

1 STATE OF MISSOURI
PUBLIC SERVICE COMMISSION
2
TRANSCRIPT OF PROCEEDINGS
3
4 Evidentiary Hearing
5 March 22nd, 2017, 8:30 a.m.
6 Missouri Public Service Commission
7 Jefferson City, Missouri
8 VOLUME 14
9 In the Matter of the Application of Grain
Belt Express Clean Line, LLC, for a
10 Certificate of Convenience and Necessity
Authorizing it to Construct, Own, Operate,
11 Control, Manage and Maintain a High
Voltage, Direct Current Transmission Line
12 and an Associated Converter Station
Providing an Interconnection on the
13 Maywood-Montgomery 345kv Transmission Line
14 FILE NO. EA-2016-0358
15
MICHAEL BUSHMANN, PRESIDING
16 SENIOR REGULATORY LAW JUDGE
17 DANIEL Y. HALL, Chairman
18 COMMISSIONERS
19 WILLIAM P. KENNEY
STEPHEN STOLL
20 SCOTT RUPP
MAIDA COLEMAN
21
22
23 REPORTED BY:
MARY LYNN CUSHING, CSR
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1 JUDGE BUSHMANN: Let's go on the
2 record. Good morning. Today is March 22nd, 2017.
3 It's day three of the evidentiary hearing in File No.
4 EA-2016-0358.

5 Before we go to our first witness, I
6 just want to talk about administrative notes about
7 what's going to happen today. The Commission does
8 have an agenda meeting at noon, and there's a
9 possibility that could be somewhat lengthy, so I'm
10 anticipating that we'll break a little before noon
11 and probably have until 1:30 before we start up
12 again. That would be my guess.

13 And other than that, I don't think
14 that there are any witnesses that have to appear
15 today. Unless the parties tell me otherwise, I'll
16 assume that we will just go with the list in the
17 order of witnesses that we have scheduled for today.

18 I think that's all. The parties have
19 anything else they want to bring up at this point?
20 All right. I think that we are ready for our first
21 Grain Belt witness.

22 MR. HARDEN: Grain Belt Express calls
23 Richard Roddewig.

24 (Witness sworn in.)

25

1 DIRECT EXAMINATION

2 BY MR. HARDEN:

3 Q. Will you state your name for the
4 record and will you spell it for the court reporter?

5 A. My name is Richard Roddewig,
6 R-O-D-D-E-W-I-G.

7 Q. Thank you. And by whom are you
8 employed, sir?

9 A. I'm employed by Clarion Associates.

10 Q. And on whose behalf have you submitted
11 testimony in this case?

12 A. On behalf of Clean Line Energy.

13 Q. And you are the same Richard Roddewig
14 who wrote and submitted surrebuttal testimony as well
15 as the corresponding schedule which is your expert
16 report in this case?

17 A. That's correct.

18 Q. Do you have any corrections to that
19 testimony --

20 A. I do.

21 Q. -- or the report at this time?

22 A. I do, I have two. In my expert
23 report, at page 15, paragraph 21, the 5th line down,
24 the word "not" should be inserted between the word
25 "farmland" and "right-of-way."

1 MR. AGATHEN: I'm sorry, could you
2 repeat that?

3 A. Page 15, paragraph 21, 5th line down.
4 The word "not" is missing, and it should be inserted
5 between the word "farmland" and the words "on the
6 right-of-way."

7 And at page 44, paragraph 98B, second
8 line, towards the end of that line it says, "a linear
9 regression with the outlier." That should read, "a
10 linear regression without the outlier."

11 Q. (By Mr. Harden) That's 98B?

12 A. Correct.

13 Q. Page 44?

14 A. Correct.

15 Q. And are those all the corrections that
16 you have?

17 A. Yes.

18 Q. With those corrections, are you -- is
19 your testimony and expert report -- are those true
20 and accurate, as when you submitted those?

21 A. Yes.

22 MR. HARDEN: With that, Grain Belt
23 Express submits Exhibit -- what's marked as 120,
24 surrebuttal testimony of Richard Roddewig.

25 JUDGE BUSHMANN: Any objections to

1 Exhibit 120?

2 MR. AGATHEN: For the court reporter,
3 my name is Paul Agathen, representing the MLA. This
4 is a new objection. It was not submitted in advance
5 in writing, but we object to page 24 of the
6 surrebuttal, lines 2 to 7. If you're there, the
7 testimony there recounts what a colleague of
8 Mr. Roddewig supposedly told him about what a third
9 party told the colleague. So we've really got
10 hearsay on hearsay here, and we're unable to cross
11 either of those two parties, and we ask it be
12 stricken.

13 JUDGE BUSHMANN: Tell me again the
14 page and line numbers?

15 MR. AGATHEN: Page 24 of the
16 surrebuttal, lines 2 through 7.

17 JUDGE BUSHMANN: Any response by Grain
18 Belt?

19 MR. HARDEN: So two responses. First,
20 I would need to, to a certain extent, look further
21 into this, but I believe there's a hearsay exception
22 to certain components of expert witness testimony
23 where they are allowed to rely upon hearsay if it
24 helps in the formation of their expert opinion. That
25 will be my first response.

1 Second, simply it goes to the weight
2 that the Commission can put on these lines of his
3 testimony, and I think that it's within the
4 Commission's discretion to understand that this is
5 exactly what it purports to be and this is where his
6 expert testimony, in a very limited part of this,
7 came from so.

8 JUDGE BUSHMANN: Anything further,
9 Mr. Agathen?

10 MR. AGATHEN: No, Your Honor.

11 JUDGE BUSHMANN: I think the objection
12 could go to the weight not the admissibility, so I'm
13 going to overrule it. Any other objections to that
14 exhibit?

15 MR. AGATHEN: I have none.

16 JUDGE BUSHMANN: That is received into
17 the record.

18 Further cross by MJMEUC?

19 MR. HEALY: No questions, Your Honor.

20 JUDGE BUSHMANN: Wind On the Wires?

21 MR. BRADY: No questions, Your Honor.

22 JUDGE BUSHMANN: Infinity Wind Power?

23 MS. PEMBERTON: No questions, Judge.

24 JUDGE BUSHMANN: I have to see which
25 attorneys we have here today. MIEC?

1 MR. MILLS: No questions, Your Honor.
2 JUDGE BUSHMANN: Commission staff?
3 MS. MYERS: No questions, Judge.
4 JUDGE BUSHMANN: Rockies Express?
5 MS. GIBONEY: No questions, Judge.
6 JUDGE BUSHMANN: Show-Me Landowners?
7 MR. LINTON: No questions, Your Honor.
8 JUDGE BUSHMANN: Missouri Landowners?
9 MR. AGATHEN: Yes, Your Honor. Thank
10 you.

11 CROSS EXAMINATION

12 BY MR. AGATHEN:

13 Q. Good morning, Mr. Roddewig.

14 A. Good morning, Mr. Agathen.

15 Q. You work for a company named Clarion
16 Associates, correct?

17 A. That's correct.

18 Q. And your office is located in Chicago?

19 A. We have multiple offices, but I'm in
20 the headquarters in Chicago.

21 Q. How many different offices does your
22 company have?

23 A. We have six affiliated offices.

24 Q. How many employees does your company
25 have?

1 A. Between the six offices, I would
2 estimate 40 employees.

3 Q. Were you one of the founders of
4 **Clarion and Associates?**

5 A. Yes, I was.

6 Q. And you're currently its president?

7 A. Yes, I am.

8 Q. And you're an attorney as well, right?

9 A. I am, but I no longer practice law.

10 Q. Approximately how many other
11 **administrative cases have you testified in, either in**
12 **person or through deposition?**

13 A. I would estimate I've given
14 depositions in approximately 50 cases or thereabouts,
15 and I've testified in either administrative hearings
16 or in actual court proceedings perhaps 30 times, 30
17 or 35 times.

18 Q. And I assume during the course of all
19 **of those administrative hearings and depositions, you**
20 **have represented clients who are opposing the**
21 **construction of a transmission line on the ground**
22 **that it's going to devalue the property?**

23 A. I'm not sure I understand the question
24 because only some of the times that I've testified
25 involved transmission line proposals.

1 Q. Correct. What I'm after is how many
2 cases have you testified in opposition to the
3 construction of a transmission line on the ground
4 that it's going to devalue a nearby property?

5 A. I guess I wouldn't characterize my
6 testimony as being in opposition. My testimony has
7 always been as a professional real estate appraiser,
8 is there going to be an impact or not.

9 Q. Have you represented clients who are
10 making that argument that the transmission line is
11 going to devalue property?

12 A. Not that I can recall.

13 Q. How much do you get paid for your work
14 on an hourly basis on this case?

15 A. I charge \$575 an hour.

16 Q. How many others at your company
17 assisted you in preparing your testimony on your
18 expert report?

19 A. There were two principle colleagues
20 who worked on it, and perhaps there was some minor
21 research done by two others.

22 Q. And how much will you and your firm be
23 paid by Grain Belt or Clean Line to prepare the
24 testimony and expert report in this case, including
25 your time?

1 A. I haven't added up my time since we
2 submitted our expert report and testimony, but up to
3 the end of the submission of our report, the billings
4 were about \$100,000 or \$105,000.

5 Q. **And then you'll have to add in the**
6 **time that you're spending here, obviously?**

7 A. Correct.

8 Q. **I assume you're familiar with the**
9 **depiction of the Grain Belt line which was submitted**
10 **as Schedule SN-3 by Mr. Nordstrom in this case?**

11 A. I've looked at the maps. I'm not sure
12 I've seen that specific submission, but I have been
13 provided with maps of the proposed right-of-way.

14 MR. AGATHEN: Judge, I'm going to hand
15 him a copy of the exhibit that's been circulated.

16 Q. **(By Mr. Agathen) Have you seen that**
17 **depiction?**

18 A. Not that I can recall.

19 MR. AGATHEN: That's all of the
20 questions I have, Your Honor.

21 JUDGE BUSHMANN: Any questions by
22 Commissioners?

23 COMMISSIONER STOLL: I have no
24 questions, Your Honor.

25

1 EXAMINATION

2 BY COMMISSIONER HALL:

3 Q. Good morning.

4 A. Good morning, Mr. Chairman.

5 Q. On page 7 of your surrebuttal
6 testimony you reference an article entitled Power
7 Lines and Property Prices.

8 A. Yes, sir.

9 Q. What was the conclusion of that
10 article?

11 A. That article is attached to my expert
12 report, and it summarizes the research that we had
13 done in the past related to the published literature,
14 as well as our own research at Clarion Associates
15 related to the impact of power lines on property
16 prices and value. It's similar to my conclusion in
17 this case.

18 The literature -- more than half of
19 the published literature in the real estate appraiser
20 profession indicates that there's no impact on
21 property prices. The rest of the literature,
22 approximately half of the literature, indicates that
23 when there are impacts, they are typically between 1
24 or 2 percent and 10 percent.

25 Our particular research that's

1 summarized in that article indicates that in the
2 single family home, suburban areas that we've
3 studied, we haven't been able to find overall average
4 impacts on prices from proximity to power lines. In
5 some specific situations we have found impacts due to
6 views of power lines or of the towers themselves from
7 particular pieces of property.

8 The article also discusses our
9 farmland research and the work that we did in
10 researching farmland prices in Christian County,
11 Illinois, where again we could find no adverse
12 impact.

13 Well, we found a small adverse impact
14 of an average of about 2 percent on farmland prices
15 in Christian County, Illinois, due to the presence of
16 power lines.

17 Q. Did the article explain the
18 discrepancy between the perception of an impact of
19 transmission lines on property value to the -- to the
20 actual impact of transmission lines on property
21 values based on your research?

22 Q. Yes. It does discuss that in terms of
23 standards of professional practice of the appraisal
24 profession which indicates real estate appraisers,
25 licensed real estate appraisers, are required to look

1 at actual prices paid, which will reflect how the
2 perceptions in the market as a whole actually play
3 out in the real world of real estate prices and
4 values.

5 Q. But does it get into explanation for
6 why there is a perception of an impact of
7 transmission lines, which I assume you can't debate
8 there is a popular conception that it would impact
9 property values, and if you did a poll of Missourians
10 or Americans, I would assume that polling would show
11 that the perception is that it would affect property
12 values. So why is it that that perception is
13 inaccurate, or is that beyond the scope of your
14 research?

15 A. In terms of the surveys, it would be
16 beyond the scope of my research because I'm not a
17 survey expert. I think we, as real estate
18 appraisers, find this happening in lots of areas of
19 real estate valuation. Different parts of different
20 markets have perceptions of why they do or do not
21 like a particular attribute of a property, and what
22 then we, as real estate appraisers, have to do is,
23 yes, we understand there are perceptions, and I will
24 agree with you that there are significant concerns
25 among much of the general public about power lines,

1 but our job as real estate appraisers is to see what
2 actually happens then when those properties transact
3 in the marketplace.

4 Q. So bottom line is why that perception
5 exists and why it doesn't manifest itself in a
6 reduction of property values is beyond the scope of
7 your research?

8 A. I will have to say yes and no to that,
9 Commissioner Hall, because my experience indicates
10 that there are also people who are not as concerned
11 as others about proximity to power lines, and those
12 people then are still in the marketplace to buy
13 properties that are either adjacent to or crossed by
14 property lines.

15 And let me give you a personal
16 example. My sister was selling her house, and she
17 was looking at a townhouse on the end of a row of
18 townhouses adjacent to an HVTL line in the Chicago
19 suburban area. And she called me up and asked me to
20 come look at the townhouse with her. And I went out
21 and looked at it and I said, Well, Geri, you've got a
22 power line right next to you, and she goes, Well,
23 yeah, I see that. And I said, "Are you aware of the
24 studies of possible health effects related to power
25 lines? And she said, Yeah, I am, but that doesn't

1 concern me. And I said, Well, what about the
2 aesthetics? She said, When I look out my side
3 window, I don't see the lines, I see open space. If
4 I look out the back window out on my patio, I do see
5 the tower in the distance, but it doesn't bother me.

6 So there are people that think that
7 way, and in that particular case, I checked the price
8 that she was being offered compared to the other
9 prices in that row of townhouses, and it wasn't being
10 discounted for the power lines.

11 So there are people like that in the
12 marketplace, and they are the ones who buy the
13 properties, who might not be affected.

14 **Q. Does the article that we were**
15 **discussing or your research generally take into**
16 **account timeframe of purchase so that maybe there's**
17 **an impact one year, two years out, but maybe not five**
18 **or ten years out?**

19 **A.** That's a good question, and if you
20 look at the study that we did that's summarized in
21 our -- both in the article and also in our report in
22 South Elgin, where we show a timeline of prices in a
23 particular subdivision. Right after a new power line
24 was put into service, there was a temporary impact on
25 prices in the first year or two after that power line

1 went on -- went in, and then in the third year the
2 prices went back up to the level that they had been
3 before.

4 So I would agree with you that when I
5 have seen impacts in the work that I have done, often
6 there they are temporary, and then they dissipate or
7 they go away.

8 Q. And are the impacts more noticeable in
9 -- more or less noticeable in rural areas versus
10 urban areas?

11 Q. The research that I did in Christian
12 County on farmland value showed an average impact of
13 about 2 percent. I think one of the big differences
14 is that in farmland areas often there's an annual
15 payment for the easement or some kind of maintenance
16 payment that also is in the marketplace that's at
17 work in the prices that are paid.

18 You don't typically have that in the
19 residential neighborhoods where easements are taken.
20 After the fact there is no ongoing payment to the
21 owners of the homes in the subdivisions. So there
22 are some differences.

23 So that's about the best that I can
24 do. Overall the types of analyses we do are the same
25 whether we're looking at suburban areas or rural

1 agriculture areas.

2 Q. Thank you.

3 EXAMINATION

4 BY COMMISSIONER STOLL:

5 Q. Good morning. Actually, I do have a
6 question. Let's see. Have you studied a line that
7 is as -- a tower that is as tall as the ones that are
8 proposed here in your studies regarding the price of
9 agricultural land?

10 Q. I would have to look at my report to
11 see how tall the towers were in Christian County,
12 Illinois. I know it was -- I think they were 138kV
13 lines rather than 345, so likely the towers were not
14 as tall.

15 In the suburban studies that I've done
16 in the Chicago metro area, I did look at some lines
17 that were 345kV lines that had tall towers similar in
18 size to the ones proposed here.

19 Q. Okay. So 345kv tower would be very
20 similar to the one that's proposed here in your
21 experience?

22 A. The ones that -- again, I'd have to
23 refresh my recollection. One of the areas in the
24 Chicago metro area that had lattice structures and
25 was 345kV, and the other one was a monopole

1 structure, I believe, with four arms, but I don't
2 recall the exact height without looking at my report.

3 Q. So you do believe that your report
4 looked at towers of this size?

5 A. Yes.

6 COMMISSIONER STOLL: Okay. I think
7 that's all of the question I have for right now.

8 EXAMINATION

9 BY COMMISSIONER KENNEY:

10 Q. Good morning. I apologize for coming
11 in late and asking questions that -- because I wasn't
12 listening, but I'm curious on this factor. I know
13 you mentioned in your Christian County study of a
14 range moving 2 to 6 percent variation in prices, 2
15 percent lower in some areas, and I saw up to 6
16 percent, is that right, or am I wrong on that?

17 A. The overall averaging was 2 percent,
18 but you're right, it did range depending whether we
19 were using the medium or the average it went up.

20 Q. What did you find in suburban areas?
21 What was the range, the difference?

22 A. The ones that I've looked at showed no
23 overall impact on the long-term, but one of the
24 studies showed a temporary impact of approximately 10
25 percent.

1 Q. I find that just hard to even fathom
2 because I'm a real estate developer by trade, and
3 that's -- everything I have looked at, it's blighted.
4 I can show you areas that -- around a tower going in,
5 or whether it's a cell tower or any other line.
6 There is very little construction around those. No
7 one wants to buy those areas. I've been in real
8 estate since 1991 in the Kansas City area. So when I
9 heard you say that, I just -- I can't find that at
10 all. Maybe in a suburban area, maybe in an area like
11 Chicago where you can't find another place -- I mean
12 you have to go so far to get a place to live.

13 A. Well, let me respond to that,
14 Commissioner, because one of the studies that we did
15 is in a farmland area, northwest suburbs of Chicago
16 where there still was a lot of corn and soybean land
17 which was being planned for planned developments, and
18 the Coventry or Lake of the Hills Study in our report
19 deals with a townhouse project that went in
20 immediately after a new line was put in, and we
21 couldn't find any impacts. And townhouses are pretty
22 fungible. You can look at the exact same unit next
23 to the line as to a unit across the road.

24 Q. Sure.

25 A. Now, I will grant you --

1 **Q. Are the town homes rentals or are they**

2 **--**

3 **A. No, they were for sale, and the prices**
4 **per square foot came out --**

5 **Q. Were the same?**

6 **A. -- very, very close.**

7 Now, I have found that in projects
8 like that the developers will often offer a discount
9 when they are marketing, the original developer,
10 because they are concerned about whether people will
11 buy the townhouses next to the power line. And one
12 of the studies in here, the discount that was offered
13 was about 2 percent, 3 percent. It was about \$3,500
14 per townhouse, and they were able to sell the
15 townhouses. And then I guess my last comment to you
16 is I will agree with you that if you have a view of a
17 tower outside your living room or outside your
18 kitchen and it's immediately there, I have found
19 impacts in those situations, but when I look in the
20 same subdivision at homes that don't have a view of
21 the tower, but maybe are oriented in a way that they
22 look under the lines across the open space, I don't
23 see any impacts most of the time. Very seldom.

24 **Q. I apologize if I asked a question that**
25 **had already been answered. Thank you.**

1 JUDGE BUSHMANN: Cross, based on bench
2 questions?

3 MR. AGATHEN: I do, Your Honor. Paul
4 Agathen. In follow-up --

5 JUDGE BUSHMANN: Let me go through the
6 list first.

7 MR. AGATHEN: I'm sorry.

8 JUDGE BUSHMANN: And I'll get to you
9 in just a second.

10 MR. AGATHEN: I apologize.

11 JUDGE BUSHMANN: That's fine.

12 Questions by MJMEUC?

13 MR. HEALY: I concede the floor to
14 Mr. Agathen, Judge.

15 JUDGE BUSHMANN: Wind On the Wires?

16 MR. BRADY: I have a couple questions.

17 CROSS EXAMINATION

18 BY MR. BRADY:

19 Q. Good morning, sir. My name is Sean
20 Brady with Wind on the Wires. You mentioned you had
21 done -- you had reviewed property values in Lincoln
22 Hills in South Elgin relative to transmission lines?

23 A. Correct.

24 Q. Do you recall the size of those
25 transmission lines?

1 A. I'd have to look at the report. In
2 both of those places I know they were not 345kv's,
3 they were smaller, 138's, I think.

4 **Q. Was the one in South Elgin the Grand**
5 **Prairie Gateway?**

6 A. Yes, I believe so.

7 MR. BRADY: Okay. Thank you. That's
8 all I have.

9 JUDGE BUSHMANN: Infinity Wind?

10 MS. PEMBERTON: No questions, Judge.

11 JUDGE BUSHMANN: MIEC?

12 MR. MILLS: No questions.

13 JUDGE BUSHMANN: Staff?

14 MS. MYERS: No questions, Judge.

15 JUDGE BUSHMANN: Rockies Express?

16 MS. GIBONEY: No questions, Judge.

17 JUDGE BUSHMANN: Show-Me Landowners?

18 MR. LINTON: No questions.

19 JUDGE BUSHMANN: Missouri Landowners?

20 MR. AGATHEN: I do, Your Honor.

21 REXCROSS EXAMINATION

22 BY MR. AGATHEN:

23 **Q. Just a follow-up question to questions**
24 **from Commissioner Stoll. He was asking you about the**
25 **relative size of the poles in this case vis-a-vie a**

1 different line that you have studied. Do you recall
2 that?

3 A. I do.

4 Q. What are the highest heights of the
5 towers being proposed in this case by Grain Belt?

6 A. I don't remember specifically,
7 Mr. Agathen.

8 MR. AGATHEN: Thank you.

9 JUDGE BUSHMANN: Redirect?

10 REDIRECT EXAMINATION

11 BY MR. HARDEN:

12 Q. I just have one which goes to
13 Commissioner Kenny's line of questioning. So
14 somewhat putting aside the transmission, in those
15 suburban development areas, in your expert
16 experience, what has been the largest variable to the
17 fair market value of those property?

18 A. In terms of the percentage impact I
19 found when I found impact?

20 Q. Right.

21 A. You're testing my memory. I would
22 have to look at the individual data in my study. I
23 don't remember.

24 MR. HARDEN: Okay. That's fine.

25 Nothing further.

1 JUDGE BUSHMANN: Mr. Roddewig, that
2 completes your testimony. You may step down, sir.

3 THE WITNESS: Thank you, Your Honor.

4 MR. ZOBRIST: We would call Prescott
5 Hartshorne.

6 (Witness sworn in.)

7 DIRECT EXAMINATION

8 BY MR. ZOBRIST:

9 Q. Please state your name.

10 A. Prescott Hartshorne.

11 Q. Where you employed, sir?

12 A. At National Grid.

13 Q. And what is your position there?

14 A. I'm a Director of U.S. Business
15 Development.

16 Q. And did you prepare direct testimony
17 in this case which has been marked as Exhibit 110?

18 A. Yes, I did.

19 Q. Do you have any corrections to your
20 direct testimony?

21 A. No, I do not.

22 Q. If I were to ask you the questions set
23 forth there, would your answers be as contained in
24 Exhibit 110?

25 A. Yes, they would.

1 Q. And you told me you have no
2 corrections, correct?

3 A. That's correct.

4 MR. ZOBRIST: Judge, I offer Exhibit
5 110, the direct testimony of Prescott Hartshorne at
6 this time.

7 JUDGE BUSHMANN: Any objections?
8 Hearing none, it's received into the record.

9 First cross-examination would be by
10 MJMEUC.

11 MR. HEALY: No questions, Judge.

12 JUDGE BUSHMANN: Wind on the Wires?

13 MR. BRADY: No questions.

14 JUDGE BUSHMANN: Infinity?

15 MS. PEMBERTON: No questions, Judge.

16 JUDGE BUSHMANN: MIEC?

17 MR. MILLS: No questions.

18 JUDGE BUSHMANN: Commission staff?

19 MS. MYERS: No questions.

20 JUDGE BUSHMANN: Rockies Express?

21 MS. GIBONEY: No questions, Judge.

22 JUDGE BUSHMANN: Show-Me Landowners.

23 MR. LINTON: No questions.

24 JUDGE BUSHMANN: Missouri Landowners?

25 MR. AGATHEN: I do, Your Honor, but

1 they deal with a document marked Highly Confidential
2 by Grain Belt.

3 JUDGE BUSHMANN: So we will go into
4 closed session. Anybody in the audience who is not
5 authorized to view highly confidential information
6 will have to step outside for a few minutes.

7 MR. AGATHEN: While they are doing
8 that, Your Honor, I would like to distribute a copy
9 of what's been marked as Exhibit 371.

10 (The following in-camera testimony is
11 from Witness Prescott Hartshorne.)

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1 JUDGE BUSHMANN: We are back in open
2 session now. One thing, Mr. Agathen, do you intend
3 to offer that exhibit?

4 MR. AGATHEN: I'm sorry, Your Honor.
5 Yes.

6 JUDGE BUSHMANN: So 371-HC has been
7 offered. Is there any objection?

8 MR. ZOBRIST: No objection.

9 JUDGE BUSHMANN: It will be entered
10 into the record.

11 Are there any questions by
12 Commissioners?

13 EXAMINATION

14 BY COMMISSIONER HALL:

15 Q. Good morning.

16 A. Good morning.

17 Q. Looking over pages 2 and 3 of your
18 direct, where there's a discussion about the business
19 of National Grid, I'm trying to understand -- well,
20 let me start over.

21 How much business does National Grid
22 have in connection with participant-funded
23 transmission projects? Is it a core of your business
24 or not?

25 A. I wouldn't characterize it as a core.

1 Our core is utility business.

2 Q. Have you invested in other
3 participated-funded transmission projects?

4 A. Yes.

5 Q. And what are -- other than Clean Line
6 projects?

7 A. I'm fairly certain, but I couldn't
8 name them if you're going there.

9 Q. Could you provide a --
10 Okay. Thank you.

11 COMMISSIONER STOLL: No questions,
12 Your Honor.

13 THE COURT: Recross based on bench
14 questions? MJMEUC?

15 MR. HEALY: No questions, Judge.

16 JUDGE BUSHMANN: Wind on the Wires?

17 MR. BRADY: No questions.

18 JUDGE BUSHMANN: Infinity Wind?

19 MS. PEMBERTON: No questions.

20 JUDGE BUSHMANN: MIEC?

21 MR. MILLS: No thank you.

22 JUDGE BUSHMANN: Commission staff?

23 MS. MYERS: No questions, Judge.

24 JUDGE BUSHMANN: Rockies Express?

25 MS. GIBONEY: No questions, Judge.

1 JUDGE BUSHMANN: Show-Me Landowners?

2 MR. LINTON: No questions.

3 JUDGE BUSHMANN: Missouri Landowners?

4 MR. AGATHEN: No questions, Your
5 Honor.

6 JUDGE BUSHMANN: Redirect by Grain
7 Belt?

8 MR. ZOBRIST: Just a couple questions.
9 I think I can ask this question without going in
10 camera.

11 REDIRECT EXAMINATION

12 BY MR. ZOBRIST:

13 Q. Would you take a look at the exhibit
14 that Mr. Agathen showed you? With regard to the
15 funding numbers that you were unable to identify
16 specifically, could those have represented -- you say
17 you weren't sure if they represented National Grid.
18 Could these represent the funding by all the
19 investors in Clean Line Energy Partners?

20 MR. AGATHEN: Your Honor, I'm going to
21 object. The witness said he didn't know what those
22 numbers were.

23 JUDGE BUSHMANN: Overruled.

24 A. I would say that's a reasonable
25 assumption, but I wasn't sure so I responded.

1 Q. (By Mr. Zobrist) Okay. Thank you.
2 Now Mr. Agathen asked you about certain of the
3 milestones contained in the document that were not
4 reached. What is National Grid's attitude in general
5 towards milestones that it sets and milestones that
6 are not hit?

7 A. They're a business metric. They're
8 not cast in stone certainly. They are development
9 projects. We watch milestones and if we have a
10 metric that are not hit, we reassess and move on.

11 Q. Did you assess the milestones that
12 Grain Belt Express has not hit in this case?

13 A. Yes.

14 Q. And what has been the assessment of
15 National Grid with regard to those missed milestones?

16 A. They are part of the development
17 process. They're unfortunate that we missed the
18 milestones. We took steps to improve the business
19 since then, and we have moved on.

20 Q. Now, Chairman Hall asked you about
21 participant-funded projects. You stated that you
22 couldn't name any. Do you know where those projects
23 are located?

24 A. No.

25 Q. Okay. With regard to participant

1 **funding of HVDC projects like this, has National Grid**
2 **been involved in other HVDC projects?**

3 A. Yes, it has.

4 Q. **And if you can describe those for the**
5 **Commission, please do.**

6 A. National Grid is second only to China,
7 the largest developer and owner of HVDC projects in
8 the world. We have two projects in operation in the
9 U.K. connecting to Europe, and approximately five in
10 development, in various stages of development to do
11 the same.

12 We have a project that's been in
13 existence since 1990 that interconnects Canada with
14 the U.S., and we have another HVDC project in
15 development that connects the New York ISO with ISO
16 New England.

17 Q. **One more question with regards to the**
18 **missed milestones. What is National Grid's position**
19 **with regard to the Grain Belt Express project in**
20 **light of its current status?**

21 A. We're still in favor of it. We still
22 think it's a good project. We think they have made
23 substantial progress since the last regulatory
24 submission in Missouri, and we're inspired to follow
25 it.

1 MR. ZOBRIST: Nothing further, Judge.

2 JUDGE BUSHMANN: Thank you for your
3 testimony, sir. You may be excused.

4 MR. ZOBRIST: Judge, our next witness
5 is Edward Pfeiffer.

6 (Witness sworn in)

7 DIRECT EXAMINATION

8 BY MR. ZOBRIST:

9 Q. Please state your name.

10 A. Edward Pfeiffer.

11 Q. And by whom are you employed?

12 A. Quanta Technology.

13 Q. What is your position at Quanta
14 Technology?

15 A. I'm an Executive Advisor.

16 Q. Now, in this case did you prepare
17 direct testimony which has been marked as Exhibit
18 117, surrebuttal testimony which has been marked as
19 Exhibit 118?

20 A. Yes, I did.

21 Q. Do you have any corrections to either
22 of those pieces of testimony?

23 A. Two minor corrections. In my direct
24 testimony on page 7, line 4, there's a -- the
25 reference is SPP-North. It should just be SPP. And

1 in Schedule ECP-4, on page 1, under the section
2 marked External Hydrol, it references Schedle ECP2-1.
3 It should just be ECP-1. Hopefully that's it.

4 Q. If I were to ask you the questions set
5 forth in Exhibits 117 and 118, would your answers be
6 as stated in those exhibits?

7 A. Yes, sir.

8 MR. ZOBRIST: Judge, I offer Exhibits
9 117 and 118 at this time.

10 JUDGE BUSHMANN: Are there any
11 objections? Hearing none, those are received into
12 the record. First cross-examination will be by
13 MJMEUC.

14 MR. HEALY: No questions.

15 JUDGE BUSHMAN: Wind on the Wires?

16 MR. BRADY: No questions.

17 JUDGE BUSHMANN: Infinity Wind?

18 MS. PEMBERTON: No questions.

19 JUDGE BUSHMANN: MIEC?

20 MR. MILLS: No questions.

21 JUDGE BUSHMANN: Commission staff?

22 MR. WILLIAMS: Thank you, Judge.

23 CROSS EXAMINATION

24 BY MR. WILLIAMS:

25 Q. Good morning, Mr. Pfeiffer.

1 A. I guess I'm the first one you get to
2 examine.

3 Q. I guess the first one you get to
4 respond to in terms of questions --

5 A. Yes, sir.

6 Q. -- on cross-examination at least.
7 Isn't it true that the loss of load
8 expectation that you calculated without the project
9 was extremely low?

10 A. Yes, it is.

11 Q. And isn't it then -- the reason that
12 the percentage is so high in the improvement of the
13 loss of load expectation because -- also because the
14 original loss of load expectation is so low?

15 A. Yes, both numbers are very small.

16 Q. No further --

17 A. But the issue is it's moving as an
18 improvement.

19 Q. But it's a very small movement?

20 A. A large percentage of a small number,
21 yes, sir.

22 MR. WILLIAMS: No further questions.

23 JUDGE BUSHMANN: Rockies Express?

24 MS. GIBONEY: No questions, Judge.

25 JUDGE BUSHMANN: Show-Me Landowners?

1 MR. LINTON: Yes, Your Honor.

2 CROSS EXAMINATION

3 BY MR. LINTON:

4 Q. Good morning, Mr. Pfeiffer.

5 A. Mr. Litton.

6 Q. How are you?

7 A. Very good. Thank you.

8 Q. I guess I would like to start by
9 having an exhibit marked and identified -- I think
10 this will be Exhibit 411?

11 JUDGE BUSHMANN: That's correct.

12 (Exhibit 411 was marked for
13 identification.)

14 Q. (By Mr. Litton) Can you please
15 identify that exhibit for me?

16 A. It is in response to a data request
17 that I submitted.

18 Q. All right. I'd like to direct your
19 attention to your response to EP.1, and you say there
20 basically that no transmission facilities were
21 specifically modeled in your loss of load expectation
22 study, is that correct?

23 A. Yes, sir.

24 Q. And basically your loss of load
25 expectation study was an estimate of the benefit of

1 additional generation capacity added within Missouri,
2 is that correct?

3 A. No, sir. It was an assessment of the
4 impact that the additional tie capacity associated
5 with Grain Belt would have on the loss of load
6 expectation.

7 Q. Were there any reliability -- was
8 there a reliability benefits study in your analysis?

9 A. Reliability, the metric we used was
10 the change in LLOE and the reliability that that
11 would indicate.

12 Q. Do you agree that regulated utilities
13 have an obligation to serve -- conduct planning and
14 add generation in accordance with capacity reserve
15 margin requirements?

16 A. I believe that's correct.

17 Q. And so if Grain Belt Express is not
18 built, won't Missouri utilities still plan to meet
19 their capacity reserve requirements based upon
20 protected peak load?

21 A. Projected?

22 Q. Projected peak load, yes.

23 A. Of note is that this was not a
24 resource adequacy analysis. We were not looking at
25 the magnitude of the -- or the resource adequacy as

1 measured by LLOE, but rather the impact that the
2 additional tie capacity would have on it -- on an
3 LLOE metric.

4 Q. So if the Grain Belt Express project
5 is built, utilities will ultimately plan for and
6 adhere to the same capacity reserve margin
7 requirements based on projected peak load?

8 A. Yes.

9 MR. LINTON: Thank you. I have no
10 further questions.

11 JUDGE BUSHMANN: Do you want to offer
12 411?

13 MR. LINTON: Please. Thank you.

14 JUDGE BUSHMANN: Any objections to its
15 receipt?

16 MR. ZOBRIST: No objection.

17 JUDGE BUSHMANN: It's received into
18 the record.

19 Cross-examination by Missouri
20 Landowners?

21 MR. AGATHEN: Thank you, Judge.

22 CROSS EXAMINATION

23 BY MR. AGATHEN:

24 Q. Your testimony addresses the
25 reliability benefits the proposed line will provide

1 to the State of Missouri, is that generally correct?

2 A. Yes, sir.

3 Q. And you demonstrate this improvement
4 in reliability using what's referred to as the LLOE
5 study?

6 A. Yes, sir, an LLOE study, yes.

7 Q. And that LLOE is an acronym for loss
8 of load expectation?

9 A. Yes.

10 Q. And your analysis generally involves
11 running two different cases, is that correct?

12 A. Yes. With or without Grain Belt.

13 Q. And the difference in the LLOE between
14 those two cases shows the reliability benefit of
15 adding the 500 megawatts from the Grain Belt line to
16 Missouri's generation, is that correct?

17 A. It shows the benefit of adding an
18 additional tie capacity to access supplemental
19 capacity and how it would affect the LLOE metric.

20 Q. Of 500 megawatts?

21 A. Of 500 megawatts.

22 Q. And in both cases reliability is
23 essentially measured by the number of days or hours
24 in a year in which you would expect a loss of load
25 due to a shortage of power supply, is that correct?

1 A. Yes, sir.

2 Q. Is it fair to say that the addition of
3 any load to a given system, if added in accordance
4 with industry standards, is always going to increase
5 reliability?

6 A. As the question was asked, no.

7 Q. Why not?

8 A. Because you said "add load."

9 Q. At capacity.

10 A. Well, I attempted to answer the
11 question asked. Additional capacity would indeed
12 improve LLOE, but in this case we are really not
13 talking about a capacity addition. We're talking
14 about increased tie capacity for supplemental
15 resources during emergency.

16 Q. In either case, it's always going to
17 add to the reliability, is it not?

18 A. Yes, sir.

19 Q. In fact, you could have told us about
20 any kind of LLOE study that the Grain Belt line is
21 going to add to your reliability, could you not?

22 A. That would be a fair assumption.

23 Q. Is there a tradeoff between adding new
24 generations for reliability purposes and a cost of
25 doing so?

1 A. I'm not prepared or an expert in that
2 question. I can't answer that.

3 Q. Well, if you add any kind of capacity,
4 it's going to cost you money, is it not?

5 A. Yes.

6 Q. So you increase reliability, but it
7 costs you money for the new capacity?

8 A. That's a fair statement.

9 Q. In general, the industry has decided
10 that the appropriate target to add enough generation
11 or supply so that the loss of load expectation is one
12 day in ten years, is that generally correct?

13 A. That's generally correct, yes.

14 Q. That means that under the industry
15 standard we could expect that electrical demand would
16 exceed supply in one day during a ten-year period?

17 A. Yes.

18 Q. Or stated another way, you could
19 expect demand would exceed supply in .1 days per
20 year, is that also correct?

21 A. Yes.

22 Q. And that's the same standard used by
23 MISO, is it not?

24 A. Yes.

25 Q. Would you please turn your chart to

1 the bottom of page 4 of your direct testimony. Are
2 you there?

3 A. Yes.

4 Q. The results there show a loss of load
5 expectancy in Missouri without the addition of the
6 Grain Belt line, correct?

7 A. Yes.

8 Q. And following up on some questions
9 from staff, you say that even without the proposed
10 line, the loss of load expectancy in Missouri would
11 be only about .013 days per year, is that correct?

12 A. Yes.

13 Q. And the industry standard is .1 days
14 per year, right?

15 A. It's not -- yes. Yes.

16 Q. So even without the Grain Belt line,
17 your study shows that the loss of load expectancy is
18 already well below the industry standard, right?

19 A. That's not an applicable question in
20 that the State of Missouri and all of the load
21 serving entities within the state do not function as
22 a single resource planner with a single LLOE metric.
23 The metric we've used for this study is a construct
24 to show Missouri as a single entity, which is not the
25 way Missouri functions in the resource planning

1 environment.

2 Q. But this is your study, and you based
3 it solely on Missouri, have you not?

4 A. In an attempt to show the impact of
5 the Grain Belt project and how it affects an LLOE
6 metric which we used for this analysis.

7 Q. Okay. Fine. And, again, without the
8 Grain Belt project, the loss of load expectancy for
9 Missouri is .013, according to your table, is that
10 correct?

11 A. Based on the assumptions we used in
12 this analysis, yes.

13 Q. All right. If you turn to the next
14 page, does that show the loss of load expectancy with
15 the Grain Belt project?

16 A. Yes, sir.

17 Q. And that shows a total of .004, right?

18 A. Yes.

19 Q. And that's about 25 times lower than
20 the industry standard, is it not?

21 A. If this was being used as a metric for
22 resource planning, yes, it would.

23 Q. Are you aware of the fact that in a
24 2014 case Grain Belt presented a witness named
25 Mr. Robert -- and I'm going to have to spell this.

1 Z-A-V-A-D-I-L, to do a loss of load expectancy
2 analysis?

3 A. Yes.

4 Q. He's the Executive Vice-President of
5 Power Systems Consulting and cofounder of EnerRex, is
6 he not?

7 A. I'm not aware of his credentials, but
8 I will agree with that.

9 Q. Is EnerRex one of the leading
10 consulting firms on issues of wind integration and
11 transmission studies?

12 A. I don't know.

13 Q. You don't know?

14 A. I don't know.

15 Q. Are you aware of the fact that in the
16 study of the 2014 case, after running both a
17 business-as-usual case for Missouri and a second case
18 with the addition of Grain Belt, he concluded that
19 the added reliability from the addition of the Grain
20 Belt line was only equivalent to the addition of
21 about 165 megawatt gas-fired plant?

22 A. I believe he said the increased load
23 carrying capacity would go up by 165 megawatts.

24 Q. In your testimony you didn't quantify
25 the amount of capacity that the 500 megawatts of wind

1 generation from Grain Belt would be equivalent to,
2 did you?

3 A. As noted, this was not a resource
4 planning analysis and did not look at capacity
5 resource requirements.

6 Q. So you didn't come up with the figure
7 comparable to the 165 megawatts?

8 A. No, sir.

9 Q. We asked you in a data request what
10 the approximate cost would be of building a natural
11 gas plant which would have the same reliability
12 benefits for Missouri as the injection of power from
13 the Grain Belt project. Do you recall that?

14 A. Yes.

15 Q. Do you recall your answer?

16 A. That I didn't know. Economics were
17 not part of my analysis.

18 Q. You didn't know how much it would
19 cost?

20 A. Correct.

21 Q. Doesn't the federal government have
22 statistics which are readily available which shows
23 the cost of building a gas plant?

24 A. As economics were not part of my
25 study, I didn't look for them.

1 Q. But you're aware that they are
2 published by the federal government?

3 A. Frankly, no. If I needed to look it
4 up, I would have searched for it as part of my
5 analysis.

6 Q. But you didn't search for it in answer
7 to our data request?

8 A. No. It was not part of my analysis.

9 Q. In schedule DAV-5, page 2, Mr. Berry
10 used a figure from the Energy Information
11 Administration of just over \$1 million per megawatt
12 for the capital cost of the combined-cycle gas
13 facility. Did you look at his schedule before you
14 answered our data request?

15 A. No, sir.

16 Q. If his figure is correct, then it
17 would cost about \$165 million for the 165 megawatts
18 that we're buying in gas generation, is that correct?

19 A. I didn't do that calculation. I'm not
20 sure.

21 Q. Well, assuming that his number of \$1
22 million is correct per megawatt, then it would cost
23 about 165 million for 165 megawatts, right?

24 A. I will agree with that.

25 Q. And it would be about roughly half

1 that for combined turbine -- simple combustion
2 turbine, would it not?

3 A. If you have a source for the cost of
4 the combined -- or a simply cycle. I would have to
5 do that math, but it sounds about right.

6 Q. For some reason someone saw a need to
7 improve reliability in Missouri. Have you done any
8 analysis of whether or not the Grain Belt project and
9 the Kansas wind farms would be the least cost option
10 for doing so?

11 A. No, sir.

12 Q. To the best of your knowledge, is it
13 fair to say the resource adequacy for the aggregate
14 demand in the State of Missouri has always met or
15 exceeded minimum target values?

16 A. I don't believe there is an adequacy
17 target for all of the load in the State of Missouri.
18 There are separate load-serving entities which have
19 separate capacity resource requirements.

20 Q. Do you have a copy of our data request
21 there with you?

22 A. Which one? Sorry.

23 Q. It would be our first set of data
24 requests to you, which would include data request
25 EP.12?

1 A. I do, and I will endeavor to find it.
2 Yes, sir.

3 Q. The question was, "To the best of your
4 knowledge, has electric generation capacity in
5 Missouri ever fallen below a minimum level considered
6 to be adequate under NERC or similar reliability
7 standards," is that correct?

8 A. That was the question.

9 Q. And your response was, "Resource
10 adequacy for the aggregate demand in the State of
11 Missouri is the responsibility of multiple
12 independent resource planners. In addition, these
13 independent entities report their resource adequate
14 forecasts to different NERC regional entities, FRENS,
15 SERC and SPP, close paren. Having offered that
16 clarification, to the best of my knowledge resource
17 adequacy for the aggregate demand in the State of
18 Missouri has always met or exceeded minimum target
19 values," correct?

20 A. Yes, sir.

21 Q. Can you tell me the last time that a
22 utility in Missouri has needed to curtail load due to
23 an inadequate generation being available to serve
24 load?

25 A. I'm not aware of any circumstances.

1 Q. In fact, is it fair to say you don't
2 know if a Missouri utility has ever needed to curtail
3 load due to inadequate supply?

4 A. I'm not aware of that.

5 Q. On a different subject, have you read
6 the direct testimony of Mr. Berry in this case?

7 A. No, sir.

8 Q. Pardon?

9 A. No, sir.

10 Q. Let me ask you this question: In all
11 your years in the business, have you seen any study
12 or analysis which compares the relative cost of
13 various types of generation, by starting with a
14 levelized cost of energy for each alternative and
15 then adjusting that cost for each alternative by its
16 capacity value?

17 A. I'm not aware of any that I have read.

18 Q. One more topic I would like to talk
19 about. Let's assume hypothetically that you run a
20 small utility, that you're the CEO of a small
21 utility, and you're looking to retire a base load
22 plant, coal plant with the nameplate capacity of
23 about 100 megawatts, okay. If you don't want the
24 system's reliability to suffer, you need to replace
25 not only the energy, but also the capacity that you

1 were getting from that plant, correct?

2 A. Yes.

3 Q. And, in general, you'd start by
4 determining how much of the capacity credit your
5 system was getting for the retired 100 megawatts of
6 the coal plant, right?

7 A. Yes.

8 Q. So you know how much capacity to
9 replace then. What's a typical capacity credit as a
10 percent of nameplate rating for a base load coal
11 plant? 90 percent range?

12 A. I believe that would be relatively
13 high.

14 Q. 85 percent?

15 A. It varies by plant, by year.
16 Sometimes they have good years and run for a lot.
17 Sometimes they have bad years and blow a turbine or a
18 boiler, and it is bad. I would say in my experience,
19 looking at equivalent capacity factors for a generic
20 coal plant, so that box has gotten pretty small.

21 Q. I understand.

22 A. 65 percent maybe. 75 percent might be
23 a reasonable expectation.

24 Q. So it has a capacity credit of say 70
25 percent. That means you need to replace it with the

1 generation also having capacity credits equal to
2 about 70 megawatts, right?

3 A. I don't know if that is how I would do
4 the calculations.

5 Q. Well, if we don't want to effect
6 system reliability and you're retiring a plant with
7 70 megawatts of credit capacity, then you have to
8 come up with another 70 megawatts, do you not?

9 A. I would -- that's a fair assumption.
10 It's not germane to the analysis I did, but that's a
11 fair assumption.

12 Q. Understood. Let's say you want to
13 diversify your supply by replacing a coal unit with a
14 couple of different sources of supply. For each of
15 those sources you would have to take the nameplate
16 rating and then apply the capacity credit for that
17 individual source of generation in order to figure up
18 how much that would be accredited to the replacement
19 of your coal-fired plant, right?

20 A. This is an interesting line of
21 thought. I'm not sure it's consistent with the way
22 capacity planning is performed. I was never a
23 capacity planner in my history, especially with
24 Ameren. I was in periphery. I spoke with those
25 folks. I dealt with operations, but I didn't do

1 capacity resource planning, so at this point you're
2 asking me to respond to a number of questions that,
3 A, are really not in my wheelhouse and, B, are not
4 germane to my testimony. So I'll give you a general
5 okay, but we're starting to get tangential to where I
6 feel comfortable.

7 Q. Let me ask you a very simple question.
8 If you're looking to replace the capacity of a
9 retired coal plant, could you accredit the capacity
10 of existing generation in order to replace the
11 retired unit?

12 A. I would assume that if I had existing
13 capacity, it was already in my calculus, and I can't
14 double count it, so I'm not sure where you're going
15 with that.

16 Q. But you would be double counting it,
17 as you say, if you counted it toward replacement of
18 the retired plant, would you not?

19 A. If it was my resource, I would assume
20 it was already in my calculation, and so I don't know
21 why I would consider it a second time.

22 MR. AGATHEN: Thank you, sir. That's
23 all of the questions I have, Your Honor.

24 JUDGE BUSHMANN: Any questions from
25 Commissioners?

1 EXAMINATION

2 BY COMMISSIONER HALL:

3 Q. Good morning.

4 A. I thought I was off the hook.

5 Q. Mostly. So you were manager of
6 transmission planning for Ameren, is that correct?

7 A. Yes, sir.

8 Q. And when did you retire from that
9 position?

10 A. 2009.

11 Q. And how long were you with Ameren?

12 A. 31 years.

13 Q. And were you in transmission planning
14 that entire time?

15 A. I was in -- I did long-term
16 transmission planning for 20 to 25 years. I then
17 went to the operation side of the business and did
18 operational planning, calculated available
19 transmission capacity for sale of transmission
20 service under Ameren's prior to entering MISO, and
21 then became manager of planning, overall planning,
22 after that.

23 Q. Okay. Do you have any sense at all as
24 to how Ameren should view this particular project as
25 it relates to their business? I'm not asking if you

1 have any understanding of their particular position,
2 but what should their position be, based on your
3 understanding of the market?

4 A. Since my retirement, they are not
5 interested in my position but, in general, I think
6 they would be relatively neutral on this. It
7 represents access to energy resources both in the
8 Southwest Power Pool and PJM, that are deliverable
9 absent any interim congestion. They don't interact
10 with the AC system; therefore, it represents a source
11 of power that will go into the Ameren system, which
12 can be relied on without concerns -- pardon the term
13 -- without LMP considerations or congestion or
14 constraint considerations. So that's a positive.

15 And other than that, as long as the
16 Midwest ISO has done an adequate job of doing their
17 interconnection study, which Ameren probably
18 participated in or did not perform, Ameren should be
19 neutral to this because it's not going to have a
20 negative impact on them at all.

21 Q. You mentioned one potential positive
22 impact, and there's no negative impacts, so why would
23 they not be supportive of it then? Is it just
24 because it's relatively a small amount of power and
25 they don't have a stated need for additional energy?

1 A. Well, again, on my side of business I
2 was a transmission -- you know, I did wires and I
3 didn't worry about capacity. Bert got real upset if
4 I worried about capacity and those kinds of things.

5 So from my perspective as a
6 transmission planner, they should be relatively
7 neutral as long as the interconnection study was
8 performed adequately and there were no adverse
9 effects of it.

10 **Q. The LLOE study that you performed, is**
11 **that a study -- a type of study that is typically**
12 **performed by MISO in analyzing reliability projects?**

13 A. Not in analyzing liability projects
14 per se. LLOE studies are typically associated
15 directly with resource adequacy; however, MISO does
16 have the added analysis of generation deliverability
17 and load receivability to make sure that any
18 resources acquired from external resources to satisfy
19 a load zone's reliability requirements are
20 sufficient. So I mean that's where the reliability
21 component, transmission reliability component would
22 come from.

23 **Q. You, I believe, indicated in response**
24 **to questions from staff counsel that the LLOE**
25 **improvement from, or impact of this project is**

1 relatively small, but still positive?

2 A. Correct. With the assumptions we
3 made, which -- and those assumptions drove very small
4 numbers.

5 Q. Your final conclusion at the end of
6 your surrebuttal, I want to make sure I understand
7 what you're saying here. Would there be any
8 difference in your analysis -- does the type of
9 generation impact this analysis at all?

10 A. No.

11 Q. No? Why is that?

12 A. The basic benefit that this project
13 provides is access to supplemental resources and time
14 of capacity deficiency. In this case, it's tying
15 both the Southwest Power Pool and PJM, which
16 represents a significant pool of diverse generation,
17 and it -- the Missouri, and at the Maywood end, it
18 doesn't make any difference where it came from, it's
19 the fact that you can get 500 megawatts of some
20 resource in as needed and it's a benefit of
21 additional tie capacity as opposed to tied to
22 specific generation or generation type.

23 Q. But staff does not agree with you that
24 it's a fair assumption that the 500 megawatts would
25 always be available, is that correct?

1 A. That was staff's position.

2 **Q. And what is your understanding as to**
3 **the basis for that position?**

4 A. I believe they were either -- well, I
5 don't know. I didn't get a chance to ask them, so I
6 don't know if I can rely on it. Again, my position
7 is that this is a tie line. This is tie line that
8 ties into both Southwest Power Pool and BJM, the
9 assumption being that because of load diversity and
10 because of an assumed diversity of generation
11 deficiency, that everybody is not having the same
12 generation deficiency at the same time. Those two
13 diversity components would make some capacity
14 available of some type at all times.

15 In addition to the 4000 megawatts of
16 wind, there's the other conventional generation on
17 either end, and it's from that aggregate pool that
18 Missouri can call to supplement its resources.

19 **Q. And would your conclusion be the same**
20 **if instead of 500 megawatts we were talking about**
21 **1000 or 2000, or is the fact that the 500 is**
22 **relatively small compared to the total load of the**
23 **state?**

24 A. I was thinking if one pole's out and
25 what the delivery would be for a single contingency

1 if one of the poles was out of service as required by
2 NERC planning standards, and at 2000 you're probably
3 starting to get close, but at 500 I believe you're
4 under the first contingency of deliverability of the
5 circuit without having done an analysis of that.
6 Again, that was outside the scope of my explicit
7 study.

8 COMMISSIONER HALL: Thank you.

9 JUDGE BUSHMANN: Recross based on
10 bench questions? MJMEUC?

11 MR. HEALY: No questions, Judge.

12 JUDGE BUSHMANN: Wind on the Wires?

13 MR. BRADY: No questions.

14 JUDGE BUSHMANN: Infinity Wind?

15 MS. PEMBERTON: No questions.

16 JUDGE BUSHMANN: MIEC?

17 MR. MILLS: No questions.

18 JUDGE BUSHMANN: Commission staff?

19 MR. WILLIAMS: No thank you.

20 JUDGE BUSHMANN: Rockies Express?

21 MS. GIBONEY: No questions, Judge.

22 JUDGE BUSHMANN: Show-Me Landowners?

23 MR. LINTON: No questions.

24 JUDGE BUSHMANN: Missouri Landowners?

25 MR. AGATHEN: No questions, Your

1 Honor.

2 JUDGE BUSHMANN: Redirect by Grain

3 Belt?

4 MR. ZOBRIST: No redirect, Your Honor.

5 JUDGE BUSHMANN: Mr. Pfeiffer, thank
6 you for your testimony.

7 MR. ZOBRIST: Our next witness is J.
8 Neil Copeland.

9 (Witness sworn in.)

10 DIRECT EXAMINATION

11 BY MR. ZOBRIST:

12 Q. Please state your name?

13 A. Neil Copeland.

14 Q. And where are you employed?

15 A. GES Associates, Incorporated.

16 Q. What's your position there?

17 A. Managing Director.

18 Q. Did you prepare in this case direct
19 testimony which has been marked as Exhibit 107, and
20 surrebuttal testimony which has been marked -- or
21 direct testimony marked as Exhibit 106 and
22 surrebuttal testimony marked as Exhibit 107?

23 A. Yes, I did.

24 Q. And did we also, at your direction
25 prepare an errata sheet which has been marked as

1 Exhibit 128?

2 A. Yes.

3 Q. Now, beyond the material in the errata
4 sheet, do you have any other corrections to your
5 testimony?

6 A. No, I do not.

7 Q. If I were to ask you the questions
8 contained in Exhibits 106 and 107, would your answers
9 be as set forth there?

10 A. Yes.

11 MR. ZOBRIST: Judge, I have nothing
12 further. I offer Exhibits 106; 107; and the errata
13 sheet, Exhibit 128.

14 JUDGE BUSHMANN: Any objections?
15 Hearing none, those three exhibits are received into
16 the record.

17 First cross by MJMEUC?

18 MR. HEALY: No questions, Judge.

19 THE COURT: Wind on the Wires?

20 MR. BRADY: No, thank you.

21 JUDGE BUSHMANN: Infinity Wind?

22 MS. PEMBERTON: No questions.

23 JUDGE BUSHMANN: MIEC?

24 MR. MILLS: No questions.

25 JUDGE BUSHMANN: Commission staff?

1 MR. WILLIAMS: No questions, thank
2 you, Judge.

3 JUDGE BUSHMANN: Rockies Express?

4 MS. GIBONEY: No questions.

5 JUDGE BUSHMANN: Show-Me Landowners?

6 MR. LINTON: No questions.

7 JUDGE BUSHMANN: Missouri Landowners?

8 MR. AGATHEN: Yes, Your Honor, thank
9 you.

10 CROSS EXAMINATION

11 BY MR. AGATHEN:

12 Q. Good morning, Mr. Copeland.

13 A. Good morning to you.

14 Q. Would you turn to page 10 of your
15 direct testimony?

16 A. I'm there.

17 Q. Starting at line 10 you explain how
18 you ran your model under a number of different
19 scenarios, using different assumptions about the
20 future, is that generally correct?

21 A. That's correct.

22 Q. And so this produces a number of
23 different ranges of results based on one's assumption
24 about future conditions in the energy markets, right?

25 A. Correct.

1 Q. Is it fair to say that when you call
2 your business-as-usual case, that it is sometimes
3 what is referred to as the base case scenario?

4 A. Yes, that's generally correct.

5 Q. And it's fair to say that the business
6 as usual case depicts what we would expect to see is
7 it the most likely outcome given what we know today?

8 A. It's definitely one outcome that was
9 used as a general baseline for looking at all the
10 scenarios.

11 Q. Based on what we know today?

12 A. That's correct.

13 Q. You essentially ran two different
14 cases for comparison here; one, as the system would
15 look without the Grain Belt line and then a second
16 run with the Grain Belt line added as an additional
17 source of power, is that a fair statement?

18 A. Yes. And that was performed across
19 all scenarios.

20 Q. Sure. Did you run a third case where
21 the additional wind generation would be imported from
22 sources other than the Grain Belt line such as from
23 Iowa or other MISO states?

24 A. Only to the extent that generation was
25 already included in the cases included here.

1 Q. Right. You didn't run a whole third
2 scenario?

3 A. No.

4 Q. Did you make any analysis or study of
5 the comparative total cost to Missouri's utilities of
6 wind generation from the Grain Belt line and wind
7 generation from other sources?

8 A. The only scenarios that we ran were
9 the ones that were included here. There was no
10 specific study that was done that directly assumed
11 that there was other wind imported specifically from
12 another point within the system.

13 Q. So the answer is no?

14 A. Correct.

15 Q. Does your modeling assume that any
16 utility in Missouri would stop their purchases of
17 renewable energy if by doing so they would exceed the
18 RES rate cap?

19 A. No.

20 Q. If you'd turn, please, to page 17 of
21 your direct testimony.

22 A. I'm there.

23 Q. Beginning at line 18 you discuss the
24 fact that "Grain Belt is now offering service from
25 the Missouri convertor station to the PJM convertor

1 station", correct?

2 A. Correct.

3 Q. And generation which is input at the
4 Missouri convertor station would not necessarily be
5 from wind generation, would it?

6 A. If the generation was coming --
7 generation could move from -- let me backup. Could
8 you clarify the question?

9 Q. Sure. If there is generation input
10 into the Missouri convertor station for delivery to
11 PJM, it may or may not be wind generation, is that
12 correct?

13 A. That's correct.

14 Q. Do you know of any municipal utility
15 in Missouri which has excess wind generation?

16 A. Define excess wind generation?

17 Q. Generation that they might input into
18 the Missouri convertor station for delivery to PJM?

19 A. Not that I'm aware of.

20 Q. If an entity purchases say 100
21 megawatts of firm transmission capacity, from the
22 Missouri convertor station to the PJM convertor
23 station, that's going to mean that the firm capacity
24 available for sale from Kansas wind farms to PJM is
25 going to be reduced by that 100 megawatts, will it

1 not?

2 A. That's correct.

3 Q. Could you turn please to your errata
4 sheet to your Schedule JNC-2, page 4. It's the one
5 that shows the emission reductions.

6 A. I understand. Just a moment. My
7 apologies, I do not have the errata sheet, but I
8 believe I have the proper numbers here that I can
9 work with.

10 Q. I think that you can work with that.
11 If you look at the first column on the left is your
12 third set of figures show the projected emission
13 reductions in the base case of your model?

14 A. I have those.

15 Q. So it might show a reduction, for
16 example, in CO2 emissions of about 13 million tons?

17 A. That looks correct.

18 Q. And those reductions are essentially
19 the result of replacing fossil fuel generation with
20 wind generation, are they not?

21 A. Yes.

22 Q. Approximately how many million
23 megawatt hours per year would be generated by the
24 Kansas wind farms supplying energy to the proposed
25 line, do you know?

1 A. I don't have those figures directly in
2 front of me.

3 Q. Roughly 22 million, does that sound
4 right, if that's what the testimony of the Grain Belt
5 witnesses say?

6 A. If that is the case, then, yes.

7 Q. Is it fair to say that if the Grain
8 Belt line is not built and replaced instead by
9 renewable energy from some other source such as wind
10 generation from Iowa or other MISO states, that you'd
11 see comparable reductions in emission reductions as
12 you show on your schedule?

13 A. I didn't do that particular study so I
14 can't answer if that would be true, if the impact be
15 true.

16 Q. Is there any reason why if you replace
17 one source of wind generation with another, that the
18 reductions in emission won't be roughly comparable?

19 A. Yes, there is.

20 Q. What is that?

21 A. The amount of wind generation is put
22 into a system and the location matters greatly. So
23 the topology of the transmission system. The excess
24 that that wind has to certain types of generation,
25 does have a large effect on the change in emissions.

1 Q. It's going to reduce the number of
2 megawatt hours delivered from fossil fuel plants in
3 both cases, right?

4 A. Yes. Wind generation being a low
5 variable cost and it sits in the bottom of the supply
6 stack, and so in all the studies that I have done it
7 typically will remove fossil fuel generation.

8 Q. Thank you. To the best of your
9 knowledge, do any of the existing emissions listed on
10 your schedule exceed any federal, state or local law
11 or regulation?

12 A. I don't know, I'm not an attorney, I
13 can't speak to that.

14 Q. To the best of your knowledge do they
15 exceed any of those regulations?

16 A. I do not know.

17 Q. On a different subject you testified
18 in a case of the Indiana Commission on behalf of
19 Southern Indiana Gas and Electric Company, did you
20 not?

21 A. Yes, I did.

22 Q. Some times called Vectern South?

23 A. Correct.

24 Q. V-e-c-t-e-r-n, V-e-c-t-r-e-n, right?

25 A. Yes, that's correct.

1 Q. And that's a traditional integrated
2 investor owned utility in Indiana, correct?

3 A. Yes, it is.

4 Q. And the basic issue there was whether
5 to invest substantial amounts in three aging
6 coal-fired units or to replace them with other
7 sources of generation, correct?

8 A. Correct.

9 Q. And your client Vectern South was
10 proposing to reinvest in the coal plants, right?

11 A. Correct.

12 Q. Do you recall what you said about
13 comparing the economics of traditional base load
14 generation with that of emergent plants?

15 A. No, I do not.

16 Q. Mr. Copeland, I'm going to hand you a
17 copy of a document which purports to be your verified
18 surrebuttal testimony in the case we were just
19 talking about and ask if you can identify that?

20 A. This looks to be correct.

21 Q. And if you look at page 2, line 14,
22 the question and answer is as follows. This is a
23 question to you. "Should Vectern South's base load
24 generation be compared to a merchant plant in terms
25 of economics? Answer: No. This base load

1 generation has been built and operated for decades to
2 provide reliable service to customers. During this
3 period merchant plants have gone out of business in
4 periods of low market prices. As a regulated
5 utility, Vectern South provides capacity with the
6 reserve margin to ensure reliable service and systems
7 stability. Merchants sell energy and capacity to
8 maximum their profits. Vectern South follows a
9 dispatch order which its lowest cost generation goes
10 to its retail customer." Is that accurate?

11 A. Yes, that's what I stated.

12 Q. And then if you turn over to page 4
13 starting at line 8, you have an answer which says, "I
14 have nearly 16 years of experience in resource
15 planning, utility valuation, transmission adjustment,
16 assessment and long term market price forecasting,
17 and in my experience there is no subtle understanding
18 that reasonable utility planning only supports a
19 20-year analysis period", is that correct?

20 A. Where is that again, four?

21 Q. Page 4, line eight.

22 A. Yes, I did that.

23 Q. And then beginning at the end of line
24 13, you say, "The forecasts that are required to
25 project the 20 year period are very speculative. It

1 is not infrequent to significant unforeseen changes
2 such as erratic coal decrease in natural gas prices
3 that would not be predicted even ten years ago or
4 changes in carbon cost forecasts, is that correct?

5 A. That's correct.

6 Q. Mr. Copeland, I'm going to now hand
7 you a copy of your verified rebuttal testimony from
8 that same case and ask if you recognize that
9 document?

10 A. This looks correct.

11 Q. If you turn to page 11, please.
12 Beginning at line 10, do you not state as follows,
13 quote: "Many technologies were screened out based on
14 price while others such as wind and solar were
15 screened out due to their inability to provide full
16 replacement capacity without procuring large amounts
17 of these resources," is that your testimony?

18 A. Yes, it is.

19 Q. Did the Indiana Commission rule in
20 your favor in that case we were just discussing?

21 A. I believe the outcome was favorable to
22 Vectern, yes. They were going to be able to put
23 their air quality control equipment upgrades on their
24 units and get them into the rate base, yes.

25 Q. On a different subject, have you read

1 the direct testimony of Mr. Berry in this case?

2 A. No.

3 Q. Let me ask you this. How many years
4 have you been in this business?

5 A. About 16 years.

6 Q. Have you ever seen any studies or
7 analyses which compare the relative cost of various
8 types of generation by starting with the levelized
9 cost of energy for each alternative and then
10 adjusting that cost for each alternative by its
11 capacity value?

12 A. No, I have not.

13 MR. AGATHEN: That's all I have at
14 this point, Your Honor, but I do have some questions
15 on highly confidential material.

16 JUDGE BUSHMANN: All right. We will
17 go into closed session. Those in the audience who
18 are not authorized to hear highly confidential
19 information will need to step outside for a minute.

20 (The following in-camera testimony is
21 from Witness J. Neil Copeland.)

22 * * * * *

23

24

25

1 JUDGE BUSHMANN: Ready for questions
2 from Commissioners.

3 COMMISSIONER HALL: I don't have any
4 questions. Thank you.

5 COMMISSIONER COLEMAN: No questions.

6 COMMISSIONER KENNEY: No.

7 JUDGE BUSHMANN: Redirect by Grain
8 Belt?

9 REDIRECT EXAMINATION

10 BY MR. ZOBRIST:

11 Q. Mr. Copeland, I think I can ask this
12 question in open session, but with regard to the
13 document Mr. Agathen just showed you in camera, why
14 were the impacts on the coal units occurring by
15 virtue of Grain Belt Express being included in the
16 model?

17 A. That's a good question. Typically
18 when you look at the supply stack, historically there
19 has been the low cost generation sits at the bottom,
20 which I think everybody is aware of, which is exactly
21 what wind generation is. So anytime that you
22 introduce a low cost generation supply source into,
23 you know, a region or an area it typically tends to
24 move the higher cost resources as we say off the
25 margin.

1 So at any point in time that you would
2 put a low cost resource in the system, the natural
3 indication would be that you would move plants like
4 coal because they tend to sit directly above where
5 wind would sit in the resource stack.

6 **Q. And those are higher cost units?**

7 A. Absolutely.

8 **Q. Now Mr. Agathen showed you two pieces**
9 **of testimony from the Vectern proceeding before the**
10 **Indiana Commission?**

11 A. Correct.

12 **Q. Is there anything you stated there**
13 **that is inconsistent with the conclusions you came to**
14 **in your testimony in this case?**

15 A. Not really. There is one thing I
16 would like to add and that would be, you know, when
17 we were talking about looking out into the future,
18 that is actually one of the reasons that you run
19 scenario analysis such as what we did in this where
20 we ran seven different scenarios, because when you do
21 look into the future, that is difficult to predict,
22 so proper modeling will actually take a set of
23 outcomes abound, you want to look at what could be
24 highly probable, what couldn't, and you want to
25 abound to see where your project might fall within

1 those. So even though looking at long term may be
2 considered speculative, the reason that you --
3 because of that nature you want to run scenario
4 analysis around that especially one that is as robust
5 as this analysis.

6 MR. ZOBRIST: Judge, no further
7 questions.

8 JUDGE BUSHMANN: Thank you, Mr.
9 Copeland, that completes your testimony. You are
10 excused.

11 WITNESS: Thank you.

12 JUDGE BUSHMANN: Before we take up
13 Mr. Berry, why don't we take a short break. We will
14 be in recess for approximately 15 minutes.

15 (Recess.)

16 JUDGE BUSHMANN: We're back on the
17 record. And Mr. Williams, you wanted to make a
18 statement?

19 MR. WILLIAMS: Yes, Judge. The staff
20 is asking the Commission to take official notice of
21 some of its prior rules of procedure and practice
22 that were in place back on -- from 1913 through past
23 the 1970s, and to that end I have three exhibits that
24 are copies of those rules, and I would like to go
25 ahead and offer those into the record at this time?

1 JUDGE BUSHMANN: Can you give me the
2 numbers and what they describe?

3 MR. WILLIAMS: Yes, they are on the
4 staff exhibit list that was circulated earlier.
5 Staff Exhibit No. 202 is the 1913 Rules of Practice
6 and Procedure and Forms Governing Matters Before the
7 Commission.

8 Staff Exhibit No. 203 is the 1954
9 Rules of Practice and Procedures Before the Public
10 Service Commission, and Staff Exhibit No. 204 is the
11 1971 Rules of Practice and Procedures Before the
12 Public Service Commission.

13 JUDGE BUSHMANN: Have counsel had an
14 opportunity to look at those exhibits? Are there any
15 objections to taking administrative notice of those
16 prior rules? Any objections?

17 MR. ZOBRIST: No objection.

18 JUDGE BUSHMANN: Hearing none, then
19 Exhibits 202, 203 and 204 are received into the
20 record of the hearing. We're ready for Mr. Berry I
21 believe.

22 MR. ZOBRIST: That's correct, Judge.

23 (Witness is sworn.)

24 DIRECT EXAMINATION

25 BY MR. ZOBRIST:

1 Q. Please state your name.

2 A. My name is a David A. Berry,
3 B-e-r-r-y.

4 Q. By whom are you employed?

5 A. I'm employed by Clean Line Energy
6 Partners.

7 Q. And what is your position there?

8 A. I am the Chief Financial Officer and
9 head of Strategy.

10 Q. Mr. Berry, did you prepare in this
11 case direct testimony, both highly confidential and
12 nonproprietary marked as Exhibit 104 and surrebuttal
13 testimony again both done nonproprietary and highly
14 confidential marked as Exhibit 105?

15 A. I did.

16 Q. And did we also prepare a first
17 amended errata sheet which has been marked as Exhibit
18 127B?

19 A. I did.

20 Q. Do you have any further corrections to
21 either your direct or your surrebuttal testimony?

22 A. I do not.

23 Q. If I were to ask you the questions set
24 forth in the Exhibits 104 and 105, would the answers
25 be as stated there?

1 A. They would.

2 MR. ZOBRIST: Judge, I offer at this
3 time Exhibits 104, NP and HC, Exhibit 105-HC and NP
4 and Exhibit 127B, First Amended Errata sheet.

5 JUDGE BUSHMANN: Any objections?

6 MR. AGATHEN: I do, Judge. We
7 previously submitted in written form MLA objection
8 382, and I would ask those objections be renewed and
9 treated as if made into the record at this point.

10 JUDGE BUSHMANN: I'll overrule MLA
11 objections designated No. 382, and I will receive
12 Exhibits 104, 105 and 127 into the record.

13 MR. ZOBRIST: Thank you, Judge. And
14 just to advise the Commission, this is the final
15 witness on behalf of the company and Mr. Berry is
16 prepared, for example, to discuss any of the
17 questions that the Chairmen had about staff
18 conditions and Grain Belt conditions that have been
19 agreed to, so.

20 Thank you Judge.

21 JUDGE BUSHMANN: First cross would be
22 by MJMEUC.

23 MR. HEALY: No questions, Judge.

24 JUDGE BUSHMANN: Wind on the Wires?

25 MR. BRADY: No questions.

1 JUDGE BUSHMANN: Infinity Wind Power?

2 MS. PEMBERTON: No questions.

3 JUDGE BUSHMANN: MIEC?

4 MR. MILLS: No questions.

5 JUDGE BUSHMANN: Commission staff?

6 MR. WILLIAMS: No questions, thank
7 you, Judge.

8 JUDGE BUSHMANN: Rockies Express?

9 MS. GIBONEY: No questions, Judge.

10 JUDGE BUSHMANN: Show-Me Landowners?

11 MR. LINTON: Yes, Your Honor, thank
12 you.

13 CROSS EXAMINATION

14 BY MR. LINTON:

15 Q. Good morning, Mr. Berry.

16 A. Good morning, Mr. Linton.

17 Q. How are you?

18 A. Doing fine, thank you.

19 Q. I guess the first thing I would like
20 to do is have a document marked as exhibit, I believe
21 this would be 412?

22 JUDGE BUSHMANN: That's correct.

23 (Exhibit 412 was marked for
24 identification.)

25 Q. (By Mr. Linton) Can you please

1 identify that exhibit?

2 A. This is a response to what's labeled
3 here as the Second Set of Data Requests to Grain Belt
4 from Show-Me Concerned Landowners.

5 Q. Let me just point your attention to
6 the question and answer starting at the bottom of the
7 first page. It asks who would be responsible for
8 answering questions regarding input into the first
9 docket ER14-409 and what's the response there?

10 A. Well, the question is who provided the
11 factual information and the FERC application you're
12 referencing?

13 Q. Right.

14 A. That was me. I'm familiar with the
15 statement and I can address any questions?

16 Q. I appreciate that. Thank you. At
17 page 9, line 20, you do make reference to that FERC
18 docket, do you not?

19 A. I'm sorry, is this my direct
20 testimony?

21 Q. Your direct testimony, yes, I
22 apologize.

23 A. Yes, I do.

24 Q. And you say that the FERC has granted
25 that authority to you for --

1 A. That's correct.

2 Q. -- transmission capacity, selling
3 transmission capacity at market rates?

4 A. Correct.

5 Q. Now have you had two open
6 solicitations?

7 A. We've had a single open solicitation
8 which had several different windows. It's all part
9 of one single process.

10 Q. And two windows then?

11 A. Three actually.

12 Q. Okay. Thank you. And how many
13 entities have received invitations and then made
14 solicitations or response to those open windows?

15 A. Well, this process doesn't rely on
16 invitation. The point of open solicitation is to
17 provide a very broad notice. So we provided notice
18 in numerous industry publications and websites.
19 We've had 14 separate requests for transmission
20 service. Actually, I'm sorry, let me check that
21 number real quickly. I apologize for the delay.
22 It's been a little while since I prepared this
23 testimony.

24 Q. I understand.

25 A. It's approximately 15 shippers.

1 Q. Okay. The next thing I would like to
2 do is have another document distributed, marked and
3 presented to you.

4 (Exhibit 413 was marked for
5 identification.)

6 JUDGE BUSHMANN: That should be marked
7 as 413.

8 A. If I might correct, the number is
9 actually 16.

10 Q. (By Mr. Linton) Can you please
11 identify that document?

12 A. It appears to be Grain Belt's
13 application to FERC for authorization to sell
14 transmission service at negotiated rates.

15 Q. And you can answer questions about
16 that, preparing that document?

17 A. It will depend on the question, but
18 I'm familiar with it and I was involved in preparing
19 it.

20 Q. Can you tell me the criteria that is
21 necessary for you to show, for FERC to grant the
22 authority to provide open access transmission service
23 and merchant?

24 A. FERC generally established a number of
25 criteria to allow transmission companies to charge

1 negotiated rates. So they relate to assuring that
2 the rates are just and reasonable; that there is a
3 capacity allocation process which is transparent and
4 reasonable; that there wouldn't be any undue
5 preference and that the project is consistent with
6 regional reliability.

7 Q. The second one, the capacity
8 allocation, that has to do with making sure that
9 there's no potential for undue discrimination, is
10 that right?

11 A. Broadly speaking, yes.

12 Q. Let's take a look at page 13 of the
13 application, that discusses just and reasonable rates
14 as I read the document?

15 A. Correct. It's part of a discussion on
16 why the rates we charge would be just and reasonable.

17 Q. Okay. It says basically starting with
18 the "Further" -- "Further because potential customers
19 can pursue alternative transmission service from
20 incumbent transmission owners operating where the
21 project will be built at cost of service rates."
22 (Capped at the incumbent utility's cost of
23 expansion.)

24 "Customer will purchase transmission
25 service from applicant only to the extent that it's

1 cost effect -- it is cost effective to do so." Is
2 that accurate?

3 A. That is what it says there, yes,
4 that's correct.

5 Q. Now you explain that statement a
6 little bit further on page 1 in the data request that
7 you have that's been marked as Exhibit 412?

8 A. Correct.

9 Q. Basically what you say there is that
10 RTOs are required to expand their systems in response
11 to requests for transmission service and incumbent
12 transmission owners must work with the RTOs to expand
13 their transmission system?

14 A. I believe my response here is a more
15 complete answer to the question, but your summary is
16 not objectionable.

17 Q. Okay. And if it's more cost effective
18 for a customer to pay for that potential new
19 facility, basically the customer will pursue that
20 transaction with the RTO, correct?

21 A. Generally I agree, but I think they
22 would also have to weigh the feasibility of the new
23 upgrades and the timeframe and likelihood that
24 they're successful.

25 Q. Is there any reason to believe that an

1 incumbent transmission owner with an RTO couldn't
2 upgrade a well-established interconnected grid on a
3 timely basis?

4 A. There are many reasons to believe that
5 would be very difficult.

6 Q. But an established system of an RTO
7 would have a track record of having accomplished
8 that, correct?

9 A. I would say that would very much be a
10 case-by-case basis.

11 Q. There is other service available?

12 A. Could you clarify that question for
13 me?

14 Q. There is other service available in
15 the form of transmission service from an established
16 RTO?

17 A. No, I wouldn't agree with that.
18 Certainly a customer can request it, that doesn't
19 mean the service is available.

20 Q. But the RTO, as you have said in your
21 data request response, is required to respond and
22 upgrade the system, correct?

23 A. The RTO is required to study the
24 request and determine what upgrades or new facilities
25 would be needed to accommodate the request, and then

1 the customer can choose whether to proceed with those
2 upgrades or not, and that would depend on the cost,
3 the feasibility, the timeline as I have described.

4 **Q. Thank you. At page 14 of the**
5 **application, you discuss the lack of potential for**
6 **undue discrimination, correct?**

7 A. This is of the FERC application?

8 **Q. Yes.**

9 A. That's correct.

10 **Q. And part of that is the open**
11 **solicitation process?**

12 A. Correct.

13 **Q. Now you mentioned at page 15 of the**
14 **application that you will share any form of customer**
15 **agreement prior to the open solicitation, right?**

16 A. Well, what it states is in the event
17 we have developed a form of this agreement --

18 **Q. Right.**

19 A. -- prior to the solicitation, then our
20 notice will describe that formal agreement.

21 **Q. Have you shared MJMEUC's TSA?**

22 A. Well, we've provided it as a public
23 document. That was a negotiated contract rather than
24 a formal agreement. It was not supplied to all
25 respondents to our open solicitation.

1 **Q. Not been posted to your website?**

2 A. Well, at this moment it's available in
3 this docket, but, again, we didn't provide it to
4 every customer requesting transmission service
5 because it was a negotiated agreement, not a formal
6 agreement.

7 **Q. Was it marked as highly confidential**
8 **in this proceeding?**

9 A. I don't know.

10 **Q. Also at the bottom of that page 15 you**
11 **state that, "Preliminary meetings will be publicly**
12 **noticed on the applicant's website," is that correct?**

13 A. Correct.

14 **Q. Now did you notice, publicly notice,**
15 **the meeting between MJMEUC and Clean Line?**

16 A. We didn't, but I will say that's not a
17 meeting that's covered by this commitment here.

18 **Q. So is this agreement, this TSA with**
19 **MJMEUC, a result of the open solicitation?**

20 A. I would say yes, it's a result of
21 their request for service. MJMEUC requests for
22 service through the open solicitation.

23 **Q. Yet, you did not notice the meeting**
24 **publicly?**

25 A. That's correct, we did not notice

1 meetings for individual negotiation of this
2 agreement, the agreement with MJMEUC.

3 Q. Now turning to the capacity allocation
4 process, this is part of the guard against undue
5 discrimination, correct?

6 A. That's correct.

7 Q. You say at page 16, that "Applicants
8 proposed criteria are intended to incent early movers
9 and minimize commercial risks that could adversely
10 effect the economic viability of the project",
11 correct?

12 A. Correct.

13 Q. And you explain that further what it
14 is to incent early movers in your response to the
15 data request that's been identified as 412 on the
16 last page. Feel free to either read the response or
17 to paraphrase it.

18 A. So the question is, with respect to
19 Grain Belt's representation, its application in the
20 FERC document we just referenced, "Applicants
21 proposed criteria are intended to incent early movers
22 and minimize commercial risks that could adversely
23 effect the economic viability of the project." And
24 the data request asks for an explanation of how the
25 proposed criteria is, quote, "intended to incent

1 early movers." Response: The selection and the
2 ranking criteria that Grain Belt Express proposed in
3 its open solicitation process, reward generation
4 projects in advanced development stages and customers
5 willing to make commitments to Grain Belt Express
6 that align with Grain Belt Express' development needs
7 and project schedule."

8 Q. Okay. And then I'm particularly
9 interested in the commercial risk. What's the
10 explanation for the commercial risks to be avoided or
11 minimized?

12 A. Well, the two principle risks would be
13 the fact that we need to make large capital outlays
14 to build the project and to develop the project prior
15 to there being commitments. So the earlier we get
16 commitments, the less risk we have. And further that
17 in the case of a generation shipper, we would to be
18 assured that generation project is in the advanced
19 stage of development and can be completed on time, so
20 that is one factor we would consider in our open
21 solicitation project.

22 Q. And how is it that commercial risks
23 can adversely effect the economic viability of the
24 project?

25 A. Well, our project proceeding is

1 dependent on revenue commitments from shippers and
2 wind generation projects that are able to be
3 constructed and developed.

4 **Q. Please describe me your selection**
5 **criteria on page 17 of your application?**

6 A. So for purposes of clarity, these are
7 initial selection criteria to determine who we would
8 consider negotiating with. And there's a second set
9 of criteria, which we will get to later. I want that
10 to be clear. The selection criteria are a first
11 mover status or commitment to pursue an agreement
12 during a specific negotiation window. The credit
13 worthiness of the customer, the commitment to pay a
14 nonrefundable deposit, a transmission service
15 reservation of at least five years, a transmission
16 service reservation of at least 50 megawatts of
17 capacity.

18 **Q. And how does MJMEUC stack up in that**
19 **selection criteria?**

20 A. Well, they rose to the top because
21 they were willing to be a first mover and silent
22 while we were still in the process of obtaining our
23 regulatory approvals. They are a very creditworthy
24 entity, since they are a large organization that has
25 the right to sell power. They did not commit to pay

1 a nonrefundable deposit, but we were willing to waive
2 that requirement given the amount of time, effort and
3 commitment they had to the project. Their
4 reservation was for longer than five years and their
5 reservation was for more than 50 megawatts of
6 capacity.

7 **Q. You would agree with me that they have**
8 **the right to select no energy delivery under that**
9 **contract?**

10 A. I wouldn't agree with that
11 characterization of it, no.

12 **Q. Why not?**

13 A. Well, our Transmission Service
14 Agreement is for transmission service not energy, and
15 I would agree that as a technical matter in the
16 contract they have the right to reduce their
17 commitment, but they now have committed to buy energy
18 from the project, which even though it's not yet
19 explicitly incorporated into our agreement, the
20 commitment to buy wind energy in Kansas necessitates
21 taking the service on Grain Belt in order to move the
22 energy to Missouri.

23 **Q. But if MJMEUC breaches its contract**
24 **with Infinity, MJMEUC could still elect to take zero**
25 **energy delivered on the TSA with Clean Line, correct?**

1 A. Again, they're not buying energy from
2 Grain Belt Express. You're correct that if they were
3 to default on their commitment to buy wind power,
4 they would during a period of time have the right to
5 reduce their capacity under our Transmission Service
6 Agreement.

7 **Q. The contract provides no remedy for**
8 **Clean Line in the event that MJMEUC selects zero**
9 **megawatt on the TSA?**

10 A. That depends on the moment in time,
11 but there is an initial period of time before MJMEUC
12 has to confirm its commitment where it does have the
13 right to reduce its commitment.

14 **Q. It can confirm at zero, correct?**

15 A. During that initial period of time,
16 that's correct.

17 **Q. So there is really no commitment in**
18 **that TSA?**

19 A. I wouldn't agree with that.

20 **Q. Okay. You made reference then to a**
21 **more detailed ranking criteria on pages 19 and 20.**

22 A. Again of the FERC application?

23 **Q. Right.**

24 A. Okay.

25 **Q. And have you applied that criteria**

1 **yet?**

2 A. Yes.

3 **Q. Okay. So how have you ranked**
4 **respondents in this criteria?**

5 A. Well, we selected two customers,
6 MJMEUC and another load servicing entity, to
7 prioritize for negotiations. We haven't specifically
8 ranked the remainder of the customers requesting
9 service. We've stated that we will return to
10 negotiate with them at the right time.

11 **Q. Have those negotiations been open?**
12 **Have they been publicly noticed?**

13 A. I'm sorry, which negotiations are you
14 referring to?

15 **Q. The negotiations with MJMEUC and this**
16 **other customer?**

17 A. Again, we don't publicly notice
18 individual negotiations.

19 **Q. So you have two in the ranking at this**
20 **point under this criteria on page 19 and 20?**

21 A. We have two that have specifically
22 been ranked at this time to prioritize negotiations,
23 that's correct.

24 **Q. At page 20 you talk about your**
25 **relationship with generation resources, is that**

1 correct?

2 A. Correct.

3 Q. And you say that, "The project relies
4 heavily on the development of generation resources."

5 A. I don't see that statement
6 specifically here, but I agree with your premise.

7 Q. Down about three-quarters the way on
8 the page, "Given that the advancement of the project
9 relies heavily on the development of these generation
10 resources, applicant also proposes specific ranking
11 criteria to be applied to customers seeking project
12 capacity for the development of such generation."

13 A. Fair enough, that's what it says.

14 Q. So let's take a look at page 21 then.
15 It says basically there, "Absent these criteria, the
16 project faces greater risk that negotiated agreements
17 will be awarded to customers that later backout
18 because they do not have definitive project plans.
19 Moreover, because a merchant transmission owner and
20 its generator customers must rely on each other, the
21 complex -- to complete their respective projects,
22 they must work together to coordinate timelines and
23 contractual arrangements." Is that an accurate
24 reading of it?

25 A. Yes, you read it correctly.

1 Q. Okay. I would like to have another
2 exhibit distributed marked and presented to you.

3 JUDGE BUSHMANN: This is 414.
4 (Exhibit 414 was marked for
5 identification.

6 Q. (By Mr. Linton) Can you identify this
7 document?

8 A. This appears to be my testimony in the
9 integrated resource plan in 2016 for Georgia Power.

10 Q. Can you just briefly describe what the
11 purpose of your testimony was in that case -- or
12 backup. What was that case? What was that docket
13 all about?

14 A. There was some specific issues
15 considered, but the most important issue was Georgia
16 Power Company's integrated resource plan.

17 Q. And what was the purpose of your
18 testimony?

19 A. It was to make comments and
20 suggestions on the integrated resource plan. If I
21 might add, with respect to our Plains and Eastern
22 Clean Line project.

23 Q. At page 21 of that testimony, line
24 426 --

25 A. If I might clarify, there could be two

1 page numbering systems here. One for this docket and
2 one for the previous docket, so I'll need you to help
3 me out here.

4 **Q. We've been having problems with page**
5 **numbering, haven't we?**

6 A. The numbers aren't lined -- the lines
7 are numbered, excuse me, if that helps.

8 **Q. The lines are numbered so let's go**
9 **with the lines. 406 to line 441, and I'm not going**
10 **to ask you to read all of that, but basically**
11 **summarize what you described there?**

12 A. I describe the recent extension of the
13 production tax credit for wind generation and the
14 fact that the level of tax credit for which a
15 generator is eligible depends on them starting
16 construction on a wind farm, which can either be
17 accomplished by ordering turbines or beginning
18 physical work at a site.

19 **Q. And the key point there is beginning**
20 **of construction, right? The point for the generator**
21 **to get the tax credits or the amount of tax credits**
22 **he gets depends on the date the construction begins?**

23 A. Broadly speaking, that's correct.

24 **Q. Okay. So for construction begun in**
25 **2016, there's a 100 percent tax credit, presuming he**

1 finishes in the appropriate amount of time?

2 A. Well, finishing is largely a separate
3 issue because there are numerous ins and outs of that
4 requirement, so I would agree with the first part of
5 your statement, that generating to start construction
6 by 2016 to get the 100 percent tax credit. With
7 respect to finishing, I would say that your statement
8 is probably a little bit of a oversimplification.

9 Q. Starting in 2017 there's an 80 percent
10 tax credit, correct, assuming all the hoops are
11 jumped through for a period of construction? If the
12 project is started in 2017 there's an 80 percent tax
13 credit?

14 A. That's correct.

15 Q. And it goes down 20 percent from there
16 until the point where there's no more tax credit?

17 A. Correct.

18 Q. Now I'm having some confusion with the
19 line numbering. I was citing to page 7, lines 21
20 through 23, but that can't be. There's some language
21 in here, in your testimony, "Therefore the total cost
22 of the wind energy delivered to Missouri by GBX must
23 be better -- a better value for Missouri utilities
24 and their customers than both owner renewable
25 resources and other sources of power generally in

1 **order to be contracted."**

2 MR. ZOBRIST: I'm sorry, where are you
3 reading from, please?

4 MR. LINTON: I'm reading from my
5 notes, but apparently it's in here. I'm just
6 wondering if he can tell me where that is?

7 A. Sorry, I can't recall off the top of
8 my head.

9 Q. **(By Mr. Linton) We'll strike that**
10 **entire thing.**

11 **What happens if ultimately after the**
12 **project is constructed, the cost of wind energy via**
13 **Grain Belt Express project is no better than what**
14 **could be added via SPP, MISO and PJM?**

15 A. Sorry, could you repeat that question
16 and break it down for me?

17 Q. **Right. So you have to construct Grain**
18 **Belt Express, and you have to get wind generators**
19 **online and you have to get customers. In the event**
20 **that that project can't be developed, you can't get**
21 **power producers and you can't get customers at a**
22 **lower cost than what can be provided by SPP, MISO and**
23 **PJM, what happens?**

24 A. I'm sorry, I don't understand the full
25 question.

1 **Q. You specified that RTOs are required**
2 **to provide service and do provide service?**

3 A. If you're referring to the earlier
4 line of questioning, that's correct. I testified
5 about the process by which a customer can request
6 service from an RTO.

7 **Q. And you've indicated that your prices**
8 **will be disciplined by those prices, i.e., if your**
9 **prices exceed the prices of that process, you will**
10 **not be able to sell service?**

11 A. Generally speaking, I think that is
12 true, though, again, I mentioned earlier there were
13 some other factors a shipper might weigh.

14 **Q. All right. That's good. Now take a**
15 **look at page 27, line 21 of your direct testimony,**
16 **you say in your analysis, "LCOE, levelized cost of**
17 **the energy", produces a levelized cost per unit of**
18 **energy, that is a proxy for a Power Purchase**
19 **Agreement", a PPA, "that a utility would enter into**
20 **for the cost for a utility to own and operate a**
21 **generation asset."**

22 A. I'm sorry, I'm not clear on which
23 portion of the testimony that you're pointing to.

24 **Q. Page 27, line 21.**

25 A. I'm sorry, I heard line 1. I'll take

1 subject to check, your reading was correct.

2 Q. Okay. But what you say then is that,
3 "The LCOE", levelized cost of energy, "allows the
4 comparison of different alternatives using a single
5 analytic method. Some alternatives may have higher
6 initial costs, capital costs while other alternatives
7 may have higher ongoing operating or fuel costs." Is
8 that correct?

9 A. Correct.

10 Q. And basically that analysis condenses
11 all the costs of a given alternative into a single
12 figure?

13 A. Correct.

14 Q. Okay. So you mentioned there that
15 some units may have different capital investments and
16 some may have different operating costs. Some may
17 also be different in size, correct?

18 A. Correct.

19 Q. And the normalizing or the factor that
20 brings them all down to the base comparison is the
21 fact that they are all on a per unit basis, correct?

22 A. You can compare plants of different
23 size because the results are expressed per megawatt
24 hour, so you can compare units of different size and
25 it's an appropriate comparison.

1 Q. Take a look at page 10, lines 11 and
2 12 of your surrebuttal testimony. You have a
3 disagreement with Mr. Justis's approach to making
4 adjustments for this capacity penalty is what it's
5 been called, I'm not sure I like that term, but
6 that's what you've been calling it, is that correct?
7 And you say that Mr. Justis doesn't follow
8 Mr. Proctor's method, correct?

9 A. That's correct.

10 Q. Let's turn then to Mr. Proctor's
11 testimony. I would like to have another exhibit
12 marked.

13 (Exhibit 415 was marked for
14 identification.)

15 Q. (By Mr. Linton) Before we go there,
16 let me make reference to page 10, line 2 of your
17 surrebuttal. And I'll start it at line 1 just to
18 give an entire context. You say in reviewing
19 Mr. Justis's work papers, "He computes the Grain Belt
20 Express delivered wind energy as an inherent capacity
21 value of 58.5." And then you go on and say that he
22 then adds the cost of 241.5 megawatts, is that
23 correct?

24 A. Correct.

25 Q. Okay. So you have a concern with his

1 **inherent capacity value of 58.5?**

2 A. Well, I do, but here I'm specifically
3 taking objection to a different part of his analysis.

4 **Q. His addition of the 241.5?**

5 A. Correct.

6 **Q. Let's take a look at what Mr. Proctor**
7 **has done at page -- as you've referred to it -- well,**
8 **please identify this document that has been**
9 **distributed and marked as 415?**

10 A. This appears to be the rebuttal
11 testimony of Michael S. Proctor.

12 **Q. Okay.**

13 A. Which conveys to me no small sense of
14 déjà vu.

15 **Q. I hear you. And you make reference to**
16 **page 16 of that testimony. Is that what you're**
17 **referring to in your surrebuttal?**

18 A. Correct.

19 MR. LINTON: And while I am thinking
20 about it, Judge, I move that these exhibits be
21 entered into evidence.

22 JUDGE BUSHMANN: You're referring to
23 Exhibit 412, 413 and 414 and 415?

24 MR. LINTON: Yes.

25 JUDGE BUSHMANN: Is there any

1 objection to receipt of those exhibits?

2 MR. ZOBRIST: No, Your Honor.

3 JUDGE BUSHMANN: They're received into
4 the record.

5 Q. (By Mr. Linton) So Mr. Proctor's
6 approach here is, he says for example, "A
7 combined-cycle plant with accredited unforced
8 capacity of 93 percent and Kansas wind having
9 accredited unforced capacity 14.5 percent, would
10 result in a difference of 78.5 percent." And
11 basically he goes on and says that you need to add
12 78.5 percent of other capacity to get the wind
13 generation up to the 93 percent, is that correct?

14 A. The summary I'd give of his testimony
15 as you say that you would add the cost of enough
16 accredited capacity to the lower capacity resource,
17 in this case wind, so it has equal dependable
18 capacity to the higher capacity value resource, so
19 the heart of it is you're adjusting the model, so
20 you're comparing two alternatives that have the same
21 capacity value.

22 Q. Right. You would agree that, for
23 example, as long as they have the same capacity
24 value, that's what you're concerned about, right?

25 A. Well, I'm just stepping back and I

1 think I made this clear in my testimony, I'm not
2 onboard with this whole method. I don't think it's
3 the way markets and RTOs and current wind generation
4 works, so here I'm talking about I'd say just the
5 mathematics of Mr. Justis's calculation, right? So
6 with that clarification, I think the way Proctor did
7 it was, Dr. Proctor did it, was mathematically
8 correct because he set the two alternatives to have
9 dependable capacity values that are equal and then
10 compared them. And the fact that Mr. Justis didn't
11 do that is the concern I'm describing here.

12 Q. So as long as they have the equal
13 capacity value, that's what you're concerned about?
14 As long as you're comparing apples to apples, as long
15 as they have the equal capacity value, that's what
16 you're concerned with?

17 A. That's the specific issue I'm
18 discussing here, correct.

19 Q. Okay. So, for example, the
20 combined-cycle plant could add a capacity penalty,
21 there again, I'm not crazy about the term, but that's
22 what we're using, of 7 percent and you could add a
23 capacity penalty to the wind of 85.5 percent,
24 bringing them both up to 100 percent capacity value,
25 and you would have the same apples to apples

1 comparison, correct?

2 A. I'm sorry, I'm not following that
3 question.

4 Q. Okay. You start with a combined-cycle
5 plant with 93 percent capacity factor, correct?

6 A. Sorry, I'm not following the question.

7 Q. All right. Looking at Mr. Proctor's
8 testimony --

9 A. Okay.

10 Q. - for example, a combined-cycle plant
11 with accredited capacity, unforced capacity of 93
12 percent, you start there with a combined-cycle
13 capacity of 93 percent, and you have an accredited
14 capacity for a wind generating plant of 14.5 percent,
15 to get them to the same capacity you could add a 7
16 percent capacity penalty to the combined-cycle plant
17 to get it up to 100 percent and you could add 85.5
18 percent to the wind generating unit to get it up to a
19 100 percent and you would still have a comparison of
20 the same capacity values, correct?

21 A. And I apologize, I'm just really
22 having trouble following all the predicates of the
23 question to give you a clear answer.

24 Q. Well. Think about it. Mr. Proctor
25 says you have to add 78.5 percent to the wind to get

1 **up to the 93 percent, correct?**

2 A. I don't believe that's what he's
3 saying, no.

4 **Q. All right. Please explain to me what**
5 **he is saying?**

6 A. What he's saying here, sorry,
7 hopefully it's in plain English, you got to add
8 enough capacity to the wind plant so it has the same
9 capacity as the natural gas plant, combined-cycle
10 plant.

11 **Q. Okay. Let's move on. I think that**
12 **will suffice. Let's take a look at your work papers**
13 **and I have two documents to be distributed, 416 and**
14 **417.**

15 A. If I could inquire, I think these
16 might include highly confidential information. Could
17 we just double check that?

18 **Q. They probably do.**

19 MR. ZOBRIST: Yes, they do.

20 JUDGE BUSHMANN: We will need to go in
21 camera to discuss these.

22 MR. LINTON: I think so.

23 JUDGE BUSHMANN: Is that correct?
24 This is a closed session. Members of the audience
25 who are not authorized to hear confidential

1 information, will you step outside, please?
2 (Exhibit 416 and 417 was marked for
3 identification.)
4 JUDGE BUSHMANN: Those are both HC,
5 correct?
6 MR. LINTON: Yes.
7 JUDGE BUSHMANN: We are in closed
8 session, so you can proceed whenever you're ready.
9 (The following in-camera testimony if
10 from Witness David Berry.)
11 * * * * *
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1 (Exhibit 406-HC was marked for
2 identification.)

3 JUDGE BUSHMANN: Okay. Let's go back
4 on the record. Before we broke for lunch, I think
5 there was some unfinished business, Mr. Linton, about
6 your exhibits.

7 MR. LINTON: Right. I would move that
8 Exhibit 416-HC and 417-HC be entered into evidence.

9 JUDGE BUSHMANN: And what about 418
10 and 419?

11 MR. LINTON: Those as well.

12 JUDGE BUSHMANN: Any objections to
13 receipt of those exhibits?

14 MR. ZOBRIST: No objection.

15 JUDGE BUSHMANN: Hearing none they are
16 received. We are ready for cross-examination by
17 Missouri Landowners.

18 MR. AGATHEN: Thank you, Judge.

19 CROSS EXAMINATION

20 BY MR. AGATHEN:

21 Q. Good afternoon, Mr. Berry.

22 A. Good afternoon.

23 Q. Before I forget, I have just a few
24 questions in follow-up to your cross-examination
25 earlier this morning. Could you explain for the
record, please, what the term capacity credit as a
percent of nameplate rating means?

A. Sure. Generally speaking it's the
percentage of the resources total nameplate capacity.

1 So what can you count on to be there in the peak
2 hours when you need generation most.

3 Q. And that's the number that utilities
4 could generally use in capacity planning purposes in
5 looking at reliability?

6 A. Generally speaking, yes.

7 Q. Do you have a ballpark of what the
8 capacity credit would be for a combined-cycle unit?
9 That came up this morning.

10 A. You intend to think of gas plants as
11 over 80 percent, perhaps over 90 percent.

12 Q. And how about wind generation, what
13 does MISO assign normally to wind generation as far
14 as capacity credit?

15 A. It really varies on the region and the
16 capacity factor. The high end is about 20 percent.

17 Q. Thank you. Back to my question.
18 Hypothetically if MJMEUC buys say 100 megawatts of
19 firm capacity for service from Kansas to Missouri,
20 that leaves you with 400 megawatts to sell, is that
21 correct?

22 A. We actually measure the capacity at
23 the sending end, so that would be closer to 540
24 megawatts. You would have 440 megawatts left to
25 sell.

1 Q. So you still got roughly 440 megawatts
2 to sell?

3 A. Roughly.

4 Q. Is it fair to say one factor in your
5 ability to sell that roughly 400 megawatts is going
6 to be the price that you charge for the capacity?

7 A. I'd agree with that.

8 Q. And also price that the wind
9 generators will charge for the energy?

10 A. I'd agree with that as well.

11 Q. Could you turn to page 24, please, of
12 your direct testimony. Beginning at line 8 you say
13 that you have "Independently confirmed the price of
14 wind generation in Western Kansas from the results of
15 a Request for Information which your company sent out
16 to perspective wind developers back in January of
17 2014", is that correct?

18 A. That's correct.

19 Q. And they call the Request for
20 Information an RFI?

21 A. I understand what you mean.

22 Q. And the purpose of the RFI was to see
23 how much interest there might be from wind farms in
24 the area of your lowest collection center, is that
25 generally true?

1 A. That's correct.

2 Q. What the cost of the generation might
3 be?

4 A. Correct.

5 Q. And as you stated in line 11 of your
6 testimony you received responses from 14 wind
7 developers in response to that RFI, is that correct?

8 A. That's correct.

9 Q. We asked you in the data request in
10 this case, DB.40, to provide us with a complete
11 un-redacted copy of responses to that RFI, do you
12 recall that?

13 A. Subject to check on the number I
14 recall the data request.

15 Q. Thank you. And in response you sent
16 us the RFI forms given to you by the wind developers
17 but with certain of the information redacted, is that
18 correct?

19 A. I believe we provided all the
20 information in summary form, but some of it wasn't --
21 couldn't be tied back to an individual generator.

22 Q. Some of the information was redacted,
23 right?

24 A. On those individual forms that's
25 correct.

1 Q. You sent us a response of 261 pages of
2 the actual responses, did you not?

3 A. I'll take your word for the number.

4 Q. I'll show you. I'm going to hand you
5 a copy of what's been marked as Exhibit 340 and ask
6 you if that appears to be copies of the forms which
7 were sent to you by the wind farms and which you in
8 return sent to us but with certain information
9 redacted?

10 A. It appears to be, correct.

11 MR. AGATHEN: Your Honor, if you
12 recall you allowed us to make the one copy of this
13 for the court reporter without distributing copies to
14 everybody else.

15 JUDGE BUSHMANN: I think that has
16 already been ordered.

17 MR. AGATHEN: At this point I will
18 hand it to the court reporter and ask that 340 be
19 received in evidence.

20 JUDGE BUSHMANN: Any objection to
21 receiving that exhibit?

22 MR. ZOBRIST: No objection.

23 JUDGE BUSHMANN: It is received in the
24 record.

25 MR. ZOBRIST: This is highly

1 confidential, correct, Mr. Agathen?

2 MR. AGATHEN: I believe is.

3 JUDGE BUSHMANN: Then it would Exhibit
4 340-HC.

5 MR. AGATHEN: Thank you for that
6 clarification.

7 MR. BRADY: Your Honor, may I ask, can
8 we get just a brief description of what was the
9 document that was added for the record?

10 MR. AGATHEN: Mr. Berry, can give a
11 brief description.

12 A. These are -- were the responses with
13 certain redactions from the 14 wind generators to our
14 Request for Information. They were the actual forms
15 submitted by the 14 parties.

16 MR. BRADY: Thank you.

17 Q. (By Mr. Agathen) There were 14 wind
18 developers you said which responded for 26 different
19 wind farms, is that correct?

20 A. Correct.

21 Q. So some developers obviously sent in
22 information for more than one wind farm?

23 A. Correct.

24 Q. You also recall a second data request
25 DB.41, which stated with reference to page 24, lines

1 14 to 15 of your testimony; "Please provide the work
2 papers and documentation which support the figure of
3 2.0 cents per kilowatt hour flat for 25 years for the
4 lowest price of 4000 megawatts, including the name of
5 each wind farm included in that calculation."

6 A. I recall that request.

7 Q. In response you did not send us any
8 information at all, did you?

9 A. I don't recall whether we sent any
10 information specific to that request.

11 Q. I'll hand you a copy of a data request
12 which we sent to you, DB-152, and that says, "Please
13 confirm that Grain Belt has provided no information
14 in response to our data request DB.41." Is that the
15 question?

16 A. Correct.

17 Q. And your response was, "Beyond the
18 documents provided in response to", I think you meant
19 DB.40 there, "no additional information has been
20 provided. There are no work papers regarding average
21 2.0 cents per kilowatt hour figure regarding the
22 lowest price 4000 megawatts of new wind generation",
23 is that correct?

24 A. That's correct.

25 Q. So essentially that says you did not

1 provide us any information in response to DB.41,
2 correct?

3 A. I'm sorry. That -- correct. Other
4 than what was provided in DB.40, correct.

5 Q. Thank you. And the redacted documents
6 sent to us from you which had been sent to you by the
7 wind farms?

8 A. Correct. I don't know if it was that
9 data request. I know we also provided summary
10 information in addition to the forms to DB.40 I
11 believe it was.

12 Q. So we don't have the data at this
13 point which would -- let me, just for clarification.
14 Grain Belt is saying they did not provide certain
15 information to us, but that was pursuant to an order
16 from the Commission which said that they did not have
17 to allow or that they did not have to provide that
18 information, so I'm not faulting them for not
19 providing it, they were in compliance with an order
20 of discovery.

21 MR. ZOBRIST: Judge, just to clarify,
22 your ruling was based upon the fact that we did not
23 identify by wind farm the speeds. We gave wind speed
24 information over here and then we gave the redacted
25 farms over here, so we didn't link them up which was

1 the issue that was before the Commission.

2 JUDGE BUSHMANN: That's my memory.

3 MR. AGATHEN: I wanted to make it
4 clear that I'm not accusing them of providing
5 information that they weren't obligated to provide.

6 JUDGE BUSHMANN: Thanks for clarifying
7 that.

8 Q. (By Mr. Agathen) In any event, we
9 don't have the data which would allow us to check or
10 verify what you said was the cost of the lowest 4000
11 megawatts in response to the RFI, do we?

12 A. I'm not sure I agree with that. I
13 agree you don't have a price that you can link to
14 each generator. I do believe you have a summary of
15 the prices provided in the RFI.

16 Q. Summary given to us in your testimony?

17 A. My recollection is there were
18 additional summary documents we provided in response
19 to DB.40 that were part of the verification on that.

20 Q. But they certainly did not have a
21 breakdown of individual prices by individual wind
22 farms, did they?

23 A. Correct.

24 Q. Thank you. We couldn't tell which
25 wind farms were included in the calculation of the

1 lowest cost 4000 megawatts, could we?

2 A. I'm sorry, I don't recall exactly what
3 we provided on that.

4 Q. Well, do you have any information with
5 you which would show that you gave us the names of
6 the wind farms that were included in the calculation
7 of the 4000 megawatts?

8 A. No, I don't.

9 Q. We couldn't even tell how many wind
10 farms were included in the calculation of your 4000
11 megawatts, could we?

12 A. Again, I don't know the answer to
13 that.

14 Q. To the best of your knowledge?

15 A. I don't know one way or the other.

16 Q. We don't have the price per megawatt
17 hour which were included in your calculations, do we?

18 A. Again, I don't know.

19 Q. And we couldn't calculate from what
20 you gave to us what the cost would be for any
21 increment in capacity above 4000 megawatts, could we?

22 A. I don't know.

23 Q. Based on the documents that we have
24 submitted today we could not, could we?

25 A. From the RFI forms, that's correct.

1 Q. And that's correct with respect to
2 these other questions that I just talked about,
3 correct?

4 A. I'm sorry, I don't remember all of
5 them.

6 Q. Okay. We couldn't tell from the
7 documents that we've just talked about that were
8 submitted in evidence today, which wind farms were
9 included in the calculation of the lowest cost 4000
10 megawatts?

11 A. I agree with that.

12 Q. Or how many wind farms were included?

13 A. I agree with that.

14 Q. And we don't have the price per
15 megawatt which were included in your calculations of
16 the lowest cost 4000 megawatts, do we?

17 A. Not based on the redacted forms we
18 provided, correct.

19 Q. I'm going to distribute now what has
20 been marked as Exhibit 341. I just might note as
21 indicated near the bottom of the exhibit, this is the
22 same as Exhibit 326 from the earlier case. Do you
23 have a copy of their Exhibit 341?

24 A. I do.

25 Q. This is what we've been calling the

1 Request for Information which Grain Belt sent out to
2 perspective wind farm developers, correct?

3 A. That's correct.

4 Q. And in response to this document you
5 received back the 261 pages of information in Exhibit
6 340, is that correct?

7 A. I'll accept that subject to verifying
8 the filed document.

9 Q. Looking at page 2 of Exhibit 341, I've
10 added the page numbers in the bottom right hopefully
11 for clarification, but looking at page 2 as marked in
12 the low right corner, in the first long paragraph
13 there you discuss some of the purposes of the RFI,
14 correct?

15 A. Sorry, which paragraph?

16 Q. Page 2 in the first long paragraph?

17 A. Correct.

18 Q. And in the second sentence of that
19 paragraph, you say that the data collected in your
20 RFI will be used to communicate to regulators that
21 there is a need for more transmission infrastructure,
22 is that correct?

23 A. Correct.

24 Q. And then in the second long paragraph
25 on that same page in the second sentence, you make it

1 clear to the wind developers that the RFI was not a
2 commitment to enter into any kind of transaction, is
3 that correct?

4 A. That's correct.

5 Q. Next sentence you say that none of the
6 information provided by the wind developers is
7 binding and that it would be provided solely for
8 informational purposes, is that correct?

9 A. Correct.

10 Q. Is it true that if developers gave you
11 wind data that you found useful in obtaining
12 regulatory approvals, that that could help the
13 ranking with you when it came time to bidding that
14 capacity?

15 A. We haven't used that one way or the
16 other in our capacity rankings.

17 Q. That was certainly a possibility that
18 you could use that?

19 A. I couldn't say one way or the other.
20 We didn't use it, I don't recall we ever discussed
21 it.

22 Q. Mr. Berry, I'm handing you a copy of
23 the data request from the prior case. So there's no
24 confusion, it's Data Request No. 40, but it was from
25 the earlier case and we asked you with respect to

1 page 20 of Grain Belt's application to the FERC in
2 Docket No. ER14-409, "Please describe the means by
3 which a customer might meet the 4th criteria, their
4 ability to assist with the projects, development
5 needs including obtaining necessary citing approvals
6 and government authorizations", is that correct?

7 A. That's correct.

8 Q. And then a part of your response was,
9 "There are many scenarios over the course of
10 developing a project in which a potential customer
11 could assist Grain Belt in this process." This goes
12 on to say, "Alternatively, a potential customer could
13 provide wind data that is useful to Grain Belt
14 Express in seeking regulatory approvals", is that
15 correct?

16 A. Again, we haven't actually done that,
17 but we did state that in the data request, that's
18 correct.

19 Q. Would you please turn to page 8 of
20 Exhibit 341, that we just distributed, the RFI form.
21 Do you have that?

22 A. I do. And just for clarification,
23 this is your marked page 8 bottom right?

24 Q. Yes. Right. The document shown there
25 or the materials shown there on page 8, that's one of

1 the forms which the wind developer was asked to fill
2 out in responding to the RFI, correct?

3 A. Correct.

4 Q. And one of the items you asked for at
5 page 8 is the annual capacity factor based on
6 nameplate rating, right?

7 A. Correct.

8 Q. Is it fair to say that you have no
9 personal knowledge of how the wind farms actually
10 derived or calculated the annual capacity factors
11 they submitted to you?

12 A. I would say that I have personal
13 knowledge of the methods they use, I don't have
14 personal knowledge of the exact calculations.

15 Q. Mr. Berry, I'm handing you a copy of a
16 data request again from the last case, Data Request
17 No. 3-5, and the request asked, "How did the wind
18 farms derive or calculate the annual capacity factors
19 which they submitted on the RFI forms?" And response
20 was, "Both Grain Belt Express does not know how any
21 RFI respondent derived the actual capacity factor.
22 The industry standard method is to use local
23 meteorological data in combination with long term
24 reference wind data such as at an airport or other
25 meteorological station to predict long term wind

1 speeds." Is that correct?

2 A. That's correct.

3 Q. Turning over to page 10, as I have
4 marked them on the form, the RFI form near the middle
5 of the page, you ask the wind developers for an
6 estimate of the average wind speed on their project,
7 is that correct?

8 A. Correct.

9 Q. And at page 11 you ask them for
10 estimates of the Buspar price on their wind farm, is
11 that correct?

12 A. Correct.

13 Q. Were the terms pricing or price as
14 used in your form ever defined by Grain Belt for the
15 parties responding to the RFI?

16 A. I don't recall.

17 Q. Mr. Berry, I'm handing you a copy of a
18 data request again from the last case and the request
19 asks, "Were the terms "pricing" or "price" as used in
20 part D of the RFI ever defined by Grain Belt or Clean
21 Line for the parties responding to the RFI?" And the
22 response was, "The terms were not defined other than
23 as described in the form of the RFI", is that
24 correct?

25 A. That's correct.

1 Q. Pricing data from page 11 of the RFI
2 form is where you derived the information you cite in
3 your direct testimony where you say the lowest price
4 4000 megawatts was 2.0 cents per kilowatt hour flat,
5 is that correct?

6 A. That's correct.

7 Q. In your form at page 11 says that,
8 "Providing a project Buspar cost is mandatory", is
9 that correct?

10 A. Correct.

11 Q. But despite what you say there, isn't
12 it true that some of the projects did not bother to
13 provide their estimated Buspar costs?

14 A. I believe that's correct.

15 Q. Did you do an audit of the responses
16 to your RFI to verify any of the data that the wind
17 farms provided regarding wind speeds, capacity
18 factors or Buspar costs?

19 A. I inspected it for reasonableness, I
20 didn't attempt to verify all the information
21 independently.

22 Q. Some of the wind farms had different
23 wind speeds than others, did they not?

24 A. Correct.

25 Q. So wind speeds will vary even in the

1 area where the perspective wind farms are located,
2 right?

3 A. To some extent.

4 Q. Did you tell the wind developers you
5 wouldn't impose any penalty, financial or otherwise,
6 if you found that they provided any inaccurate
7 information to you in response to the RFI?

8 A. No.

9 Q. And the RFI process was done
10 independently from the process of your subsequent
11 open solicitation for bids for capacity, is that
12 right?

13 A. That's right.

14 Q. So none of the information in the RFI
15 was in any way binding on the wind developer if they
16 later decided to bid for capacity, is that correct?

17 A. Correct.

18 Q. And if they buy capacity on the line
19 when it comes time for them to negotiate a price for
20 their energy with a load serving utility, nothing
21 that was said in response to the RFI will in any way
22 be binding, will it?

23 A. Correct.

24 Q. The wind developer will essentially be
25 allowed to charge what the market dictates regardless

1 of what they told you in response to the RFI?

2 A. I concur that their RFI response will
3 not be binding on their pricing.

4 Q. Good enough. In fact, the very top of
5 page 11 of the RFI form you state the following:

6 "Clean Line acknowledges that pricing is indicative
7 not binding and provided only for informational
8 purposes"?

9 A. Correct.

10 Q. And just a question maybe sort of an
11 aside, when you say the pricing is indicative, what
12 does that generally mean in your industry?

13 A. Indicative and nonbinding mean similar
14 things.

15 Q. So it's a projected price, is that
16 fair to say?

17 A. Not necessarily, it could be as of the
18 moment in time.

19 Q. So it's a nonbinding number that they
20 will not necessarily sell their energy for?

21 A. Correct.

22 Q. Thank you. Two lines of questions now
23 about how you calculated the cost of the lowest 4000
24 megawatts of capacity which you got in response to
25 the RFI. 4000 megawatts is the delivered capacity of

1 the line, correct?

2 A. Correct.

3 Q. And for variety of reasons you would
4 expect that about 4,600 megawatts of wind capacity is
5 actually going to connect to the convertor station in
6 Kansas, right?

7 A. Approximately 4,600, yes.

8 Q. When you went to calculate the lowest
9 4000 megawatts, you started by taking the lowest cost
10 of all the RFIs responses, right?

11 A. Correct.

12 Q. And then you added in the cost of the
13 next lowest?

14 A. Correct.

15 Q. Until you reached 4000 megawatts?

16 A. Averaging those costs, right.

17 Q. At the end you averaged them?

18 A. Correct.

19 Q. As you said, you actually expected
20 about 4,600 megawatts of wind capacity connected to
21 the convertor station, right?

22 A. Yes, correct.

23 Q. If you want to calculate the lowest
24 cost of capacity, which will actually be delivering
25 energy on your line, you need to calculate the lowest

1 price, 4,600 megawatts, would you not?

2 A. I would say the lowers price, 4000
3 megawatts, is a very good indication of what the
4 price of 4,600 megawatts would be.

5 Q. That would depend on the price of the
6 next increment above 4000 megawatts though, right?

7 A. I'd agree with that.

8 Q. And since you did this by adding in
9 progressively higher blocks, we don't have the
10 information from what you gave us in order to
11 calculate the cost of the 4,600 cheapest megawatts,
12 do we?

13 A. I don't know if that would have been
14 possible to calculate from what we gave you one way
15 or the other.

16 Q. Well, it couldn't have been calculated
17 from the RFI responses with redacted information that
18 you gave us, could it?

19 A. That's correct, it might have been
20 possible to calculate from the summary, I don't
21 recall.

22 Q. And it couldn't have been calculated
23 from the information that we asked for in the Data
24 Request 41 because you didn't provide anything,
25 right?

1 A. Again, I think the only thing germane
2 we provided was the summary of responses and I don't
3 know whether this calculation would have been
4 possible or not.

5 Q. Can you point to any information that
6 you gave us which would allow us to make that
7 calculation?

8 A. I can't sitting here today. I don't
9 have the data request in front of me.

10 Q. Which data request?

11 A. Again, I'm uncertain of the number,
12 but we provided the redacted forms as well as some
13 summary information, and the summary information may
14 have allowed you to make this calculation, I don't
15 know.

16 Q. We need the actual pricing data from
17 each wind farm in order to make that calculation,
18 wouldn't we?

19 A. Agree, though it wouldn't be necessary
20 to know the name of each wind farm to do the
21 calculation.

22 Q. Right. We would have to know the
23 actual prices?

24 A. I agree. And to clarify, prices in
25 the aggregate, not necessarily what it would be for

1 each wind farm.

2 Q. Is it also true that for technical
3 reasons most wind farms will not buy firm capacity on
4 the line in the full amount of the nameplate capacity
5 rating of their wind farm?

6 A. I think that's most likely; some may.

7 Q. More likely in the range of 80 to 90
8 percent?

9 A. It's possible.

10 Q. Could you explain very briefly why
11 that is so?

12 A. Sure. The wind is somewhat variable
13 so if you buy say 90 percent firm transmission
14 rights, most of your wind energy would be covered
15 through that firm transmission and only a small
16 percentage of your output would require some other
17 form of transmission, non-firm or another option.

18 Q. If a wind farm has a total capacity of
19 say 200 megawatts and buys capacity on the line for
20 say 85 percent of the amount, will he or she have the
21 right to ship the full 200 megawatts on a firm basis?

22 A. Not on a long term firm basis.
23 Additional service would have to be procured when
24 output is higher. Additional output would have to be
25 -- additional service would have to be procured when

1 the output is over the long term firm reservation.

2 Q. Let's assume hypothetically that the
3 very lowest cost block of capacity in your
4 calculation was 51.9 cents for 200 megawatts. Are
5 you with me?

6 A. I believe so.

7 Q. As we just discussed that developer is
8 likely to buy something less than 200 megawatts of
9 firm capacity on the line, right?

10 A. It's possible.

11 Q. Using your example, when you
12 calculated the cost of the lowest 4000 megawatts, did
13 you add in all 200 megawatts of the lowest cost block
14 at the 1.9 hypothetical number?

15 A. We based it on the nameplate capacity
16 of the wind farm. We didn't take a view on how much
17 firm transmission they bought.

18 Q. So you would have added in all 200
19 megawatts?

20 A. Correct.

21 Q. Grain Belt used that 0.2 cents per
22 kilowatt hour that you calculated in sales promotions
23 to perspective customers, have they not?

24 A. That's correct.

25 Q. Without the information we requested

1 in Date Request DB.41, we don't know how many
2 developers were included in your calculation for the
3 lowest possible 4000 megawatts, do we?

4 A. Again, I don't know if that could have
5 been computed for this, from the summary or not.

6 Q. It can't be from the information that
7 we've been discussing here today, can it?

8 A. Not from the redacted forms, correct.

9 Q. And we can't tell if one or more of
10 the wind farms in the lowest cost group were located
11 outside of Kansas, can we?

12 A. Not from the redacted forms.

13 Q. Or if they've gone out of business?

14 A. Not from the redacted forms.

15 Q. Or found a different outlet for their
16 energy?

17 A. Same answer.

18 Q. And we can't look at the credit rating
19 of those in your lowest cost group, can we?

20 A. Yes, same answer.

21 Q. Is it true that one of the wind
22 developers which responded to the RFI has since
23 signed a contract to sell the wind from that
24 development to a different buyer?

25 A. I believe that is the case.

1 Q. But we don't know which wind farm that
2 might have been, do we, from the information you gave
3 to us?

4 A. I don't know.

5 Q. From the information that we talked
6 about here today, we would not know, would we?

7 A. I guess I'm a little confused because
8 if that wind farm signed another power purchase
9 agreement, we wouldn't know which wind farm it was.

10 Q. You would know?

11 A. I'm sorry, I'm not following the line
12 of questioning.

13 Q. Would we know from the information you
14 gave us that that wind farm was no longer in the 4000
15 megawatt lowest cost?

16 A. Could you rephrase that for me?

17 Q. Sure. If a wind farm has gone out of
18 business, we don't know whether or not they were
19 included in that calculation you made of the lowest
20 cost 4000 megawatts, do we?

21 A. Correct.

22 Q. Thank you. Sorry for the confusion.
23 On a different subject, your direct testimony didn't
24 include a comparison of the cost of Kansas wind with
25 wind from Iowa or other MISO states, did it?

1 A. Not a specific dollar per megawatt
2 comparison, no.

3 Q. They bar charts that you have of the
4 levelized cost of energy, they were not included,
5 were they?

6 A. Not in my direct testimony, correct.

7 Q. Would you agree that the areas around
8 Northwest Iowa have some of the highest capacity
9 factor wind resources in the country?

10 A. Some of the highest, not the absolute
11 best.

12 Q. Would you agree that there is enormous
13 untapped potential for wind development in Iowa?

14 A. If transmission were available I would
15 agree with that.

16 Q. Would you agree that Iowa has the
17 potential to install over 318,000 megawatts of wind
18 projects with capacity factors in excess of 40
19 percent?

20 A. In respect of the wind resource
21 potential, just the raw technical potential, I agree
22 with that. I think there are a lot of practical
23 limitations around transmission and siting and so
24 forth.

25 Q. Clean Line is proposing a sister line

1 called the Rock Island Line, correct?

2 A. That's correct.

3 Q. And you testified at the Illinois
4 Commerce Commission in support of the Rock Island
5 application, did you not?

6 A. I did.

7 Q. And the figures we mentioned earlier
8 the 318,000 megawatts of wind projects, those figures
9 came directly off the pages of data published by the
10 NREL on a state by state basis for potential wind
11 energy, is that correct?

12 A. That sounds correct. I'll accept it
13 subject to check.

14 Q. And the acronym NREL stands for what?

15 A. National Renewable Energy Laboratory.

16 Q. Thank you. The Rock Island line is
17 intended to carry this abundant, low cost wind energy
18 from Northwest Iowa and surrounding areas to a
19 convertor station near Chicago, is that correct?

20 A. 40 miles west of Chicago, yes.

21 Q. Would you agree that there is no
22 shortage of wind land suitable for wind farms in and
23 around Northwest Iowa?

24 A. Generally speaking, yes.

25 Q. On a related subject, are you familiar

1 with the MISO MVP transmission project?

2 A. Generally familiar, yes.

3 Q. They're designed at least in part to
4 facilitate the development of additional renewable
5 energy, is that correct?

6 A. Correct.

7 Q. In order to meet state RPS
8 requirements of MISO utilities?

9 A. In part.

10 Q. And that would include Ameren, would
11 it not?

12 A. Correct.

13 Q. And they would provide access to any
14 of the Missouri municipalities within MISO, is that
15 correct?

16 A. Well, for clarification the projects
17 weren't dimensioned around municipalities, but could
18 a municipality who is a MISO customer use the MISO
19 system to potentially buy the wind resource, the
20 answer is yes.

21 Q. And the same with the REA co-ops,
22 which are in MISO?

23 A. From MISO cooperatives, yes.

24 Q. I would like to distribute now a copy
25 of Exhibit 343.

1 MR. AGATHEN: Your Honor, it was
2 pointed out to me I failed to offer Exhibit 341. I
3 would like to do so at this time.

4 JUDGE BUSHMANN: Any objections?

5 MR. ZOBRIST: No objection.

6 JUDGE BUSHMANN: 341 is received into
7 the record.

8 Q. (By Mr. Agathen) Do you have a copy
9 there of Exhibit 341 -- 343? Excuse me.

10 A. I do.

11 Q. That consists of several pages of your
12 rebuttal in the Rock Island case?

13 A. It appears to be correct.

14 Q. Near the top of page 60 of that
15 testimony, you discuss the purpose of and advantages
16 to MISO utilities of the MVP transmission projects,
17 correct?

18 A. Correct.

19 Q. And those projects are intended, are
20 they not, to facilitate the movement of renewable
21 energy from windy regions of MISO to MISO member
22 utilities?

23 A. Correct.

24 Q. And do you recall that one or more
25 parties suggested in that case that MISO MVP projects

1 might be used to provide wind energy to the Chicago
2 area in competition with your Rock Island line?

3 A. Correct.

4 Q. You noted at page 60, line 1443 that
5 the MISO MVP projects do not provide for delivering
6 your additional renewable energy to Northern Illinois
7 on the PJM grid, is that correct?

8 A. Correct.

9 Q. Several lines below that, you noted
10 that MISO MVP projects enable 41 million megawatts of
11 new renewable energy from leaving RPS poles in the
12 Midwest footprint, is that correct?

13 A. In the mid-continent MISO, correct.

14 Q. Pardon?

15 A. In the MISO footprint, correct.

16 MR. AGATHEN: I offer Exhibit 343,
17 Your Honor.

18 JUDGE BUSHMANN: Any objection?

19 MR. ZOBRIST: No objection.

20 JUDGE BUSHMANN: 343 is received.

21 Q. (By Mr. Agathen) On a different
22 subject, would you please turn to schedule DAB-4 of
23 your direct testimony in this case. Do you have it?

24 A. I'm there.

25 Q. That's a map of the United States

1 showing wind speeds as depicted by different colors,
2 is that generally correct?

3 A. Correct.

4 Q. Is it fair to say this map starts with
5 a collection of numerous individual data points which
6 represent wind speed for a particular location?

7 A. It starts with that as well as weather
8 data, but that is a starting point.

9 Q. Do you have any idea how many
10 thousands or hundreds of thousands of data points
11 we're talking about?

12 A. I don't.

13 Q. Thousands at least?

14 A. I don't know sitting here today.

15 Q. Okay. Each of those individual wind
16 speeds or range of wind speeds are assigned a
17 different color for the mapping purposes, right?

18 A. Correct. For clarification this is
19 the output of the computer model, not the individual
20 point wind speeds.

21 Q. Fair enough. The underlying data for
22 a map was compiled by a firm named AWS, all caps,
23 True Power, is that correct?

24 A. Correct.

25 Q. And the methodology they used is

1 called a MESO Map, M-E-S-O, M-a-p, System?

2 A. Correct. MESO Map or MESO scale.

3 Q. I'd like to distribute Exhibit 344 at
4 this point. Do you have a copy of that exhibit
5 there?

6 A. I do.

7 Q. Does Exhibit 344 describe the MESO Map
8 System used to gather and compile the underlying data
9 for the map that was on Schedule DAB-4?

10 A. That's correct.

11 MR. AGATHEN: Your Honor, I would
12 offer Exhibit 344 at this point.

13 JUDGE BUSHMANN: Any objection? It is
14 received.

15 Q. (By Mr. Agathen) On a different
16 subject again, as part of your first open
17 solicitation of bids for capacity on the Grain Belt
18 Line, did you give potential bidders a minimum base
19 for firm capacity for service from Kansas to the PJM
20 connection?

21 A. Correct.

22 Q. And you may consider this to be
23 confidential, I'm not sure, but can you tell us what
24 that minimum bid was?

25 A. That would be confidential

1 information.

2 Q. Okay. We'll get back to that later.
3 Have you provided bidders yet with any minimum rate
4 for the service from Kansas to Missouri?

5 A. No, we have left that open to market
6 forces.

7 Q. Although you didn't have any minimum
8 bid for Kansas to Missouri service, you told us that
9 you estimate that the normal rate for that service
10 will be about \$5.60 per kW per month, is that
11 correct?

12 A. Correct.

13 Q. And that figure is right in line with
14 the number you used in your levelized cost analysis,
15 is it not?

16 A. Right, for the normal rate case, not
17 the first mover case.

18 Q. Isn't it true that in your first open
19 solicitation for the service from Kansas to Missouri
20 you had requests for more than six times the
21 available capacity?

22 A. That's correct.

23 Q. And from Kansas to PJM you had
24 requests for only about 4.5 times a total available
25 capacity?

1 A. 17,300 megawatts, five times, almost
2 exactly.

3 Q. So yes?

4 A. Correct.

5 Q. Thank you. But rate for service from
6 Kansas to Missouri will be significantly lower than
7 the rate for service from Kansas to PJM, correct?

8 A. Agreed.

9 Q. And in your words you believe the
10 Kansas to Missouri rate should provide a substantial
11 discount to the Kansas to PJM rate, is that correct?

12 A. Correct.

13 Q. After the Commission ruled against you
14 in the 2014 case, Grain Belt made a concerted effort
15 to get someone to buy service to the Missouri
16 convertor station, did you not?

17 A. Correct.

18 Q. Do you know how many different
19 entities in Missouri you think someone from Grain
20 Belt met with after the Commission's order in that
21 last case?

22 A. I don't know.

23 Q. Dozens?

24 A. I don't know if it was that many.

25 Q. A number at least?

1 A. A number.

2 Q. In January of 2015 you sent out your
3 first solicitation of bids for capacity on the line,
4 right?

5 A. That's correct.

6 Q. And the objective was to determine the
7 parties which might have an interest in buying
8 capacity on the line and how much they would -- might
9 be willing to pay?

10 A. Yes.

11 Q. It didn't cost them anything to
12 actually submit any kind of --

13 A. No, it did not.

14 Q. And there's no liability to buy
15 capacity later if someone responded, was there?

16 A. Correct.

17 Q. How many Missourian investor-owned
18 utilities submitted a response to you of any kind in
19 your first open solicitation?

20 A. I don't believe there were any.

21 Q. So Associated Electric Co-op, they
22 didn't respond?

23 A. No.

24 Q. And none of the individual municipal
25 systems responded?

1 A. Not in that first window.
2 Q. Not even MJMEUC?
3 A. Not in that first window, correct.
4 Q. And then you even extended the due
5 date for bidding in that first time, did you not?
6 A. That's correct.
7 Q. And still no takers from Missouri,
8 right?
9 A. There were no load serving entity
10 requests during that extended period of the first
11 window.
12 Q. Do you have any kind of formal
13 agreement at this point with anyone other than MJMEUC
14 to buy capacity on a proposed line?
15 A. Yes.
16 Q. You do?
17 A. Yes.
18 Q. Did you supplement your answers to
19 data requests with this additional entity?
20 A. No, we provided information about
21 that. I believe we did.
22 Q. To us?
23 A. I believe so.
24 Q. Do you have any documentation which
25 shows that?

1 MR. ZOBRIST: It would be the
2 responses to Mr. Skelly's DRs and Mr. Skelly
3 responded to my question on Monday about that entity
4 called Realgy, R-e-a-l-g-y.

5 Q. (By Mr. Agathen) Where are they
6 located?

7 A. They have offices in various places,
8 but they're a retail electric supplier primarily in
9 the State of Illinois.

10 Q. Do you know how many megawatts you're
11 talking about?

12 A. I believe they bought 15 megawatts in
13 total.

14 Q. They won't be able to supply customers
15 in Missouri, will they?

16 A. Not directly serve retail customers in
17 Missouri, that's correct.

18 Q. Is it fair to say you're now offering
19 a substantial discount for the Kansas to Missouri
20 service compared to the Kansas to PJM service?

21 A. I would agree with that.

22 Q. Do you recall what you said in the
23 2014 case about the magnitude of any discount which
24 could be justified for the Kansas to Missouri service
25 compared to the Kansas to PJM service?

1 A. I don't recall.

2 Q. Do you recall we asked you in the data
3 request in the last case what the average price you
4 would charge for capacity for the Kansas to Missouri
5 service was?

6 A. Rings a bell, but I don't remember
7 specifically.

8 Q. Mr. Berry, I'm handing you a copy of a
9 data request that we sent to you in the last case.
10 One of the items that we asked for in Item 1E was the
11 average price charged per megawatt by Grain Belt for
12 transmission capacity for delivery of energy from the
13 Kansas interconnection to the Missouri
14 interconnection, is that correct?

15 A. Correct.

16 Q. And then turning to look at your
17 answer to part E you stated, "The price will be
18 determined by market willingness to pay for the
19 service. However, based on the financial model
20 described in Mr. Berry's pre-filed direct testimony,
21 he estimates the price of the service on the line at
22 \$89,000 per megawatt year of firm transmission
23 service with a capacity measured at the point of
24 delivery. Mr. Berry's expectation is that the
25 Missouri service will be available at a discount to

1 this value based on market conditions. The Indiana
2 capacity may be priced slightly higher to pay for
3 this discount." Is that what you said?

4 A. That's what I said.

5 Q. And when we talk about Indiana
6 capacity, we're talking about the PJM connection?

7 A. Kansas to PJM service, correct.

8 Q. I'm trying to avoid getting into
9 anything that's highly confidential here. Let's look
10 at the rate you gave to MJMEUC in this case. You
11 were involved in the negotiations with MJMEUC, which
12 led to your contract with them to buy capacity,
13 correct?

14 A. Correct.

15 Q. The rate given to MJMEUC for the first
16 100 megawatts of service is \$1,167 per megawatt per
17 month, correct?

18 A. Correct.

19 Q. Or \$1.167 per kW per month?

20 A. Correct.

21 Q. And that discounted rate is what you
22 call a first-mover rate, is that correct?

23 A. Yes.

24 Q. Hadn't you already negotiated the
25 first rate -- first-mover rate with MJMEUC even

1 before you went out for bids in the second window?

2 A. I know we discussed it. I don't think
3 the terms of the deal were finalized by any means at
4 that point.

5 Q. When all of the bidders filled out
6 your Transmission Service Request Form, isn't it true
7 that MJMEUC was the only entity which completed the
8 portion of the form asking for first-mover status?

9 A. I don't know.

10 Q. Handing you a copy of the data request
11 we submitted in this case No. DB-146 and it asks you
12 when completing your Transmission Service Request
13 Form, did any interested party other than MJMEUC
14 complete the portion of the form asking for
15 first-mover status and early development support?
16 And your response was no, is that correct?

17 A. Correct.

18 Q. Compared to the discounted MJMEUC
19 rate, you said that you expected the normal rate for
20 service from Kansas to Missouri will be about \$5.67
21 per kW per month?

22 A. Correct.

23 Q. So the normal rate will be about five
24 times greater than what you offered to MJMEUC for the
25 first 100 megawatts, is that correct?

1 A. Approximately.

2 Q. For the same physical service?

3 A. Correct.

4 Q. And even for the next 100 megawatts,
5 the second 100 megawatts to MJMEUC, that would only
6 be \$1.667 per month -- per kW per month, is that
7 correct?

8 A. Correct.

9 Q. I'm going to try to translate these
10 rates per kW into rates per kilowatt hour. If you
11 use your assumed annual capacity factor 55 percent,
12 you told us that the combined rates you're charging
13 MJMEUC will translate on a per kWh basis to a rate of
14 only about 0.35 cents per kilowatt hour, does that
15 sound right?

16 A. It's approximately correct.

17 Q. Just slightly over one-third of a cent
18 per kilowatt hour?

19 A. Correct.

20 Q. And your price to MJMEUC for the first
21 100 megawatts would be even less than that, about 0.3
22 cents per kilowatt hours, is that correct?

23 A. Correct.

24 Q. And even with the escalation factor,
25 ten years from now the cost for that first 100

1 megawatts is still only going to be about 0.35 cents
2 per kilowatt hour, does that sound right?

3 A. I haven't done the math to calculate
4 that. I should say I don't have it off the top of my
5 head.

6 Q. Fair enough?

7 A. You're about to tell me I have done
8 that.

9 Q. You've given us a lot of information,
10 I certainly understand. Looking at Data Request
11 DB.54 from this case, would you say that with the 2
12 percent escalation for a year, in ten years the
13 charge will be about 0.35 cents per kilowatt hour?

14 A. That's correct, that's correct.

15 Q. Do you recall that in the 2014 case
16 you testified that the cost to move power on the
17 Grain Belt Express project would be between 1.5 and
18 2.0 cents per kilowatt hour?

19 A. Correct.

20 Q. And you told us in this case that
21 except for shippers who get the special first-mover
22 rate, that's still your best estimate, is that
23 correct?

24 A. It is our best estimate.

25 Q. And that's supposedly a cost just for

1 moving the power from Kansas to Missouri, is that
2 correct?

3 A. I believe that's an overall average
4 cost to both of the delivery points.

5 Q. I'm going to hand you some more data
6 requests from this particular case and direct your
7 attention to DB.56. The question was in your direct
8 testimony in the 2014 case, you estimated that the
9 cost to move power on the Grain Belt Express project
10 would be 1.5 to 2. cents per kilowatt hour, correct?

11 A. That's correct.

12 Q. And then the next question was, "With
13 reference to the preceding item for the 2014 case,
14 please state the beginning and end points on the line
15 to which that estimate applied." And your answer
16 was, "The estimate applied to the cost to move power
17 on the Grain Belt project from Kansas to Missouri
18 basically", correct?

19 A. Correct. This is all in reference to
20 the statement in the 2014 case?

21 Q. Certainly. What you said was still
22 your best estimate, correct?

23 A. That's what I said. I could have been
24 more precise. I do agree with that.

25 Q. So the cost to move power from Kansas

1 to the PJM connection is even higher than 2.0 cents
2 per kilowatt hour?

3 A. 2.0 cents per kilowatt hour is a good
4 approximation of that cost.

5 Q. From Kansas to PJM?

6 A. Correct.

7 Q. The rate to MJMEUC for the first 100
8 megawatts produces revenue of about \$1.4 million per
9 year, is that correct? That's the 167 times 100
10 megawatts times 12 months?

11 A. That's correct.

12 Q. Did you do that off the top of your
13 head?

14 A. I have done that calculation before,
15 so.

16 Q. Very good. If you charge that same
17 rate to everyone for all 4000 megawatts of capacity,
18 in the first year that would bring in only.
19 \$56 million in revenue for the sale of firm capacity,
20 is that correct? That's 1.4 million for 100
21 megawatts times 4000?

22 A. Again, we would rate the capacity in
23 Kansas slightly over 4000 megawatts, so I agree with
24 the math that 1.4 times 4000 is 56 million.

25 Q. And you're projecting that the line

1 will be built with about 50 percent debt and 50
2 percent equity, is that correct?

3 A. It's an approximation.

4 Q. So if the line cost 2.8 billion to
5 build, you would have debt of about 1.4 billion?

6 A. Correct.

7 Q. And you're estimating that you would
8 pay interest on that debt at the rate of 4.5 percent
9 a year, correct?

10 A. It's a reasonable estimate.

11 Q. And 4.5 percent of 1.4 billion in
12 debt, see if you can do that one, would mean annual
13 interest payments of approximately \$63 million a
14 year, is that correct?

15 A. That's correct.

16 Q. So if you charged everyone what you're
17 charging MJMEUC for the first 100 megawatts, your
18 revenue of 56 million wouldn't even cover your
19 interest payments on your debt, would it?

20 A. We would charge it again based on a
21 higher number than 4000 megawatts, so it would be
22 slightly higher.

23 Q. But it still wouldn't cover your debt,
24 would it?

25 A. I haven't done that calculation.

1 Q. Well, the annual revenue figure was 56
2 million, right?

3 A. Again, that's assuming we're selling
4 4000 megawatts which is the delivery capacity.

5 Q. Sure. It's going to be approximately
6 that number?

7 A. We'd sell about 10 percent, slightly
8 under 10 percent more of that, on the rated high side
9 of the line.

10 Q. And that still wouldn't cover the debt
11 if the interest payments on the debt are 63 million,
12 would it?

13 A. It would be very, very close.

14 Q. It wouldn't be enough to pay off any
15 of the debt would it?

16 A. If you're paying 63 million in
17 interest and under this hypothetical revenue
18 scenario, again, which is not our projection at all,
19 then you would not have additional funds to pay off
20 any substantial principal.

21 Q. And nothing left for the equity owners
22 either?

23 A. Again, in this hypothetical scenario.

24 Q. One more calculation. We figured that
25 the rate for the first 100 megawatts to MJMEUC would

1 bring in a revenue of about 1.4 million per year,
2 correct?

3 A. Correct.

4 Q. And the rate on the second 100
5 megawatts is \$1,667 per megawatt per month, correct?

6 A. Correct.

7 Q. So that would bring in a revenue of
8 about \$2 million a year, correct, on that second 100
9 megawatts?

10 A. Correct.

11 Q. So that would be a total of about \$3.4
12 million a year, correct?

13 A. Correct.

14 Q. So hypothetically if the only capacity
15 you could sell for the Kansas to Missouri service was
16 the 200 megawatts you sold to MJMEUC, the revenue for
17 that service would be only about 3.4, \$3.4 million a
18 year, correct?

19 A. Again, all hypothetically if the math
20 is correct.

21 Q. You're also covering MJMEUC's
22 conversion and transmission losses, are you not?

23 A. At least for part of the service,
24 that's correct.

25 Q. So actually you end up with gross

1 revenues from that contract significantly less than
2 the 3.4 million, correct?

3 A. Depends on how we structure covering
4 the losses, but there would be some cost to them.

5 Q. That would barely confer the interest
6 on the debt for the convertor station, would it?

7 A. We wouldn't think of a separate debt
8 to the convertor station versus the rest of the
9 station.

10 Q. But simply looking at cost of the
11 convertor station and the interest that is going to
12 go on the debt for that cost, you would barely cover
13 that, wouldn't you?

14 A. I haven't done that math.

15 Q. But the convertor station cost about
16 100 million. Is that a ballpark?

17 A. Correct.

18 Q. So 50 percent debt means about 50
19 million, correct?

20 A. Again, I'll go along with your math,
21 but this is not how we think about financing the
22 project.

23 Q. Sure. And the interest rate of 4.5
24 percent on that 50 million is about 2.25 million, is
25 that right?

1 A. 50 million times 4.5 percent is 2.25
2 million, yes.

3 Q. On a slightly different aspect on this
4 subject, could you turn, please, to page 29 of your
5 direct testimony.

6 A. Okay.

7 Q. You have a bar chart there showing the
8 levelized cost of energy for different generation
9 options, correct?

10 A. Correct.

11 Q. The first bar chart on the left is
12 based on the MJMEUC rate?

13 A. Correct.

14 Q. And the second bar is the cost of
15 using the normal rate?

16 A. Correct.

17 Q. Instead of using the discounted rate
18 for service to Missouri, you used a published rate
19 for service from Kansas to PJM. A levelized cost
20 figure there for the Grain Belt project would be
21 approximately \$33.00 per megawatt hour, correct?

22 A. Approximately correct, yes.

23 Q. Or just about equal to the cost for
24 Missouri wind?

25 A. That's correct.

1 Q. While we're there, I just have a
2 couple of unrelated questions about your bar chart on
3 page 29. If you can turn first to page 23 of your
4 direct testimony. Are you there?

5 A. Yes.

6 Q. In answer to your question at line 18
7 about the cost of wind generation in Western Kansas,
8 you point to a wind contract with a price of \$19.15
9 per megawatt hours, is that correct?

10 A. Correct.

11 Q. And then you go on to say at the top
12 of page 24, that resent contracts have trended
13 downward from that level, correct?

14 A. That's correct.

15 Q. Do you recall that we asked you for
16 the prices of contracts which trended downward to
17 that \$19.15 level?

18 A. I recall a data request along those
19 lines. Would you be able to point me to the data
20 request number?

21 Q. DB.38.

22 A. In the first set?

23 Q. Yes, sir.

24 A. Okay. I have a copy.

25 Q. You cited three different contracts to

1 us, did you not?

2 A. Yes.

3 Q. The first had a cost in dollars per
4 megawatt hour of 15?

5 A. I apologize, I need to check with my
6 counsel. This is highly confidential information.

7 Q. It's not listed as such.

8 A. Okay.

9 Q. The first contract you cited has a
10 price of \$15.80 correct?

11 A. Correct.

12 Q. And the second one, \$18.05?

13 A. Correct.

14 Q. And the third had a range between
15 \$17.17 cents up to \$22.89?

16 A. Correct.

17 Q. And they all had a start date during
18 2016, the year 2016, correct?

19 A. Yes.

20 Q. So it's fair to assume they all
21 included the full value of the production tax credit?

22 A. I think that's most likely.

23 Q. And to reiterate, the lowest price
24 there was \$15.80 per megawatt hour, correct?

25 A. Correct.

1 Q. Now if we go back to the bar charts
2 for your cost analysis at page 29 of your testimony,
3 what level of costs for the Kansas wind did you use
4 in your analysis?

5 A. I don't have the rate for the Kansas
6 wind broken out separately from the transmission
7 charge here.

8 Q. You may have this already, do you have
9 copies of the data requests?

10 A. I generally do if it saves us time.

11 Q. Saves me walking anyway. This is the
12 first set of data requests to you, DB.48?

13 A. Okay.

14 Q. The question was, "In the chart at
15 page 29 of your testimony, what is the cost of the
16 energy for the Kansas wind farms used in calculating
17 the Grain Belt project normal rate", is that correct?

18 A. Yes.

19 Q. And the answer you gave was \$14.00 per
20 megawatt hour?

21 A. And for clarification this is the year
22 one price with a two-and-a-half percent escalator,
23 not a flat price.

24 Q. Right.

25 A. Correct.

1 Q. So that \$14.00 figure you used in your
2 bar charts was about 11 percent below the very lowest
3 price of any actual contract you quoted to us,
4 correct?

5 A. Correct. You can't do that comparison
6 because the price I provided was a year one price
7 with a two-and-a-half percent escalator, whereas,
8 we're comparing it to a flat price of, I think it was
9 \$15.80 if I remember correctly.

10 Q. Did your \$14.00 figure, which you used
11 in the bar charts, assume that only 80 percent of the
12 production tax credit would be available?

13 A. Yes.

14 Q. We now know the cost charged to MJMEUC
15 for the wind by Infinity amounts to only \$16.50 per
16 megawatt hours, is that correct?

17 A. Correct.

18 Q. Which again is 18 percent higher than
19 the cost of the Kansas wind which you used in your
20 bar chart analysis?

21 A. I believe my number has a higher
22 escalator, so you can't perform that comparison
23 without taking into account the escalators.

24 Q. Have you done that?

25 A. I have not.

1 Q. On a different subject, is it fair to
2 say that the cost of the utility-scale solar energy
3 has been declining faster over the last six or seven
4 years than the cost of wind energy?

5 A. I would say they have both been
6 declining very quickly. I suppose it would depend on
7 how you measure it in terms of which is declining
8 faster.

9 Q. Handing you a copy of a document
10 published by Lazard, L-a-z-a-r-d. Are you familiar
11 with this document?

12 A. Lazard, yes.

13 Q. How do you pronounce that?

14 A. Lazard.

15 Q. Lazard. Thank you. That study has a
16 calculation for the percentage decrease for both wind
17 and utility-scale solar, does it not?

18 A. I'm familiar with parts of this
19 document, I'm really not familiar with this
20 comparison.

21 Q. Well, the figures show, do they not,
22 that from the year 2009 to the 2015 the percent
23 decrease for wind was 61 percent?

24 A. Again, that's what the report appears
25 to say, but I'm not familiar with it.

1 Q. And it also says that the decrease for
2 utility-scale solar was 82 percent, correct?

3 A. That's what the report appears to say,
4 yes.

5 Q. And you did cite this report in your
6 own testimony, did you not?

7 A. Not that specific part of it, but
8 other parts of the report, yes.

9 Q. Is it fair to say that the major
10 declines in the cost of on-shore wind production are
11 behind this plan?

12 A. I would not agree with that.

13 Q. You discussed earlier the fact that
14 you testified in a Georgia Public Service Commission
15 case, correct?

16 A. Yes.

17 Q. Were you the only witness in that case
18 for Clean Line?

19 A. I believe so.

20 Q. You were represented in that
21 proceeding by Mr. Joshua Belcher, were you not?

22 A. Yes.

23 Q. An attorney from Houston?

24 A. Yes.

25 Q. I assume that at some point you looked

1 at the argument made by Mr. Belcher in his brief?

2 A. I didn't review that brief in detail.
3 I'm sure I glanced at it.

4 Q. Handing you a copy of the document
5 which purports to be the brief filed on behalf of
6 Clean Line in the Georgia case we've been talking
7 about, is that correct?

8 A. Yes.

9 Q. Looking at the bottom of page 3, it
10 states, quote, "Because the decline in cost for wind
11 energy due to improvements in wind turbine technology
12 has largely leveled off, any future price reductions
13 associated with declining technology costs or
14 technology improvements are not expected to be enough
15 to offset the decline in production tax credit
16 value." Correct?

17 A. You read that correctly.

18 Q. Compared to wind generation, isn't it
19 true the solar generation is projected to see
20 dramatic declines in the cost of production over the
21 coming years?

22 A. Again, I would expect they both would
23 see major declines.

24 Q. You're familiar with the U.S. Energy
25 Information Administration's Annual Energy Outlook of

1 2016, are you not?

2 A. I am.

3 Q. In fact, you cited it at footnote 15
4 at page 40 of your direct testimony, did you not?

5 A. That's correct.

6 Q. At this time I would like to
7 distribute a copy of -- I would like to distribute
8 copies of Exhibit 345. Exhibit 345 consists of
9 several pages from that report we just discussed. Do
10 you have a copy of Exhibit 345 there?

11 A. I do.

12 Q. At page MT-17, the report talks about
13 -- it's up at the upper left-hand corner, "Renewables
14 and natural gas lead to capacity additions through
15 the year 2014 in the referenced case." Do you see
16 that?

17 MR. LINTON: You said 2014.

18 Q. (By Mr. Agathen) Excuse me, 2040.

19 A. I see that.

20 Q. The reference case is basically the
21 base case, is it not?

22 A. I don't know what the reference case
23 means in this context.

24 Q. The paragraph below the bar charts
25 says, "In the reference case two developments

1 significantly improve the prospects for renewable
2 capacity. Extension of favorable federal tax
3 treatment for renewable generators and continue
4 dramatic reductions in the capital cost of solar PV
5 systems," is that correct?

6 A. I'm sorry, where are you reading?

7 Q. The paragraph just below the bar
8 charts at page MT-17 up near the top left.

9 A. I see those sentences.

10 Q. That's essentially what I read?

11 A. Correct.

12 Q. And then on the bottom of that
13 paragraph at the end of that paragraph it says,
14 "Renewable generation capacity additions consists
15 primarily of wind having 73 gigawatts, and solar 221
16 gigawatt technologies, including 77 gigawatts of
17 solar PV installations in the end-use sectors", is
18 that correct?

19 A. That's what the report says.

20 Q. I think if you turn over to the next
21 page which is MT-20, do you see that?

22 A. I'm there.

23 Q. First column on the very bottom of the
24 report says, "With slow growth, the wind capacity
25 additions will continue fast growth in solar

1 additions. Solar capacities will pass the wind
2 capacity in year 2032 in the referenced case and in
3 the year 2033 in the CPP case." Is that correct?

4 A. Again, that's what the report says.

5 Q. CCP presumably is a power plant?

6 A. That's what I would assume.

7 Q. And turning over to page MT-22, the
8 first column, first paragraph, you see a sentence
9 beginning with "Wind plants", about the middle of the
10 paragraph?

11 A. Okay.

12 Q. It says, "Wind plants have increased
13 generation during the night when demand for and value
14 of electricity typically are low and thus provide a
15 limited contribution to system reliability reserves.
16 Solar PV plants produce most of their energy during
17 the middle of day when higher demand increases the
18 value of the electricity", is that correct?

19 A. You read it correctly.

20 MR. AGATHEN: Your Honor, I offer
21 Exhibit 345.

22 MR. ZOBRIST: Judge, I don't have an
23 objection to this, if I could be permitted to
24 supplement the record with the entire report because
25 we obviously just had certain pages that were

1 excerpted by Mr. Agathen.

2 JUDGE BUSHMANN: That will be
3 acceptable to me.

4 MR. ZOBRIST: Thank you.

5 JUDGE BUSHMANN: And I will receive
6 this exhibit into the record.

7 Q. (By Mr. Agathen) I have a few more
8 questions about your transmission service contract
9 with MJMEUC.

10 In addition to the service from Kansas
11 to Missouri, you offer them a service from Missouri
12 to the PJM connection, correct?

13 A. Correct.

14 Q. Does the second service involve
15 injecting energy at the Missouri interconnection and
16 delivering it to PJM?

17 A. I'm sorry, what was the word you used?
18 Inducting?

19 Q. Injecting.

20 A. Injecting.

21 Q. Give me a better word.

22 A. Withdrawing energy from MISO and
23 delivering it to PJM.

24 Q. Is it correct that you did not offer
25 Missouri to PJM service in your first window of your

1 open solicitation?

2 A. Correct.

3 Q. It was only offered in the second
4 window of the open solicitation after you already
5 discussed this option with MJMEUC, correct?

6 A. Correct.

7 Q. If MJMEUC does end up purchasing say
8 50 megawatts of firm transmission service from
9 Missouri to PJM, won't that mean the firm capacity
10 available for sale from the Kansas wind farms to PJM
11 will be reduced by that 50 megawatts?

12 A. It could or could not.

13 Q. You may already have a copy of this
14 available. I'm looking at the first set of data
15 requests to you specifically DB.6.

16 A. Okay.

17 Q. The question was, "If an entity
18 purchases say 100 megawatts of firm transmission
19 service from the Missouri convertor station to the
20 Sullivan substation", which is PJM, right?

21 A. Correct.

22 Q. "Will that mean that the firm capacity
23 available for sale from the Kansas wind farms to the
24 Sullivan substation will be reduced by 100
25 megawatts?" And your response was yes?

1 A. Yes. And I agree that's generally
2 true, there could be some cases where it's not.

3 Q. On the subject of the service from
4 Missouri to PJM, I'm going to distribute what's been
5 marked at this point as Exhibit 351. The caption
6 says it includes information which may be considered
7 highly confidential, but perhaps, Mr. Zobrist, you
8 can tell us that highly confidential parts are not
9 included in this document.

10 MR. ZOBRIST: Which DR are you going
11 to ask Mr. Berry about?

12 MR. AGATHEN: G-88. There's nothing
13 here that has been marked HC. Parts were HC, but
14 none of the parts that are included here are marked
15 HC.

16 MR. BRADY: I think that is correct,
17 Judge.

18 JUDGE BUSHMANN: Very good.

19 Q. (By Mr. Agathen) Do you have a copy,
20 Mr. Berry, of Exhibit 351?

21 A. I do.

22 Q. Turning your attention to G-88, it
23 says, "Part of Grain Belt response to Data Request
24 DB.12 was a two page set of questions and answers
25 dated February 19th, 2015, presumably in connection

1 with the January open solicitation. Question and
2 answer No. 1 were as follows: "Is it possible to get
3 transmission service from the Missouri convertor
4 station to Sullivan?" And the answer in that
5 document was, "We are not offering service from
6 Missouri to Sullivan in this open solicitation.
7 Providing Missouri to Sullivan service would require
8 additional transmission studies and could affect our
9 convertor station design and cost in Missouri." And
10 then the data request went on to ask you, "Have the
11 additional transmission studies referred to there
12 been completed at this point? And, if so, when were
13 they completed by whom and what date or dates and
14 what were the results with respect to the design and
15 cost of the Missouri convertor station." That was
16 our question, right?

17 A. Correct.

18 Q. And the response was that, "The cost
19 estimates for Grain Belt Express that have been
20 provided in this case reflect the bidirectional
21 convertor station design that can offer Missouri the
22 PJM service. Grain Belt has confirmed that it will
23 use the bidirectional design. MISO transmission
24 studies have not been performed." Is that correct?

25 A. Correct.

1 Q. The document that was being referred
2 to was something of an FYI question and answer for
3 entities interested in submitting bids during the
4 first open solicitation, is that correct?

5 A. Yes.

6 MR. AGATHEN: I would offer Exhibit
7 351, Your Honor?

8 JUDGE BUSHMANN: Any objections?

9 MR. ZOBRIST: No objection.

10 JUDGE BUSHMANN: 351 is received.

11 Q. (By Mr. Agathen) This bidirectional
12 service from Missouri to PJM was added after the 2014
13 case was completed, right?

14 A. Yes.

15 Q. I got some miscellaneous questions now
16 to ask you on several topics that didn't seem to fit
17 anywhere else.

18 First, in order to get construction
19 loans for your project, you'll need to convince the
20 lenders that you have a secure source of revenue from
21 buyers for capacity on your line, is that correct?

22 A. I'd agree with that.

23 Q. So the lenders will be looking at
24 among other things the quality and certainty of
25 future revenues from your project?

1 A. Yes.

2 Q. Is it safe to say that you could not
3 secure construction loans based on your contract with
4 MJMEUC?

5 A. Not until MJMEUC confirms service
6 under that contract, yes.

7 Q. Which would be 60 to 90 days or so
8 before the line is energized?

9 A. I think they can do it earlier. That
10 would be the outside date for them to do it.

11 Q. On a different subject, if this
12 project goes as planned, Kansas wind developers will
13 be eligible for production tax credits from the
14 federal government, correct?

15 A. Yes.

16 Q. And each megawatt hour they generate
17 will produce additional production tax credits?

18 A. As long as it's sold to a third party.

19 Q. What's the value at this point of the
20 100 percent of the production tax credit?

21 A. It has an inflation adjustment each
22 year, I believe it's 2.2 cents per kilowatt hour.

23 Q. For each kilowatt hour they generate
24 they get a tax credit of 2.2 cents?

25 A. Correct.

1 Q. Over the ten years of operation based
2 on your present construction schedule, the wind farms
3 will be able to utilize approximately \$4 billion in
4 tax credits, is that correct?

5 A. I recall a DR along these lines.
6 Would you be able to point me to it?

7 Q. Number 49?

8 A. Is it DB.49?

9 Q. Yes.

10 A. Correct.

11 Q. And by your calculation, the present
12 value of those tax credits would be approximately
13 \$2.6 billion?

14 A. Correct.

15 Q. So the tax credits, even on a present
16 value basis, are nearly equal to the cost of your
17 project, aren't they?

18 A. Correct.

19 Q. On a different subject, will you turn
20 please to page 35 of your direct testimony? Do you
21 have that?

22 A. One moment. Okay.

23 Q. You mention at lines 10 to 12 that
24 Ameren issued a Request for Proposals in December of
25 the year 2015 for wind power, is that correct?

1 A. Yes.

2 Q. Do you know if any Kansas wind
3 developers submitted a bid to Ameren?

4 A. I don't know.

5 Q. In the 2014 case at page 12 of the
6 final report, the order of the Commission, the
7 Commission made the following findings: "Ameren
8 Missouri stated in its 2014 integrated resource plan
9 that it needs a total of 400 megawatts of additional
10 wind energy by 2026. Ameren Missouri plans to meet
11 its needs for additional wind energy through wind
12 resources located within MISO including areas in
13 Missouri. Ameren Missouri has the ability to meet
14 its 2021 RES requirements without purchasing
15 renewable energy transported over the project."

16 My question is, are you aware of any
17 subsequent information supplied by Ameren which
18 indicates that they have had a change in plan since
19 that Commission order was issued?

20 A. I'm sorry, I'm having trouble with the
21 question.

22 Q. Sure. Are you aware of any subsequent
23 information supplied by Ameren, issued by Ameren,
24 which indicates that they have had a change of plan
25 since the Commission's order was issued in the 2014

1 case?

2 A. I'm sorry, change of plans with
3 respect to what?

4 Q. Purchase of renewables?

5 A. I don't know whether this RFP was
6 specifically contemplated, I know that would be a
7 change. I know Ameren has issued some public
8 statements that they're looking at adding more
9 renewable resources.

10 Q. Any indication that they have any
11 plans to purchase renewable energy from the Grain
12 Belt project?

13 A. No specific plans.

14 Q. How about unspecific plans?

15 A. I would say I believe it's an
16 opportunity that they will evaluate on its merits and
17 the costs. They haven't said one way or the other
18 that they're going to do it.

19 Q. The same page of your direct testimony
20 at page 35, lines 13 to 49, you note that Associated
21 Electric Co-op issued a Request for Proposals just
22 last year of 300 megawatt of wind power, is that
23 correct?

24 A. That's correct.

25 Q. Do you know of any Kansas wind

1 developers which submitted a bid to Associated?

2 A. I don't recall one way or the other.

3 Q. You don't know of any?

4 A. I don't know of any.

5 Q. Speaking of Ameren again, has Grain
6 Belt done any kind of analysis which calculates the
7 maximum amount which Ameren could pay in a per unit
8 basis for new renewable energy under their RES,
9 R-E-S, and not be constrained at all by the 1 percent
10 rate cap?

11 A. The only analysis we've done is that
12 if they buy something that's below the cost of other
13 resources, we don't think it would implicate the rate
14 count. We haven't calculated a maximum amount that
15 they could pay.

16 Q. So you don't know the cost of the
17 kilowatt hour it would take before Ameren would no
18 longer be constrained by the rate cap?

19 A. Well, again, our view is that if they
20 can buy a product below their avoided costs, the rate
21 cap would not apply. So I don't have a specific
22 number, but we looked at whether we can deliver below
23 their avoided costs and we think we can.

24 Q. My question was you don't know the
25 cost per kilowatt hour it would take before Ameren

1 would no longer be constrained by the rate cap, do
2 you?

3 A. We don't know the specific price per
4 kilowatt hour, no.

5 Q. A different subject, would you turn to
6 page 40 of your direct testimony?

7 A. Okay.

8 Q. At line 11, are you there?

9 A. I am.

10 Q. At lines 11 to 13 you provided an
11 estimate of what demand for renewable energy will be
12 in MISO and PJM for the years 2016, 20/20 and 2025.
13 Do you see that?

14 A. I do.

15 Q. As opposed to your estimated demand
16 figures, you have any estimates for those years of
17 the available supply for renewables generation?

18 A. No specific estimate.

19 Q. And it's application in this case at
20 paragraph 15, "Grain Belt states the projected cost
21 of the project will be approximately 2.35 billion",
22 is that correct?

23 A. Correct.

24 Q. And then a footnote you say, "That
25 figure does not include another \$550 million for

1 required upgrades of the transmission system", right?

2 A. That's correct.

3 Q. So including both figures, the cost
4 would approximately be 2.9 billion?

5 A. Approximately, yes.

6 Q. And is it true that even that figure
7 does not include any costs for the AC Peter System
8 which will connect the wind farms to the Kansas
9 convertor station?

10 A. Not the gen-tie lines, that's correct.

11 Q. And you estimate the cost for those
12 tie lines will be between 40 and 150 million, is that
13 correct?

14 A. Sounds approximately right. For
15 clarification, likely those wind farms will build
16 those lines and it will be part of their capital
17 costs rather than ours, at least part of it.

18 Q. Has that been determined yet?

19 A. Not definitively, but that's the best
20 estimate.

21 Q. Either way the retail customer is
22 going to pay that amount, are they not?

23 A. Any way it would influence the PPA
24 price, yes.

25 Q. Your estimated cost at this point for

1 the 4,600 megawatts or so of wind farms is about 7.5
2 billion, is that correct?

3 A. Do you have a data request you can
4 point me to? I don't have the number off the top of
5 my head.

6 Q. DB.141. Let me find out what set
7 that's in.

8 A. I believe it's the third set.

9 Q. Correct.

10 A. I'm sorry.

11 Q. DB.141?

12 A. Did you ask was the estimate
13 approximately 7.5 billion?

14 Q. Yes.

15 A. That's correct.

16 Q. On another subject, is it true that
17 you did not expect to complete even an initial
18 allocation of capacity on this line until all major
19 permits are obtained and you're closer to the
20 beginning of construction on the line?

21 A. I would agree with that.

22 Q. And among the major permits you still
23 need are those from the Army Corps of Engineers and
24 U.S. Fish and Wildlife Service, correct?

25 A. We do need those permits. I would say

1 it's possible that we could complete our capacity
2 allocation before having those. We would definitely
3 need our state regulatory approvals.

4 Q. Are you still looking at a couple
5 years out for those permits?

6 A. I don't recall the exact timing.

7 Q. More than a year?

8 A. For the grant of the permits I would
9 agree with that.

10 Q. Is it your position that as a merchant
11 transmission project, your investors are incurring
12 all the financial risks of the project?

13 A. Correct.

14 Q. And one such risk is that this
15 Commission doesn't approve your application to build
16 the line, right?

17 A. I'm sorry, could you repeat that?

18 Q. One of the risks is that this
19 Commission won't approve your application?

20 A. Correct.

21 Q. If that happens that's just one of the
22 many risks which investors knowingly assumed all
23 along, right?

24 A. It's one of the risks, yes.

25 Q. If the Commission does not approve the

1 Grain Belt project, Clean Line would still be
2 profitable if one or more of its other major projects
3 are completed, would it not?

4 A. It could or could not be the case.

5 Q. Pardon?

6 A. That could or could not be the case.

7 Q. It would depend on what?

8 A. Which project is built, how profitable
9 it is.

10 Q. If the Plains and Eastern Line is
11 built, and that's the only line that's built, Clean
12 Line would still be profitable, would it not?

13 A. Again, I can't say for sure; certainly
14 possible.

15 Q. On a different subject again, is it
16 fair to say that you pretty much took the Commission
17 for granted in the 2014 case that they would approve
18 your application?

19 A. I would disagree with that 100
20 percent.

21 Q. You testified in the Grain Belt case
22 at the Illinois Commission, right?

23 A. I did.

24 Q. Filed that testimony in April of 2015?

25 A. It sounds correct.

1 Q. So when you filed the testimony in
2 Illinois the case at this Commission was still
3 pending, was it not?

4 A. Yes, it was.

5 Q. You were going to need approval from
6 four different states to build the Grain Belt Line,
7 right?

8 A. Correct.

9 Q. Do you recall what you told the
10 Illinois Commerce Commission in your direct testimony
11 about the status of the pending case in Missouri?

12 A. I don't recall, no.

13 Q. Handing you a copy of your direct
14 testimony from the Illinois Commerce Commission case
15 involving this same line, which was dated April 10th,
16 2015, and I would direct your attention to page 93,
17 specifically line 2070, you state there, "With a
18 decision pending before the Missouri Public Service
19 Commission in the case of Rock Island, the Commission
20 was the first state regulatory Commission to approve
21 the line. In the present proceeding the Commission's
22 order will be the fourth and final state regulatory
23 Commission approval", is that right?

24 A. That's what the testimony says, yes.

25 Q. That's your testimony?

1 A. It is.

2 Q. So if Illinois approved it, they would
3 be the last state to approve it even though this
4 Commission had not yet acted?

5 A. I was assuming we would get a positive
6 outcome, but I wouldn't read too much into the word
7 "will" there.

8 Q. You just assumed this Commission would
9 approve it?

10 A. That was our hope at the time.

11 Q. Has the fair market value of the Grain
12 Belt Line go down since the last case before this
13 Commission, between now and the 2014 case?

14 A. I couldn't say one way or the other.

15 MR. AGATHEN: That's all I have other
16 than questions dealing with highly confidential
17 material.

18 JUDGE BUSHMANN: Out of curiosity, how
19 long do you think that will take? I'm trying to
20 decide when to take a break.

21 MR. AGATHEN: I'm guessing 45 minutes.

22 JUDGE BUSHMANN: Why don't we take a
23 break now.

24 (Recess.)

25

1 JUDGE BUSHMANN: Will someone from
2 staff please notify the people that are waiting
3 outside that they can come back in?

4 We are now back in open session and
5 ready for questions by Commissioners.

6 EXAMINATION

7 BY COMMISSIONER HALL:

8 Q. Good afternoon.

9 A. Good afternoon.

10 Q. Just so you know, I personally don't
11 take offense that you took this Commission for
12 granted in 2014.

13 A. We learned our lesson.

14 Q. Of the Clean Line projects on the
15 drawing board right now, which one is farthest along?

16 A. I would say the Plains and Eastern
17 Line. The Grain Belt Line is not far behind.

18 Q. So where is the Plains and Eastern
19 Line right now? What's the status?

20 A. So it has a fully approved route.
21 State approval is in Oklahoma and Tennessee and also
22 a federal approval, and so we're actively proceeding
23 on engineering and working on commercial contracts.

24 Q. And so has -- how many megawatts will
25 that line carry?

1 A. Similar to Grain Belt Express, it will
2 deliver 4000 megawatts.

3 **Q. And is that fully subscribed yet?**

4 A. We have precedent agreements for --

5 **Q. I'm sorry?**

6 A. Precedent agreements, which are
7 initial agreements which setup the major terms.
8 We're still in the process of converting those into a
9 final Transmission Service Agreement. So it's well
10 on its way, it's not signed, sealed and delivered.

11 **Q. And from an engineering and design
12 perspective and from a finance perspective, are there
13 any significant differences between the Grain Belt
14 and the Plains and Eastern Lines?**

15 A. Well, they are probably significant to
16 me because I live them every day, but they're the
17 same rating, same technology, I think the same
18 financing models, so they are actually very similar.

19 **Q. Concerning the 3500 megawatts that
20 Clean Line would like to deliver into PJM, have you
21 sent out a solicitation for buyers yet on that 3500?**

22 A. Yes, we have.

23 **Q. And what were the -- what was the
24 result of that solicitation?**

25 A. So we got transmission service

1 requests equal to six-and-a-half times the total
2 capacity.

3 Q. Let me -- I'm sure your answer is
4 correct for the question I asked, but it's not the
5 information that I was seeking.

6 A. Sure.

7 Q. So I'm not -- I'm not talking about a
8 solicitation of generation, but a solicitation of
9 buyers of the actual generation.

10 A. So load serving entities.

11 Q. Thank you.

12 A. Okay. Well, we do one solicitation
13 that targets both. To PJM the subscribers or the
14 requesters were mainly generators and that's largely
15 because in PJM it's largely an IPP market, so they're
16 independent generators and then there's retail
17 competition. But we did get one request from an
18 Illinois load-serving entity called Realgy, who has
19 transacted with us for 25 megawatts of the capacity
20 in PJM, and we're working on more deals like that.
21 To a large extent PJM will more generator push
22 because of the nature of that market.

23 Q. Generator push, you mean generator in
24 that footprint?

25 A. Sorry. The generator in Kansas would

1 buy the capacity and then sell its RECs, energy
2 capacity, into the PJM market because that's how most
3 of the generation works in PJM because states like
4 Illinois, much of Ohio, they have retail competition,
5 so you don't have a big Ameren or load-serving entity
6 buying everything, you have generators who all
7 competing to serve a larger market.

8 **Q. What do you expect the -- do you**
9 **expect the price paid for that 3500 dropping to PJM**
10 **to be higher than the price paid for the 500 drop in**
11 **Missouri?**

12 A. Definitely.

13 **Q. Why is that?**

14 A. Well, there are a number of factors.
15 One is just the actual power prices are higher in
16 PJM, sometimes in the nature of \$10.00 a megawatt
17 hour. The renewable energy credits are a higher
18 price. Right now they are about \$10.00 a megawatt
19 hour, so substantially higher than the RECs in MISO,
20 and you have very strong corporate demand there, you
21 have a larger market, so all of those factors mean
22 that folks can pay more for transmission. And in our
23 participant-funded model this all boils down can we
24 build a project at a price that people are willing to
25 pay and the market conditions in PJM allow folks to

1 pay a higher price.

2 Q. So it's a market differential as
3 opposed to a difference in the costs?

4 A. Correct.

5 Q. So why did you decide to drop 500 in
6 Missouri?

7 A. Well, there is a market here we
8 believe and so that is additional revenue for the
9 project and it helps make the project work. Also, we
10 believe it's important to show benefits for the state
11 and that's part of a compact of being, we hope to be
12 a regulated utility, is to provide power to a state
13 and show public benefits.

14 Q. Concerning the 500 megawatts to be
15 dropped in Missouri, I had a couple questions
16 yesterday or Monday and I didn't -- I don't think I
17 understood the answer -- the answers.

18 Will MISO be in control of that 500?

19 A. Right. I think we confused you by the
20 way. So control means different things in our
21 jargon, but I think the heart of your question is
22 will MISO be able to dispatch that convertor up and
23 down because it's dispatching its market and making
24 sure supply meets demand, does the generator need to
25 ramp-down? Say you ramp-down, and the answer is

1 absolutely yes, just like any other resource in MISO.

2 Q. That was my question. I didn't phrase
3 it correctly probably.

4 A. We probably made it too complicated.

5 Q. Concerning the levelized cost of
6 energy analysis that is in your direct testimony,
7 would you say that this analysis is really the
8 lynch-pin of your case; that if you can show that the
9 energy that you could deliver costs less than
10 alternatives, then you can show feasibility, need and
11 public benefit?

12 A. I would say I think it's one part of
13 our case. I think having a contract with a
14 load-serving entity is also a very important aspect.

15 Q. I would say your contract is a
16 function of your levelized cost of energy. I'm
17 sorry, I didn't mean to interrupt.

18 A. No, I mean I absolutely agree that the
19 two are linked. And I'd say our ability to deliver
20 energy at a low cost is what's leading to the
21 benefits that MJMEUC is here supporting. And with
22 the levelized cost of energy analysis says that we
23 will be likely to be able to replicate those benefits
24 on future deals and even if we have to charge a
25 little bit more on the future deals because the same

1 -- someone said a too good to be true deal isn't
2 still an offer, there would still be a lot of savings
3 relative to all alternatives which means we'll likely
4 get more contracts and there will likely be more
5 savings for customers.

6 Q. So my sense is that it is the
7 lynch-pin of your case, and you're saying it's one of
8 many arguments in support. But are there any that
9 are as significant as that analysis from your
10 perspective?

11 A. Well, I'm not a Commissioner who gets
12 to decide, but I think if you're looking at the
13 financial viability of the project and can it happen,
14 does the market make this work? And will this
15 provide benefits to customers in Missouri and
16 elsewhere, I agree it's one of the most important
17 pieces of the case. And I would add we essentially
18 are very consistent now that I think about it with
19 how our case went in Illinois. And there the
20 Commission looked at the analysis we presented,
21 actually Michael Proctor who from our case testified.
22 He ended up coming to a different conclusion than he
23 did in Missouri. And the Commission staff weighed in
24 and they said we think Grain Belt is the lowest cost
25 option. And in Illinois that's sort of specifically

1 one of the statutory tests, and they said, okay, we
2 agree it is and so we think it's likely to happen and
3 likely to produce benefits.

4 **Q. Okay. Well, let me switchgears just a**
5 **little bit. So is there always, from your**
6 **perspective, a direct relationship between the**
7 **wholesale cost and the retail cost?**

8 A. Not always. Would you like me to
9 elaborate? I didn't want to assume you want me to.

10 **Q. Sure.**

11 A. By wholesale cost do you mean the cost
12 of the generation or wholesale prices, MISO prices?

13 **Q. Well, the cost of delivery.**

14 A. Right. I would say there is a direct
15 relationship. In the short term you might have some
16 lag, it might take some time to get a rate case, but
17 in the end the cost of generation is the most
18 important part of a utility's cost base rate. So if
19 we can help MJMEUC, if we can help Ameren, if we can
20 help other customers have a lower cost of generation,
21 when they come in for a rate case or set their rates
22 for the members, they will have lower costs to pass
23 through, and that's exactly what the munies are here
24 saying, is we can have lower costs to pass through
25 which will translate into savings for their

1 customers.

2 Q. So on page 35 of your direct you
3 discuss Ameren's IRP from 2014 where they indicate
4 they have a interest in purchasing 400 megawatts of
5 new wind starting in 2019 and I believe over 1000 by
6 2024. Do you have any sense at all as to Ameren's
7 interest in purchasing that from you or some portion
8 of that from you?

9 A. Right. My impression is that they
10 have deliberately stayed neutral in supporting our
11 line or not supporting our line. So I would go back
12 to the dollars and cents and I think that we can
13 offer them the lowest cost resource they can find and
14 I think that they will be or at least should be
15 interested in that.

16 And when I looked at this IRP, the
17 point of my discussion here is that they're saying
18 they can't meet their RAS because their renewables
19 are too expensive, and we think our line and the low
20 cost power it could bring could allow them to meet
21 their RAS without hitting their cost cap and actually
22 save them money. So we need to prove that out to
23 them, we're not there, but I think it will be the
24 case because we've done it with one customer here,
25 and as you mentioned, if we have a lower cost of

1 generation compared to alternatives, we should be
2 able to convince buyers that it's in the best
3 interest of their customers to participate in the
4 line.

5 Q. Turning to Schedule 9, it was filed
6 with your surrebuttal which concerns the conditions.

7 A. Okay. I got it.

8 Q. There are two that I wanted to talk to
9 you about.

10 A. Sure.

11 Q. It's the one that concerns
12 interconnection studies.

13 A. Okay.

14 Q. I'm having a hard time finding it.
15 Where is that on this document?

16 A. It's page 2 of 12. I have a copy here
17 if it's helpful.

18 Q. Here it is. What type of new issues
19 might these interconnection studies raise?

20 A. To be honest I don't really know. I
21 think this condition is getting at the point that
22 staff has really burrowed into the issue of
23 interconnection studies and thinks things might come
24 up, and so we've agreed that we will file those
25 interconnection agreements and studies, even though

1 we don't think anything will come up, just to make
2 sure there's transparency and that we're doing what
3 we're suppose to be doing.

4 **Q. From your perspective though, you**
5 **don't expect interconnection studies to require**
6 **significant additional investment?**

7 A. No. Well, to be clear there are going
8 to be some upgrades and we baked them into our
9 business projection and the levelized cost model of
10 550 million of upgrades.

11 **Q. How much of that is in Missouri?**

12 A. 20 million. And that's based on a
13 study that Ameren and myself have done, and it's not
14 the final study, there are more to do, but it's the,
15 not to get into the jargon, I tried not to, it's the
16 thermal part of the study, which usually leads to
17 most upgrades. There's a stability aspect of the
18 study that MISO and Ameren haven't done yet. But
19 what we have done is hired a third-party engineering
20 firm, which is one of those same firms that the RTOs
21 would hire to do that part of the study, and they
22 think it looks good.

23 **Q. When would you expect those studies to**
24 **be completed?**

25 A. I would say possibly by the end of

1 this year that would be a good target.

2 Q. Another condition that I want to ask
3 you about is on page 9, and I believe I asked some
4 questions of another of your witnesses on this point,
5 but can you explain to me why that additional clause
6 concerning minor deviations is necessary? And I
7 believe that you actually agreed that those
8 deviations need to be limited to 500 feet, is that
9 correct?

10 A. That's correct. And we've also agreed
11 that we would need to come back and ask for variance
12 if we go on a new landowner's parcel who has not
13 already been part of the route in process, hasn't
14 been able to participate, so we've worked those
15 refinements in working with staff to try to get to a
16 condition that works for both of us. But I might
17 have cut off your question which is why do we need
18 the variance at all?

19 Q. Sure.

20 A. Okay. So what happens when you're
21 micro-siting transmission lines and finding
22 individual structure locations is when you get down
23 to that level of detail sometimes you find things.
24 Sometimes you find that there's a utility crossing
25 and you need to move the line a little bit to be safe

1 at the utility crossing. Or you find out that the
2 soil somewhere doesn't work for a structure and you
3 need to move it a little bit or you find there's a
4 native American cultural site that you need to adjust
5 the route a little bit to move. So the reason we
6 want the ability to make small variance is so that we
7 don't have to have a whole bunch of new requests and
8 that we have certainty that we can actually build the
9 project, and we will do this in consultation with the
10 landowners, so that's part of the condition here, and
11 we'll do it when we find something. This is not an
12 unfettered right to move the line around, but in the
13 end we're the entity responsible for safety and so we
14 want to be able to make these modifications where we
15 need to make sure the line is safe.

16 Q. Okay. And then I think maybe the last
17 condition I'm going to ask you ask -- well, actually,
18 no, there's two more. On page 11 the company is not
19 agreeing with the staff's proposed condition that
20 they will not cause to allocate any amount to
21 Missouri rate payers. And I understand what Grain
22 Belt is proposing, that they won't do that unless
23 they get Commission approval, but under what
24 circumstance could you foresee such a request coming?

25 A. Actually it's really hard to say. I

1 think this is really unlikely, and I mean this is not
2 the most important issue to us, but rules could
3 change. Right now you can't cost allocate a project
4 like this. There's no really good interregional cost
5 allocation. It's not like SPP, MISO and PJM get
6 together and say let's plan a great interregional
7 project to save people money.

8 But let's say the world changes and
9 that does happen and something like Grain Belt comes
10 out and says this is a really good project. They can
11 accomplish goals more cheaply than other projects and
12 provide benefits, and we think it would make sense at
13 that point to come back to the Commission and say,
14 hey, actually the cost allocating part of the project
15 could make sense, could be good for everyone. So
16 again, it's not something we plan to do, it's just
17 our view is having that language in the condition
18 really -- it doesn't really hurt because we're not
19 getting any authority to build a cost self-allocated
20 line now, we just have to come back and prove our
21 case.

22 **Q. Of course, the reality is even without**
23 **that provision, nothing would prevent you from coming**
24 **back to a future Commission and saying circumstances**
25 **have changed; yes, we did agree that we would not try**

1 to cost allocate to Missouri rate payers, but we
2 think you should do so anyway and that Commission
3 could, of course, make a decision to allow that?

4 A. I agree with that. When I said this
5 isn't the biggest issue in the case, I think that's
6 exactly why. This may be a debate that's not really
7 a substantive issue.

8 Q. More academic. All right. And then
9 finally on the decommissioning fund, I understand the
10 company's position on that, but I'm trying to
11 understand a little bit about how much you care. If
12 there was -- if there was a requirement to start
13 funding that fund on the day that the line went into
14 operation, would that be a huge problem for you?

15 A. Well, it's certainly not the most
16 important issue in this case or most important among
17 the conditions. The reason we wouldn't want to put
18 it up is really simply just because it's financially
19 wasteful and you won't need it for a long period of
20 time, so we think it would make more sense to use
21 that money to make our land payments and to bill the
22 project. So our position is as simply as that and we
23 also don't think anyone would lose anything by
24 delaying its establishment, so that's why we are of
25 the view we are.

1 Q. And then I think one final question
2 concerning Exhibit 347.

3 A. I may need some help finding that one.
4 I got quite a stack here.

5 Q. And I'll look to your counsel. I'm
6 going to ask about a statement on page 24, three
7 bullets up. It's a highly confidential document, but
8 I can't imagine why that provision would be highly
9 confidential.

10 A. I'm sorry, which page is this?

11 Q. Page 24, it's the first, second, third
12 fourth, fifth bullet?

13 A. I'm not seeing the same page numbers.

14 MR. AGATHEN: This may be the document
15 that's a combination of documents.

16 A. Subject to my counsel's confirmation,
17 I will be able to discuss this.

18 Q. (By Commissioner Hall) Did you find
19 the provision?

20 A. Yes.

21 Q. "The merchant model allows for
22 potentially hire returns on equity versus traditional
23 cost of service reimbursement rates." Why is that?

24 A. Well, it could also lead to lower
25 returns and ours is a market-base project, so we're

1 saying that we're going to let the market set our
2 prices and we're going to take the risk that we sell
3 all the capacity. So if we sold all of the capacity
4 and the market is really good and we can get higher
5 prices with customers voluntarily doing business,
6 then we can make higher returns than a regular
7 utility.

8 Also, if our project cost more, we
9 sell less capacity, we can make less money, so that's
10 the basic -- the distinction here, it's between sort
11 of a cost recovery model with guaranteed cost
12 recovery versus a more free market model of doing
13 business.

14 COMMISSIONER HALL: Thank you. I have
15 no further questions.

16 MR. KENNEY: I have no questions.
17 Thank you for your testimony.

18 EXAMINATION

19 BY MR. RUPP:

20 Q. On your direct testimony I believe I
21 think it was page 31, lines 15 to 18, you're talking
22 about basically the lease cost option in those lines?

23 A. Correct.

24 Q. What is the cost of MISO land right
25 now?

1 A. Well, I think you got to distinguish
2 between the cost of the wind and the cost to actually
3 get it to Missouri. So the cost of the wind is going
4 to be higher than Kansas wind, but still pretty
5 competitive, so it might be, giving you my best rough
6 estimate here, low 20 dollars per megawatt hour. The
7 trouble is there's a lot of congestion between the
8 best wind blocks in MISO and Missouri. So I actually
9 looked at this in the last case because this came up
10 a lot and saw that it cost ten to \$12.00 a megawatt
11 hour of congestion cost just because the grid is so
12 clogged up in MISO to get the power to Missouri. So
13 you add that up and you're in a price in the 30's.

14 By the way this has happened to
15 Missouri utilities buying power elsewhere in MISO
16 already. There's a Pioneer Prairie project, I
17 actually worked on it at my old company. In the end
18 that congestion has cost Ameren a lot of money. So
19 when you put those two together, I think you're
20 somewhere in the mid-30 dollars per megawatt hour,
21 something like that. And there's risks too, right,
22 because that congestion, it could go down, but it
23 could go way up. And usually what happens when you
24 have a grid, people build wind farms like crazy until
25 it breaks. With the DC line you're actually bringing

1 the power right into Missouri, so it's like, it's
2 right close to your load, and so you don't really
3 have any risk of congestion in the same way you do
4 for plain power in Northwest Iowa or South Dakota.

5 Q. Okay. So then that leads me to my
6 other question is, just for a simplicity, why do some
7 places you talk about megawatt per year, megawatt per
8 month, megawatt per hour. Is there a reason why you
9 quote these in all these different documents or --

10 A. I bet that's annoying. So there is
11 one difference. So the transition price usually we
12 talk about in dollars per kilowatt month, you can
13 also call it dollars per megawatt year. They are
14 interchangeable, but we should pick one and stick
15 with it. And then dollars per megawatt hour and
16 cents per kilowatt hour, also we should probably
17 stick with dollars per megawatt. So there is a
18 capacity cost and energy cost, but other than that
19 we're probably just -- we should be more precise.

20 Q. Okay. So getting back to the line of
21 questioning that you were being asked on the
22 kilowatts per hour in the MJMEUC deal, the first 100
23 megawatts is at .30 cents a kilowatt hour?

24 A. No. The transmission charge is about
25 .3 cents per kilowatt hour -- excuse me, .23 cents

1 per kilowatt hour, and then the PPA is about 1.65
2 cents per kilowatt hour. So what that means you have
3 approximately a .02 cent per kilowatt hour generation
4 resource delivered directly to Missouri that the
5 munies are buying, and the way they look at their
6 savings, it was similar to what Chairman Hall was
7 asking, they are comparing now to their next best
8 alternative. And so that difference is how they are
9 saying this project saves our customers money.

10 Q. Okay. So .30 is not 30 cents, it's
11 .30 --

12 A. Cents per kilowatt hour.

13 Q. .3 cents per kilowatt hour.

14 A. Do you like dollars per megawatt hour
15 better or cents per kilowatt?

16 Q. I got numbers written all over.

17 A. I'm sorry.

18 Q. I'm just trying to get there.

19 A. To boil it down, the deal, delivered
20 power, is about .2 cents per kilowatt hour, 20 bucks
21 per megawatt hour, and that's a locked-in cost for 20
22 or more years with a predictable 2 percent escalator.

23 Q. Okay. So if I'm comparing MISO wind,
24 your estimates are the cost of the wind is low 20's
25 for the megawatt hour, with a 10 to \$12.00 megawatt

1 per hour congestion cost bringing it to the low 30's
2 per megawatt hour?

3 A. That's a reasonable estimate.

4 Q. And the MJMEUC contract is \$20.00 per
5 megawatt hour with the escalator for 20 years?

6 A. Correct.

7 Q. Is Ameren able to build a transmission
8 line into MISO to help relieve the congestion so they
9 can have access to the cheaper wind in MISO?

10 A. It's possible. I mean that's the kind
11 of thing MISO studies. So there are some projects
12 going on now that help with more wind access. The
13 trouble I think is, if you don't mind me going on a
14 little bit.

15 Q. Please.

16 A. The trouble is twofold. One, when you
17 do those cost allocated projects, then the bill comes
18 back to rate payers. You may say I'm getting that
19 cheap wind in MISO, but there's another cost, which
20 is the transmission cost to fix the congestion goes
21 back to rate payers.

22 The other trouble I mentioned that
23 with the AC grid it always gets overbuilt, right,
24 because there's really no limit, some limits, but
25 people keep building wind power. So, for example,

1 Mid-American in Iowa just announced that they're
2 going to put I think 2000 more megawatts of wind
3 power in. So if there's any spare capacity there,
4 it's going to get snapped up like that and the prices
5 are going to go up and the congestion is going to
6 come back.

7 With a DC line you actually have a
8 dedicated property right, so you own that capacity
9 from Point A to Point B. So no matter how many more
10 wind farms get built behind the Iron Star Wind Farm,
11 MJMEUC has its price locked in because they're not
12 exposed to that congestion charge from the grid
13 getting overbuilt -- excuse me, the generation
14 getting overbuilt.

15 **Q. So in that example, if Ameren would**
16 **have increased costs because they have to build the**
17 **transmission line, would they be able to earn a**
18 **return off that?**

19 **A.** Correct, but that would I guess depend
20 on if you're asking about Ameren or its customers.
21 So Ameren would earn a return, but my point was that
22 that cost would flow back to customers. So if you
23 look at the overall cost of upgrading the grid and
24 buying the wind power, there are still these two
25 components, the generation component and the

1 transmission component.

2 Q. So if I'm an incumbent company and I
3 have a choice between building a transmission line
4 and earning a return on it to have access to
5 renewables for my targets, would that not be -- or I
6 would have the option of buying cheaper wind through
7 your project, I would think that there would be a
8 prudent issue that they would need to do what's in
9 the best interest of the rate payers?

10 A. I think that's right. And when
11 Chairman Hall asked why do I think Ameren will
12 ultimately come around, I think it's because we'll be
13 able to offer a compelling product that it's prudent
14 for them to buy to get the lowest cost. And there
15 are different ways that we can work with them,
16 different structures, different prices, but it comes
17 down to this cost of energy is just really fantastic.

18 Q. So if your project is not built, would
19 they have that same decision point?

20 A. Would they still have to make a
21 decision between our project and a different project?

22 Q. I mean the lower cost wind versus --

23 A. Right. I mean I think the argument
24 we're hoping you consider is if we get our approval
25 and can build the project, then we will have this

1 really low cost resource available. But if we aren't
2 able to get our approval and build the project, that
3 option will go away and it will only be the more
4 expensive option that's left on the table and that
5 higher generation costs in the end that ends up on
6 the customer's bill.

7 Q. So let's get off that train of thought
8 and go to, if there is -- you know, if there's wind
9 in MISO, and it's more expensive than what you are
10 offering, explain to me why you only have roughly 200
11 megawatt of the 500, you know, interested in, called
12 for, earmarked or what have you, why would -- explain
13 to me why there isn't a -- there was only person
14 asking for first-mover status, why is not all 500
15 earmarked if it is that much cheaper?

16 A. I ask myself the same question because
17 I think it is a really good deal. It may be that
18 utilities want to remain neutral because there is a
19 contested case on this project, they don't want to
20 get ahead of it. We have heard that from some
21 buyers, they think the Commission should make a
22 decision and then they're willing to consider it. We
23 have a pretty low degree of regulatory certainty
24 right now because we're asking for the project to be
25 approved, but don't take it for granted. And when

1 you have a high degree of regulatory certainty in a
2 business, you don't know when you can deliver or if
3 you can deliver, and so I think that has been an
4 impediment. I mean our contract with MJMEUC and Iron
5 Star's contract is if the Commission approves this,
6 then we'll deliver on this, but if they don't, then
7 you're out of luck, so that uncertainty creates a
8 problem.

9 Q. Walk me through how that's an
10 uncertainty or risk for the purchaser? If I have no
11 skin in the game and on the if chance this gets
12 approved, I have the opportunity to get this cheap
13 wind, where is my risk for not saying yes, sign me up
14 and if it happens, it happens; if not, then not?

15 A. Right. I think a large part of it is
16 opportunity costs. I mean utilities have to make
17 plans pretty far out and they crave certainty, right?
18 They want to know exactly what the world is going to
19 look like in five years. And so what the
20 municipalities have agreed to do as a first-mover,
21 say, I believe the projects are going to happen,
22 right? And I'll plan around the projects happening,
23 and I've got an extensive contract coming up, and
24 I'll plan that this project can fill in and I'll go
25 get my customers onboard, the various individual

1 municipalities, and they've pressed the I believe
2 button. That's a lot of work and it is sort of an --
3 it comes down to a belief and taking some risk that
4 you got to find something else to do.

5 Now I agree just financially, are you
6 really worse off if you sign up and it never happens,
7 I mean I think that's true. I don't think there's a
8 lot of downside risk in terms of the dollars and
9 cents, but in terms of certainty and planning, I
10 think there is risk there.

11 **Q. You were asked a line of questioning**
12 **and it kind of got back to the transmission cost for**
13 **the first hundred and the second hundred in the**
14 **MJMEUC's contract with you, it doesn't quite cover**
15 **your debt payment to build the line. Is there --**
16 **what dollar amount do you need to have coming in from**
17 **this first 500 megawatts to get financing to move**
18 **forward with the construction?**

19 A. Right. If you don't mind, I could
20 clarify that line of questioning just a little bit
21 that you're referring to.

22 That was all very hypothetical. It
23 was assuming we sell every megawatt to Missouri and
24 to PJM at this same first-mover rate. So there's two
25 issues with that assumption. One is first-mover

1 rates have known that forever and the other is that
2 the PJM service is more valuable for all the reasons
3 that I was discussing with Chairman Hall, it's a
4 bigger market. So in the end the Missouri benefits
5 are central in this case, but what determines the
6 financial viability of the project is Missouri, it's
7 also PJM. And in PJM, it's the biggest wholesale
8 market in the world, it's 71 million customers, so
9 there's a lot of opportunity.

10 So now I'll get back to your question.
11 I think we would need to generate say about 200
12 million, and again these are very round numbers,
13 about \$200 million in revenue each year at a minimum
14 to be able to build the project. So of our total of
15 4000 megawatts, we would have to sell, I would say 50
16 percent or more to actually be able to build the
17 project. Now we won't start building it until we
18 have that capacity contracts in place and that's one
19 of the conditions we have agreed with staff is we got
20 to get the financing agreed and documented and filed
21 with this Commission before we go and install
22 equipment on peoples' property, and we've also got to
23 show that we have enough transmission service
24 contracts to service our debt, because we get that no
25 one wants to take the risk of a half built project or

1 a developer building something that he really doesn't
2 have the right revenue for it.

3 Q. So isn't there a risk that no one will
4 take your price in hopes that you basically have to
5 continue to keep pushing your prices down because
6 they know you have to hit so much sold and no one
7 wants to -- no one wants to buy that contract and
8 then six weeks later Joe down the street gets one for
9 so much better because he waited it out?

10 A. We do worry about that, that's part of
11 the reason you want prices to increase over time.
12 It's like if you're selling condos, you never want
13 the first one to be the most expensive. So we do
14 think about that, and in the end it comes down to the
15 market. And I mean I believe markets can work and I
16 believe if you have a good product that adds value to
17 customers you can find the price that benefits both
18 parties to transact, but will there be a little game
19 of chicken in getting there as you mentioned?
20 Probably.

21 Q. Do you feel that once you have all the
22 regulatory hurdles you need, then that signifies it
23 is going forward and does that lessen the risk
24 whereas now there's more uncertainty, is this project
25 going to go, so is there more a willingness to play

1 **the game of chicken because it's still very**
2 **uncertain?**

3 A. Absolutely. I mean regulatory
4 uncertainty is really hard for markets to deal with.
5 And so if we are fortunate enough to get our approval
6 here and keep going with our engineering and so
7 forth, it just brings more certainty to the project,
8 and will help us sell our product.

9 At this point I think what we know is
10 that the product is a good price and it adds value to
11 customers, but what we got to be able to show people
12 is that we can get it done, and our ability to get it
13 done, of course, depends on getting the regulatory
14 certainty.

15 Q. Using your, you know, knowledge of
16 **what's going on in the PJM market as of today, you**
17 **have all your regulatory approval today, you start**
18 **construction, what is the estimated price that you**
19 **could get for your product in the PJM market as of**
20 **current, today's environment?**

21 A. Right. So we -- I won't use the
22 confidential number, but it's -- we ran an open
23 solicitation as a way of gauging interest. It's not
24 fully binding, but a way of gauging interest. We
25 offered a price there which was about 30 percent

1 higher than the price we've been talking about to
2 Missouri, even the full price, and we had
3 six-and-a-half times as many bids as there was
4 capacity at that price, so that's a good indication,
5 it's a solid indication. Between now and getting all
6 those contracts down, there's a lot of work to do.
7 But as we thought about our business plan, I mean the
8 way we do it is we build a business case, we build a
9 financial model, we say does this product add value
10 and then we go test the market interest and the way
11 we did that was through this RFI and the open
12 solicitation and say, hey, do other people believe
13 that our economics work, and when we got that
14 feedback that they did, we said, okay, let's go spend
15 the tens of millions of dollars to permit this thing,
16 to engineer it and to get it ready to go.

17 **Q. Will you offer a first-mover option to**
18 **PJM?**

19 **A.** Can I say not if we have to, not
20 unless we have to.

21 **Q. Fair enough. The decommissioning fund**
22 **that was briefly mentioned, what is -- I don't want**
23 **to get into anything HC, but assuming you have a**
24 **dollar amount you want to hit in order to -- what you**
25 **think that that fund needs to have, an assumed rate**

1 of return and things, what is the difference of the
2 annual outlay to you of starting now versus waiting
3 20 years?

4 A. I don't know that I have a number, but
5 let me offer one clarification and I'll come back to
6 your question. I don't want to brush it off, I will
7 have to think about it for a minute.

8 We don't actually think we should set
9 a specific number. The way we think this should
10 work, and we're happy to spell out more of this I
11 think because we're at the -- this hasn't been done
12 before, we're still beginning to write down what it
13 looks like, but we think the right answer is to have
14 an independent engineering firm, so someone like
15 Black & Veatch or one of those firms to estimate the
16 cost to decommission the line because it depends on
17 time and place, it depends on labor costs, it depends
18 on material costs. Whatever we think it will be 20
19 years from now, it probably will be different than
20 that.

21 So our thought was that if this line
22 lasts decades, at the end of 20 years we have an
23 independent engineer sit down and say, okay, if this
24 line has less than ten years of useful life, let's
25 estimate how much it will cost to decommission based

1 on everything we know at the time and then we start
2 funding. So that's what we think is most efficient
3 in terms of making sure we have enough money to
4 decommission it and not having money sitting around
5 not doing anything. And there's a financial cost to
6 us of putting up the money early. As I said to
7 Chairman Hall, I mean this is not the most important
8 financial issue to us, but, you know, we sort of
9 don't see the need to do something financially
10 wasteful, it doesn't benefit anyone.

11 Q. So when you say financially wasteful,
12 it's just Grain Belt could utilize that cash for
13 something else versus -- because your outlay if you
14 start -- if you have 20 years to hit a certain
15 number, you're going to put in a lot less than time
16 value of money, so it's more we'd rather do something
17 else with that money for 20 years than -- even though
18 we're going to have to put in more 20 years from now,
19 that money to you is more important to be left in
20 your organization?

21 A. It boils down to the time value of
22 money and whether that really creates any additional
23 protection. I think what we're saying is not that
24 the time value of money is exorbitant, more that we
25 don't see it creates additional protection to fund it

1 on day one.

2 Q. I think this is where some people were
3 heading with their line of thought and I'm just going
4 to ask it. So did Grain Belt just drop the 500
5 megawatts into Missouri and offer just a sweetheart
6 deal to MJMEUC to get a customer to say, hey, we got
7 it, knowing that they can get more and make it up on
8 the back end in the PJM market?

9 A. I'd say there's some truth to that. I
10 mean I probably have a little -- that sounds pretty
11 Slick Willie, so I probably have a different take if
12 I may, but the convertor in Missouri has been part of
13 the project for a long time, so that's not a recent
14 addition, hey, we need to do something for Missouri.
15 We did it in part to create benefits for the state
16 because it made sense. I mean if you're building a
17 line, if you have more drop-offs, then you can sell
18 more capacity, then there's an economy of scale,
19 right? And that's actually part of why we think this
20 project is a good deal for Missouri because you got a
21 huge market in PJM that can pay higher prices. And
22 yes, in a way those other states, if you want to look
23 at it that way, are subsidizing Missouri a little bit
24 because they have higher prices and they help us
25 build the line that comes to Missouri. So I think

1 that is sort of for the first part of your question.

2 The other is why is MJMEUC getting
3 such a sweetheart deal, right? And I think, well,
4 one, the better deal they get, the more savings they
5 get and the more excited they are about helping us, I
6 mean that's fair. And they are taking more risks
7 because of this planning of regulatory uncertainty of
8 working with us, and they don't want to think that
9 they'll pay a price and the price will go down in the
10 future for the very reason you're mentioning, so I
11 think all those factors went into this first-mover
12 rate which we agree is a very good deal for them.

13 MR. RUPP: Thank you very much.

14 JUDGE BUSHMANN: Recross based on the
15 bench? MJMEUC?

16 MR. HEALY: No questions, Judge.

17 JUDGE BUSHMANN: Wind on the Wires?

18 MR. BRADY: No questions.

19 JUDGE BUSHMANN: Infinity Wind?

20 MS. PEMBERTON: No questions.

21 JUDGE BUSHMANN: I think I see
22 Mr. Bear. Economic Development, any questions?

23 MR. BEAR: No questions.

24 JUDGE BUSHMAN: MIEC?

25 MR. MILLS: No questions.

1 JUDGE BUSHMANN: Commission staff?

2 MR. JOHNSON: Yes. Thank you, Judge.
3 Just very briefly because I think we are officially
4 now into the evening.

5 CROSS EXAMINATION

6 BY MR. JOHNSON:

7 Q. Chairman Hall mentioned or asked you
8 if MISO would be in control of dispatching 500
9 megawatts into Missouri. My question would be does
10 the company have any type of agreement with MISO that
11 would give them control over the Missouri convertor
12 station?

13 A. Well, this is actually going to be
14 accomplished through -- I mean there will be the
15 aspect of signing an interconnection agreement with
16 them and spelling out the nitty-gritty and to be fair
17 we haven't done that. But MISO's tariff actually
18 prescribes how generators through our line interact
19 with their markets. So they have to submit a bid,
20 they actually get cleared through the central
21 dispatch. MISO has the ability to ramp them down if
22 needed. If their price doesn't fund, they don't get
23 dispatched. All of that protocol is already there in
24 the tariff. So the core is there and we will just
25 need to flush out a few details in the

1 interconnection agreement.

2 MR. JOHNSON: Okay. All right. Thank
3 you, Mr. Berry.

4 A. You're welcome.

5 JUDGE BUSHMANN: Rockies Express?

6 MS. GIBONEY: No questions.

7 JUDGE BUSHMANN: Show-Me Landowners?

8 MR. LINTON: Just a couple, Your
9 Honor.

10 RE CROSS EXAMINATION

11 BY MR. LINTON:

12 Q. So Clean Line is a merchant
13 transmission developer, correct?

14 A. We're trying to call ourselves a
15 participant-funded developer. Yes, the words mean
16 the same thing.

17 Q. And you got a lot of questions about
18 pricing from the bench?

19 A. Yes.

20 Q. What is the definition of fair market
21 value?

22 A. I would say it's a willing buyer and a
23 willing seller.

24 Q. Right. And that presumes an arm's
25 length transaction, correct?

1 A. Generally speaking I would agree with
2 that.

3 Q. Okay. Were your negotiations with
4 **MJMEUC at arm's length?**

5 A. Yes.

6 Q. So the price that you negotiated with
7 **MJMEUC is a fair market value?**

8 A. You take all of the circumstances at
9 the time into consideration. So in a way they're
10 getting a good deal because they're saving so much
11 money, but also we're getting a good deal because we
12 have a first-mover, who is willing to go first and
13 who is helping us move the project along, so I would
14 say, yes, it's taking everything into account. It's
15 a fair deal.

16 Q. And there's no commitment, that's also
17 **another factor in the transaction too, there's no**
18 **commitment on MJMEUC's side?**

19 A. Well, I think we talked about this. I
20 don't agree there's no commitment. I mean I agree
21 with the fact that we started with a contract that
22 allowed them to reduce their transmission capacity,
23 but we never had the intent that this was just an
24 option for them like a toy. And so since then, they
25 have gone and signed a binding PPA for at least 100

1 megawatts and they have got numerous municipalities
2 onboard. So as we're planning our business case,
3 that is a commitment and, yes, there are some outs in
4 the legal contract, but that is not the way this
5 thing appears to be headed.

6 **Q. So we never had the intention that**
7 **this would be the way it would end up, that's still**
8 **an arm's length transaction?**

9 A. I'm sorry, I don't understand the
10 question.

11 **Q. When you said we never had the**
12 **intention that this would be the way, that this would**
13 **be the limitation of our transaction?**

14 A. Let me clarify. I mean there have
15 being questions about, well, isn't the Transmission
16 Service Agreement with MJMEUC just an option because
17 that could reduce the amount of capacity, right? And
18 I agree there is a legal provision that says that in
19 the contract, but I'm saying that neither of us went
20 into this thinking it was just an option and MJMEUC
21 would back-out because something small changed or
22 because they changed their mind and that was not our
23 intent. And I was explaining that's borne out to be
24 true because they're doing a lot of things in terms
25 of their PPA and bringing their munies along and that

1 is showing that it was actually a real commitment.

2 Q. Okay. So this is a fair market, you
3 think this is a fair market value price because it
4 was an arm's length transaction?

5 A. I mean I think I've been through that
6 when I said taking into account everything going on
7 at this time, I think it was a fair deal for both of
8 us.

9 Q. You would expect in the future that
10 customers would buy above that fair market value
11 price?

12 A. I will say they will buy at a higher
13 price in the future, yes.

14 MR. WILLIAM: Thank you.

15 JUDGE BUSHMANN: Questions, Farm
16 Bureau?

17 MR. HADEN: Yes, Your Honor, thank
18 you.

19 CROSS EXAMINATION

20 BY MR. HADEN:

21 Q. So I'm clear, you were talking about
22 fair markets, fair market value here. Is property
23 bought under eminent domain a fair market value?

24 A. I'm not an eminent domain expert, but
25 my understanding is that generally courts have to

1 award fair value if there's any condemnation.

2 Q. I'm just going off your deposition.
3 You said a willing buyer and willing seller. It's
4 not a willing seller in the case of eminent domain,
5 is it?

6 MR. ZOBRIST: Judge I'm going to
7 object. I don't think there were any questions from
8 the bench with regard to eminent domain.

9 JUDGE BUSHMAN: Your response?

10 MR. HADEN: Can I follow up on recross
11 if it was brought up, the same topic that was
12 adequate recross earlier?

13 JUDGE BUSHMANN: No, this is based on
14 bench questions.

15 MR. HADEN: Fair enough. I do have a
16 follow-up that is related to the bench questions.

17 Q. (By Mr. Haden) You talked to
18 Commission Hall about micro-siting issues and need to
19 -- you may get in there and in the real world you
20 have to make changes. You said that you'd do that in
21 concern with landowners, correct?

22 A. We said in consultation, right.

23 Q. So if a landowner tells you no, what
24 is going to happen?

25 A. Well, we try not to get to that point.

1 We'd sit down and say, okay, here's the issue we're
2 facing, what do you think the solution is and as
3 Ms. Landon testified, we've been through it any
4 number of times. And we do feel like we need to have
5 the ultimate decision because we're the ones who have
6 to safely operate the project and comply with all the
7 laws. So, again, I hope it doesn't get to that
8 point. I think an overwhelming majority of the time
9 we can figure out a mutually acceptable solution.

10 **Q. When you say the ultimate decision, I**
11 **mean the scenario I heard you envision earlier may**
12 **have been you're building what you think is your**
13 **right-of-way and you hit a problem, you may have to**
14 **reroute your right-of-way, is that right?**

15 **A.** That's not what I'm envisioning here,
16 no.

17 **Q. Could that happen?**

18 **MR. ZOBRIST:** Judge, I object. This
19 is -- the questions from the bench related to the
20 minor deviations within 500 feet and Mr. Haden is
21 talking about a reroute that presumably goes far
22 beyond the condition we came to the staff with.

23 **MR. HADEN:** I don't know why you
24 presume that. If you want me to make the question
25 more specific I can, but I mean that is a

1 presumption. When I say you're building in the
2 right-of-way, then you have to move it, okay, within
3 500 feet, fine.

4 JUDGE BUSHMANN: Overruled.

5 Q. (By Mr. Haden) So even within 500
6 feet. 500 feet is not nothing, right, 500 feet is a
7 long way, isn't it?

8 A. It's not nothing I agree with that.

9 Q. I mean it's longer than a football
10 field, right?

11 A. I agree.

12 Q. A football field-and-a-half even I
13 think, right?

14 A. Sounds right.

15 Q. Okay. So for a lot of people, I mean
16 for a lot of urban or suburban landowners, it's more
17 air space, property space than they would ever even
18 own, right?

19 A. Some cases I agree with that.

20 Q. Okay. So even within 500 feet though,
21 I mean you could be building as if your -- and if
22 this is outside out of your expertise tell me, but
23 you could be building within the right-of-way, within
24 the easement, find a problem and then say, well, we
25 got to go over here now, right?

1 A. Well, I'll go as far as my expertise
2 let's me. That's not what we're envisioning here.
3 This condition is meant to deal with a case where we
4 receive a certificate, have the route center line
5 approved as part of that certificate, and then go do
6 the really detailed survey and engineering you need
7 to do before you actually build a line. And if we
8 find something in that process that requires a
9 reroute on the same landowner's parcel that's already
10 been part of the process and within 500 feet, we want
11 the ability to be able to make a change in the route.
12 We're not envisioning that we start construction and
13 something happens and, you know, we got to change
14 things, but could that theoretically happen? Yes, it
15 could. We would need to negotiate a modification to
16 the easement with the landowner. We're not asking
17 for the ability to go do things without an easement,
18 we're asking for the ability to modify our route if
19 we learn things in the future.

20 **Q. And even if you abandon an earlier**
21 **easement, can you make the commitment that you'll pay**
22 **for it, you'll pay for whatever you tear up before**
23 **you move?**

24 A. We would pay for any damages, yes,
25 that's part of our standard easement agreements.

1 Q. Now you say you believe in response to
2 one of the questions from Commissioner Rupp, you said
3 that you believe in markets, correct?

4 A. Generally speaking, yes.

5 Q. And you believe that both parties can
6 eventually get to a price within market and have that
7 make sense, right?

8 A. I would say that's generally the case.
9 I definitely believe it's the case in -- when we're
10 talking about wholesale power markets, yes.

11 Q. Okay. So do you believe that about
12 the property markets as well, real estate markets?

13 MR. ZOBRIST: Objection, we haven't
14 had bench questions in regard to property markets.

15 JUDGE BUSHMANN: Sustained.

16 Q. (By Mr. Haden) Let's be clear then.
17 In the power context, you said that we can get to --
18 you can get to that place where you find equilibrium
19 of supply, presumably supply, demand and price,
20 correct?

21 A. I think that's right.

22 Q. Okay. But is that the only market
23 that operates or are there other markets where that
24 operates?

25 A. I say that principle works in a number

1 of markets.

2 Q. But it doesn't always work?

3 A. No.

4 Q. What are the exceptions?

5 MR. ZOBRIST: Objection, calls for
6 speculation at this point.

7 MR. HADEN: Does he have the expertise
8 or not I guess is my question. I mean if he knows
9 about -- if he's going to testify about what markets
10 mean and how markets work as he did --

11 JUDGE BUSHMANN: I'll overrule to the
12 extent he has knowledge.

13 A. Could you repeat the question for me,
14 please?

15 Q. (By Mr. Haden) Okay. You said it
16 works that way in power markets. I think you said it
17 works that way usually, but there are -- and my
18 question was what are the exceptions where it
19 doesn't?

20 A. I don't have any specific examples
21 that are really within my expertise off the top of my
22 head.

23 Q. So it's possible that it works every
24 time if the market is allowed to work that way, is
25 that right?

1 A. I generally don't think that's the
2 case because sometimes you wind up in situations
3 where it's not as simple as two sophisticated parties
4 sitting down and saying here's what I'll willing to
5 pay, here's what I'm willing to sell it for. It's
6 more complicated than that, there are other factors.

7 **Q. When you say it's more complicated**
8 **what do you mean?**

9 A. I guess I mean that there's friction
10 to the market working perfectly.

11 **Q. Okay. Like what would be an example**
12 **of that?**

13 A. I feel like I'm getting way off track
14 of, you know, my expertise here. As a general
15 function of how markets work, I'm comfortable
16 discussing it, but I'm now getting into specific
17 markets I don't know about.

18 **Q. Okay. So do you only know about power**
19 **markets then?**

20 A. That's the only market in which I have
21 particular expertise, I agree.

22 **Q. You don't have expertise in any other**
23 **market?**

24 A. No professional expertise.

25 **Q. Okay. Talking about MJMEUC and -- I**

1 mean Commission Rupp asked you if it was brought on
2 specifically to create, I'm paraphrasing now, to
3 create a customer here so you had a justification
4 that you do have a customer in Missouri, and I think
5 your answer was -- what was your answer to that?

6 MR. ZOBRIST: Wait a minute, his
7 answer to what?

8 MR. HADEN: His answer to Commission
9 Rupp's question as to whether MJMEUC was brought on
10 and solicited as a customer specifically so that the
11 company could say we have a customer in Missouri now.

12 MR. ZOBRIST: Well, Judge, that's
13 cumulative. The answer to Commission Rupp's question
14 is on the record.

15 JUDGE BUSHMANN: Sustained.

16 Q. (By Mr. Haden) I'll ask you because I
17 think it was brought up as a matter of the subject
18 matter. Was MJMEUC -- is that completely fictive?
19 Were they brought on just as a political crowbar to
20 get this thing over the finish line?

21 A. No.

22 Q. Okay. Are you going to actually make
23 any money on the deal with MJMEUC?

24 A. We'll make revenue, yes.

25 Q. How much?

1 A. We went through the numbers earlier
2 today.

3 **Q. Well, what's your answer?**

4 MR. ZOBRIST: This is argumentative
5 and it's cumulative.

6 JUDGE BUSHMANN: Sustained.

7 **Q. (By Mr. Haden) So MJMEUC will be**
8 **profitable for your company, that deal will be?**

9 A. We will make revenue off that
10 Transmission Service Agreement, which will be part of
11 the revenue used to finance the project.

12 **Q. Will it be profitable though, because**
13 **there's a difference. You can make gross revenue and**
14 **still be under water, right?**

15 A. We think about the profitability of
16 the project in the aggregate, not with respect to a
17 specific contract.

18 **Q. Okay. I understand that. But if you**
19 **charged every customer the rate you're going to**
20 **charge MJMEUC, this project couldn't be profitable,**
21 **is that right?**

22 A. I think we would need to charge other
23 customers especially in PJM higher rates, I'd agree
24 with that.

25 **Q. And so -- and that all goes to my**

1 question then, so as a second part of that, that
2 being the case, if you couldn't find enough customers
3 out there to be profitable the rates you're charging
4 them, was the only purpose -- I know you said they
5 were brought on as first-mover, you wanted a
6 first-mover, was that really the only purpose in
7 making this contract with --

8 MR. ZOBRIST: Asked and answered,
9 Commissioner Rupp asked about that, Mr. Agathen asked
10 about it, it's cumulative and becoming argumentative.

11 JUDGE BUSHMANN: Sustained.

12 MR. HADEN: That's all I have, Judge.

13 JUDGE BUSHMANN: Missouri Landowners?

14 MR. AGATHEN: Thank you, Your Honor.

15 RECROSS EXAMINATION

16 BY MR. AGATHEN:

17 Q. You had several questions regarding
18 decommissioning funding, correct?

19 A. Yes.

20 Q. And the answers seem to all go to the
21 solution of a self-funding decommissioning fund; in
22 other words, you put the money into a fund which
23 would be held in a trust somewhere and earn interest,
24 is that generally accurate?

25 A. I'm not familiar with self-funding,

1 but I generally agree that we would make either
2 contributions or have a security instrument that
3 would be held in trust for the purpose of
4 decommissioning the line.

5 Q. And I think that goes to my question,
6 aren't there financial instruments -- you've got
7 plenty of contacts in the financial community, right?

8 A. Yes.

9 Q. Aren't there financial instruments
10 which would be available akin to a Letter of Credit
11 or an insurance policy of some kind where you would
12 not be self-funding it, but you would pay to some
13 company, some large bank or something in New York, X
14 dollars per year and then they would take on the risk
15 of having to, in effect, decommission the project at
16 any point along the line?

17 A. I don't think that we could pay
18 someone to take the risk to decommission it for us.
19 I mean I would agree there are security instruments.
20 Those also have a cost, and as I think of them, it's
21 similar to the time value of money, but it would be
22 another option.

23 Q. If would be an option?

24 A. I agree with that.

25 Q. And if you're telling the Commission

1 that the probability is close to nothing of ever
2 having to decommission this line, that would be
3 reflected in the cost that they would charge you,
4 right?

5 A. No, I don't agree with that. A
6 financial institution isn't going to be in the
7 business of assessing how much it would cost to
8 decommission the line.

9 Q. But they would take into account the
10 risk of having to decommission, would they not?

11 A. No, I don't think they would.

12 Q. How would they set a rate for this
13 fund then?

14 A. It would be more about the cost of
15 extending credit, liquidity to the beneficiary of the
16 security instrument.

17 Q. So they wouldn't care that there's
18 almost zero chance according to you and according to
19 history that this line would actually have to be
20 decommissioned?

21 A. That's not the way they look at the
22 cost of a security instrument, correct.

23 Q. Okay. But you did say that there is
24 methodologies out there other than self-funding which
25 might be applicable to a decommissioning fund?

1 A. Yes, there could be other security
2 instruments.

3 MR. AGATHEN: Thank you.

4 JUDGE BUSHMANN: Any other questions
5 for Mr. Berry?

6 MR. AGATHEN: No, Your Honor.

7 JUDGE BUSHMANN: Redirect?

8 MR. ZOBRIST: I just got a couple
9 questions.

10 REDIRECT EXAMINATION

11 BY MR. ZOBRIST:

12 Q. **Mr. Berry, in response to Commissioner**
13 **Rupp's question, I just want to clarify the record.**
14 **Would you compare the price that you were talking**
15 **about as far as sales to PJM versus sales to the**
16 **Missouri convertor station and do it in the same**
17 **terms, preferably megawatt hours?**

18 A. I'm sorry, the transmission price or
19 the --

20 Q. **It was the total delivered price to**
21 **PJM, the total delivered price to the Missouri**
22 **convertor station?**

23 A. I think it would cost approximately
24 \$10.00 per megawatt hour more to deliver to PJM.

25 Q. **And that was roughly, you're talking**

1 about lower \$30.00 to PJM and about \$20.00 for
2 megawatt hour to Missouri?

3 A. Right at 20 for the MJMEUC transaction
4 and I would say somewhere in the 20's for the
5 negotiated transaction after the first-mover.

6 Q. Thank you. You mentioned that Dr.
7 Michael Proctor in Illinois agreed with the position
8 of Grain Belt Express. Just summarize that briefly
9 if you would, please?

10 A. Sure.

11 MR. HADEN: I'm going to object to
12 that, Judge, as hearsay.

13 MR. ZOBRIST: Well, we've had
14 testimony about what Dr. Proctor's views were. Mr.
15 Agathen handed him a copy of Mr. Berry's testimony.
16 He was asked about Dr. Proctor's opinion. I think he
17 should be allowed to state why Dr. Proctor agreed
18 with Grain Belt Express in the Illinois proceeding.

19 MR. HADEN: And my -- sorry, Judge.

20 JUDGE BUSHMANN: Go ahead.

21 MR. HADEN: My objection would stand
22 that the document -- it is a document in the record
23 and the document can speak for itself. But to have
24 this witness testify to what some other witness, who
25 could be called, believes is hearsay.

1 JUDGE BUSHMANN: Overruled, it goes to
2 the weight, not the admissibility.

3 A. So Dr. Proctor did a comparison of the
4 cost of our project delivering to Illinois and PJM
5 versus the combined-cycle gas plant. And because of
6 some changed assumptions since he was in Missouri and
7 some issues with his calculations we worked through,
8 he saw that the resources were very similar in price,
9 but that the Kansas wind was actually a little bit
10 cheaper and that was a finding that the Commission
11 staff and Grain Belt, we thought it was a lot
12 cheaper, sort of came to a single view on it, it was
13 part of the approval in Illinois.

14 Q. (By Mr. Zobrist) You mentioned that
15 there was a contract for 50 megawatts from this
16 company in Illinois called Realgy, is that correct?

17 A. Correct.

18 Q. Is any of that 50 megawatts plan to be
19 sold in the Missouri convertor station of Grain Belt
20 Express if the project is built?

21 A. Yes, I believe it's 25 megawatts and
22 then 25 megawatts to PJM.

23 Q. You were asked a number of questions
24 about national trends with regard to solar generation
25 versus wind generation. What are the prospects of

1 **solar generation in the Midwest versus the national**
2 **picture?**

3 A. Sure. I mean generally the Midwest,
4 certainly the great plains, has an outstanding wind
5 resource. The solar resource is when you get into
6 the states like Missouri is not as outstanding as
7 elsewhere, so I think when we're comparing wind and
8 solar, we also have to be region specific. And so in
9 Western Kansas you got the best wind. If you're
10 comparing it to solar in Missouri, it's not going to
11 be the best solar resource in the country.

12 Q. **And a final question. Going back to a**
13 **couple hours ago when you were asked questions I**
14 **think by Mr. Linton about Mr. Justis' capacity**
15 **penalty.**

16 A. Sure.

17 Q. **There was a discussion of apples to**
18 **oranges and apples to apples. What is your opinion**
19 **with regard to Mr. Justis' capacity penalty?**

20 A. Sure. I'll try to boil this down.
21 Plants create two things, they create energy and they
22 create dependable capacity. So energy is just a
23 megawatt hour, capacity is how much can you count on
24 on your peak day when you really need it?

25 So my position is that this is pretty

1 simple. If you're going to compare two things, you
2 got to compare the same amount of energy and you got
3 to compare the same amount of capacity. And what
4 Mr. Justis did, and I point out my testimony, is add
5 so much backup capacity to the wind that you have 300
6 megawatts of dependable capacity there versus 200
7 megawatts for the combined-cycle, so you're comparing
8 apples and oranges. Sort of like saying a 3,000
9 square foot house is more expensive than a 2000
10 square foot house. It doesn't really mean anything;
11 they're different things.

12 **Q. Judge, I apologize, one final question**
13 **and one final answer. Mr. Linton did ask you about**
14 **the policy with regards to negotiated rates and**
15 **meetings with interested parties, do you recall that?**

16 A. I do.

17 **Q. What has Grain Belt Express done to**
18 **comply with those FERC policies with regard to**
19 **negotiated rates and meeting with private parties?**

20 A. Sure. The requirement has to do with
21 preliminary meetings and providing folks, you know,
22 the same initial information, so we had a webinar
23 where we presented the basic information about the
24 project so all interested participants, and then we
25 offered to have one-on-one meetings with individual

1 subscribers, some of them took us up, some of them
2 didn't, but after that we got into the bilateral
3 negotiations, which is also part of the process set
4 up.

5 MR. ZOBRIST: Nothing further, Judge.

6 JUDGE BUSHMANN: Mr. Berry, you've
7 been on the stand for a long time. Thank you for
8 your testimony. You are now finished.

9 THE WITNESS: Thank you.

10 JUDGE BUSHMANN: I think we're going
11 to be in recess starting tomorrow at 8:30 a.m. We
12 will start with Mr. Kincheloe and we'll pick up there
13 where we left off. We are in recess until 8:30
14 tomorrow morning.

15 (WHEREIN, the hearing ended at 5:30
16 p.m. and continued to the next day.)

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STATE OF MISSOURI)
) ss.
CITY OF JEFFERSON CITY)

I, Mary Lynn Cushing, a Certified Court Reporter (MO), and a Notary Public within and for the State of Missouri, do hereby certify that the proceedings were taken by me to the best of my ability and thereafter reduced to typewriting under my direction; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this deposition was taken, and further that I am not a relative or employee of any attorney or counsel employed by the parties thereto, nor financially or otherwise interested in the outcome of the action.



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