load and the generation
19 availability to KCP&L?

20 A. So I'm going to try to repeat back your
21 question to me to make sure I understand what you're asking.

22 Q. That's fine.

23 A. So what was it about the resource plan that
24 made me believe that we should sign the stipulation? Is that
25 what you're asking me?

1 Q. Yes, basically, uh-huh.

2 A. Knowing that as a Commission Staff that we
3 need to look for safe and adequate supply of service, and
4 that our ratepayers need a reliable source, and that they
5 want an inexpensive source but also a clean source, and that
6 KCP&L has shown itself to be a good plant. And that this
7 coal unit -- the Iatan I is a very good unit, and that
8 they're looking at building another such unit.

9 They are growing. Growth is good. It's good
10 for the state of Missouri, that not just KCP&L is growing on
11 the western side of the state, but we need a utility that can
12 provide an anchor for a coal plant on the west side of the
13 state. We have other utilities on that side of the state
14 that's also needing coal that can't be an anchor for the
15 large coal unit. And this would provide them an opportunity
16 to also have some base load.

17 We've got older coal units that may need to be
18 shut down on that side of the state because of emission
19 requirements in the future, and we've got an aging coal unit
20 that's out there, and we've got cheap electricity here in
21 Missouri, and wanting to keep good, clean, cheap electricity
22 here in Missouri, and those are the basic reasons.

23 Q. Okay. But in regard to the specifics of load
24 forecasts and the assumptions made on generation, those
25 numbers -- you are not suggesting to me that you have a

1 thorough understanding of what those numbers have in regard
2 to that -- to that -- to the resource planning side of this
3 equation and the demand side? You can't testify today as to
4 what those numbers were and what those numbers showed to the
5 Staff?

6 A. Well, those numbers weren't out of line with
7 what I've seen, and they were looking at DSM. KCP&L has
8 Staff that are willing to work on DSM. They are interested
9 in DSM, which is more than we've seen at other utilities.
10 They're willing to implement DSM.

11 Q. What I'm looking for, though, Ms. Mantle, is
12 what -- and I think I just need to go to the other two
13 individuals. I'm trying to see whether or not you reviewed
14 those numbers, and Mr. Warren and Mr. Elliott reviewed and
15 determined that they were -- that those numbers indicated a
16 need for this generation plant to be built when it's proposed
17 to be built.

18 A. You need to ask them.

19 Q. Okay. I will -- I will do that, then. I
20 think that's all I have of Ms. Mantle. I'll probably ask the
21 rest of my questions with these other witnesses, then.

22 JUDGE PRIDGIN: Commissioner Gaw, thank you.
23 Commissioner Clayton. Thank you. Commissioner Appling.

24 QUESTIONS BY COMMISISONER APPLING:

25 Q. Ms. Mantle, just one question, please.

1 A. All right.

2 Q. Have you read the complete stip agreement?

3 A. Yes, I have.

4 Q. Do you think it's a good document?

5 A. Yes, I do.

6 Q. Just in a quick nutshell, tell me why you
7 think it's a good document. And I know that's a big order,
8 but help me out.

9 A. Well, I'm sure there's some things we missed.

10 Q. Right.

11 A. But it covers a lot of areas. We've tried to
12 be complete. But it provides KCP&L some of the basics that
13 they need for financial coverage of this plant, but at the
14 same time, it allows Staff to -- some of the ways to go -- to
15 know what's happening to, and ...

16 Q. In your best judgment, do you think we should
17 go forward with this agreement?

18 A. Yes, I believe we should.

19 Q. Thank you very much.

20 JUDGE PRIDGIN: Commissioner Appling, thank
21 you. Let me see if we have any examination from counsel.
22 Any counsel wish to consider examine Ms. Mantle?
23 Mr. Fischer, Ms. Henry, you will? Any others?

24 Mr. Fischer, whenever you're ready.

25 ///

1 CROSS-EXAMINATION

2 QUESTIONS BY MR. FISCHER:

3 Q. I just had a couple questions and I'll ask it
4 from here, if that's all right. Ms. Mantle, you were
5 principally involved in the demand side, energy efficiency
6 affordability programs in a lot of detail; is that right?

7 A. That's correct.

8 Q. And there were other folks on Staff, including
9 Mr. Warren, that in addition to yourself, was looking at the
10 big picture IRP-type issues that would bring together the
11 supply, the supply options and the load forecasting and
12 whether it ought to be base load or peak plant, that kind of
13 thing?

14 A. Now, you said Mr. Warren.

15 Q. I'm sorry, Warren Wood also.

16 A. Okay.

17 Q. And Mr. Warren would have looking at the load
18 forecasts, right?

19 A. Yeah.

20 Q. I was actually thinking -- I think Mr. Warren
21 Wood would have also been a person that had kind of an
22 overview of the whole IRP-type issues, and I believe he's
23 already testified?

24 A. Yeah.

25 Q. But he would be another Staff person that

1 would be very much involved?

2 A. That is right.

3 Q. In your analysis, did you see anything that
4 would lead you to a conclusion that KCP&L's assertion that
5 the coal-fired plant would produce the lowest cost present
6 value revenue requirement to ratepayers was in any way
7 incorrect?

8 A. No, I did not.

9 Q. Okay. Thank you.

10 JUDGE PRIDGIN: Mr. Fischer, thank you.

11 Ms. Henry.

12 CROSS-EXAMINATION

13 QUESTIONS BY MS. HENRY:

14 Q. When you said that KCP&L could be an anchor
15 for other utilities on the western side of the state, what
16 were you referring to?

17 A. The coal plant, to build the coal plant.

18 Q. Were you referring to the emergent sales that
19 it plans to make with other plants.

20 A. I'm sorry, I don't understand.

21 Q. Were you referring to the agreement that it
22 has Empire and Aquila that they would get 30 percent of it,
23 or is that what you mean or what did you mean?

24 A. I don't believe -- I don't know that that
25 agreement has been signed yet, but there's a possibility,

1 yes, that they will have part of that plant.

2 Q. But is that the type of thing that you're
3 talking about, the anchor for plants like that?

4 A. Yes, and the municipals also.

5 Q. Okay.

6 A. The possibility of having a portion of that
7 plant.

8 Q. Okay. Thank you.

9 JUDGE PRIDGIN: Thank you. Anything else from
10 counsel? Let me see if we have anything else from the bench.
11 Mr. Dottheim.

12 REDIRECT EXAMINATION

13 QUESTIONS BY MR. DOTTHEIM:

14 Q. Ms. Mantle, I'd like to ask you a number of
15 questions based on questions received from the bench. Does
16 the Staff generally perform an independent load forecast?

17 A. No, we do not.

18 Q. What does the Staff generally do in regards to
19 load forecast?

20 A. Generally, we review the -- the inputs, the
21 outputs, and we make -- we compare them to other forecasts
22 nationwide-type forecasts or regional forecasts put out by
23 EIA, DOE, other forecasts that we can find.

24 Q. Is that what the Staff did in this instance
25 regarding case number EW-2004-0596 in the -- well, in that

1 case in looking at KCP&L's load forecast?

2 A. We -- Henry Warren did that, but not to the
3 same extent that we did in previous IRP filings in the past.

4 Q. Ms. Mantle, do you believe that it's
5 reasonable to assume that demand response and energy
6 efficiency programs could address KCP&L's capacity needs at a
7 level to eliminate or defer KCP&L's need for Iatan II?

8 A. No, I do not.

9 MR. DOTTHEIM: That's all the questions I
10 have.

11 JUDGE PRIDGIN: Mr. Dottheim, thank you. Is
12 there nothing further from this witness? Ms. Mantle, thank
13 you. Mr. Dottheim, is Mr. Warren -- Henry Warren available?

14 MR. DOTTHEIM: Yes, he is.

15 JUDGE PRIDGIN: All right. Mr. Warren, if
16 you'll come forward and be sworn, please.

17 (THE WITNESS WAS SWORN.)

18 JUDGE PRIDGIN: Thank you very much, sir. If
19 you would please have a seat. Mr. Dottheim, when you're
20 ready, sir.

21 MR. DOTTHEIM: Judge, as with Ms. Mantle,
22 Mr. Warren has prepared a document that -- that lists his
23 education and employment history, and work here at the
24 Commission. At this time, I'd like to request to approach
25 the witness and also have marked as Exhibit 48 such a

1 document.

2 JUDGE PRIDGIN: You may approach.

3 (EXHIBIT NO. 48 WAS MARKED FOR IDENTIFICATION
4 BY THE COURT REPORTER.)

5 DIRECT EXAMINATION

6 QUESTIONS BY MR. DOTTHEIM:

7 Q. Mr. Warren, have you had an opportunity to
8 review the document that's been marked Exhibit 48 and which
9 has been handed to you?

10 A. Yes, I have.

11 Q. Is that the document that you prepared that
12 lists your education, employment history, and work performed
13 at the Commission?

14 A. Yes, it is.

15 Q. Is the information contained therein true and
16 correct to the best of your knowledge and belief?

17 A. Yes, it is.

18 MR. DOTTHEIM: At this time, I'd like to offer
19 Exhibit 48 and tender Mr. Warren for questions.

20 JUDGE PRIDGIN: Mr. Dottheim, thank you. Any
21 objections? Hearing none, Exhibit No. 48 is admitted into
22 evidence. Let me see if we have questions from the bench.
23 Commissioner Gaw?

24 COMMISSIONER GAW: Thank you, Judge.

25 ///

1 QUESTIONS BY COMMISSIONER GAW:

2 Q. Doctor Warren.

3 A. Yes.

4 Q. Tell me what you did in regard to this case,
5 generally, first. Just what topics did you look at when you
6 were working on this case?

7 A. I primarily looked at the load forecast that
8 was provided by Kansas City Power & Light. I also
9 participated in sessions involving demand side management,
10 but my primary assignment was the load -- reviewing the load
11 forecast.

12 Q. Okay. What material did you review?

13 A. Well, I reviewed the -- the handouts -- I
14 attended the sessions where the load forecast was presented
15 by KCP&L and the documents that were presented at those
16 sessions. And also, in collaboration with Ms. Mantle, we
17 submitted data requests for some background information on
18 the load forecast to KCP&L.

19 Q. All right. And what -- what materials
20 specifically did you review? Can you identify that for me?

21 A. Oh, certainly, sir. Excuse me. There was a
22 handout, and I -- I believe most of these have been -- well,
23 I won't state as to whether they're in evidence or not, but
24 there was a document prepared by Kansas City Power & Light
25 dated May 12, 2004, entitled Kansas City Power & Light and

1 the great resource plan -- planning review.

2 And then another document that was more
3 specifically directed at the resource -- at the load
4 forecasting. And this was dated August 11th, 2004, prepared
5 by Kansas City Power & Light entitled regulatory workshop,
6 parentheses, team A, load forecasting, and then the acronym
7 MPSC.

8 And these -- these documents contain the
9 outline and some details on the structure of the model, the
10 inputs to the model, and the accuracy of the model. And the
11 time period over which the -- the input to the model was --
12 was observed and the projection for the model was made.

13 Q. All right. Let me -- is that the material
14 that you examined?

15 A. Yes, this is the -- this is the -- these are
16 the -- the primary material, and then in addition to that, we
17 received some -- some background information as a result of
18 our data requests.

19 Q. All right. Let me get to that in a moment,
20 but let me ask whether or not those documents are admitted
21 into the record from counsel.

22 MR. FISCHER: No, your Honor, they're not.

23 MR. DOTTHEIM: Commissioner, I don't believe
24 that are. I believe Mr. Fischer is correct that those are
25 not exhibits or attached to KCP&L testimony.

1 BY COMMISSIONER GAW:

2 Q. Are they HC?

3 A. Yes, they're designated, I believe, several --
4 some of the -- I think some of the -- yeah, if not -- part,
5 if not all, of the documents are designated as HC.

6 Q. How voluminous are they?

7 A. The one from August 11th is 34 pages; the one
8 from May 12th is 35 pages.

9 MR. DOTTHEIM: Excuse me, those documents are
10 terribly voluminous. If you want to take a brief break, we
11 could -- we could run copies for the bench and counsel in the
12 room.

13 COMMISSIONER GAW: I think that would be
14 helpful. If I'm going to ask him questions about what he
15 found, I don't know how it would be very easy to do it
16 without having those documents available for the record, so,
17 Judge, whatever you want to do.

18 JUDGE PRIDGIN: Mr. Dottheim.

19 MR. DOTTHEIM: Mr. Warren, are there any other
20 documents that you would suggest might provide assistance to
21 the bench in the questions that you've received so far or
22 that were asked of Ms. Mantle and Ms. Mantle directed to you?

23 THE WITNESS: Let's see. Could I have a --
24 could I consult with you and Mr. Wood for a moment, please?
25 Would that be appropriate?

1 MR. DOTTHEIM: May we go off-the-record for a
2 moment?

3 JUDGE PRIDGIN: We'll go off-the-record and
4 we'll take a break, because it sounds like we're going to
5 need to take some time to make copies so counsel can follow
6 along with some cross-examination, so let's go
7 off-the-record. And Mr. Dottheim, how much time will you
8 need to run those copies, do you think?

9 MR. DOTTHEIM: To be safe, maybe I should say
10 20 minutes. All right. Let's try to go back on the record
11 at about 2:05. I show 1:45 back on the clock on the window,
12 so we will be in recess.

13 (A BREAK WAS HELD.)

14 (STAFF EXHIBIT NOS. 49 AND 50 WERE MARKED FOR
15 IDENTIFICATION BY THE COURT REPORTER.)

16 JUDGE PRIDGIN: We're back on the record. We
17 went off the record to take some time to make some copies of
18 a couple of exhibits. And Mr. Dottheim, if you could briefly
19 describe what it is that you took the time to copy here.

20 MR. DOTTHEIM: These are documents that
21 Mr. Warren was referring to in responding to questions from
22 Commissioner Gaw. What's been marked as Exhibit 49 is a
23 multi-page document, which has on the cover page Kansas City
24 Power & Light integrated resource planning review May 12,
25 2004. It has on it highly confidential, and it's my

1 understanding from the company that it is not any longer
2 deemed to be highly confidential.

3 MR. FISCHER: That's correct, your Honor.

4 MR. DOTTHEIM: Now, the Staff had anticipated
5 questions that would require reference to that document. And
6 that document that we distributed, because of the timing, is
7 not in color. But the Staff has two of those pages in color,
8 which we can distribute now, but from the questions from the
9 bench, we thought the best thing to do was to duplicate the
10 entire document. Okay. What I have are Pages 12 and 13 from
11 the May 12, 2004, document. These pages are in color, and I
12 have copies for the bench and all counsel in the room. So at
13 this time, I'd like to distribute those.

14 JUDGE PRIDGIN: You may.

15 MR. DOTTHEIM: Also, I would note there has
16 been distributed at least for the -- for the bench and what
17 is another document, Kansas City Power & Light document. On
18 the cover page, it has regulatory workshop, team A, load
19 forecasting, MPSC, August 11, 2004. It's a multi-page
20 document. We didn't have the time to produce it in color,
21 but I would note that pages -- and we will have color copies
22 run, but time doesn't permit that at the moment.

23 But I would refer to Pages 15 and 16, which is
24 already been marked as Exhibit 43. That document was -- was
25 marked two weeks ago as Exhibit 43 by Kansas City -- Kansas

1 City Power & Light, and Mr. Brimwave [ph. sp.] testified
2 regarding those pages. Now, those pages had different
3 numbers on the bottom of the page. Instead of 15 and 16,
4 they were different pages, but the data, I believe, is the
5 same in both those pages.

6 JUDGE PRIDGIN: And Mr. Dottheim, did I
7 understand correctly that you had Pages 12 and 13 from
8 Exhibit 49 to be done in color?

9 MR. DOTTHEIM: Yes, which ...

10 JUDGE PRIDGIN: Thank you.

11 MR. DOTTHEIM: And also, Exhibit 50 is not
12 highly confidential.

13 MR. FISCHER: That's correct.

14 JUDGE PRIDGIN: Mr. Dottheim, thank you.

15 MR. DOTTHEIM: Yes, we now have additional
16 copies of Exhibit 50 for others in the -- in the hearing
17 room.

18 JUDGE PRIDGIN: Thank you. Mr. Warren, you're
19 still understand oath -- or Dr. Warren, rather.

20 THE WITNESS: Yes, sir.

21 JUDGE PRIDGIN: Commissioner Gaw, do you have
22 any other questions?

23 COMMISSIONER GAW: Yes, thank you.

24 BY COMMISSIONER GAW:

25 Q. Now, Dr. Warren, since the break, you have --

1 there have been copies distributed of two documents, I think.
2 One is a -- has a front page on it that says Kansas City
3 Power & Light integrated resource planning review, dated
4 May 12th, 2004?

5 A. Yes, sir.

6 Q. The other one is Kansas City Power & Light
7 regulatory workshop team A, load forecasting, MPSC,
8 August 11, 2004.

9 A. Yes, sir.

10 COMMISSIONER GAW: Okay. Judge, for purposes
11 of identification, would it be helpful to have numbers
12 attached to these or not?

13 JUDGE PRIDGIN: Yeah, I believe that --

14 COMMISSIONER GAW: Or did you do that already?

15 JUDGE PRIDGIN: As Exhibit No. 49 for
16 identification purposes, the KCP&L May 12, 2004 report.

17 COMMISSIONER GAW: And other one was --

18 JUDGE PRIDGIN: And Exhibit No. 50 for
19 identification, the regulatory workshop team A report dated
20 August 11, 2004. And I'm seeing nods from counsel.

21 COMMISSIONER GAW: Thank you.

22 BY COMMISSIONER GAW:

23 Q. Dr. Warren, earlier, you testified, I believe,
24 that there were two documents that were relied upon in the
25 Staff making the decision about the need for this additional

1 generating unit being built, in addition to some, perhaps
2 some -- I want to say interrogatories, some --

3 A. Data requests.

4 Q. -- data questions, thank you --

5 A. Yes, sir.

6 Q. -- that were given and Staff received answers
7 to.

8 A. Yes.

9 Q. So as far as the two documents are concerned,
10 are they -- are they the documents that are now listed and
11 identified as Exhibit 49 and Exhibit 50?

12 A. Yes, sir.

13 Q. Okay. Now, tell me, if you would, please,
14 what the important numbers were within these documents that
15 led you to believe that this was -- that building this plant
16 was the appropriate thing to do. What principally did you
17 rely upon within these documents. First, just very
18 generally.

19 A. Okay. Very generally, on -- we looked at the
20 -- at the rate of the load growth, and these are given on
21 Page 18. They're summarized on Page 18 where --

22 Q. Of which document?

23 A. I'm sorry, of Document No. 50.

24 Q. Okay.

25 A. And these were -- I think these numbers have

1 previously been referred to by -- by Mr. Warren Wood, and
2 this gives the range of growth over the -- the 20-year
3 period, 2004 to 2024, and showing the -- what we call the
4 baseline of the four peak load is 1.4 percent and the
5 baseline for energy at 1.8 percent.

6 And then it also gives a -- a low boundary and
7 a high boundary on each one of those for peak. The low
8 boundary is 1 percent, the high boundary is 1.8 percent. And
9 for the -- the energy -- the forecast, low of 1.3 percent,
10 high of 2.2 percent.

11 Q. All right. Now, these are the numbers for the
12 native load of KCP&L?

13 A. Yes, they are.

14 Q. Projected?

15 A. Yes, they are.

16 Q. Are these numbers that were provided to you by
17 KCP&L?

18 A. Yes, they are.

19 Q. Did you look at these numbers -- behind these
20 numbers to verify whether Staff would have come up with the
21 same numbers in its own calculation of what load growth would
22 be?

23 A. Okay. Just for -- if I may clarify my answer
24 very briefly, sir.

25 Q. Sure.

1 A. And that is we did not do an independent
2 calculation, but we attempted -- we, as best as possible,
3 verified the calculation that KCP&L made.

4 Q. What does that mean that you verified it? How
5 did you do that?

6 A. All right, sir. At the -- we looked at the --
7 the model, in other words, this -- the load forecast is based
8 on assumptions about the demographic and economic
9 characteristics of the KCP&L service area. And without going
10 into extreme detail, the -- in the back of Document 50 are
11 the detailed models, which include things like -- like
12 population, and what they call the gross metropolitan
13 product, which is for the metropolitan area of Kansas City,
14 similar to the gross domestic product of the United States.

15 In other words, the measure of aggregate
16 economic activity, and we, you know, reviewed the -- these
17 basic inputs and the way they -- they fed into the model in
18 terms of expected customer growth and -- and the projected
19 demand, and the -- there are two characterizations of the --
20 of the graphic of peak demand on -- one is on Page 15, which
21 is -- I'm sorry, the peak demand model on Page 15, which is
22 forecast, and the energy model on Page 16.

23 And what we were wanting to do was verify that
24 these -- the basic model itself and the basic inputs were
25 reasonable and reliable as they were constructed.

1 Q. Okay. But what -- when you say you wanted to
2 verify them, I understand that. But how did you verify them?
3 Did you go out, seek independent information in regard to
4 whether these numbers were correct, for instance?

5 A. Well, yes. The independent information was
6 analyzed from -- and this is presented in Document 49, and
7 these are on Page 13 -- 12 and 13, which has been -- which
8 have been provided in color. And these are the -- on Page
9 12, are the Reliability Council's -- Electric Reliability
10 Council's in this area of the United States, and showing what
11 their expected load growths are.

12 And once again, these are -- are consistent
13 with the -- the base forecast and the -- and the range of
14 forecasts provided by KCP&L. And as seen on Page 12, the --
15 these range from 1.2 percent to 2 percent. And then the
16 other on Page 13, it shows the reserve margins of the power
17 pools that are -- some of which are -- also appear on
18 Page 12. And in particular, it shows the SPPN, which KCP&L
19 is a part of as having the lowest reserve margin of the four
20 there.

21 And so then also there was a Department of
22 Energy forecast of -- of national electric energy forecast,
23 and that was also 2 percent.

24 Q. Okay. Now, you said a whole lot there,
25 Dr. Warren. First of all, let me see if I understand --

1 understand you. On your verification, you looked at the
2 predictions on increasing regional demand for electricity in
3 the -- the NERC regions.

4 A. Yes.

5 Q. Would that be correct? MACC, MAIN, MAPP? I
6 don't know, you've got two MAPP regions there, two broken
7 down, it looks like. MAPP is no longer MAPP now, is it?

8 A. I don't believe so.

9 Q. It's MRO or something. What does that stand
10 for?

11 A. Yes.

12 Q. Do you know what it is?

13 A. No, sir, I do not.

14 Q. That's all right. And then SPP. You looked
15 at all those, and you compared that to what was predicted
16 within the SPP region by SPP; is that correct?

17 A. Yes.

18 Q. And you said, well, it looks like it's within
19 a range of reasonableness in comparison to these other -- the
20 big areas --

21 A. Yes, sir.

22 Q. -- that we have out there, that we have
23 numbers for?

24 A. Yes, sir.

25 Q. It doesn't verify that that's -- that the

1 information is accurate, it's just that it's within some
2 numbers that you see for the security areas that are out
3 there?

4 A. Yes. I believe that was requested, and we
5 tried to verify this independently.

6 Q. Okay. But that was part of the way you did
7 it?

8 A. Yes, sir.

9 Q. Okay. And then this Page 13 in -- on Exhibit
10 49, the numbers there that you have for MAIN, MAPP, and SPP,
11 did you verify those or were they provided by KCP&L?

12 A. They were provided by KCP&L. I did not
13 independently verify those.

14 Q. Did you verify the ones on Page 12?

15 A. No, I did not independently verify those.

16 Q. So all that information has been provided to
17 you by KCP&L?

18 A. Yes, it has.

19 Q. What about the specific numbers for SPP North?
20 Did you verify that?

21 A. No, sir. There might be other Commission
22 witnesses that could -- who worked more with electrical --
23 the electric load data and the power pool data that could
24 verify those.

25 Q. Okay. You're telling me you didn't verify

1 them. Do you know whether -- you don't know whether other
2 Staff might have?

3 A. I don't know for sure other Staff have.

4 Q. Okay. Well, now, this -- this strategic
5 planning forecast peak demand on Page 15, do you know how
6 those numbers were calculated?

7 A. Yes. The -- there were -- the -- that's
8 essentially what this whole -- this document is about is
9 about how -- how KCP&L had what could be -- what I believe
10 they termed their -- I was trying to remember if they called
11 it their short-term forecast or they were looking at the --
12 what they call their budget forecast for 2004 through 2008,
13 and then they had a long-term forecast, which they performed
14 in 2002, and they -- they blended -- they came up with what
15 they call a blended forecast and then their projection out
16 through 2024.

17 So I can just tell you in general that they
18 were using a series of -- of forecasts to get a composite for
19 the whole time period that we're looking at on Page 15.

20 Q. Okay. On Page 15, some of those numbers are
21 historical, obviously.

22 A. Yes, sir.

23 Q. Right? And I suppose on this document, since
24 it was prepared in 2004, 2004 numbers were not -- actual
25 numbers are not there, those were projected for 2004 and

1 beyond, since the document was prepared in the middle of
2 2004?

3 A. I believe that's correct. Yes. Yes, that's
4 -- 2004 is indicated below the date numbers as in the
5 forecasted period.

6 Q. Okay. Did you verify the historical numbers
7 on that page?

8 A. I did not have an independent source of
9 verification for those.

10 Q. All right. And did you do anything to check
11 their projections?

12 A. Only in comparing them to the kinds of -- the
13 projections I did just described for other areas and for
14 national.

15 Q. Just to check it from a reasonableness
16 standpoint?

17 A. Yes, sir.

18 Q. Now, when -- have you been engaged in resource
19 planning in the past with the Commission?

20 A. Yes, in the first filings of integrated
21 resource plans.

22 Q. When the rule was in effect?

23 A. Yes, sir.

24 Q. When you would do forecasts for load, under
25 that environment, would you have done any more than what you

1 have done in -- with this case in verifying the numbers that
2 you've just described in the last few minutes?

3 A. Yes, I would have, sir.

4 Q. What would you have done that you didn't do
5 with this?

6 A. Well, we looked at the variables and the
7 forecasts of the input variables. And at that time, the
8 variables were -- I was looking at the commercial sector for
9 Kansas City Power & Light, and in particular, and we were
10 looking at projections of commercial floor space, and I
11 believe we were looking at projections of school-age
12 population, and those are a couple of the things that we
13 looked at.

14 And we looked at -- we did what was called bag
15 casting, or we took the -- we took the rate of -- the rate
16 that was projected, and then we -- we followed it back to see
17 if it was -- if it accurately reflected the input data, and
18 as well as looking forward, and so we tried to verify the
19 reasonableness of both the input data and -- and the
20 projected data for the input variables.

21 Q. Okay. Now, obvious question. Were you doing
22 too much checking under the old resource planning rules or
23 are you not doing enough under this?

24 A. This -- it's my understanding that -- that
25 their long-term forecast in this is actually an updated

1 version of what they did in their forecast back in -- in the
2 original filing. And so given -- given that, I think we
3 already verified their basic long-term model from the
4 original analysis of the integrated resource plan from the
5 original filing, and so I -- we possibly -- we felt like we
6 didn't need to go back and reverify that model. And so we
7 felt comfortable with, you know, with what we had seen of the
8 updating and the assumptions that went into the -- to the
9 forecast.

10 Q. Okay. Now, I want to make sure I'm following.
11 When you say on the initial filing of when they first filed,
12 what are you talking about?

13 A. Well, sir, when they filed their integrated
14 resource plan, I believe that was in 1994.

15 Q. And in '94, was the possibility -- we're just
16 looking at load right now --

17 A. That's right.

18 Q. -- in your description?

19 A. Yes, sir.

20 Q. So the load forecast -- do you believe that
21 these numbers come from the same sources that you had already
22 verified back when you were doing integrated resource
23 planning as a part of the rule?

24 A. That was my understanding when they were
25 talking about updating their -- their long-term model. It

1 was my understanding that that was the model -- the long-term
2 model they were using at that time.

3 Q. And you say it was your understanding. What's
4 that understanding based upon?

5 A. My reading of the document and their response
6 to data requests.

7 Q. Do you have a data request to refer to there
8 that --

9 A. Just a moment.

10 Q. -- leads you to that conclusion?

11 A. Just a moment. This response is marked highly
12 confidential, about I think I can answer the question without
13 -- without giving numbers in the document.

14 Q. Would you give me the data request number or
15 something to identify that?

16 A. Yes, sir. This is Data Request No. 1023 in
17 Case No. EW-2004-0596.

18 Q. Okay. Go ahead and provide what you think you
19 can.

20 A. All right.

21 Q. Whatever the parties need to do on this. I do
22 not obviously know what is contained in this.

23 A. Well, what I'm going to do is give the titles
24 of the columns in this without talking about specific
25 numbers, sir. If you need specific numbers, that would

1 probably -- that might require some ...

2 Q. I'll try to avoid that.

3 A. I'll proceed, and if you need information,
4 just please ask me questions.

5 Q. Sure.

6 A. The first question is labeled '94 IRP, which
7 gives the -- a value for peak and a value for net system
8 input. It's actually labeled NSI. The next column is '98
9 IRP, and it's labeled, once again, the subheading is peak and
10 NSI.

11 The next column is 02-20, long-term update,
12 and has -- the subheadings LT peak and LT NSI, which I think
13 LT stands for long-term. And then the next column has 04-08
14 budget forecast and has the headings budget peak and budget
15 NSI, and then last column has 04-24 IRP plan, peak and NSI.

16 And then the column which denotes the dates on
17 the side runs from 2004 to 2024. So I believe these are the
18 -- and these are the -- the data in the peak column of the
19 last column correspond to the data on page -- Page 15 of the
20 Exhibit 50 that we've been looking at, so that's my
21 conclusion about the -- the update of the IRP model, and
22 being used in this -- in this projection.

23 Q. Dr. Warren, are you confident that the
24 information that you've received from KCP&L is accurate in
25 this case in regard to the load forecast?

1 A. Yes, I believe it is accurate.

2 Q. And did you specifically ask KCP&L whether or
3 not the data that it received, or that it provided, was --
4 was the same -- based upon the same information and provided
5 in the same way that it had been provided previously to you
6 when -- in the IRP process when you had verified those
7 numbers?

8 A. That was the -- yes, the specific question in
9 the data request was how do these forecasts compare with the
10 end-use forecast from the IRP filing that KCP&L did in 1994.

11 Q. All right.

12 A. And yes.

13 Q. Do those numbers, without telling me what they
14 are specifically here in open session, do those numbers match
15 up fairly closely?

16 A. Yes, they do, sir.

17 Q. The earlier projections? Are they about the
18 same? Do they show much change to them one direction or the
19 other?

20 A. They're slightly -- they are slightly lower.

21 Q. Current projections are slightly lower?

22 A. Yes.

23 Q. Okay. So the -- the demand forecast for this
24 case or the information that you were provided last summer
25 shows a slightly lower demand forecast than the ones that

1 were done a few years ago?

2 A. Yes.

3 Q. All right. So there's not a change in the
4 other direction which might -- if the change had been in the
5 other direction, would that have caused you more inquiry?

6 A. It possibly would, yes.

7 Q. All right. Now, as you're -- as we're looking
8 at this part of this equation, did you deal with any part of
9 the supply side of the equation or was it just the demand
10 side?

11 A. I was dealing with the demand side.
12 Mr. Elliott, in terms of the generation of electricity, dealt
13 with the supply side.

14 Q. All right. Now, in looking at demand and
15 supply, when we're examining what is needed in order to meet
16 demand, and how the demand varies throughout -- throughout
17 the year that causes there to be, perhaps, a need for
18 different types of generation, did you do that analysis? In
19 other words -- and I can explain further, if you need me to.

20 A. No, I think I can answer the question in that
21 I did not look into -- in any way how this -- how it would be
22 appropriate that this demand should be met.

23 Q. Did someone else do that?

24 A. Yes, sir.

25 Q. With Staff? Who was that?

1 A. My understanding is that it's Mr. Elliott.

2 Q. Okay. He's the one that I need to ask the
3 questions on, then, ing regard to appropriate generation?

4 A. Yes, sir.

5 Q. Okay. Now, the -- on Page 15, there is a --
6 there's clearly in the years between 2000 -- looks like
7 sometime, maybe 2000 to about 2003, I can't exactly see.
8 There appears to be a dip in demand. Am I reading that
9 correctly?

10 A. Yes, you are.

11 Q. And would you explain that? I think that's
12 been done once, but would you explain that for me?

13 A. Well, sir, it's my understanding, and from
14 reading the information, then, also from hearing previous
15 testimony and also from the graph itself, they're in very
16 light print. It's indicated between 1996 and 2000, they have
17 an area marked economic boom where things were -- the peak
18 was expanding as much as four percent a year.

19 And then they -- there's very light writing
20 here indicating loss of GST, recession, 9/11, and Sprint
21 layoffs. And so I believe they're saying that in 2001, that
22 there were a combination of -- of exogenous and economic
23 activities going on that caused the load to lessen, and also
24 from additional information we've been furnished, there's an
25 indication that those were relatively -- those years also had

1 relatively cool summers where the -- the peak was not growing
2 due to weather-related demand.

3 Q. Is that weather issue somewhat reflected on
4 Page 16 when you compare 15 and 16?

5 A. Yes, sir, I believe, yeah, this is weather
6 normalized.

7 Q. I know one is for peak demand, the other is
8 for energy, but it does show weather normalization on 16?

9 A. That's right. I don't believe the peaks are
10 -- they've been in calculation where the peaks are weather
11 normalized.

12 Q. All right.

13 A. But the energy is.

14 Q. Now, there's a steep incline, then, sometime
15 between 2000 -- in between 2002. I can't quite tell when
16 that starts, and then sometime up into 2003.

17 A. Yes, I believe you're correct, 2002.

18 Q. Do you know what caused that?

19 A. I think that may be weather-related. I would
20 have to -- let me.

21 Q. Okay. And do you know about, then, that's
22 followed with another dip --

23 A. Uh-huh.

24 Q. -- that goes -- that goes down into -- into
25 2004.

1 A. Yeah, of course, 2004 is forecasted.

2 Q. It is, yes.

3 A. And so what I'm assuming is that they are
4 looking at the -- at the years 2000, 2001, 2002, and 2003 as
5 being nontypical years because you have a down burst -- a
6 downward trend or a downward shift in peak between 2000,
7 2001, somewhat flat between '01 and '02. A marked increase
8 of -- in 2003.

9 And although as we can see back in the early
10 part of the graph in the early 90's, there are, you know,
11 more of the sawtooth type pattern, and such as between 1994
12 and 1995, they go from almost minus six percent to plus ten
13 percent, so there can be, you know, dramatic swings. What
14 they're doing when they do their projection is -- is -- I'm
15 not trying to inject any particular weather pattern or
16 economic -- or nonsystematic weather pattern or nonsystematic
17 weather pattern, and just assuming systematic weather
18 patterns in their projection, so that you don't get the
19 sawtooth pattern in the projection.

20 Q. Uh-huh. Sir, have you seen the actual figures
21 for 2004?

22 A. Yes, sir. Those were -- let's see.

23 THE WITNESS: Was that entered as an exhibit?

24 MR. FISCHER: Not yet.

25 THE WITNESS: Not yet, okay.

1 BY COMMISSIONER GAW:

2 Q. Do you know how the actual figures for 2004
3 compared with the projections?

4 A. Yes, sir, if I can -- those were furnished,
5 and I've got my information here a little bit scrambled, but
6 I should be able to come up with those. Yes, sir. Okay.

7 Now, according -- according to the -- the
8 graph we're looking at and the table on the side, it says
9 2004, 3,469, and the information I've been furnished shows
10 that the peak actually occurred on July 13th of '04, and that
11 the observed peak less GST is 3,384. So that looks to be --
12 with some quit mathematics, about 80 -- approximately what is
13 that -- 85 less than the 2004 projection.

14 Q. Okay. Would that fact have any influence on
15 your examination going forward on the projections?

16 A. Not a -- not an error of that -- of that
17 magnitude, no, sir.

18 Q. Okay.

19 MR. FISCHER: Your Honor, that information
20 might be helpful to the record. I think what he's referring
21 to is the weather normalized peak forecast for the last six
22 years and showing the GST and some adjustments, but it does
23 show the actual versus the weather normalized, that it shows
24 the growth rate, if that would be appropriate or helpful, we
25 could get that introduced.

1 COMMISSIONER GAW: Sure.

2 JUDGE PRIDGIN: I believe we're up to 51 now,
3 is that correct?

4 (KCP&L EXHIBIT NO. 51 WAS MARKED FOR
5 IDENTIFICATION BY THE COURT REPORTER.)
6 BY COMMISSIONER GAW:

7 COMMISSIONER GAW: Dr. Warren, thank you.
8 You've all been given this two-page document. I don't know,
9 Judge, do you want to refer to it as something?

10 JUDGE PRIDGIN: I've labeled that as
11 Exhibit No. 51 for identification purposes.

12 COMMISSIONER GAW: Thank you.

13 MR. FISCHER: And your Honor, I would note
14 that this was prepared by KCP&L, but it does have the
15 information that Dr. Warren was discussing, and I think had
16 been -- has reviewed that in the past.

17 JUDGE PRIDGIN: Thank you, Mr. Fischer.

18 BY COMMISSIONER GAW:

19 Q. And I might ask Dr. Warren, whether you agree
20 with Mr. Fischer for the record?

21 A. Yes, this was furnished in an e-mail to
22 Mr. Warren Wood from KCP&L, I believe at the end of last week
23 or the first of this week. And he furnished this information
24 to me, so I have seen it prior to this.

25 Q. Now, how does this relate to Page 15, since

1 Page 15 is not weather normalized on Exhibit 50?

2 A. Okay. Well, the number -- the number I was
3 actually quoting you, the 3,384 is the next to -- the next to
4 the last on the right column where it says observed peak less
5 GST. And so that would -- that would be the next appropriate
6 number to enter in as actual data in 2004, if we wanted to
7 put actual data in for 2004.

8 And then what this did does show is
9 information we don't have in the final column where it says
10 normalized net system -- normalized net peak in megawatts.
11 We did not have a -- a corresponding graph of normalized
12 peaks in the document we're looking at.

13 Q. Okay. But you do have the numbers there on
14 Exhibit 51 that KCP&L has provide for '99 through 2004 on
15 normalized net peak?

16 A. Yes, sir.

17 Q. Have you checked -- you haven't checked these
18 numbers other than this is what's been provided?

19 A. Right.

20 Q. But these numbers, at least on the document,
21 show 1.99 percent. What is that, an average growth? What is
22 the CARG -- CAGR Stand for?

23 A. Is that the average growth rate? Sir? May I
24 ask --

25 MR. FISCHER: Your Honor, I think at the very

1 bottom of that, it indicates compound average growth rate,
2 CAGR.

3 COMMISSIONER GAW: Thank you.

4 BY COMMISSIONER GAW:

5 Q. That make sense to you, Dr. Warren?

6 A. Yeah, you're right. The last line under the
7 table.

8 Q. As a matter of fact, on the next page, it
9 actually talks about five-year compound annual growth rate?

10 A. Okay. Right.

11 Q. Do you see that?

12 A. Yes.

13 Q. What does that mean, weather normalized net
14 system input on the second page?

15 A. Well, I think that refers to the -- those are
16 the -- the energy units, and which I believe these would be
17 consistent with what's in Table 16.

18 Q. Okay.

19 A. Or on Page 16, strategic -- the energy graph.

20 Q. And that Number 15,434 or 640, is that the
21 number that would be -- would replace the number that's in
22 2004 on Page 16 or is it a different number?

23 A. My understanding would be that that would be
24 the number of the last -- the last number in the last column,
25 yes, on the right. I believe you're correct.

1 Q. All right. Now, as I look at Page 15 again on
2 Exhibit 50, it starts out projecting beginning in 2004 going
3 forward, a -- looks like about a 2.4 percent growth out for
4 the years leading up to 2010. Well, perhaps a little before
5 that do you see that?

6 A. Yes, sir.

7 Q. And then it seems to subside to drop off
8 somewhat. Can you explain that to me why that would be?

9 A. It would simply -- in general, I can just say
10 it reflects the input variables, such as population growth
11 and the gross metropolitan product. In other words, the
12 input variables are slowing in their growth so the load is
13 slowing in growth.

14 Q. Okay. And the same is true of the demand --
15 excuse me, of the energy side, isn't it, on 16?

16 A. Yes, sir. Now --

17 Q. If I look at the regional demand on Page 12
18 for the different reliability regions, I don't -- those
19 figures do not seem to show any -- any real drop off. They
20 just seem to be fairly straight-lined, don't they?

21 A. They certainly do, yes.

22 Q. Okay. But the numbers are more specific for
23 the KCP&L region that are utilized, you believe?

24 A. Yes, I would believe that.

25 Q. And you say these inputs, these are inputs

1 that go into some sort of a computer program?

2 A. Yes.

3 Q. Which program is that?

4 A. Well, I'm assuming -- I believe they -- let me
5 check the -- the tables in the back to see if they list that
6 specifically, and let me look at my -- we also had asked that
7 as part of our data request was how those -- how those were
8 put into.

9 Well, I don't know the -- I don't know the
10 specific computer software, but it looks to be what would be
11 termed a -- what we just call, like, a multi-variable model,
12 where the coefficients are determined by regression analysis.

13 Q. You don't know whether this is the same kind
14 of a program or analysis that was done when you were doing
15 your IRP process back a few years ago?

16 A. I believe -- well, of course, the -- the
17 long-term -- yeah, this specifically here at the back, the
18 04-08, what they call their budget forecast, which, like I
19 said, they combined that with the -- the long-term model and
20 the long-term model, I believe, was -- was based on -- was
21 based on a software called HELM -- I'm sorry, let me get that
22 specifically here out of the data requests. The acronym is
23 H-E-L-M. I know that was used in the original -- in the
24 original one. I'm not sure I -- I would have to -- I think
25 I'd have to refer to KCP&L to verify, because I'm not sure if

1 that software is still -- is still -- is still current.

2 Q. You're not -- you didn't -- you didn't do that
3 analysis about whether the software was appropriate or
4 whether or not those projections based upon that software
5 would therefore be appropriate or accurate based upon your
6 previous experience?

7 A. I would say we -- I did review the -- the
8 variables in this budget forecast and did, you know,
9 qualitatively compare them to what were in the forecast of
10 the 1994 integrated resource plan, and, you know, found these
11 to be -- you know, found these to be consistent.

12 Q. In other words, you didn't do a specific
13 request to see what kind of software they were doing or
14 analyze whether that software program might be appropriate
15 based upon your experience, but the conclusions that you saw,
16 the results that you saw, were not inconsistent with what you
17 had seen before when you had made those kinds of --

18 A. Yes, sir.

19 Q. -- checks and analysis?

20 A. Yes, sir.

21 Q. Okay. And your load -- the load forecast here
22 would have nothing to do with any margins, reserve margins,
23 or anything. That would all be on the supply side, correct?

24 A. That's correct, sir.

25 Q. This is just the actual load?

1 A. Yes, sir.

2 Q. I think -- I think that my other questions
3 will be for Mr. Elliott and -- but Dr. Warren could be
4 available in case I get referred back to him. Otherwise, I'm
5 done.

6 JUDGE PRIDGIN: Okay. Commissioner Gaw, thank
7 you. Commissioner Appling, any questions?

8 JUDGE PRIDGIN: Judge, I have no questions.

9 JUDGE PRIDGIN: Thank you. Let me see if we
10 have any cross, Mr. Fischer.

11 CROSS-EXAMINATION

12 QUESTIONS BY MR. FISCHER:

13 Q. Just briefly, Dr. Warren. Your Exhibit 48
14 indicates your experience in reviewing load forecast; is that
15 correct?

16 A. Yes, sir.

17 Q. And it notes that you were involved in KCP&L
18 IRP filing in 1994; is that correct?

19 A. Yes, sir.

20 Q. Would you have reviewed the forecasts and the
21 models at that time, too, that KCP&L was using?

22 A. Yes, I reviewed a specific part of those. I
23 was asked to concentrate on the commercial energy forecast.

24 Q. Were you also involved in the more informal
25 IRP discussions that have been held in the decade that's

1 ensued since 1994?

2 A. I have not.

3 Q. Okay. I noticed you were also involved in the
4 UtiliCorp, Empire, and St. Joseph during the 1994-1995
5 period.

6 A. Yes, I was.

7 Q. Were you also reviewing those companies'
8 forecasts in that time period, too?

9 A. Yes, I was.

10 Q. And then it notes that you've been involved in
11 reviewing load forecasts in the EW docket in the 2004-0596
12 case, which was the workshop docket that proceeded this. Is
13 that true?

14 A. Well, yes, that's the -- those -- that's where
15 most of my -- somewhat the basic information we've been
16 discussing came from, yes.

17 Q. So it would be correct to conclude you've been
18 looking at KCP&L's forecasting models and the other companies
19 that are listed here over a decade anyway?

20 A. Yes, at times, yes.

21 Q. Okay. And then if I look at Exhibit 51, which
22 is the weather normalized peak information, on the first
23 page, it indicates that -- well, would you explain just what
24 is a weather normalized, what does that mean from a
25 forecasting standpoint?

1 A. Well, for -- KCP&L is a summer peaking system,
2 and the summer peak is related usually to both the
3 temperature on the -- on the day of the peak because of the
4 air-conditioning load, and often the days preceding that day
5 will also be very important to the -- usually two- to
6 three-year, or more, days preceding the peak will be
7 important in determining that peak, as well due to a
8 phenomena that is usually referred to as heat build up.

9 Q. Okay. Like on Exhibit 51, in the year 2004, I
10 believe there's an indication that the peak temperature was
11 94 degrees.

12 A. Yes.

13 Q. And that would be less than the typical summer
14 in Missouri in Kansas City Power & Light service area. Would
15 you agree?

16 A. Based on the information presented in this
17 graph where it shows, for other years, a temperature such as
18 in 2000 of 104, and my personal experience, I would agree.

19 Q. And would that explain, at least be one of the
20 factors, that would explain why the peak might dip in 2004
21 compared to the previous year?

22 A. Yes, sir.

23 Q. Would that kind of phenomenon explain why it's
24 important to use a weather normalized peak forecast rather
25 than just taking the actual observed peaks when you're trying

1 to look at what your needs are for the future?

2 A. Yes, it would.

3 Q. And there's been some discussion about what
4 the actual peaks were for KCP&L over the last five years or
5 so, and maybe it had been flat. If you were looking at just
6 the observed peaks and not weather normalizing it, would that
7 be very helpful in understanding what your needs would be for
8 the future?

9 A. Not necessarily. The -- the weather is
10 extremely important, as I've mentioned previously, in
11 determining the accuracy of the peak.

12 Q. Exhibit 51, I think, as the Commissioner had
13 noted, showed that the -- the compound average growth rate
14 for peak had been about just under two percent over that
15 period of time. Is that correct?

16 A. Yes.

17 Q. Is that consistent with KCP&L's projections
18 for the future for peak growth?

19 A. Yes, I believe -- I believe it is. The -- as
20 I referred to in the -- in Exhibit 50 on Page 18, the -- the
21 -- the baseline peak has shown for the 20-year period, 2004
22 to 2024, is shown to be 1.4 percent. And the high end is
23 shown at 1.8 percent, so that -- that's actually a little bit
24 beyond the high range as shown in the document, Exhibit 50.

25 Q. And if we look at the energy forecast, the

1 five-year compound annual growth rate since 1999 has been
2 2.23 percent; is that correct?

3 A. That's what's shown, yes.

4 Q. And is that generally in the ballpark of what
5 KCP&L's projecting for the future?

6 A. Yes, it is. Once again, on Page 18 of Exhibit
7 50, the baseline is 1.8 percent, and the high is 2.2 percent,
8 so this would be completely consistent with that range.

9 Q. I believe you had some questions regarding
10 Exhibit 49, particularly the graphs that are on Page 13 -- 12
11 and 13, which have the color graphs on them. Do you recall
12 those?

13 A. Yes, I have those.

14 Q. Is it your understanding that those forecasts
15 provided by MAIN, MAPP, and SPP would be publicly available
16 forecasts?

17 A. I would expect they would, yes.

18 Q. And is it also your understanding that those
19 weren't created by KCP&L, but they were provided by those
20 particular regional reliability council's?

21 A. That's my understanding, yes.

22 MR. FISCHER: That's all I have, thank you.

23 JUDGE PRIDGIN: Mr. Fischer, thank you. Any
24 other counsel wish to cross? Ms. Henry.

25 COMMISSIONER GAW: Could I just real quick?

1 JUDGE PRIDGIN: Commissioner Gaw.

2 COMMISSIONER GAW: So I don't duplicate anyone
3 unnecessarily.

4 QUESTIONS BY COMMISSIONER GAW:

5 Q. Dr. Warren, in looking at the numbers -- this
6 is for my clarification -- on Page 12 of Exhibit 49, as
7 Mr. Fischer was pointing out, on the range that you have
8 there between ECAR at 1.6 percent to SPP at 2 percent, help
9 me with the short-term there, when I'm looking at the growth
10 over the next few years up to almost 2010 at 2.4 percent in
11 the KCP&L growth anticipated.

12 Help me to understand why you think it's
13 consistent when that is above the highest number that's shown
14 on Page 12 of Exhibit 49. And I realize that you may be able
15 to justify that by looking at the longer range or whatever,
16 but help me to understand how you view that consistency.

17 A. Okay.

18 Q. Or lack thereof, whatever it is.

19 A. Well, I guess the -- maybe the most
20 appropriate number we are a looking at, you have the -- we've
21 got -- you've got 2 percent. Okay. And then on SPP.

22 Q. And I'm not even sure if Page 12, as I'm
23 looking at it, is a regional peak demand or it's something
24 different.

25 A. Yeah, I believe it says, you know, they're

1 talking about regional demand, and so that's talking about --
2 that's referring to peak.

3 Q. Goes without saying that it's peak?

4 A. Yes, sir.

5 Q. Okay. Thank you.

6 A. And so they're showing a -- a 2 percent
7 growth. And I think your question has to -- now, when.

8 Q. I'm trying to ask the hard question in regard
9 to the comparison there. Just help me about with your --
10 your conclusion that there is a consistency, because if I
11 look just up through 2010 on Page 15, it appears that we're
12 about 2.4 percent growth, and then when I look over here on
13 the long-term average, which is basically a straight line on
14 Page 12, of 49, the highest that I see there is SPP's 2
15 percent per year growth, and it goes down to 1.6. So you're
16 above the high end, and I wanted you to explain the -- the
17 consistency or lack of consistency with that and how you came
18 to your conclusion that it was consistent.

19 A. Well, I think it would just be on the basis of
20 the -- probably the -- the general range that is -- is -- has
21 to be placed around any given forecast of this type, and if I
22 can refer it -- look in the document, I think this document
23 has a -- has an illustration on the -- of what a -- one of
24 these -- I was looking for the -- one of these documents had
25 a -- I believe showed the forecast demand as it's referred

1 to, if I can -- okay.

2 Yes, if you can refer back to Page 13 and 14
3 of Exhibit 50, and this -- this is -- this is -- this is kind
4 of a complicated diagram, but this is the kind of diagram
5 that you -- when you're actually looking at a forecast that
6 you -- you actually have, and that is a -- the, you know, the
7 -- the median -- the median forecast, the middle -- the
8 middle forecast, which they're showing here as the red -- as
9 a -- let's see, do you have it in color, sir?

10 Q. No, I don't have it on this copy.

11 A. It would be the -- the lower dark line in the
12 middle, and I believe it has the numbers, like, it starts out
13 at 3.8 percent, and then minus 2.6 percent, minus 2.3
14 percent, and anyway, these two dark -- the two dark lines in
15 the forecast are the long-term forecasts and the budget
16 forecast. The upper one being the long-term.

17 And then the lighter lines on top and bottom
18 of that, you know, are the type of range that you have in a
19 forecast like this where, you know, there's a sizable range
20 within the forecast -- that give the upper and lower bounds
21 of that forecast, and that's why on Page 18, we have a range
22 from low to high of -- of .8 percent for peak and about .9
23 percent for -- for energy.

24 So to -- to say so that the Southwest Power
25 Pool has 2 percent per year and KCP&L is showing 2.4 percent

1 per year, is about half of what, you know, what we're looking
2 at. And what you would say would be the normal bounds of a
3 forecast, and so that's why it would lead me to believe that
4 it is -- it is still -- that the 2.4 percent is not
5 inconsistent with the 2 percent.

6 Q. It's not an unreasonable --

7 A. Yes, sir.

8 Q. -- thing to assume?

9 A. That's right, sir.

10 Q. I think that's -- I'm sorry to interrupt.

11 Mr. Fischer may have.

12 MR. FISCHER: Just one quick one.

13 RE-CROSS-EXAMINATION

14 QUESTIONS BY MR. FISCHER:

15 Q. On Page 15 where you're looking at that
16 strategic planning forecast, Dr. Warren, would you agree that
17 that historical data that's listed there is not weather
18 normalized, it's only the forecasts that are, and therefore
19 that would affect those numbers, since he was asking about
20 the point where it's becoming a forecast, it would be weather
21 normalized. There's a difference in the data there, right?

22 A. Yes, sir.

23 MR. FISCHER: Thank you.

24 JUDGE PRIDGIN: Mr. Fischer, thank you. Let
25 me see if we have any other cross-examination. Ms. Henry?

1 CROSS-EXAMINATION

2 QUESTIONS BY MS. HENRY:

3 Q. On Exhibit 50, on Page 9, it says the Kansas
4 customer growth rates. I'm wondering if there's some
5 document or one page of this document that I haven't noticed
6 that lists the Missouri customer growth rates. Did you have
7 those numbers before you when you did your analysis?

8 A. Well, the -- what I'm relying on are the -- in
9 the -- toward the end of the document where they have the --
10 the models, if I can find the right spot here. Yeah, it's in
11 the section starting on Page 21, Section 7, called models,
12 and let's see. One of the -- in the -- yeah, it's in the --
13 it would be in the energy model on Page 23, they have the --
14 let's see.

15 In the table on the left, the -- under the
16 column headed variable, the second term is CDD underscore
17 CUST. And on the right, it's explained to be cooling degree
18 days multiplied by residential commercial customers. And the
19 next variable, HDD, underscore, CUST, which is explained in
20 the variable definitions as heating degree days multiplied by
21 residential commercial customers. And so those are the --
22 the combined -- I believe those are the combined -- those are
23 the combined customers for all the customers of the Kansas
24 City Power & Light service region.

25 Q. Okay. Those are the combined ones for

1 Missouri and Kansas?

2 A. That's my understanding, so although there may
3 not be a specific -- let's say a specific -- and so when they
4 say on Page 7, I believe, their total residential slash
5 commercial customers, that would be the, I believe, combined
6 Missouri and residential customers. So I think it may just
7 be that they didn't -- they didn't provide a graphic of all
8 -- of every -- every component in the model.

9 Q. I would like to approach the witness and show
10 him a document, which I would like to have marked Exhibit 52,
11 and I'll have to make more copies during the break.

12 JUDGE PRIDGIN: Okay. You may.

13 (SIERRA EXHIBIT NO. 52 WAS MARKED FOR
14 IDENTIFICATION BY THE COURT REPORTER.)
15 BY MS. HENRY:

16 Q. I wonder if you can just read the numbers at
17 the bottom of the -- on the right-hand -- what they show the
18 Missouri growth rate, what has happened to the Missouri
19 customers growth rate in the past five years and the past ten
20 years.

21 A. Well, this -- this seems to have information
22 on megawatt hours and megawatts, and let's see, so when you
23 say -- you said something about customer growth rate. I'm
24 sorry.

25 Q. I'm sorry, you said by the Missouri customers

1 of megawatt hours of the past five years and the past ten
2 years.

3 A. I said those were -- I'm sorry, I was
4 referring to that -- yeah, customers are part of the input
5 into their forecast model, and I think these, from what I'm
6 reading here, we're talking about the growth rate of
7 Missouri -- okay. Missouri retail megawatt hours from 1999
8 to 2004 is minus 55 percent. Is that the number you're
9 referring to?

10 Q. That's the number I'm referring to, yes.

11 A. Okay.

12 Q. And the number for the -- the five-year
13 period -- or which did you give me, the five or ten?

14 A. I gave you the five-year period, 1999 to 2004.
15 Which one?

16 Q. I wanted you to read both of those numbers
17 into the record.

18 A. Okay. Both the five-year and ten-year.

19 Q. Yes, that's right?

20 A. Okay. According to this, the table I've been
21 handed, it says compound average growth rate, 1999 to 2004,
22 Missouri retail megawatt hours is minus 0.55 percent, and
23 for -- this would also be compound average growth rate, 1999
24 to 2004, Missouri load coincident with system peak megawatts,
25 minus 3.9 percent. And then for the ten-year period, 1994 to

1 2004, the compound average growth rate for Missouri retail
2 megawatt hours, 0.8 percent, and Missouri load coincident
3 with system peak megawatts, 1.4 percent.

4 Q. Okay. Thank you. Would you agree that those
5 numbers are a lot lower than what's -- than the numbers on
6 the colored chart that was Page 12 of Exhibit 49?

7 A. All right. Page -- let me make sure I'm
8 comparing the right things here. On Page 12 would be
9 consistent with the -- the megawatt hour number -- numbers on
10 this table, and the -- the power pools shown on this table
11 range from -- excluding the MAPP for California -- would be
12 between 1.6 percent and 2 percent. 1.4 percent would be
13 slightly less than the lower -- than the 1.6 percent of the
14 lower of those.

15 And then -- and of course, these are
16 calculated over a 20-year period, and the minus 3.9 percent
17 of -- would be, of course, that's a negative value compared,
18 so that would be lower than those numbers -- than the
19 positive numbers that we referred to in Page 12.

20 Q. When you -- in general, when you do your
21 analysis of a regulatory plan, do you look at -- do you
22 distinguish between Kansas customers and Missouri customers
23 regarding KCP&L's plans?

24 A. No, we don't -- we don't distinguish for
25 the -- for the integrated resource plan, because -- because

1 we're -- we're wanting to look at the -- the whole -- the
2 whole utility.

3 MS. HENRY: Okay. I have no further
4 questions. I would move to have Exhibit 52 admitted into
5 evidence, and I'll make copies at the afternoon break.

6 JUDGE PRIDGIN: Any objections?

7 MR. FISCHER: No objection, your Honor. I
8 would also -- he's about to leave the stand, move for the
9 admission of 51.

10 JUDGE PRIDGIN: All right. I'll show
11 Exhibit No. 52 admitted into evidence, and Mr. Fischer, are
12 you moving for 51 --

13 MR. FISCHER: Yes.

14 JUDGE PRIDGIN: -- to be admitted? All right.
15 Any objections to that? All right. Excuse me, 51 and 52 are
16 admitted. Do we have any further cross from counsel? Do we
17 have anything from bench?

18 COMMISSIONER GAW: Just a point of inquiry.

19 JUDGE PRIDGIN: Commissioner Gaw.

20 COMMISSIONER GAW: Mr. Fischer may have
21 already taken care of this. Did we admit 49 and 50?

22 MR. DOTTHEIM: No, we haven't admitted 49 and
23 50, and I have some questions for Mr. -- excuse me, for
24 Dr. Warren, and I was going to move to have 49 and 50 moved
25 into evidence at that time.

1 COMMISSIONER GAW: I figured that you were. I
2 apologize for preempting that question, but the other
3 question I had was the last document that was -- that was
4 provided by the Sierra Club, excuse me, the last document
5 that was provided by the Sierra Club, since I don't have a
6 copy of it yet, I wasn't clear about what the source of the
7 information was.

8 MS. HENRY: I'm sorry, it's KCP&L.

9 MR. FISCHER: It's a KCP&L answer to data
10 requests.

11 COMMISSIONER GAW: Okay. That helps.

12 MR. FISCHER: It doesn't reflect GSD and
13 things like that.

14 COMMISSIONER GAW: It does not?

15 MR. FISCHER: No.

16 COMMISSIONER GAW: Okay. Thank you all.
17 That's all I have, Judge. I apologize for the interruption.

18 JUDGE PRIDGIN: Thank you, Commissioner Gaw.

19 REDIRECT EXAMINATION

20 QUESTIONS BY MR. DOTTHEIM:

21 Q. Mr. Warren, earlier in response to a question
22 I think you stated that weather is important for determining
23 the accuracy of the peak. What did you mean by that?

24 A. Well, I believe the -- the question referred
25 to the -- the projection -- the projections of peak load

1 compared to the observations of peak load. And without -- to
2 know specifically what the peak load would be in a specific
3 year without specific weather information would simply be an
4 assumption that weather was going to be near normal. And
5 that's the normal assumption in a forecast. If that answered
6 the question.

7 Q. Yeah. I think you've also been referred to
8 the year 2004, and the -- the data that is shown, in
9 particular, for example, in Exhibit 51 for 2004. Do you know
10 whether the Summer of 2004 was cooler than normal, hotter
11 than normal?

12 A. I don't have that information with me at this
13 time.

14 Q. Okay.

15 A. I cannot say.

16 Q. I'd like to direct you to exhibit -- what's
17 been marked and received as Exhibit 52.

18 A. Yes.

19 Q. Do you know whether the data that's contained
20 on that -- that exhibit is weather normalized?

21 A. Since it is historic data with no other
22 indication, I would assume that it is not weather normalized.

23 Q. At the bottom, there's a note. It says
24 note --

25 A. Yeah, it says -- yeah, actually, there's a

1 note at the bottom that says reported sales are not weather
2 normalized.

3 Q. On that exhibit, the time frame, 1999 to 2004,
4 I'd like to also refer you to Exhibit 50, Page 15. And I'd
5 like to refer you to that same time frame on Exhibit 15. Is
6 that the time frame for which there is, in light print, the
7 lines loss of GST, rescission, 9/11, Sprint layoffs begin?

8 A. I believe the word is recession.

9 Q. Yes, I'm sorry.

10 A. Yes, that would appear to -- yeah, I'm
11 assuming there -- there's a section of that graph where the
12 -- the line is colored red as opposed to the majority of it,
13 which is colored blue, and so that looks to include the --
14 the red line runs from 2000 to 2001 to 2002 and 2003, so '99
15 would not be specifically -- it's hard -- I'm assuming the --
16 the -- the -- the legend you refer to and the arrow, I
17 believe, from my understanding, would refer to the -- to the
18 red line version, so it would appear that the red lines are
19 for the three middle years, 2000 through 2003, and that '99
20 and 2004 would be on either end of that, yes.

21 Q. Mr. Warren, excuse me, Dr. Warren, you were
22 asked a number of questions regarding the Chapter 22 resource
23 planning reviews that you've previously performed as a member
24 of the Staff. In those reviews, did you, alone, review load
25 analysis and forecasting, or were there additional members of

1 the Staff who worked on the review of load analysis and
2 forecasting?

3 A. There were additional members.

4 Q. Over what time period, generally, in those --
5 in those prior IRP filings did the Staff perform its review
6 of load anal -- load analysis and forecasting?

7 A. Well, I'm trying to think back to the -- going
8 back about ten years now, but my impression is that it was
9 probably in the neighborhood of -- I would say six months.

10 Q. Did the Staff have --

11 A. If I can -- well, I would say between the
12 initial information provided by the company and the Staff's
13 final review of the final document.

14 Q. Was the Staff able to -- to spend that amount
15 of time in reviewing KCP&L's load forecast for purposes of
16 Case No. EW-2004-0596?

17 A. No, we did not have that amount of time.

18 Q. And how many members of the Staff were
19 available to also review the KCP&L load analysis and
20 forecast?

21 A. Well, my participation was -- was not
22 full-time on this task. I know that, you know, partial
23 participation was by Ms. Mantle and Mr. Elliott, and has been
24 mentioned, George Jaclonsy [ph. sp.] also assisted on this,
25 and I know there were -- I'm aware that there were other

1 Staff involved. Those were the people that I interacted with
2 specifically.

3 Q. Dr. Warren, even given the amount of time that
4 you were able to spend to review the KCP&L load analysis load
5 and forecast, do you believe that the load forecast provided
6 by KCP&L, performed by KCP&L, is reasonable?

7 A. I do.

8 MR. DOTTHEIM: At this time, I'd like to offer
9 evidence Exhibit 49 and Exhibit 50.

10 I have just one other question for Dr. Warren.

11 JUDGE PRIDGIN: All right. Any objections to
12 Exhibits 49 or 50?

13 MR. FISCHER: No objection.

14 JUDGE PRIDGIN: All right. Hearing no
15 objection, Exhibits 49 and 50 are admitted. Mr. Dottheim.

16 BY MR. DOTTHEIM:

17 Q. And Dr. Warren, again, I'd like to refer you
18 to Exhibit 51 that Mr. Fischer handed to you, and which he
19 offered into evidence. And again, I would like to ask you
20 have you verified the information that's contained in Exhibit
21 51?

22 A. I have not independently verified it.

23 MR. DOTTHEIM: Thank you.

24 JUDGE PRIDGIN: Mr. Dottheim, thank you. If
25 there's nothing further from counsel, this looks like to be a

1 natural time to break. I'm showing the time -- the clock on
2 the back of the wall to be about 10 till 4:00. Let's try to
3 resume the hearing at four o'clock. We're off-the-record.

4 (A BREAK WAS HELD.)

5 JUDGE PRIDGIN: We're back on the record. I
6 believe we just finished with Dr. Warren, and the next Staff
7 witness is Mr. Elliott. Mr. Dottheim, if -- whenever you're
8 ready, sir, if you need a minute. Mr. Dottheim.

9 MR. DOTTHEIM: Yes, I believe Commissioner Gaw
10 has some questions that have been directed to -- to
11 Mr. Elliott, so the Staff would call David W. Elliott.

12 JUDGE PRIDGIN: All right. Mr. Elliott, if
13 you would raise your right hand to be sworn.

14 (THE WITNESS WAS SWORN.)

15 JUDGE PRIDGIN: Thank you very much, sir. If
16 you would, please, have a seat. Mr. Dottheim when you're
17 ready, sir.

18 MR. DOTTHEIM: Yes, I'd like to have marked as
19 Exhibit 53, a three-page document which identifies
20 Mr. Elliott's education, employment history, and his activity
21 while here in the employ of the Commission, if I may approach
22 the witness.

23 JUDGE PRIDGIN: You may.

24 (STAFF EXHIBIT NO. 53 WAS MARKED FOR
25 IDENTIFICATION BY THE COURT REPORTER.)

1 DIRECT EXAMINATION

2 QUESTIONS BY MR. DOTTHEIM:

3 Q. Mr. Elliott, have you had an opportunity to
4 look at what's been marked as Exhibit 53?

5 A. Yes.

6 Q. And does Exhibit 53 list your education,
7 employment history, and your activity while in the employ of
8 the Missouri Public Service Commission?

9 A. Yes.

10 Q. Is the information contained in there true and
11 correct to the best of your knowledge and belief?

12 A. Yes.

13 MR. DOTTHEIM: At this time, I'd like to offer
14 Exhibit 53 and tender Mr. Elliott for questions.

15 JUDGE PRIDGIN: Mr. Dottheim, thank you. Any
16 objections to Exhibit 53? Hearing none, Exhibit No. 53 is
17 admitted into evidence. Let me see if we have any questions
18 from the bench, Commissioner Gaw.

19 COMMISSIONER GAW: Thank you.

20 QUESTIONS BY COMMISSIONER GAW:

21 Q. Good afternoon, Mr. Elliott.

22 A. Good afternoon.

23 Q. Mr. Elliott, can you tell me what your role
24 was in regard to the case that's before us for the Staff?

25 A. Part of what I was involved with was review

1 the supply side of their plan, the type of plant, and timing
2 and such like that. Also, I was involved in meetings with
3 discussions on environmental issues and also I was majorly
4 involved in the development of the in-service criteria for
5 the stipulation.

6 Q. Okay. What is in-service criteria mean before
7 I go on?

8 A. Missouri statutes require that a new unit be
9 used -- is used and useful, but that's not the exact words,
10 but used and useful before it's put in rate base. Staff has
11 developed some criteria that we require the plant to either
12 meet some testing or some milestones before we allow it --
13 would put it in rate base.

14 Q. All right. So that was part of your analysis?

15 A. Yes.

16 Q. All right. In regard to your -- your
17 determination of the supply side of the equation in this
18 case -- first of all, tell me what experience you've had in
19 the past dealing with that issue with this Commission in
20 general.

21 A. In general, I have been involved with the IRP
22 process for the last six years or so on Staff, and basically
23 focusing on the supply side of the IRP process.

24 Q. Okay. Did that -- during that time frame, did
25 you have the opportunity to work in the resource planning

1 under the resource planning rule that was at some point in
2 time suspended?

3 A. No, I entered the process after that.

4 Q. Okay. So you don't have any experience in
5 that regard?

6 A. That's correct.

7 Q. All right. In regard to the experience that
8 you do have, have you had experience with all of the electric
9 utilities that we regulate in the state on the supply side in
10 resource planning in the informal process that has been going
11 on here since the rule was suspended?

12 A. Yes, I have.

13 Q. You have? That was a yes?

14 A. I'm sorry, yes.

15 Q. And in regard to this case, can you tell me
16 what you did in determining the appropriate supply to meet
17 the demand of the KCP&L system in looking at a need in the
18 future for additional generation?

19 A. Okay. Staff did not do our own independent
20 analysis of the supply side. We did review what KCP&L did
21 with their MIDAS model. We had discussions with KCP&L about
22 certain criteria or inputs into the model. We reviewed the
23 outputs of the model to determine the reasonableness of them,
24 and discussed different types of supply options that were
25 possibly available to meet the need for KCP&L.

1 Q. Okay. You said a whole lot there to me.
2 First of all, in regard to not doing an independent review of
3 the supply side of the equation, is that something that would
4 have normally been done in a resource planning process with
5 the Commission?

6 A. It's -- Staff does not have the MIDAS software
7 to do the same type of analysis. I believe back before the
8 rule was changed, the Staff did have access to MIDAS. I
9 assume that we could, if we had the model, but we don't, so
10 it limits us on the type of analysis that we can match what
11 they did.

12 Q. Do you know -- are you familiar with the MIDAS
13 model itself?

14 A. Somewhat, yes.

15 Q. Do you know whether or not that model is
16 something that is in concrete in the software, just subject
17 to the inputs, or can the model itself be changed in some way
18 by the -- by the entity that's running it?

19 A. I believe that the software allows you to make
20 all kinds of -- of specific modeling -- what's the word I'm
21 looking for -- but it gives you great flexibility in modeling
22 what you want to model. I don't think you can go in and
23 change the software so that it will give you a different
24 answer than somebody else if they had the same model. But it
25 gives you great flexibility of putting different options in,

1 and timing, and costs, and things like that, which is a good
2 help when you're doing some kind of massive analysis like
3 this.

4 Q. What I'm looking for in that question, and to
5 ask you to follow-up, is what -- how much analysis did Staff
6 do in regard to the runs that were made, the model that was
7 utilized in this case?

8 A. We met with KCP&L in their headquarters while
9 they had the model there. We reviewed certain items of the
10 model. Again, we concentrate on issues like, you know, did
11 you consider high and low gas price. Did you consider, you
12 know, did you consider high and low gas prices, did you
13 consider -- multiple things to make sure that they covered
14 all those things in their analysis so that the analysis that
15 they do produce, we have a good, warm feeling about, that
16 they covered as many issues as we could think of.

17 Q. What kind of -- and what did you do to
18 follow-up and verify that information?

19 A. When -- typically when we ask them if they did
20 something, then the next presentation that they give us would
21 show the results of their model with any changes they made
22 based on our suggestions.

23 Q. Okay. And backing up just a minute. Did you
24 do any thorough analysis of the modeling that was done beyond
25 just asking whether certain inputs were put in to the model

1 **itself in the runs that were made?**

2 A. Not in any detail. As I said, we -- we were
3 there one day and watched them run the model; but as far as
4 great detail, no.

5 Q. Now, in your opinion, if you would have had
6 more time in this case, would you have done more of that kind
7 of analysis or did you do a sufficient analysis, if time were
8 not an issue?

9 A. Well, it's always nice to have more time to
10 look at things. For this particular case, I think it was --
11 KCP&L had done a very good job of covering all the issues
12 that we saw, and I have no feeling -- no problem supporting
13 what the results are.

14 You know, part of our job is in the time
15 they've given us, is to look at things, and sometimes it's
16 just looking to see if there are problems, did they cover
17 things, did they miss something. You know, we don't
18 necessarily have time, and a lot of things we do is to follow
19 every step that they do, and this was a very big analysis, as
20 I said, so I feel comfortable saying that the analysis is a
21 good analysis.

22 Q. **And you're comfortable because?**

23 A. Because I have looked at what they've done,
24 and I've talked to them about, you know, those issues about
25 did you put low/high gas price in, did you consider what

1 effective purchase power price -- how did you develop your
2 purchase power price to give you what you want. Those kind
3 of things I looked at gives me the feeling of where I'm at.

4 Q. So if you were doing this process without
5 having to deal with the window of time that you had to
6 operate under, or that you did operate under in this case,
7 would you have done anymore than you did?

8 A. As I said before, Commissioner, there's always
9 more you can look at.

10 Q. Well, what would you have looked at if you had
11 more time?

12 A. At this point in time, I do not know what I
13 would have looked at more. I'm just saying that possibly,
14 you know, given more time, you always can look for more
15 things. I feel like I've looked at the major things that
16 would effect things the biggest, and feel comfortable with
17 that.

18 Q. Okay. And that -- the things that you looked
19 at had to do with did you put these kinds of -- of factors
20 in, such as high/low natural gas prices?

21 A. Yeah, and what kind of sensitivity did you
22 have on those things, yes.

23 Q. All right. And what did you do to verify that
24 what they did was appropriate in your -- up to your standard?

25 A. Again, reviewed the output and if there was

1 change, noticed the change. I'm not -- I'm not saying that
2 they did a lot of changes, I'm just saying that we asked a
3 lot of questions, and most of the stuff they had covered
4 anyway. So it was a matter of showing us what you had in the
5 model -- sorry, having KCP&L show us what was in the model,
6 and discussing that number. You know, is that number the
7 right number, what do you think about this number, and
8 discussions with them about why they selected that number,
9 and getting a feel for why that number was a good number.

10 Q. Give me an example.

11 A. You know, well, gas prices. Obviously the
12 model was run awhile ago, but you know, gas prices, you don't
13 know what kind of gas price you're going to put in, but if
14 they put in, like, \$2 and \$3, that's an obviously that there's
15 something wrong here, or if they put in \$22, you know, so
16 they put in some of, I think it was -- I don't have the exact
17 numbers, but something like five to eight or something like
18 that gas prices, which in today would seem reasonable.

19 Q. Okay. So those kinds of inputs would be easy
20 to verify. Are there inputs that are less easy to verify,
21 although that's a matter of opinion?

22 A. That's right.

23 Q. Do you have a general concept of what that
24 range might be within a reasonable level?

25 A. Right.

1 Q. Are there other inputs that are less -- that
2 are more difficult, rather, to confirm or to -- to suggest
3 the reasonableness?

4 A. I think the most difficult -- one of the most
5 difficult inputs in the model is what the purchase power
6 market is going to be like. Obviously if the purchase power
7 market is going to be, you know, \$5 power out there, you'd
8 have a different decision than if it was \$50.

9 My understanding is KCP&L has this program,
10 part of the MIDAS program that they go out and they -- they
11 model the eastern interconnect to -- to put in information to
12 try to generate a regional price for them to use, and that's
13 something that we -- we, as Staff, have looked at for many
14 years of how, you know, how do you come up with a good price
15 and the magnitude of what they did, you know, that's a pretty
16 good effort to come up with a purchase power price for the
17 region to use in the model.

18 Q. And for instance, in that case, what did you
19 do to confirm whether or not that was reasonable?

20 A. Again, it's just -- it's just, you know, what
21 did the results come up with, and having been involved with
22 rate cases with other utilities in the state and having
23 purchase power issues come up, you know, I looked at it, and
24 it looks reasonable. I can't duplicate what they did, but on
25 the other hand, I have an idea of if you're modeling an

1 eastern interconnect, you've got a lot of inputs there that
2 will give you a pretty good answer, if you're looking for
3 that kind of answer. Again, all I can say is I reviewed and
4 I feel that what I saw was reasonable.

5 Q. But you did not, again, go out and
6 independently verify that those numbers would have been the
7 numbers that you would have put in if you would have
8 collected the information yourself?

9 A. That's correct.

10 Q. Okay. And you didn't go to any specific
11 source to say these are the numbers that we can get from this
12 source of information, and that's -- that comes within a
13 reasonableness range of what KCP&L has provided?

14 A. That's correct.

15 Q. It was just based on your instinct, your
16 knowledge based on what you --

17 A. Right, running fuel models for the last 12
18 years, yes.

19 Q. So you have some experience in that regard?

20 A. Yes.

21 Q. But that's what you relied on in your
22 reasonableness test?

23 A. Yes.

24 Q. Nothing that you can present to me on a piece
25 of paper that says here's the numbers, here's where I got

1 them, but based upon your -- your experience, you think they
2 were reasonable?

3 A. Yes, sir.

4 Q. But if I -- so I've got to come to you and get
5 that information if I want to test that reasonableness. I
6 can't go to a document, I can't go to a market, I can't go
7 out and say I called all of these different entities to try
8 to give me some idea about the reasonableness as a check from
9 the Commissioners' standpoint?

10 A. I believe the natural gas prices that KCP&L
11 did use came from another source other than themselves. I
12 would be hard pressed --

13 Q. Do you know what that source was? Did you
14 know at the time?

15 A. Yes, I looked at the document -- I looked at
16 the information they provided us with the resource name, yes.

17 Q. And you -- so it wasn't just KCP&L said they
18 thought it was going to be this.

19 A. Right, right, they had support.

20 Q. That sounds reasonable. It was more than
21 that?

22 A. Yes, for that particular -- and I would go
23 back to purchase power. I would think you could get a room
24 full of people and they would all come up with different
25 purchase power prices. That's an issue that's very difficult

1 to nail down.

2 Q. I agree, but how do you determine what's
3 reasonable if it's difficult to nail it down? You're telling
4 me you came up with an opinion that it was reasonable.

5 A. Yes.

6 Q. How did you do that?

7 A. Based on I do purchase power pricing for fuel
8 models for the runs that we make that cases that I'm involved
9 with.

10 Q. Yes, sir.

11 A. So I know how purchase power prices have
12 changed over the years. I know what's reasonable -- I
13 believe I know what's reasonable and what's not reasonable,
14 and it may be a question of whether it's not -- the question
15 may be is it not -- not that is it reasonable but is it not
16 reasonable.

17 Q. Could be. But you don't have any numbers to
18 present to me today that says this is a number, this is a
19 range of a number that I thought was reasonable, and that was
20 within the range that they came up with, and here's my source
21 and there's their source,

22 A. That's correct sir.

23 Q. You can't. Okay. Now, in looking at -- in
24 looking at the -- the supply that you have, on the supply
25 needs that you have, do -- you have to match that up with --

1 with demand, correct?

2 A. That's correct, yes.

3 Q. As a general rule?

4 A. Yes.

5 Q. So if I look on Page 15 of Exhibit 50, do you
6 have that somewhere or someone that can hand it to you?

7 A. No, I don't have.

8 Q. We were just discussing it with the last
9 witness. Thank you, Mr. Dottheim for handing Exhibit 50. Do
10 you see that?

11 A. Page 15?

12 Q. Page 15.

13 A. Yes.

14 Q. Okay. Now, I realize you did the supply side,
15 but I suppose at some point in time you had to look at
16 documents like this. Never looked at it?

17 A. No, sir.

18 Q. This wasn't your job?

19 A. I relied on other Staff members to take care
20 of this.

21 Q. Well, who does the matching up? If you do the
22 supply and somebody else does the demands, who actually ties
23 those things together for you?

24 A. When you run the fuel model --

25 Q. Yes.

1 A. -- you put the loads in and you put the units
2 in, and it matches the units to the load.

3 Q. Okay. Well, you understand how the concept
4 works, though?

5 A. Yeah, yes.

6 Q. Okay. So when you do that, you've got on Page
7 15, that -- is that going to be -- is that going to be
8 relevant, important to the model, that information?

9 A. Yes, that the model will -- the loads will be
10 put in the model, and the model's goal is to meet that load
11 at the most economical method.

12 Q. Okay. Now, if I looked on Page 16, then,
13 that's -- that shows the strategic planning forecast for
14 energy. Do you see that?

15 A. Yes.

16 Q. That's normalized for weather, I believe.

17 A. Yes.

18 Q. Do you see that?

19 A. It says that, yes.

20 Q. So that would be -- that might be important to
21 information for the model?

22 A. What the model takes is a load curve, it
23 doesn't necessarily put in that these percentages of growth;
24 although for multiple years, you would add the growth to your
25 curve so it would increase by a certain percentage, but

1 again, yeah, you would need to know -- the model needs to
2 know what to generate to. It needs a load to generate to.

3 Q. Okay. Now, on Exhibit -- let me have you turn
4 to Page 16 of Exhibit 49. Do you see that?

5 A. I don't have Exhibit 49 in front of me.

6 Q. I bet someone will find that for you.

7 A. Okay.

8 Q. Now, what is that? What does that page show?

9 A. KCP&L is trying to show by year based on their
10 forecast where their -- where their capacity matches the
11 load.

12 Q. Okay. All right. Now, explain that to me,
13 would you? Explain what that -- you said in general what
14 it's doing. What load is that matching up capacity?

15 A. I would -- I would assume across the bottom
16 there that the load forecast is -- okay. This is the
17 capacity that they have -- right now it appears -- in 2004,
18 they have 217 capacity unused in either low expected or high
19 forecast.

20 As you go up for the years, obviously their
21 load growth goes so that if you keep the capacity, if you
22 don't install any new capacity, eventually, you end up being
23 negative, or what they call shortfall. Because of your
24 growth, you don't have the capacity to meet that load for,
25 like, year 2007, in the low forecast, it appears they are 77

1 megawatts short, expected 106 short, and high forecast 143
2 short, because they didn't -- if the scenario they don't want
3 to add anymore capacity, they will be short capacity based on
4 the load growth.

5 Q. Okay. Does this have any reserve margin built
6 into it or do you know, on this page?

7 A. I can't -- I can't tell.

8 Q. Okay. And can you tell whether or not
9 there's -- there are any assumptions regarding plant
10 generation plant retirements?

11 A. I do not see that indicated on here.

12 Q. Okay. In your analysis or the analysis that
13 you saw of KCP&L's on the minus runs, were there any
14 assumptions made about plant retirement?

15 A. I don't believe -- in the period to 2000 --
16 the ten-year, I do not believe they had any plant
17 retirements.

18 Q. Okay. Were there any assumptions made in
19 regard to additional generation?

20 A. Well, that's -- that's why they ran the model
21 is to see what -- what additional generation would fit their
22 load growth or would be the least cost fit for their load
23 growth. So in the MIDAS model, yes, their model, I believe
24 they put in, like, combustion turbines, and combined cycles,
25 and a coal plant to allow the model to decide which -- to

1 make a dispatch run to see which one of these would fit best
2 and would be less cost.

3 Q. Okay. And on this page, on Page 16, are there
4 any -- any additional capacity availabilities added, other
5 than what currently exists?

6 A. I would say since it goes negative, no. I
7 think this is based on current capacity.

8 Q. Okay. Now, if you want to turn over to Page
9 19 of that exhibit, 49. Do you see that page?

10 A. Yes.

11 Q. Have you seen that page before?

12 A. Yes.

13 Q. Was it important to you?

14 A. Yes.

15 Q. Why?

16 A. When we initially talked to KCP&L, they told
17 us they went through a supply side review of different types
18 of supply side resources, and took a look at things like cost
19 per KW, the -- the technology's viability and so forth. So
20 this was something that they started with first to see -- if
21 you want to make sure you cover all alternatives, obviously
22 you have to look to see what other alternatives are out there
23 first, so yeah, this was one of the first documents that we
24 reviewed with KCP&L, yes.

25 Q. Okay. Now, did you review the numbers on

1 installed costs, they're showing the one column there,
2 dollars per kilowatt?

3 A. All I can -- from time to time, we get costs
4 from other units, inside the state and also public knowledge
5 information. These -- when we reviewed these, these appeared
6 to be in line with that data that we were aware of.

7 Q. This is another one of those things, it's like
8 I asked you awhile ago where this comes within a range of
9 reasonableness based upon your general knowledge that you
10 acquired working in the Commission.

11 A. Yes.

12 Q. But there -- you're not going to give me any
13 particular sources of information that you might have to
14 verify that those numbers are reasonable?

15 A. I don't have any with me today, no.

16 Q. Did you at the time you reviewed them?

17 A. As I said, yes, we did look at what's out
18 there and see if they were reasonable, yes.

19 Q. What kinds of sources would you have looked
20 at?

21 A. Well, there's other -- other IRP information
22 from other companies, their estimates of cost.

23 Q. Okay.

24 A. You can go out to different sites, EIA or DOE,
25 on the Internet, and look at what they're using for pricing.

1 Q. Okay. Some of these margins are just
2 incredibly large, and some of them are not so large. As I go
3 down to fuel cells, that's a margin of \$700 to \$4,000. I
4 don't know what that -- I don't know how meaningful that
5 might be.

6 A. And that may be why -- it may be hard to pin
7 that down. It may be a new technology that hasn't matured,
8 and there's a lot of information out there, a lot of
9 different people doing things, and the cost could be all over
10 the place.

11 Q. All right.

12 A. That would be my assumption on that.

13 Q. Okay. The -- just an interesting note here,
14 the assumptions made comparison pulverized coal to IGCC
15 technology. Is that correct, that the low cost is actually
16 slightly lower on IGCC than the low cost on pulverized coal?
17 Of course, the high end reverses.

18 A. Right.

19 Q. Is that your understanding?

20 A. I think from the information that's available
21 that that's -- that's probably correct. I don't know
22 specifically how old this information is and what specific
23 site. But since they gave a range, I think that's why they
24 gave a range, because there's no specific one dollar fits
25 all. And I would assume what's not figured in some of this

1 is site specific, you know, site specific might add more
2 costs than other sites. That's probably not in here, so I
3 would use the word ballpark for these, get you close to what
4 the cost might be.

5 Q. Okay. And on that, just briefly on that
6 subject, it's shown that ten plus year technology viability
7 timeline on IGCC, do you know where that number came from?

8 A. No, I do not, but I have -- we have had
9 discussions with KCP&L about IGCC. We felt they needed to do
10 a little bit more background check, and I believe that they
11 have produced an appendix, which I believe is already in the
12 record about IGCC and different projects in the country. And
13 I have read that, and I have also gone out to the Internet
14 and read some DOE reports for a couple of the existing IGCC
15 plants.

16 I don't think that's unreasonable that it's
17 not there, you know, the largest unit is 300 megawatts today.
18 It's burning eastern coal instead of power river coal. You
19 know, they're still having availability problems with that,
20 so I would not say that's unreasonable.

21 Q. Why isn't it unreasonable?

22 A. The ten plus years.

23 Q. Oh, okay. All right. Is that before one gets
24 built or before one's actually planned to be built?

25 A. I would say that's probably until it gets to a

1 point where it becomes a mature technology, that you can buy
2 one from B&W down the street and have it installed.

3 Q. Okay. Now, if I look at the -- those dollar
4 amounts again, were those dollar amounts the ones that were
5 utilized in the MIDAS model or were they important to that at
6 all?

7 A. I believe that not all of these options got
8 put into the MIDAS model. I believe that they did -- they
9 did factor into the -- they -- obviously the MIDAS model
10 produces a lowest cost, so I believe that the cost of the
11 plant was put in MIDAS also, as well as fuel prices and
12 everything else.

13 Q. Okay. And you believe that these numbers are
14 the ones that were put in?

15 A. I would say the numbers were close to these
16 numbers. I can't --

17 Q. Did you see those numbers at one point in
18 time?

19 A. I did, I cannot remember exactly what they
20 are, sir.

21 Q. At the time -- but you did review those
22 numbers?

23 A. Yes.

24 Q. And you don't know for sure whether they were
25 these numbers?

1 A. Not exactly these numbers, no, I do not.

2 Q. Are you telling me that you felt those numbers
3 at the time were reasonable inputs?

4 A. Yes.

5 Q. If they -- if you had not felt that, what
6 would you have done?

7 A. I would have had discussions with KCP&L and
8 had them provide additional information to show that that is
9 the right number, if I felt it was too low or too high. And
10 again, that's part of our job is to -- if we don't feel
11 comfortable with a number, we ask the company to provide
12 additional information to show that that's the right number
13 or change it, you know. That's what -- that's what we do.

14 Q. Do you want to look at Page 27 for me?
15 Exhibit 49.

16 A. I'm there, sorry.

17 Q. That's okay. Have you seen that page before?

18 A. Yes, I have.

19 Q. What does that tell you?

20 A. One of the things that the model does besides
21 pick the low cost is the timing of the units is critical
22 also. And this is -- is what KCP&L shows of the timing of
23 different units and how they come out. Obviously, like 2008
24 is not enough time to put a coal unit in, so there is no
25 dollars for coal in 2008.

1 As you can see, the timing issue, it goes from
2 2000 fine to 2010 and the dollars, you know, change a little
3 bit, but it kind of gives you an idea of where the range --
4 the best place to put that unit could be. And again, a
5 combined cycle is the same way, the dollars are there showing
6 the model -- you have the model put the coal unit in
7 operation in 2009 or 2010, 2011, 2012. And the model tells
8 you how it comes up cost-wise.

9 Q. Okay.

10 A. This is what this is showing.

11 Q. And these numbers, are they based on the MIDAS
12 runs?

13 A. Yes.

14 Q. And they show, as a conclusion on this page,
15 what?

16 A. I would say that it shows that the timing of
17 the coal varies -- varies little between 2009 and 2013,
18 although the lowest year appears to be 2012.

19 Q. And what does that mean, by the way? What's
20 the lowest year mean, is that the most efficient time to put
21 it in or what does that mean?

22 A. From the standpoint of timing, yes, that's the
23 most optimal time to put -- to have it operational -- to have
24 it operational, because it takes time to put it in.

25 Q. And when is it slated to be operational under

1 this stip?

2 A. 2010.

3 Q. Why did Staff go along with it being
4 implemented in 2010 as opposed to what appears to be more
5 optimal in 2012?

6 A. Well, as I said, these numbers are so close
7 together, I'm not sure it makes that much of a difference.
8 Obviously there's other issues timing-wise other than just
9 the cost associated with that timing. Again, we're back to
10 load growth. This doesn't take into consideration that the
11 load growth may need to be there in 2010 as opposed to 2013.

12 Q. Okay.

13 A. This is just cost-wise.

14 Q. And you don't know -- you didn't match those
15 numbers up, so you can't tell me how they fit together. Am I
16 right?

17 A. I did not do that calculation, no.

18 Q. Somebody else did that?

19 A. I'm sorry?

20 Q. Somebody else with Staff made that analysis?

21 A. I'm sorry?

22 Q. Matching the load up with the most optimal
23 time for new generation.

24 A. That's what the MIDAS model did.

25 Q. But who analyzed that result for Staff?