

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of: CASE NO. 2012-00503

PETITION AND COMPLAINT OF GRAYSON
RURAL ELECTRIC COOPERATIVE
CORPORATION FOR AN ORDER
AUTHORIZING PURCHASE OF ELECTRIC
POWER AT THE RATE OF SIX CENTS PER
KILOWATT HOUR UP TO 9.4 MEGAWATTS
OF POWER VS. A RATE IN EXCESS OF SEVEN
CENTS PER KILOWATT HOUR PURCHASED
FROM EAST KENTUCKY POWER COOPERATIVE
UNDER A WHOLESALE POWER CONTRACT AS
AMENDED BETWEEN GRAYSON RURAL ELECTRIC
COOPERATIVE CORPORATION AND EAST
KENTUCKY POWER COOPERATIVE, INC.

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DEPOSITION OF DARRIN ADAMS

On Friday, the 1st day of November, 2013, at the approximate hour of 1:20 p.m., at the Hampton Inn, located at 1025 Early Drive, Winchester, Kentucky, before me, Conalee Williamson, Court Reporter and Notary Public within and for the Commonwealth of Kentucky, appeared DARRIN ADAMS, Witness, who, being by me first duly sworn, gave his oral deposition in the causes pursuant to Notice of Counsel for the respective parties as hereinabove set forth. Said deposition is being taken for the purpose of discovery and any and all other purposes permitted by the Kentucky Rules of Civil Procedure.

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I N D E X

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EXAMINATION OF THE WITNESS:

Darrin Adams

Examination by Mr. Scott

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EXHIBITS:

None

Reporter's Certification - Page 13
Errata Sheet - None
Signature Page - Waived

1 A. Since June of 2004.

2 Q. Okay. What do you do there?

3 A. I'm the manager of transmission planning.

4 Q. Okay. What does a manager of
5 transmission planning do?

6 A. We identify problems on our transmission
7 system, and we also are involved in the planning
8 for our distribution delivery points for our
9 member system. So, we go down to that level. We
10 identify the problems. We identify what the
11 solutions are, what's needed to make sure we're
12 delivering power from our generators to our
13 members reliably.

14 Q. Okay. When you say "problems," would
15 that include like some line got broken or some
16 other thing about just the method of delivery?

17 A. Yes. It can be a wide range of things.
18 It can be problems with the condition of
19 facilities. It can be problems with overloading
20 facilities; we're delivering too much power across
21 a certain line or transformer versus what it's
22 rated to carry. It can be voltage problems. So,
23 it encompasses a pretty large array of problems.
24 But, generally, if there's an issue on our

1 transmission system, it's going to be my
2 department that's looking at what we need to do to
3 solve it.

4 Q. What's line loss?

5 A. Line losses are when you deliver power
6 across lines and transformers, you lose a certain
7 amount of that energy as heat, sound, etcetera.
8 So, that's where your losses come from. So,
9 you're generating a certain amount at your
10 generators, but ultimately you deliver less to the
11 end consumer because --

12 Q. (Interposing) What's your educational
13 background?

14 A. I have a Bachelor of science of
15 electrical engineering from the University of
16 Kentucky.

17 Q. And what are the factors that affect line
18 loss?

19 A. Well, the impedance of the line. So, how
20 much resistance you have to the flow of power, and
21 then the current that's being carried has an
22 impact on what the losses ultimately are.

23 Q. Are you able to predict, based upon
24 knowledge that you would have of the system and

1 its condition, are you able to predict pretty
2 accurately what you expect the line loss to be?

3 A. We have to make assumptions on what the
4 conditions are, but if we make those assumptions
5 and if we have a pretty good idea that those
6 assumptions are accurate, yes, we can make a
7 pretty good prediction.

8 Q. And do you do that?

9 A. Yes.

10 Q. What do you know about the setup of
11 Grayson Rural Electric's distribution system,
12 where the substations are and how the power gets
13 distributed? What do you know about it?

14 A. I'm sorry. When you say what do I know,
15 as far as what aspect?

16 Q. Grayson's -- you know, the substations
17 that East Kentucky has that serve Grayson's --

18 A. (Interposing) Right.

19 Q. Do you know what they are, where they
20 are?

21 A. I'm familiar with what they are and, in
22 general, where they are. I haven't been to most
23 of them, so I couldn't tell you specifically.

24 Q. Have you ever been to the Leon

1 substation?

2 A. I have, yes.

3 Q. All right. Did you see me up there? I
4 live right next to it.

5 A. I don't believe so.

6 Q. Well, I live right there next to the Leon
7 substation. Tell me how power gets to that Leon
8 substation.

9 A. We have four different transmission lines
10 coming into that substation. Three are East
11 Kentucky Power lines and one is a line that
12 connects to AEP's system. So, the power is
13 flowing in on those lines.

14 Now, of course, you have generation sources.
15 East Kentucky has generators, AEP, other
16 companies. So, the power is initiating from those
17 generators. But ultimately it travels through the
18 transmission system down to the 69 KV level, which
19 all the lines coming into Leon are at 69 KV. And
20 then it is delivered into Leon. And the amount of
21 flow again is based on the demand on the system.
22 So, you know, typically the hotter the day or, in
23 the winter, the colder the day, the higher the
24 demand, so the more power is going to flow into

1 that area.

2 Q. And that's determined by East Kentucky in
3 its forecast that it does the day before or two
4 days before or whenever it determines how much
5 power they think it needs?

6 A. We have a daily forecast that is used in
7 part to determine what we expect the need to
8 generate and/or purchase off-system.

9 Q. So, we've got three transmission lines
10 coming into Leon that are East Kentucky Power's
11 transmission lines, and a fourth transmission line
12 that comes into Leon that's AEP's?

13 A. Let me back up. I think I misstated
14 that. We have two transmission lines that come
15 into our Leon station. AEP has two that comes
16 into theirs. And then there's a tie between the
17 two. So, there's actually two East Kentucky lines
18 that comes in.

19 Q. Two East Kentucky and two AEP?

20 A. Yes.

21 Q. And would, similarly, there be, at other
22 substations on the Grayson system, at, let's say,
23 Pelfry or Argentum or any other, a possibility
24 that there would be East Kentucky transmission

1 lines coming in and possibly an AEP line?

2 A. Yes.

3 Q. And then maybe in other distribution
4 co-ops there could be an East Kentucky
5 transmission line coming in and a KU line?

6 A. In some locations, yes.

7 Q. Okay. So, that power, when it is
8 originated, is originated from East Kentucky's
9 power plant at Spurlock or Dale or Cooper or Hydro
10 or something, or could be generated from some
11 generating plant in Pennsylvania or somewhere,
12 right?

13 A. I'm not sure what you're asking.

14 Q. I'm asking you if that's accurate or not,
15 what I just said.

16 A. Well, I'm sorry, I didn't understand the
17 question.

18 Q. Okay. Fair enough. When that power
19 comes in -- let's stick with Leon, then -- those
20 two East Kentucky transmission lines that come to
21 Leon, the power that is originated that gets on
22 there can originate from where? Where would that
23 originate?

24 A. Well, generally, it's going to come from

1 sources that are closer. So, you know, Leon, for
2 instance, you've got Spurlock in the general
3 vicinity. You've got AEP generators in the
4 general vicinity. So, the flows are all
5 determined by physics. So, it's the path of least
6 resistance. So, generally the closer the load is
7 to a specific generator, the more power is going
8 to flow from that generator to --

9 Q. (Interposing) Because electricity is
10 going to go wherever it goes?

11 A. Exactly.

12 Q. When all that power comes into Leon from
13 wherever, it's going to be paid for by Grayson
14 Rural Electric paying East Kentucky Power,
15 correct?

16 A. Grayson is billed based on what flows
17 through the distribution transformer at those
18 delivery points.

19 Q. Formerly did East Kentucky have
20 utilization of the AD hub?

21 A. I'm not familiar with --

22 Q. (Interposing) You haven't been there
23 long -- how long did you say you've been there?

24 A. I've been there since June of 2004, but I

1 haven't been involved on the power supply side.

2 Q. All right. So, is there power then that
3 is utilized by the various distribution co-ops --
4 well, strike that.

5 MR. SCOTT: I believe that's all I
6 have.

7 MR. CRAWFORD: I don't have any
8 questions.

9 MR. OSWALD: No questions.

10 (The deposition of Darrin Adams was
11 concluded at 1:25 p.m.)

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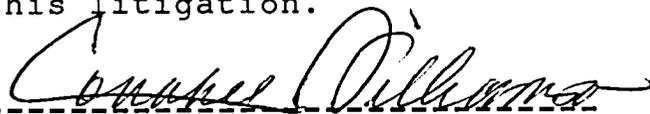
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KENTUCKY POWER COOPERATIVE, INC.

CERTIFICATION OF THE COURT REPORTER

I, Conalee Williamson, Stenotype Reporter
and Notary Public within and for the Commonwealth
of Kentucky, do hereby certify that the foregoing
twelve (12) pages is a true and correct transcript
of the proceedings had in this matter, as
hereinabove set forth, and that I have no interest
of any nature whatsoever in the ultimate
disposition of this litigation.



Conalee Williamson
Stenotype Reporter
Notary Public

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