| 1  |  |
|----|--|
| 2  | STATE OF MISSOURI<br>PUBLIC SERVICE COMMISSION     |
| 3  |  |
| 4  |  |
| 5  |  |
| 6  | ESTABLISHING RELIABILITY STANDARDS FOR INVESTOR-OW |
| 7  |  |
| 8  | Case No. EX-2008-0230                              |
| 9  |  |
| 10 |  |
| 11 |  |
| 12 | TRANSCRIPT OF PROCEEDINGS                          |
| 13 | PUBLIC HEARING                                     |
| 14 | VOLUME 1   |
| 15 | MARCH 26, 2008                                     |
| 16 | 20, 2000   |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 |  |
| 21 |  |
| 22 |  |
| 23 |  |
| 24 |  |
| 25 |  |

| 1      |  |
|--------|--|
| 2      | STATE OF MISSOURI  |
| 3      | PUBLIC SERVICE COMMISSION  |
| 4<br>5 | TRANSCRIPT OF PROCEEDINGS  |
| 6      | Public Hearing   |
| 7      | March 26, 2008   |
| 8      | Jefferson City, Missouri   |
| 9      | Volume 1   |
| 10     |  |
| 11     | In the Matter of Proposed Rules )  |
| 12     | 4 CSR 240-23.010 Establishing ) Case No. EX-2008-0230 Reliability Standards for )  |
| 13     | Investor-Owned Electrical ) Corporations )   |
| 14     | COLLEGN DALE amoniding   |
| 15     | COLLEEN DALE, presiding,  CHIEF REGULATORY LAW JUDGE   |
| 16     | CONNIE MURRAY,<br>ROBERT M. CLAYTON, III,  |
| 17     | COMMISSIONERS  |
| 18     | DEPORTED DV  |
| 19     | REPORTED BY:   |
| 20     | Patricia A. Stewart<br>RMR, RPR, CCR<br>Midwest Litigation Services<br>3432 West Truman Boulevard, Suite 207<br>Jefferson City, Missouri 65109<br>(573) 636-7551 |
| 21     |  |
| 22     |  |
| 23     |  |
| 24     |  |
| 25     |  |

```
1
    APPEARANCES:
    FOR KANSAS CITY POWER & LIGHT COMPANY:
    James M. Fischer, Attorney at Law
    Fischer & Dority, P.C.
    101 Madison, Suite 400
    Jefferson City, Missouri 65101
    (573) 636-6758
 6
    FOR EMPIRE DISTRICT ELECTRIC COMPANY:
    Brian T. McCartney, Attorney at Law
    Brydon, Swearengen and England
 8
    312 East Capitol Avenue
    Jefferson City, Missouri 65101
 9
    (573) 635-7166
10
    FOR AQUILA, INC. AND MISSOURI ENERGY DEVELOPMENT
    ASSOCIATION:
11
    Paul A. Boudreau, Attorney at Law
    Brydon, Swearengen and England
12
    312 East Capitol Avenue
    Jefferson City, Missouri 65101
13
    (573) 635-7166
14
    FOR AMERENUE:
15
    Wendy Tatro, Assistant General Counsel
    1901 Chouteau Avenue
16
    St. Louis, Missouri 63103
17
     (314) 554-3484
18
    FOR OFFICE OF THE PUBLIC COUNSEL:
19
    Christina Baker
    Lewis Mills, Public Counsel
    P. O. Box 2230
20
    Jefferson City, Missouri 65102
21
    (573) 751-5565
22
    FOR STAFF OF THE MISSOURI PUBLIC SERVICE COMMISSION:
23
    Nathan William, Deputy General Counsel
    P. O. Box 360
24
    Jefferson City, Missouri 65102
25
    (573) 751-8707
```

- 1 PROCEEDINGS
- 2 JUDGE DALE: Good afternoon. We are here
- 3 today, March 26th, 2008 in the matter of Proposed Rule
- 4 CSR 240-23.010, establishing reliability standards for
- 5 investor-owned electrical corporations.
- 6 Let us begin with entries of appearance.
- 7 MR. WILLIAMS: Nathan Williams appearing on
- 8 behalf of the Staff of the Public Service Commission,
- 9 P. O. Box 360, Jefferson City, Missouri 65102.
- 10 MS. BAKER: Christina Baker appearing for
- 11 the Office of the Public Counsel, P. O. Box 2230,
- 12 Jefferson City, Missouri 65102.
- 13 MS. TATRO: Wendy Tatro on behalf of
- AmerenUE, 1901 Chouteau Avenue, St. Louis, Missouri 63103.
- MR. MCCARTNEY: Brian McCartney of the law
- 16 firm of Brydon, Swearengen & England, P.C.,
- 17 Jefferson City, Missouri, appearing today on behalf of the
- 18 Empire District Electrical Company.
- 19 MR. FISCHER: James M. Fischer, Fischer &
- 20 Dority, P.C., 101 Madison Street, Suite 400,
- 21 Jefferson City, Missouri, appearing today on behalf of
- 22 Kansas City Power & Light Company.
- MR. BOUDREAU: Appearing on behalf of
- 24 Missouri Energy Development Association and Aquila, Inc.,
- 25 let the record reflect the appearance of Paul Boudreau,

- 1 312 East Capitol Avenue, Post Office Box 456,
- 2 Jefferson City, Missouri.
- JUDGE DALE: Thank you.
- Before we resume, I neglected to say that
- 5 this is Case No. EX-2008-0230.
- 6 Who do we have testifying today in support
- 7 of the rule?
- 8 Staff?
- 9 MR. WILLIAMS: Staff has Dan Beck who would
- 10 provide any testimony regarding the rule in support of it,
- 11 in particular with regard to the residential subdivision
- 12 undergrounding subsection.
- JUDGE DALE: Thank you.
- 14 Ms. Baker.
- MS. BAKER: Public Counsel has no one
- 16 actually giving testimony today. We are in general
- 17 support of the rules and rules of this type.
- MS. TATRO: AmerenUE's comments have been
- 19 submitted into the record, and we don't have plans to
- 20 offer testimony, but I do have Union Electric
- 21 Vice-President Ron Zdellar available for any questions.
- JUDGE DALE: Thank you.
- MR. MCCARTNEY: Empire District generally
- 24 supports the rule. Mike Palmer and Sam McGarrah are here
- 25 today to answer any questions.

```
JUDGE DALE: Thank you.
```

- 2 MR. FISCHER: Kansas City Power & Light also
- 3 supports the rules, and we filed comments to that effect,
- 4 with a few suggested changes. Bill Herdegen is not
- 5 planning to testify, but he is here to answer questions if
- 6 there are any from the bench.
- JUDGE DALE: Okay. Thank you.
- MR. BOUDREAU: I'll echo those comments,
- 9 that the rule as proposed is generally supported by both
- 10 MEDA and by Aquila. If there are -- both entities have
- 11 filed previously filed comments in some form, and we have
- 12 available Mr. Elliott Connell for Aquila to the extent
- 13 that the Commission has any questions to ask. And Warren
- 14 Wood, who is at a hearing over at the Capitol right now,
- 15 will be heading this direction and hopefully be here to
- 16 answer any questions to the extent the Commission has any.
- 17 Thank you.
- JUDGE DALE: Thank you.
- Then, Mr. Williams, if you'll call
- 20 Mr. Beck.
- 21 MR. WILLIAMS: Dan Beck, would you please go
- 22 to the stand.
- 23 (Witness sworn/affirmed.)
- JUDGE DALE: Thank you.
- 25 Please proceed.

- 1 QUESTIONS OF DANIEL I. BECK
- 2 BY MR. WILLIAMS:
- 3 Q. Please state your name.
- 4 A. Daniel I. Beck.
- 5 Q. And who is your employer and what position
- 6 do you hold with that employer?
- 7 A. I work for the Missouri Public Service
- 8 Commission Staff, and I am the Supervisor of Engineering
- 9 Analysis.
- 10 Q. And do you have any comments regarding the
- 11 proposed rule that's in front of the Commission here
- 12 today?
- 13 A. The Staff is generally supportive of the
- 14 rule. The one thing that we would just kind of bring up
- 15 as a general comment is, is there is a section of the
- 16 proposed rule that addresses undergrounding of lines in
- 17 new subdivisions, and I think that to kind of -- this
- 18 states a policy objective, but I think ultimately to kind
- 19 of move that forward, there may end up ultimately needing
- 20 to be tariff revisions.
- 21 As most of the utility tariffs stand today,
- 22 the way that the undergrounding is handled is that it's
- 23 simply if there is an additional cost for undergrounding
- 24 above the cost to put in an overhead line, then that
- 25 additional cost would be borne by the developer.

```
1 So to the extent that that doesn't support
```

- 2 this policy objective, those -- those tariffs may need to
- 3 be modified in the future.
- 4 Q. Do you have any further comments, or does
- 5 that conclude your comments here today?
- 6 A. That concludes my comments.
- 7 JUDGE DALE: I just have one question about
- 8 that.
- 9 So are you in support of retaining that
- 10 requirement that they must put facilities underground in
- 11 new construction?
- 12 THE WITNESS: I think so. And I think, you
- 13 know, the actual -- it's Section No. 10 in this rule, and
- 14 it starts out with the phrase "where reasonable and
- 15 consistent," and I think that, you know, sort of sets the
- 16 tone.
- 17 You know, I think that that is the reality,
- 18 and I think that we're supportive of that, I think. But I
- 19 think at some point in the process, you know, the actual
- 20 tariffs are kind of where the rubber hits the road, and so
- 21 there may have to be some work done on those as we go
- 22 forward.
- JUDGE DALE: Thank you.
- 24 COMMISSIONER CLAYTON: Judge, if it would be
- 25 possible, I think it would be easier, more efficient, if

```
1 maybe you could swear in all of the witnesses and then we
```

- 2 can kind of go around, rather than just ask questions one
- 3 at a time.
- 4 Would that be all right with you?
- JUDGE DALE: That's fine with me.
- 6 COMMISSIONER CLAYTON: And then let them
- 7 speak from the chairs.
- 8 JUDGE DALE: Does anyone else want to offer
- 9 testimony at this time in support of the rule that was
- 10 proposed?
- 11 Okay. Then in that case, if we can have
- 12 everyone of whom Commissioner Clayton may ask questions --
- 13 COMMISSIONER CLAYTON: Yeah. And I can't
- 14 say that I have specific questions necessarily for
- 15 everyone, but I do want the parties to be able to chime in
- 16 if they have an opinion.
- 17 So if they do, I don't want to have to stop
- 18 and get someone new sworn in. I'd say just one person per
- 19 company and certainly Staff and maybe Ms. Baker.
- JUDGE DALE: Yes. I was just going to add
- 21 that if it's a lawyer that is going to be answering the
- 22 questions, then I need for you also to also be sworn in
- 23 because we're only taking testimony at this proceeding.
- 24 Having said all that, those who wish to be
- 25 sworn in shall please rise, raise your right hand.

```
1 (Witnesses sworn/affirmed.)
```

- 2 JUDGE DALE: Before you sit down, tell the
- 3 court reporter your name, so she can --
- 4 MS. BAKER: Christina Baker.
- 5 (OFF THE RECORD.)
- JUDGE DALE: We will begin with Commissioner
- 7 Clayton's questions.
- 8 COMMISSIONER CLAYTON: Thank you, Judge, for
- 9 accommodating on this.
- 10 I think it would be more efficient -- I'd
- 11 like to go through some questions that I have relating to
- 12 the proposed rule, as well as the rule that was included
- 13 in the publication, I think commonly known as the dissent
- 14 rule or the losing rule or the rule that probably isn't
- 15 going anywhere, but I do have questions about those.
- And it would be best, I think, to include
- 17 everyone in the discussion. Feel free to chime in if you
- 18 have any concerns.
- 19 I'd like to start with Staff, Mr. Beck.
- 20 COMMISSIONER CLAYTON: And I want to be
- 21 clear. Your testimony -- and you didn't file any written
- 22 testimony, nor did anyone else from Staff. Is that
- 23 correct?
- MR. BECK: That's correct.
- 25 COMMISSIONER CLAYTON: And the version of

```
1 rule that you are supporting is the majority version or
```

- 2 the one that was approved in the initial publication. Is
- 3 that correct?
- 4 MR. BECK: That's correct.
- 5 COMMISSIONER CLAYTON: Okay. And have you
- 6 had an opportunity to review the alternative version that
- 7 has been floating around for some time, I guess commonly
- 8 known as the dissent rule?
- 9 MR. BECK: Yes.
- 10 COMMISSIONER CLAYTON: Okay. By stating
- 11 that you are in favor of the official version, the
- 12 published rule, does that mean that you are choosing one
- 13 rule over the other or just generally you're supportive of
- 14 this version?
- MR. BECK: I think that -- that I am
- 16 supporting the version that is out there. I think that
- 17 based on what I know about the other version, you know,
- 18 the Staff's position, as I understand it, is there may be
- 19 legal problems with the credit language. And so given
- 20 that fact I don't think I can support that at this time.
- 21 But, again, my understanding is, is that it
- 22 is -- that there may be legal problems with that language.
- 23 So I don't know that that's as definitive as --
- 24 COMMISSIONER CLAYTON: Well, can I
- 25 characterize from your comments there by saying that you

- 1 are in favor of the majority version, that you're not
- 2 necessarily opposed to the other version? You're just
- 3 speaking positively about the version that's before the
- 4 Commission at this time?
- 5 MR. BECK: That's correct.
- 6 COMMISSIONER CLAYTON: Okay. And your other
- 7 concerns regarding the legality of particular provisions
- 8 restricts your ability to voice support for the other
- 9 version?
- 10 MR. BECK: That's correct.
- 11 COMMISSIONER CLAYTON: If you were to remove
- 12 the issue of bill credits, or the legality of bill
- 13 credits, that are included in the other version, is there
- 14 anything else that would cause you heartburn or problems
- 15 with supporting the dissent version?
- MR. BECK: There was a couple of specific
- 17 indices that were included in that rule that -- that,
- 18 quite frankly, my understanding is, is that several
- 19 utilities couldn't come up with those statistics at this
- 20 point, and so there would be some issues there.
- 21 I'm just going to thumb through real fast.
- 22 COMMISSIONER CLAYTON: I suppose the first
- one would probably be the MAIFI, the Momentary Average
- 24 Interruption Frequency Index.
- MR. BECK: Yes.

```
1 COMMISSIONER CLAYTON: Would that be one?
```

- 2 MR. BECK: Yes, that would be one.
- 3 COMMISSIONER CLAYTON: And, I mean, are you
- 4 able to tell me in your capacity as -- you're an engineer?
- 5 MR. BECK: Yes.
- 6 COMMISSIONER CLAYTON: Are you able to tell
- 7 me whether that is consistent with your understanding of
- 8 the type of records that are kept by those companies, what
- 9 they've told you?
- 10 MR. BECK: That's my understanding, yes.
- 11 COMMISSIONER CLAYTON: Okay. All right. Go
- 12 ahead.
- MR. BECK: There's -- there's one called
- 14 CELID (8), Customers Experiencing Long Interruption
- Durations (8), and there is a second one called CEMI (6),
- 16 Customers Experiencing Multiple Interruptions (6). And,
- 17 again, there are some issues regarding the data.
- 18 COMMISSIONER CLAYTON: Well, can I stop you
- 19 right there on the indices?
- MR. BECK: Yes.
- 21 COMMISSIONER CLAYTON: Were you -- prior to
- 22 the filing of this rule, were you familiar with those
- 23 indices?
- MR. BECK: No.
- 25 COMMISSIONER CLAYTON: Okay. So this is the

- 1 first time in your experience that you've ever seen the
- 2 CELID (8) or the CEMI (6)?
- 3 MR. BECK: The first -- when I -- the very
- 4 first draft of -- of a reliability rule within the last
- 5 year is the first time I've seen those -- those particular
- 6 indices.
- 7 COMMISSIONER CLAYTON: Did you have an
- 8 opportunity to do any research into the value of those
- 9 indices?
- 10 MR. BECK: I did. You know, there is not a
- 11 lot of information or data that I could locate on them.
- 12 I think that -- you know, that if you just
- 13 look at what their names are, Customers Experiencing Long
- 14 Interruption Durations (8), the 8 is referring to having
- 15 that occur eight or more times in a reporting period,
- 16 which would be a year. And Customers Experiencing
- 17 Multiple Interruptions (6), that -- excuse me.
- 18 The first one is eight or more hours of an
- 19 outage, and the second one is six or more interruptions
- 20 within a given year.
- 21 And I think, you know, just as -- you know,
- 22 just as a common-sense approach, when you're talking about
- 23 a customer having six interruptions in a given year, you
- 24 know, it certainly bears some scrutiny as to why that
- 25 happened.

```
1 Now, what my expectations are is that
```

- 2 another part of the rule, which was in both of these
- 3 rules, which is the worst-performing circuits, should be
- 4 getting that -- getting to that same type of information,
- 5 which is customers that are experiencing --
- 6 COMMISSIONER CLAYTON: Okay. Before we get
- 7 too far here --
- 8 MR. BECK: Yes.
- 9 COMMISSIONER CLAYTON: -- I asked you if you
- 10 had done any research on these figures, or these indices.
- 11 Do you -- where did you look?
- 12 Are these included in the IEEE standards?
- 13 Are they included in any other engineering standards? Do
- 14 any other states use them?
- MR. BECK: I was able to locate one state
- 16 that -- that used them.
- 17 COMMISSIONER CLAYTON: Yeah. Which state
- 18 was that?
- 19 MR. BECK: I believe it was New Jersey, but
- 20 I can't be 100 percent positive of that.
- 21 COMMISSIONER CLAYTON: Well, that would be a
- 22 good guess because that's probably where it came from.
- MR. BECK: It's been a while.
- 24 COMMISSIONER CLAYTON: Okay. But in terms
- 25 of -- just aside from the technological issue, the costs

```
1 that goes with it, does Staff believe that gathering data
```

- 2 under these indices would have some value in evaluating
- 3 the overall performance in terms of reliability for a
- 4 utility?
- 5 MR. BECK: If -- if costs and availability
- 6 of data were no object, yes.
- 7 COMMISSIONER CLAYTON: Okay. So there would
- 8 be value that we could derive from those indices if we
- 9 were to collect those?
- 10 MR. BECK: That's -- that's correct.
- 11 COMMISSIONER CLAYTON: Okay. Were you able
- 12 to do additional research to learn the type of equipment
- 13 that would be necessary to accumulate that type of data?
- 14 MR. BECK: I think that -- that a lot of
- 15 the -- the information is not so much technology driven
- 16 but just -- it would be about recordkeeping and detailed
- 17 recordkeeping. And so I don't --
- 18 COMMISSIONER CLAYTON: So the technology is
- 19 in place right now to collect the information; it's a
- 20 matter of --
- MR. BECK: Yeah.
- 22 COMMISSIONER CLAYTON: -- programming?
- MR. BECK: Yeah. An example, you know,
- 24 there is a state that has these in place, and I don't
- 25 think it's -- it's -- it's certainly not something where

1 they, you know, are asking for something that a utility

- 2 can't do, in my opinion.
- 3 COMMISSIONER CLAYTON: So the cost isn't
- 4 technology; it's not like we'd have to go out and put a
- 5 piece of equipment on every transformer; this is a matter
- 6 of organizing the data in a new format?
- 7 MR. BECK: For some utilities --
- 8 COMMISSIONER CLAYTON: Or do you know? And
- 9 if you don't know, that's fine. You just tell me.
- 10 MR. BECK: I think for some of the utilities
- 11 there are things in place, communications with individual
- 12 meters, that type of thing, that gives some of this
- 13 information. For other utilities there would be equipment
- 14 that would have to be installed. So --
- 15 COMMISSIONER CLAYTON: Which utilities would
- 16 require equipment?
- MR. BECK: The one that comes to mind
- 18 immediately is Empire District Electric. They do not have
- 19 any automated metering system, and, therefore, much of
- 20 this information, when you're talking about specific
- 21 information for a specific customer, would not be
- 22 available.
- 23 COMMISSIONER CLAYTON: So this is an
- 24 automated -- an AMR or an AMI type of technology?
- 25 MR. BECK: It would be the most obvious way

- 1 to implement.
- 2 COMMISSIONER CLAYTON: Okay. For the other
- 3 utilities it would just be labor costs?
- 4 MR. BECK: I think it would be labor,
- 5 recordkeeping, you know, the database and then summarizing
- 6 that database.
- 7 COMMISSIONER CLAYTON: Okay. The equipment
- 8 would be by far the greatest expense, would you agree with
- 9 that, for someone like Empire?
- 10 MR. BECK: Yes.
- 11 COMMISSIONER CLAYTON: Okay. What other
- 12 concerns did you have in the dissent version?
- 13 MR. BECK: There was a section about
- 14 establishing benchmarks.
- 15 COMMISSIONER CLAYTON: Yes.
- 16 MR. BECK: And while I hope that in the near
- 17 future we're to a level where we have a better
- 18 understanding of the Missouri indices, I don't -- I just
- 19 personally don't have that -- that comfort level yet. I
- 20 think that we are going to see different levels.
- 21 COMMISSIONER CLAYTON: What do you mean you
- 22 don't have a comfort, a comfort level with that?
- 23 MR. BECK: With how to establish a benchmark
- 24 that you can set on a going-forward basis that is clearly
- 25 a level that the utility should meet.

```
1 The way this was done was talking about a
```

- 2 top 25 comparison of national average. And it's my
- 3 opinion, although I can't cite detailed specific
- 4 information, that the situations of the various utilities
- 5 are going to have are going to result in differences in
- 6 their indices without a utility really having different
- 7 operations.
- 8 So just by having more rural service
- 9 territory or more urban service territory, those type of
- 10 factors could -- could influence the -- the levels of the
- 11 indices. And -- and, you know, a utility may not be in
- 12 the top 25 just because of that -- the simple fact that
- 13 they have a lot of rural customers.
- 14 COMMISSIONER CLAYTON: All right. What if
- 15 we change it to the top 50 percent, would that change your
- 16 opinion?
- 17 MR. BECK: The last part is, is that when we
- 18 last tried to do this, it was hard to come up with a set
- 19 of national averages that met a specific definition.
- 20 Quite frankly, too many states have too many
- 21 different definitions for the same term, and so you have
- 22 to ultimately take the numbers somehow on faith.
- 23 And I don't know whether that is significant
- 24 enough to cause a problem or not, but it's certainly
- 25 something that -- you know, where on the other hand, you

```
1 know, and what this rule will establish is a standard that
```

- 2 will be used into the future.
- 3 COMMISSIONER CLAYTON: Well, if you don't
- 4 look at a national standard, if you don't look at an EEI
- 5 statistic or find some FERC number that would establish
- 6 some of these benchmarks, what would be the best way of
- 7 establishing a benchmark, of setting a standard that we
- 8 believe is appropriate for customers receiving service in
- 9 Missouri?
- 10 MR. BECK: It -- it would seem to me that
- 11 establishing a benchmark based on the company's history
- 12 but also knowledge about things like individual circuit
- 13 performance, you know, the type of feedback from customers
- 14 that we hear every day, those type of things would put --
- 15 would put -- put the Commission in a position in a couple
- of years down the road to actually set those benchmarks.
- 17 COMMISSIONER CLAYTON: But how do you take
- 18 some customer complaints and turn that into a 1.6 or --
- 19 you know, some of these indices set out numbers. How do
- 20 you compute that or set -- include that in a benchmark?
- 21 MR. BECK: Well, I think you'd have to have,
- 22 you know, the company's specific history for several years
- 23 to -- to really provide the starting point. But I think
- 24 you should look at that history then and --
- 25 COMMISSIONER CLAYTON: So the status quo is

- 1 the benchmark?
- 2 MR. BECK: No. That's why I say then --
- 3 and, no, it's not -- I can't give you an engineering
- 4 formula of how to incorporate in customer complaints, but
- 5 it seems to me that the Commission would take that into
- 6 account in determining whether the status quo is good
- 7 enough or whether it should be -- the benchmark should be
- 8 lower than the status quo.
- 9 That's -- I'm sorry it's not a black and
- 10 white formula, but that seems to me the way you would deal
- 11 with reliability on a going-forward basis.
- 12 COMMISSIONER CLAYTON: So you take a history
- 13 of the utility's performance and then if you get customer
- 14 complaints, you adjust the benchmark. Is that what you're
- 15 telling me?
- MR. BECK: I -- I think you'd use that as a
- 17 piece of information to decide if --
- 18 COMMISSIONER CLAYTON: Is there any other
- 19 information that you'd use to establish what a
- 20 benchmark -- appropriate benchmark would be?
- 21 MR. BECK: I think looking at the comparable
- 22 utilities in the -- in the state for sure. If -- if you
- 23 could find surrounding area utilities that -- that
- 24 reported the statistics in the exact same way.
- 25 And, you know, when I say the exact same

- 1 way, you know, what we're talking about here is an IEEE
- 2 standard way of calculating these numbers.
- 3 So it's not like these -- the method is, you
- 4 know, only going to be applicable to Missouri. But,
- 5 sadly, there is a lot of states that haven't adopted this
- 6 particular standard, a lot of utilities that haven't
- 7 adopted this particular standard yet.
- But, you know, it was -- it was put out
- 9 there in 2003, and so it seems to me, based on what
- 10 discussions I've had with other regulators, that it's
- 11 becoming more of an industry standard that's being used by
- 12 more and more utilities in the states.
- 13 COMMISSIONER CLAYTON: Well, would you say
- 14 both, either or neither of the proposed rules set out a
- 15 consistent standard for collection of the indices that are
- 16 listed within the respective rules?
- 17 Will both rules or neither rule or one or
- 18 the other establish Missouri standards --
- MR. BECK: Both --
- 20 COMMISSIONER CLAYTON: -- so we can do
- 21 apples to apples comparisons?
- MR. BECK: Both will do a good job of
- 23 establishing standards for Missouri.
- 24 COMMISSIONER CLAYTON: Okay. So either of
- 25 the rules are going to set out that consistency so that

- 1 you can have comparisons among utilities?
- 2 MR. BECK: Within the state.
- 3 COMMISSIONER CLAYTON: Within the state.
- 4 Now, the majority version doesn't set any
- 5 benchmarks. Is that correct?
- 6 MR. BECK: That's correct.
- 7 COMMISSIONER CLAYTON: Okay. So all it does
- 8 is require some reporting of this information?
- 9 MR. BECK: That -- as far as with regard to
- 10 the indices, yes.
- 11 COMMISSIONER CLAYTON: I mean, there are no
- 12 benchmarks at all. There are no standards that basically
- 13 says here are these four indices, we want you to collect
- 14 this information and turn in a report on an annual basis?
- MR. BECK: That's correct.
- 16 COMMISSIONER CLAYTON: Okay. So you tell us
- 17 what your performance is, is basically what this rule
- 18 does?
- 19 MR. BECK: As far as the indices go. I
- 20 mean, there is also the worst-performing circuits and
- 21 other things in the rule, but yes.
- 22 COMMISSIONER CLAYTON: So aside from not
- 23 filing a report or not filling in a complete report, can
- 24 you imagine any other circumstance where a penalty case
- 25 would come from a rule such as this where there be

- 1 punishment for poor reliability?
- 2 MR. BECK: As far as reflecting the indices,
- 3 I do not believe so, but there are other -- other
- 4 provisions about worst-performing circuits.
- 5 COMMISSIONER CLAYTON: Well, give me an
- 6 example of -- give me an example of a case where Staff
- 7 files a complaint, upset with poor reliability, how this
- 8 rule will lead to penalties, I mean, aside from something
- 9 like not filling in a report or not filing it on the day
- 10 it's due.
- 11 MR. BECK: At least in my mind the
- 12 discussion would be more about worst-performing circuits
- 13 and -- and the requirement that they -- that they come up
- 14 with a plan regarding those worst-performing circuits, but
- 15 they're also required to come up with programs, the
- 16 Section 9, reliability improvement programs, and it would
- 17 seem to me that those would be the areas that -- that
- 18 there would be penalties, if any.
- 19 COMMISSIONER CLAYTON: Well, according to
- 20 this rule, the majority version, what would require a plan
- 21 to improve service reliability?
- MR. BECK: I think the worst-performing
- 23 circuit information requires improvements in the
- 24 performance of that circuit and then the reliability
- 25 improvement programs that have to be outlined.

```
1 COMMISSIONER CLAYTON: But why would they
```

- 2 have to do a reliability improvement program? An
- 3 improvement from what?
- 4 Is it a perpetual improvement that we're
- 5 going to get -- we're going to find out what they're doing
- 6 and every year they have to be a little bit better. Is
- 7 that what you're saying?
- 8 I mean, the rule actually said maintain or
- 9 improve service reliability. So it doesn't even mandate a
- 10 plan that improves service reliability.
- 11 MR. BECK: That's, yeah, maintain or improve
- 12 is -- is correct.
- 13 COMMISSIONER CLAYTON: So basically they're
- 14 just going to document what service they're doing today
- 15 and there is no mandate to even improve service
- 16 reliability under this rule, is there?
- 17 MR. BECK: Not -- not under that section.
- 18 COMMISSIONER CLAYTON: Under any of these
- 19 sections.
- MR. BECK: I think there is a requirement
- 21 to -- to mandate for the worst-performing --
- 22 COMMISSIONER CLAYTON: For the
- 23 worst-performing circuits.
- 24 Okay. How many circuits does a company like
- 25 Ameren have? Give me just an estimate. What, 1,000?

- 1 1,500?
- 2 MR. BECK: I believe it was actually
- 3 reported in MEDA's numbers what the 5 percent value would
- 4 be. So, yeah.
- 5 COMMISSIONER CLAYTON: So then 1,000, it
- 6 would be 50 -- 50 circuits out of 1,000 will get attention
- 7 and the other 950 can continue the way they're operating
- 8 right now regardless of what the index says?
- 9 MR. BECK: The 5 percent is a -- is a
- 10 minimum. It's not necessarily a maximum recording of the
- 11 worst circuits.
- 12 COMMISSIONER CLAYTON: Yeah, but they don't
- 13 have a mandate. They don't have to report -- any
- 14 particular utility doesn't have to report any more than
- 15 the 5 percent.
- 16 Which for the largest company -- I just
- 17 picked them because they're the largest -- I think they're
- 18 the largest most number of circuits.
- 19 So for 1,000 circuits, that would only be
- 20 50 circuits, 50 neighborhoods?
- 21 MR. BECK: And in the case of the numbers
- 22 MEDA was reporting was 120 total circuits would be the --
- 23 COMMISSIONER CLAYTON: In the state?
- 24 MR. BECK: -- for Ameren.
- 25 180 total for the state.

```
1 COMMISSIONER CLAYTON: 180 total out of how
```

- 2 many?
- 3 You mean you take it times --
- 4 MR. BECK: Divided by --
- 5 COMMISSIONER CLAYTON -- .95,
- 6 whatever --
- 7 MR. BECK: .95.
- 8 COMMISSIONER CLAYTON: Okay. So if there is
- 9 no statistical difference in index for SAIDI, SAIFI,
- 10 CAIDI, CAIFI for any particular circuit, I mean, just a
- 11 minimal difference between the 5 percent worst and maybe
- 12 the 10 percent worst, that -- that -- that other 5 percent
- 13 will get zero improvement under this rule. There is no
- 14 mandate to improve reliability for those other 5 percent.
- 15 Would you agree with that statement?
- MR. BECK: There -- there is no mandate,
- 17 that's correct.
- 18 COMMISSIONER CLAYTON: So the best that this
- 19 rule does is that it mandates that the worst 5 percent
- 20 will see improvement, an improvement plan, but the rest,
- 21 there is no mandate for any change in current practice.
- 22 Would you agree with that?
- MR. BECK: That's my understanding.
- 24 COMMISSIONER CLAYTON: Okay. So there are
- 25 no penalties that can be levied for problem circuits other

- 1 than the top 95 percent, only for the bottom 5 percent.
- 2 Would you agree with that statement?
- 3 Maybe it wasn't a very good statement.
- Do you see -- do you see a cause of action
- 5 or a complaint where Staff could file for problems in
- 6 reliability for any circuits other than the worst
- 7 performing 5 percent under this rule?
- 8 MR. BECK: Under -- under this rule I don't
- 9 know that there would be anything.
- 10 COMMISSIONER CLAYTON: Okay. On the
- 11 majority version, let me talk to you about the four
- 12 indices that are set out, the SAIDI, CAIFI, SAIDI, CAIDI.
- 13 I hope I didn't repeat those. We'll find out in the
- 14 record.
- 15 The SAIDI and SAIFI are system averages, so
- 16 those are set out systemwide. Is that correct?
- 17 MR. BECK: That's correct.
- 18 COMMISSIONER CLAYTON: Now, can you also
- 19 have a SAIDI and SAIFI number by a smaller subset? Can
- 20 you break it down, say, by circuit or by distribution
- 21 division or some other way the grid is set up? Can you
- 22 have a smaller --a smaller universe?
- MR. BECK: Yes.
- 24 COMMISSIONER CLAYTON: You can.
- 25 Okay. You have a SAIDI, SAIFI number for

- 1 the circuit level?
- 2 MR. BECK: That's correct.
- 3 COMMISSIONER CLAYTON: All right. And can
- 4 you say the same thing for CAIFI and CAIDI, it can be done
- 5 on a systemwide basis, as well as down to the circuit
- 6 level?
- 7 MR. BECK: That's correct.
- 8 COMMISSIONER CLAYTON: All right. Now, in
- 9 the reporting in this rule, does this rule mandate
- 10 reporting by anything other than systemwide numbers?
- MR. BECK: Since there is the
- 12 worst-performing circuit requirement, you would have to
- 13 make those calculations and report those -- report that
- 14 5 percent.
- But I guess you would be, in essence,
- 16 reporting the -- those 5 percent and not the other
- 17 95 percent, if that makes sense.
- 18 COMMISSIONER CLAYTON: Okay. Let me ask
- 19 this question again.
- 20 Aside from that 5 percent worst-performing
- 21 circuit, 180 circuits, aside from those, will the annual
- 22 report include any other figures other than one SAIFI
- 23 number, one CAIFI, one SAIDI and one CAIDI number for any
- 24 particular utility?
- 25 So, say, KCP&L comes in and they file their

```
1 report. Basically you're going to have the worst
```

- 2 performing -- the 5 percent worst performing and then
- 3 you're going to have the four numbers for a systemwide
- 4 average and there be no other numbers.
- 5 Would you agree with that or disagree with
- 6 that statement?
- 7 MR. BECK: That is my understanding --
- 8 COMMISSIONER CLAYTON: Okay.
- 9 MR. BECK: -- of the requirement.
- 10 COMMISSIONER CLAYTON: Okay. So you agree
- 11 with that. Correct?
- MR. BECK: Yes. Yes.
- 13 COMMISSIONER CLAYTON: All right. Does
- 14 Staff believe that there is value in requiring the
- 15 reporting of the four principal indices by any universe
- less than the complete system, either by service region,
- 17 by urban or rural area, by circuit, by substation, by
- 18 transformer? Is there any value in breaking down and
- 19 getting numbers on a smaller basis?
- 20 MR. BECK: I think by circuit it's probably,
- 21 you know, the basis that makes the most sense, because it
- 22 could be summed up to the other values.
- 23 COMMISSIONER CLAYTON: So there would be
- 24 value in having reporting at the circuit level?
- MR. BECK: Yes.

```
1 COMMISSIONER CLAYTON: Okay. Would Staff be
```

- 2 supportive of an amendment that would require reporting at
- 3 the circuit level?
- 4 MR. BECK: I guess the way I envisioned this
- 5 was -- is that to make the worst-performing circuit
- 6 calculations, you have to make -- the company would have
- 7 to perform those calculations for all 100 percent of the
- 8 circuits.
- 9 And I guess I'm not sure, you know, whether
- 10 reporting, you know, thousands of circuit level
- 11 information would be of value to the public or anyone
- 12 else, without having, you know, information about what
- 13 those circuits were.
- 14 So I could see where it would have value,
- 15 you know, for someone like Staff or the company to have
- 16 access. I'm just not sure how the public would --
- 17 COMMISSIONER CLAYTON: I didn't say anything
- 18 about the public. I just wanted to know if Staff thinks
- 19 there would be value in this annual report for reporting
- 20 of these figures at the circuit level.
- 21 Is there value and would you support an
- 22 amendment that would require the reporting of these
- 23 figures by circuit?
- 24 MR. BECK: And I guess where I'm coming --
- 25 struggling with is I see that there is value in -- in

- 1 having numbers at the circuit level.
- 3 don't know whether it adds value to those numbers or not.
- 4 But having those numbers available --
- 5 COMMISSIONER CLAYTON: I don't understand
- 6 your answer.
- 7 MR. BECK: Okay.
- 8 COMMISSIONER CLAYTON: Are you in favor of
- 9 an amendment that would require this report to include
- 10 these indices at the circuit level, yes or no?
- 11 MR. BECK: I'm not opposed to it.
- 12 COMMISSIONER CLAYTON: Just a yes or a no,
- 13 Mr. Beck. Yes or no.
- 14 Are you in support of an amendment on behalf
- 15 of Staff that would require reporting of these indices at
- 16 the circuit level?
- MR. BECK: I guess I'd have to answer no
- 18 then.
- 19 COMMISSIONER CLAYTON: Okay. Why?
- 20 MR. BECK: I believe the numbers have value
- 21 to be used, but I don't think that reporting them makes
- 22 them more valuable or less valuable. I think --
- 23 COMMISSIONER CLAYTON: Well, you get them --
- 24 you get them --
- MR. BECK: Yeah.

```
1 COMMISSIONER CLAYTON: -- if they're
```

- 2 reported. Correct?
- 3 MR. BECK: That's correct.
- 4 COMMISSIONER CLAYTON: What value are they
- 5 to you if you never see them?
- 6 MR. BECK: Well, I'm assuming that they have
- 7 to be available when they make this report. So the
- 8 company has to have --
- 9 COMMISSIONER CLAYTON: So you don't want
- 10 them included in a report that is annually submitted to
- 11 you. You only want them if you request them. Is that
- 12 what you're saying?
- MR. BECK: I'm assuming that with the
- 14 Staff's first request for workpapers, they'll be provided.
- 15 COMMISSIONER CLAYTON: Well, if Staff can
- 16 ask for this information, why even have this rule? Why
- 17 have a reporting rule? You can get this information
- 18 today. All you have to do is ask for it.
- 19 MR. BECK: I think -- well, I think the
- 20 important part here is that we're talking about reporting
- 21 in a very specific way, with a very specific set of
- 22 standards, and so we have consistency for all utilities
- 23 throughout the state.
- 24 COMMISSIONER CLAYTON: Can you tell me which
- 25 utility does not follow those definitions today?

```
1 MR. BECK: I'm not sure that -- that --
```

- 2 Ameren I know uses this because they, in fact, even had
- 3 people helping develop these standards. I believe KCP&L
- 4 uses these standards.
- 5 COMMISSIONER CLAYTON: What did you -- did
- 6 you say you know Ameren uses this standard because what?
- 7 MR. BECK: Because they actually had someone
- 8 that helped develop the standards themselves, the IEEE
- 9 standards, the formatting of how you do this, the nitty-
- 10 gritty technical things to do that.
- 11 But -- but I don't think that -- it's my
- 12 recollection that Empire and Aquila I don't believe use
- 13 all of the detail of -- of this particular standard.
- 14 COMMISSIONER CLAYTON: What details do they
- 15 omit --
- MR. BECK: About --
- 17 COMMISSIONER CLAYTON: -- or exclude?
- 18 MR. BECK: Some of the specifics, like when
- 19 do you exclude data because of big storms, that type of
- 20 thing. There is a very exacting method that the IEEE
- 21 standards require.
- 22 COMMISSIONER CLAYTON: So under 5A through
- 23 H -- under 5A through H Empire doesn't -- doesn't
- 24 recognize these -- these items that should not be
- 25 reported?

```
1 Do you know? And if you don't know, it's
```

- 2 okay. Don't --
- 3 MR. BECK: The details --
- 4 COMMISSIONER CLAYTON: If you're unsure --
- 5 MR. BECK: I'm not sure.
- 6 COMMISSIONER CLAYTON: Okay. If you're not
- 7 sure, just say you're unsure. That's okay. We got -- I
- 8 can go to these other people, and we can go through these.
- 9 So you're not sure -- you're not sure
- 10 whether all of the utilities report the same way or
- 11 collect the data the same way or not?
- MR. BECK: That's correct.
- 13 COMMISSIONER CLAYTON: Okay. So you're not
- 14 sure.
- So for all we know, they could all be
- 16 collecting at the same today, for all you -- I mean, from
- 17 Staff's perspective; we're just not sure?
- 18 MR. BECK: Based on previous meetings and
- 19 discussions, that's -- that's not my understanding.
- 20 COMMISSIONER CLAYTON: It's not your
- 21 understanding, but you don't know the specifics?
- MR. BECK: Yes.
- COMMISSIONER CLAYTON: Okay. Mr. Beck, can
- 24 you tell me, are all utilities in Missouri right now
- 25 collecting SAIFI information? Do they have SAIFI data?

```
1 With a few, perhaps, differences in
```

- 2 exemptions or excluded information, are they all -- are
- 3 they all accumulating SAIFI data for a SAIFI index?
- If you don't know, that's okay. Tell me you
- 5 don't know.
- 6 MR. BECK: I know at some level. Now,
- 7 which -- at what level they're collecting --
- 8 COMMISSIONER CLAYTON: How about system--
- 9 MR. BECK: Yeah.
- 10 COMMISSIONER CLAYTON: --wide, are they all
- 11 collecting SAIFI data today?
- MR. BECK: I believe that is true.
- 13 COMMISSIONER CLAYTON: All right. Would you
- 14 say the same for CAIFI on a systemwide basis?
- MR. BECK: That I'm not sure about.
- 16 COMMISSIONER CLAYTON: SAIDI?
- MR. BECK: Again, I believe that's true.
- 18 COMMISSIONER CLAYTON: CAIDI?
- 19 MR. BECK: And that one I'm not sure about.
- 20 COMMISSIONER CLAYTON: Okay. So that we
- 21 think at least half of these they're collecting the data
- 22 and half they may be, they may not be, at the systemwide
- 23 level?
- MR. BECK: Yes.
- 25 COMMISSIONER CLAYTON: You agree with that?

```
1 Mr. Beck, you mentioned that you've had
```

- 2 meetings with utilities where you go over the definition
- 3 of each of these indices and the excluded data.
- 4 How long -- I'm mumbling. When was the
- 5 first such meeting? When did that take place between
- 6 Staff and the utilities, that you are aware of, that
- 7 involved discussion about these four indices?
- And if the answer could be 30 years ago,
- 9 we've been talking about it forever --
- MR. BECK: Yeah.
- 11 COMMISSIONER CLAYTON: -- and that's fine.
- 12 But from your personal knowledge, talking
- 13 about these indices?
- MR. BECK: Probably the ones that -- you
- 15 know, meetings and/or discussions that I've been involved
- in, probably, say, the last four years.
- 17 COMMISSIONER CLAYTON: Okay. And was there
- 18 anything in particular that instigated the discussion four
- 19 years ago?
- 20 MR. BECK: Um, actually the -- probably the
- 21 first time I remember, you know, having specific
- 22 discussions was actually part of a rate case settlement
- 23 discussion.
- 24 COMMISSIONER CLAYTON: Okay. And do you
- 25 recall why the subject came up in a rate case?

```
1 MR. BECK: It was actually a followup from
```

- 2 previous requirements in a previous stipulation and
- 3 agreement in a rate case.
- 4 COMMISSIONER CLAYTON: Just generally what
- 5 were the terms in that prior stip?
- 6 MR. BECK: It was just some reporting
- 7 that -- that was being provided to Staff, and -- and it
- 8 was discussions about continuing on in that reporting.
- 9 COMMISSIONER CLAYTON: Okay. That was just
- 10 one utility; that wouldn't have been --
- 11 MR. BECK: That's correct.
- 12 COMMISSIONER CLAYTON: -- a group, all four.
- 13 Correct?
- 14 MR. BECK: That's correct.
- 15 COMMISSIONER CLAYTON: Okay. Since four
- 16 years ago have there been more occasions where you've had
- 17 these discussions about these indices?
- 18 MR. BECK: Yes. And it's-- but, you know,
- 19 it may be -- may be something as simple as a customer
- 20 complaint or something as, you know, formal as a meeting.
- 21 But, yes, we've had discussions with -- with company
- 22 personnel regarding this topic.
- 23 COMMISSIONER CLAYTON: Okay. You stated
- 24 that Ameren follows these four indices because these
- 25 definitions follow the IEEE definition. Did I understand

- 1 that correctly?
- 2 MR. BECK: They follow the definition of the
- 3 IEEE 1366 standard.
- 4 COMMISSIONER CLAYTON: And the majority
- 5 version does that as well?
- 6 MR. BECK: That's correct.
- 7 COMMISSIONER CLAYTON: Okay. So on the
- 8 majority version -- this is 1367, did you say?
- 9 MR. BECK: 1366.
- 10 COMMISSIONER CLAYTON: 66. Okay.
- 11 Now, I can't recall. Is there a difference
- 12 in -- is there a difference in the definitions in the
- 13 majority version and the dissent version in terms of those
- 14 four indices before you get to the exclusions, just the
- 15 principal number and how it's calculated? Is that fairly
- 16 consistent?
- 17 MR. BECK: It's my recollection that there
- 18 wasn't a lot of difference.
- 19 COMMISSIONER CLAYTON: Okay. The exclusions
- 20 that are listed in the majority rule, specifically
- 21 Sections 5A through H, are those IEEE 1366 exclusion
- 22 items?
- MR. BECK: I'm not sure that they're
- 24 specifically listed out in the IEEE standard, but if
- 25 you -- if you look at the particular exclusions we're

- 1 talking about, you know, where you're interrupting because
- 2 of things like tampering with the meter or, you know, an
- 3 interruption for maintenance, those type things, that's --
- 4 those -- those are -- it's my understanding that those are
- 5 excluded as part of 1366.
- 6 COMMISSIONER CLAYTON: I'm not sure what
- 7 your answer was there.
- 8 MR. BECK: My answer --
- 9 COMMISSIONER CLAYTON: 5A through H, are
- 10 these items in 1366 or no?
- 11 MR. BECK: I think they're generally in
- 12 there. I'm not sure that they're specifically listed out.
- 13 COMMISSIONER CLAYTON: I don't know what
- 14 that means though.
- Is it yes or is it no or you don't know?
- 16 MR. BECK: I don't think that the wording is
- 17 necessarily the exact same.
- 18 COMMISSIONER CLAYTON: Then does it mean the
- 19 same thing?
- 20 Are we adopting an IEEE 1366 standard with
- 21 the principal definition and the exclusions or not?
- MR. BECK: I think we're adopting it with
- 23 these -- with these and the 1366 in addition, yes.
- 24 COMMISSIONER CLAYTON: Okay. And you
- 25 testified that Ameren to the best of your knowledge

1 follows the IEEE 1366 standards, including these

- 2 exclusions. Correct?
- 3 MR. BECK: Correct.
- 4 COMMISSIONER CLAYTON: Okay. Now, do we
- 5 have any other rules that mandate compliance with IEEE
- 6 standards?
- 7 Do we have a rule in place right now that
- 8 mandates compliance?
- 9 MR. BECK: Yes.
- 10 COMMISSIONER CLAYTON: We do. With IEEE?
- 11 MR. BECK: Yes.
- 12 COMMISSIONER CLAYTON: All right. So if any
- 13 utility is collecting the data in any way different than
- 14 this, they're already in violation of our rules. Is that
- 15 correct?
- MR. BECK: I'm sorry. I thought your
- 17 question was do we have any rules at the PSC that involve
- 18 IEEE standards.
- 19 COMMISSIONER CLAYTON: That's not what I
- 20 said.
- MR. BECK: Okay.
- 22 COMMISSIONER CLAYTON: What I wanted to know
- 23 is have we adopted all of the IEEE standards --
- MR. BECK: No.
- 25 COMMISSIONER CLAYTON: -- in our rules?

```
1
                  We have not?
 2
                  We have not?
 3
                   MR. BECK: No.
                   COMMISSIONER CLAYTON: All right. So IEEE
 5
    1366 nowhere else by express or by implication has been
 6
    adopted other than in this proposal?
 7
                   MR. BECK: That's -- to my knowledge, that's
8
     correct.
 9
                   COMMISSIONER CLAYTON: Okay. I'd like to
     ask some of the other parties. I know you all probably
10
     can't wait to get involved in this after that exchange.
11
12
                   Why don't I start with Mr. Zdellar back
13
    there smiling. He wants to get in on this action.
14
                   COMMISSIONER CLAYTON: First of all, do you
    agree with the assertion that the language in the majority
15
16
    version of the rule principally is going to be Section 1A,
17
    B, C and D, as well as Subsection 5A through H, that that
    definition of SAIDI, SAIFI, CAIFI, CAIDI are consistent
18
    and identical with the standards set out in IEEE 1366?
19
20
                   MR. ZDELLAR: I agree.
21
                  COMMISSIONER CLAYTON: You agree. Okay.
22
                   Ameren follows those today?
```

MR. ZDELLAR: We follow these.

COMMISSIONER CLAYTON: You follow these

25 today.

23

```
1 Is this a recent occurrence or is this
```

- 2 something ever since its inception you've been following?
- 3 MR. ZDELLAR: We've followed the standards
- 4 since inception. There has been a lot of discussion about
- 5 what qualifies in terms of major events. That's been a
- 6 big discussion in recent years in terms of what Mr. Beck
- 7 talked about. The -- the format to follow what is a major
- 8 event is finally --
- 9 COMMISSIONER CLAYTON: Well, let's -- let me
- 10 get that underlined in this section.
- 11 Where is the term "major event"? It's going
- 12 to be -- well, no.
- 13 Well, now I'm not seeing it. Where is major
- 14 event --
- MR. ZDELLAR: If you look at page 1 of the
- 16 majority --
- 17 COMMISSIONER CLAYTON: Yeah.
- 18 MR. ZDELLAR: -- under 3. You'll see
- 19 Adjustment of Data.
- 20 COMMISSIONER CLAYTON: Got you. Okay.
- 21 There it is.
- 22 Okay. How does this -- how does the
- 23 majority rule define major storm events?
- MR. ZDELLAR: It's based on a statistical
- 25 measure in terms of past history of events related to

1 current events, to call them outliers, if you will, around

- 2 major events. And I don't have the formula with me, but
- 3 we could provide that.
- 4 COMMISSIONER CLAYTON: No. No, no, no.
- 5 MR. ZDELLAR: It looks at standard
- 6 deviations from previous events.
- 7 COMMISSIONER CLAYTON: Yeah, I never did
- 8 very well with standard deviations.
- 9 Okay. Aside from the major storm exclusion,
- 10 5A through H in Subsection 1, is that pretty standard in
- 11 the industry?
- MR. ZDELLAR: I think it is.
- 13 COMMISSIONER CLAYTON: You think it is?
- MR. ZDELLAR: Yeah.
- 15 COMMISSIONER CLAYTON: Let me ask all of the
- 16 other ones.
- 17 KCP&L.
- MR. HERDEGEN: When you attend benchmark
- 19 sessions around the country, that is usually the ones that
- 20 mostly come up when they talk about excluding them from
- 21 calculation.
- 22 COMMISSIONER CLAYTON: Okay. So does KCP&L
- 23 follow -- I don't want to say follow.
- 24 KCP&L is already collecting data in
- 25 accordance with what this rule -- how it defines each of

- 1 the four indices?
- 2 MR. HERDEGEN: Essentially, yes. We collect
- 3 all of the data. We use it in many different ways, you
- 4 know, customer basis, circuit basis, things like that.
- 5 COMMISSIONER CLAYTON: But you collect it?
- 6 MR. HERDEGEN: You can collect it.
- 7 COMMISSIONER CLAYTON: You collect it?
- 8 MR. HERDEGEN: Right.
- 9 COMMISSIONER CLAYTON: Okay. The exclusions
- 10 in 5A through H are --
- 11 MR. HERDEGEN: They're fairly consistent.
- 12 COMMISSIONER CLAYTON: How about Aquila and
- 13 Empire, the same thing or do you-all do it differently?
- 14 MR. CONNELL: This is Elliott Connell,
- 15 Aquila.
- 16 Yes, we calculate the industries based on
- 17 the IEEE standard. The one industry that we have not been
- 18 tracking is CAIFI.
- 19 Right now we don't use the IEEE standard for
- 20 normalizing the outages because it requires that you have
- 21 five years of statistical data. On SAIDI we currently
- 22 have four years.
- 23 And what we use right now is to exclude an
- 24 outage it has to affect 10 percent of the region's
- 25 customers for 12 hours or longer before we will exclude

1 those outages. One more year's history, then we'd be able

- 2 to go ahead and use the IEEE standard.
- 3 COMMISSIONER CLAYTON: Why do you not have
- 4 the five years of history? Did you just start collecting
- 5 the data four years ago?
- 6 MR. CONNELL: We had a PC-based program for
- 7 calculating our interrupt indices until we did some
- 8 programming to automate the information in a database. We
- 9 just did not have that data available easily.
- 10 COMMISSIONER CLAYTON: Okay. Okay.
- 11 MR. CONNELL: So we calculate everything the
- 12 same way, and the data is available with some programming
- 13 to be able to calculate CAIFI going forward.
- 14 COMMISSIONER CLAYTON: So that would start,
- 15 presumably, like, next year or something like that, or
- 16 next year and a half?
- 17 MR. CONNELL: Yes. It's just a matter of
- 18 some programming.
- 19 COMMISSIONER CLAYTON: Okay. Empire.
- 20 MR. PALMER: We are in the same position
- 21 that Aquila is. We have put in an outage management
- 22 system a little over three years ago that has allowed us
- 23 to get much more accurate data. We do use the IEEE
- 24 standard.
- We're hopeful with the history then that

- 1 we're developing we will be able to do the calculation
- 2 similar to what Aquila was talking about.
- 3 COMMISSIONER CLAYTON: Okay. So then after
- 4 hearing that, it sounds, with the exception of the CAIFI
- 5 index, where Aquila and Empire need one more year's worth
- of data to establish a benchmark, the SAIFI index, the
- 7 SAIDI index and the CAIDI index are consistently -- the
- 8 data is collected and the indices are consistently
- 9 calculated for all four electric IOUs in the state. Is
- 10 that correct?
- So none of this is new to you? Would
- 12 everybody agree with that? Give me a yes.
- 13 (Unanimous yes.)
- 14 COMMISSIONER CLAYTON: So today if Staff
- 15 wanted this data, Staff could go out and file a data
- 16 request or ask for it, to be polite, smile and say would
- 17 you please give us the data, you-all would have it today.
- 18 Correct?
- 19 MR. ZDELLAR: Let me just add that some of
- 20 that data, depending on what level -- we had a discussion
- 21 earlier about level, at the circuit level, would require
- 22 considerable scrubbing in some situations because we do
- 23 move customers between circuits that are not fixed all of
- 24 the time in the same circuits.
- 25 JUDGE DALE: All right. We're going to

- 1 get -- we'll get to that here in just a second.
- 2 I guess I'm looking at systemwide numbers
- 3 right now, and I want to make sure that we're consistent.
- 4 Mr. Beck suggested that maybe there is some
- 5 inconsistencies, and it sounds like there is associated
- 6 with CAIFI, but the other three are all collected the same
- 7 way, they're compiled, and everybody has those numbers.
- 8 So those would all be comparable numbers
- 9 today among each utility. Correct?
- 10 MR. ZDELLAR: It's hard for the utilities to
- 11 suggest that because we don't know what the others do.
- 12 COMMISSIONER CLAYTON: Well, wait a minute.
- 13 Wait a minute. We just -- but you-all just said you're
- 14 doing the same thing.
- 15 MR. ZDELLAR: We only know what they do from
- 16 exclusions. We don't know what everybody does from a data
- 17 collection standpoint. Some of us have AMR. Some don't.
- 18 Some have to make estimates.
- 19 COMMISSIONER CLAYTON: Well, give me some
- 20 more feedback here and tell me why -- I'm just trying to
- 21 find out what's the difference between what is going on
- 22 today versus this rule.
- MR. HERDEGEN: I think essentially the
- 24 approach is the same.
- 25 I'm Bill Herdegen, Kansas City Power &

- 1 Light.
- 2 The approach is the same. But, you know, if
- 3 you have AMR, I know the exact minute that a customer goes
- 4 out and the exact minute they come back on.
- If you don't have AMR, it's usually what's
- 6 the first ticket of when the customer called in versus
- 7 when did the dispatcher finally say, yeah, I think we have
- 8 this circuit picked back up.
- 9 So it's more of an accuracy thing as opposed
- 10 to is it -- are we following it the same way.
- 11 COMMISSIONER CLAYTON: But how does this
- 12 rule affect that?
- 13 This rule doesn't affect how you collect the
- 14 data. It doesn't mandate AMR. So how are things going to
- 15 change under this rule?
- MR. HERDEGEN: Well, if you're going to
- 17 compare utilities head to head, it would have a difference
- 18 perhaps in the accuracy of the number.
- 19 COMMISSIONER CLAYTON: But even after this
- 20 rule passes we won't be able to compare utility to
- 21 utility. Correct?
- MR. HERDEGEN: Correct.
- 23 MR. ZDELLAR: That may be true for other
- 24 reasons too.
- 25 COMMISSIONER CLAYTON: So, Mr. Beck, I

- 1 thought you said that after we do this rule, after we have
- 2 this reporting, everything is going to be consistent. We
- 3 can do comparisons by utilities. We can do statewide
- 4 numbers. But that sounds like it's not the case. So what
- 5 are we doing with this rule?
- 6 MR. BECK: In my opinion we are coming up
- 7 with a way that each utility is going to consistently
- 8 report.
- 9 Now, what -- I don't think what's being
- 10 talked about here is the accuracy of the reporting data.
- 11 It's only as good as the equipment and the records that
- 12 you keep.
- I guess I -- you know, that's -- that's just
- 14 part of data collection in my mind. Maybe -- you know,
- 15 that's a difficult thing to explain, but it truly is the
- 16 situation where data is only as good as the information
- 17 you have.
- 18 COMMISSIONER CLAYTON: I don't disagree with
- 19 that.
- 20 Let me go back to Mr. Herdegen.
- 21 Is it Herdegen or --
- MR. HERDEGEN: Herdegen.
- 23 COMMISSIONER CLAYTON: Herdegen. I don't
- 24 want to mispronounce it.
- 25 COMMISSIONER CLAYTON: You mentioned that

1 you went to a national benchmarking session. Tell me what

- 2 that's about.
- 3 MR. HERDEGEN: There -- there is a number of
- 4 groups that get together around the United States on an
- 5 annual basis, where companies come and collect -- or share
- 6 data, and some of it is reliability data, cost data,
- 7 safety data.
- 8 COMMISSIONER CLAYTON: Is that an EEI
- 9 organization?
- 10 MR. HERDEGEN: Well, EEI does have a
- 11 benchmark report that they put out. It's a self-reporting
- 12 type of thing. PA Consulting is another big benchmarker
- 13 for our industry. Public Service Electric & Gas out of
- 14 New Jersey hosts one every year. Southern Company down in
- 15 Atlanta hosts one every year. So there is a number of
- 16 forums.
- 17 COMMISSIONER CLAYTON: It sounds like a
- 18 pretty fun conference to go to. You sit around and --
- 19 MR. HERDEGEN: Only if you're an engineer.
- 20 COMMISSIONER CLAYTON: So, I mean, do you
- 21 all use data or talk about data that would be reasonably
- 22 comparable among utilities or states or regions?
- MR. HERDEGEN: Well, I think as -- you know,
- 24 as Mr. Beck said, you're trying to get everybody to be
- 25 consistent in the methodology, realizing that technology

- 1 could provide some differences in the actual numbers.
- 2 But the purpose of those benchmarking
- 3 seminars and groups is for utilities to get together and
- 4 sit around the table and talk about, you know, what do you
- 5 classify as a customer. So we're looking at cost per
- 6 customer or something like that.
- 7 And you come out of it with something
- 8 that's -- that's fairly comparable, so that, you know,
- 9 while it may not be exceptionally accurate, you get a good
- 10 feel for a relative measurement between utilities.
- 11 COMMISSIONER CLAYTON: Well, so would you
- 12 say someone says, oh, we have a SAIFI at 1.8; you say hah,
- 13 hah; we have a SAIFI at 1.7 or something like that? I
- 14 mean, do you compare those actual indices --
- MR. HERDEGEN: Yes. In many of those
- 16 benchmark efforts, the results are presented anonymously.
- 17 So I'll have a number and I'll see where I rank compared
- 18 to everybody else, but I won't know specifically what the
- 19 other companies are.
- 20 And that's so you can't do that -- you know,
- 21 point the finger at somebody else and say I'm better than
- 22 you are, but I know where I stand.
- 23 COMMISSIONER CLAYTON: Why couldn't -- why
- 24 couldn't we, meaning Missouri, use some data like that
- 25 as -- not as firm benchmarks but as more flexible

1 guideposts to help identify what is reliable service, what

- 2 is not?
- 3 Maybe we could have a process of waivers if
- 4 something isn't appropriate, if you have a rural area, you
- 5 have forest stuff going on.
- Why couldn't we use some of those regional
- 7 or national benchmark numbers to set out guideposts for
- 8 identifying what reliable service is?
- 9 MR. HERDEGEN: I don't think there would be
- 10 any objection of using that data as one of the inputs. I
- 11 don't think it should be the end-all because of some of
- 12 the exceptions that you mentioned.
- You know, are you comparing yourself with
- 14 more urban utilities or rural utilities? But, you know,
- 15 it's obviously one data point.
- 16 COMMISSIONER CLAYTON: In those benchmarking
- 17 sessions, do you have -- do you have grafts or data -- is
- 18 data compiled in ways that you're able to establish what
- 19 the national average would be or what the national
- 20 quartiles are?
- 21 I mean, is it even possible to identify what
- 22 the top 25th percentile would be of a SAIDI or SAIFI
- 23 index?
- MR. HERDEGEN: The answer is yes, but one --
- 25 with the one caveat, that you may only have 30,

```
1 40 utilities participating in that benchmark study.
```

- 2 So it's -- it's relevant for comparisons
- 3 with those 30 utilities. It may not be expandable to
- 4 the -- you know, as a national average, if you will.
- 5 COMMISSIONER CLAYTON: Does everybody
- 6 participate in those benchmarking sessions, all four
- 7 utilities? No.
- 8 Aquila, no. Empire, no.
- 9 Ameren? Ameren is always there.
- 10 Okay. So there is a way to identify some
- 11 guideposts as long as there is flexibility.
- 12 Mr. Beck, are you familiar with these
- 13 benchmarking sessions, the data that is being discussed
- 14 here?
- MR. BECK: Yes. Most -- most notably the
- 16 EEI data, but, you know, I was aware that there were
- 17 other -- was other forums.
- 18 COMMISSIONER CLAYTON: Would there be a
- 19 problem with setting these -- using this data as setting
- 20 up general guideposts for identifying reliable service?
- 21 MR. BECK: I think you used the term
- 22 flexible guidepost earlier or general guidepost. You
- 23 know, I think -- I think there is value in looking at
- 24 those numbers. I guess I didn't -- I didn't interpret the
- 25 original rule as setting flexible quideposts. I thought

- 1 it was specific benchmarks.
- 2 COMMISSIONER CLAYTON: Well, they were. But
- 3 I think the point of a rulemaking is that you take
- 4 comments, you take suggestions.
- 5 And where we've gone is we've gone from firm
- 6 guideposts that were vague -- and I recognize that the
- 7 25th percent-- I mean, what does it mean, I understand
- 8 that.
- 9 I think the assumption from my perspective
- 10 was that, well, we get a recommendation of, well,
- 11 25th percentile is either too high or it's too inflexible
- 12 or let's soften it and make it something else or let's use
- 13 a different indices that would -- that would help set up
- 14 some benchmark for what is reliable service or what we
- 15 believe is the standard.
- 16 And basically we didn't get any suggestions.
- 17 Staff didn't offer any suggestions for flexible language
- 18 or 50th percentile or different quartile or a different
- 19 measurement that would be appropriate.
- In fact, we've got a rule now that doesn't
- 21 even have any benchmarks. Would you agree with that?
- 22 MR. BECK: Yes, that's correct. There is no
- 23 benchmarks in the majority version.
- 24 COMMISSIONER CLAYTON: Mr. Beck, were you
- 25 involved in the draft of the very first reliability

1 reporting rule that Staff compiled as part of the Ameren

- 2 storm report back in 2006?
- 3 MR. BECK: Yes.
- 4 COMMISSIONER CLAYTON: I did not bring that
- 5 version down here with me at this time, but didn't it have
- 6 benchmarks included within it?
- 7 It took a historical average and said it had
- 8 to be the historical average after three years of data or
- 9 something like that. Do you recall that? I mean,
- 10 Mr. Wood I think compiled it --
- 11 MR. BECK: Yeah, I think.
- 12 COMMISSIONER CLAYTON: -- did he not?
- 13 MR. BECK: Mr. Wood and Mr. Taylor had heavy
- 14 involvement in the -- in the development of that.
- 15 COMMISSIONER CLAYTON: So does Staff still
- 16 support setting benchmarks in accordance with the version
- 17 that was compiled by Mr. Wood, recognizing this is a
- 18 little awkward for him these days?
- MR. BECK: I think that -- that the
- 20 compilation of this data ultimately is going to -- you're
- 21 going to be looking at historical averages.
- 22 COMMISSIONER CLAYTON: I understand.
- Do you support benchmarks that were part of
- 24 the Staff's original rule? Do you support those
- 25 benchmarks?

```
1 Would you feel comfortable with setting
```

- 2 benchmarks based on that methodology in the Staff
- 3 proposal?
- 4 MR. BECK: I think I would feel comfortable
- 5 with -- with setting benchmarks based on historical
- 6 averages, yes.
- 7 COMMISSIONER CLAYTON: Okay. Now, are you
- 8 answering that question because you don't remember what
- 9 the proposal was or --
- 10 MR. BECK: That's -- that's correct. I do
- 11 not remember what the proposal was.
- 12 COMMISSIONER CLAYTON: You don't recall
- 13 that?
- 14 MR. BECK: And I didn't print it out.
- 15 COMMISSIONER CLAYTON: Was there any part of
- 16 that version of the reliability rule that Staff proposed
- 17 that you disagreed with or anything that was obviously out
- 18 of line with what you believed was appropriate?
- MR. BECK: No.
- 20 COMMISSIONER CLAYTON: Okay. Can you tell
- 21 me why Staff retreated from benchmarks, using benchmarks
- 22 to measure performance and reliability?
- 23 MR. BECK: I -- I think that -- that from my
- 24 view, the primary goal was to start gathering data on a
- 25 historical basis and to start dealing with worst-

- 1 performing credits. And so --
- 2 COMMISSIONER CLAYTON: But can't you do
- 3 both? Can't you -- we could have included worst-
- 4 performing circuits and set benchmarks using historical
- 5 data.
- Well, we're going to have historical data,
- 7 but there will never be benchmarks under the new
- 8 version --
- 9 MR. BECK: That's my understanding.
- 10 COMMISSIONER CLAYTON: -- right?
- 11 So why have benchmarks been abandoned by the
- 12 Staff?
- MR. BECK: I think from my perspective,
- 14 having historical data and -- and the worst-performing
- 15 circuits allows Staff to have the discussions about the
- 16 quality --
- 17 COMMISSIONER CLAYTON: I understand. That
- 18 doesn't answer the question. You're not answering the
- 19 question.
- MR. BECK: Okay.
- 21 COMMISSIONER CLAYTON: Benchmarks -- setting
- 22 benchmarks was in the original Staff proposal. Now Staff
- 23 is no longer advocating for benchmarks.
- 24 Worst-performing circuit reporting was
- 25 included in that initial proposal. It's sort of included

- 1 here. I think it's less. Here it's only 5 percent. In
- 2 Mr. Wood's proposal it was 10 percent, I think.
- I want to know why we are backing off the
- 4 benchmarks now from Staff's proposal. I'm sure you have a
- 5 reason. I just want to know what the reason is.
- Because you can't say, well, we're going to
- 7 focus on worst-performing circuits. That's in both. Why
- 8 can't you have both?
- 9 MR. BECK: And I guess I'm more stating my
- 10 own personal opinion was that the most important things
- 11 that I wanted to see are still in the version that's out
- 12 there.
- 13 COMMISSIONER CLAYTON: Well, why didn't
- 14 Staff file comments -- why didn't Staff file comments that
- 15 supported the original version of this rule?
- You-all didn't file any comments. No
- 17 written comments.
- MR. BECK: That's correct.
- 19 COMMISSIONER CLAYTON: Does that mean you-
- 20 all like this version more than your own version?
- 21 MR. BECK: I think either are a step
- 22 forward, and I think that's -- that's what Staff feels
- 23 needs to happen at this point.
- 24 COMMISSIONER CLAYTON: I want to ask the
- 25 utilities. I'll start with Mr. Zdellar.

```
1 Do you recall the version that was proposed
```

- 2 by Staff in the storm report from 2006? Do you remember
- 3 that version?
- 4 MR. ZDELLAR: Well, I do recall it, but I do
- 5 not recall the details.
- 6 COMMISSIONER CLAYTON: As I recall it, it
- 7 set benchmarks, and I think it used historical data, set
- 8 out a three-year average and then --
- 9 MR. ZDELLAR: There were some bounds around
- 10 different things, but I don't recall the detail in terms
- 11 of whether it looked at the overall company or divisions
- 12 or circuits. I just don't recall the detail.
- 13 COMMISSIONER CLAYTON: Do you recall whether
- 14 that rule was something that Ameren could live with?
- MR. ZDELLAR: Well, to be honest, we didn't
- 16 really have much opportunity to discuss that rule
- 17 internally before the alternative rules came out, which
- 18 sort of displaced it.
- 19 COMMISSIONER CLAYTON: Temporarily displaced
- 20 it.
- 21 How about the other utilities? Do you
- 22 recall --
- MR. HERDEGEN: I don't -- I don't recall the
- 24 rules. I don't recall the discussion on benchmarks either
- 25 on there.

```
1 MR. CONNELL: I'm not familiar with Ameren's
```

- 2 proposal.
- 3 MR. ZDELLAR: Yeah, I think -- I think,
- 4 again, I think that was part of the overall thing that
- 5 took place with the Ameren storms, and utilities probably
- 6 wouldn't have even seen it.
- 7 COMMISSIONER CLAYTON: You don't think they
- 8 looked at that report?
- 9 MR. ZDELLAR: Well, they may have other
- 10 things to do that are more important.
- 11 COMMISSIONER CLAYTON: Okay. Judge, I have
- 12 an exhibit. I might as well get to this.
- 13 Could we mark it as Exhibit 1?
- 14 And is Nathan still out there? Did he
- 15 leave?
- MR. FISCHER: I can distribute it.
- 17 COMMISSIONER CLAYTON: Mr. Fischer, if you
- 18 can just hand those out.
- 19 (EXHIBIT NO. 1 WAS MARKED FOR IDENTIFICATION
- 20 BY THE COURT REPORTER.)
- 21 COMMISSIONER CLAYTON: Mr. Beck, you
- 22 suggested earlier today that Staff was concerned with the
- 23 legality.
- 24 I'll let you get caught up with your
- 25 material here.

```
1 MR. BECK: Okay.
```

- 2 COMMISSIONER CLAYTON: Tell me when you're
- 3 ready.
- 4 MR. BECK: Okay. I was just brought a copy
- 5 of the AmerenUE's storm outage --
- 6 COMMISSIONER CLAYTON: I'll tell you what,
- 7 why don't we go over that while everyone has a chance to
- 8 look at this.
- 9 Take a look at the reliability rule that was
- 10 part of the 2006 Ameren storm report.
- 11 Proposed by Staff; you would agree with
- 12 that. Correct?
- MR. BECK: Yes, that's correct.
- 14 COMMISSIONER CLAYTON: And would you clarify
- 15 for me, first of all, whether benchmarks were set to
- 16 measure reliability and then could you relay to everyone
- 17 how that benchmark was set.
- 18 MR. BECK: I don't see benchmarks in here
- 19 anywhere.
- 20 COMMISSIONER CLAYTON: They're not in there
- 21 at all?
- MR. BECK: No.
- 23 COMMISSIONER CLAYTON: Okay. If they're not
- 24 in there, they're not in there. That's -- I didn't bring
- 25 it with me.

```
1 Make you sure you get through there.
```

- 2 MR. BECK: Yeah.
- 3 COMMISSIONER CLAYTON: Okay. So there are
- 4 no benchmarks in the Staff proposal either?
- 5 MR. BECK: No.
- 6 COMMISSIONER CLAYTON: Okay. Then I will
- 7 stand corrected. My mistake and I apologize for bringing
- 8 that up. I seem to recall there being a measurement level
- 9 that was proposed.
- The exhibit that I've just handed out, I'd
- 11 like to ask each of you to take a look at it.
- 12 You stated earlier that Staff had concerns
- 13 with the legality of certain language that was in the
- 14 dissent version relating to bill credits.
- MR. BECK: That's correct.
- 16 COMMISSIONER CLAYTON: Do you recall the
- 17 nature of the legality or the nature of the legal
- 18 challenge, that bill credit language?
- 19 MR. BECK: I think that it really was
- 20 whether the Public Service Commission had the authority
- 21 to --
- 22 COMMISSIONER CLAYTON: Okay. Okay. Do you
- 23 think the Public Service Commission has the ability to
- 24 place in a -- require a utility to place in a tariff
- 25 dollar for dollar offsets for service not rendered

- 1 relating to a fixed charge?
- 2 For example, if power is out for a third of
- 3 the month, you have a fixed charge of \$12, that the
- 4 customer would get \$4 because they didn't receive the
- 5 service.
- 6 Do you believe that is appropriate?
- 7 And I'm asking you legal questions which is
- 8 completely unfair.
- 9 MR. BECK: I mean, given the fact that a
- 10 fixed charge is typically prorated, but not always, but
- 11 most utilities prorata them based on the number of days
- 12 that you might be there for a partial month, it would seem
- 13 logical that that could be done.
- Now, having said that, part of that
- 15 proration process is that there is a band of days, like,
- 16 25 to 35, for example, where you would just charge a
- 17 standard customer charge. And so you'd have to go to the
- 18 specifics of the tariffs to see how that's done, and it is
- 19 done differently for different utilities.
- 20 COMMISSIONER CLAYTON: If we were to include
- 21 language that is set out in the exhibit that I just handed
- 22 out that adequately addressed ratemaking treatment for
- 23 bill credits or offsets, would that change Staff's
- 24 position with regard to bill credits?
- 25 MR. BECK: That adequately addressed -- I'm

- 1 sorry. What was --
- 2 COMMISSIONER CLAYTON: Would this language
- 3 address Staff's concerns to change its position,
- 4 composition to bill credits?
- 5 MR. BECK: This new language here?
- 6 COMMISSIONER CLAYTON: Yes.
- 7 MR. BECK: I really couldn't say.
- 8 COMMISSIONER CLAYTON: Mr. Beck, do you have
- 9 any other comments regarding the exhibit?
- 10 MR. BECK: Not at this time, no.
- 11 COMMISSIONER CLAYTON: Okay. Would any of
- 12 the utilities be in favor of bill credits if we included
- 13 this language in the version?
- 14 The court reporter just wrote down that she
- 15 could hear crickets chirping outside because no one else
- 16 is saying anything. I take that as a no.
- Judge, I would offer that that be included
- 18 in the record.
- 19 JUDGE DALE: Okay. It will be included in
- 20 the record as Exhibit 1.
- 21 (EXHIBIT NO. 1 WAS RECEIVED INTO EVIDENCE
- 22 AND MADE A PART OF THE RECORD.)
- 23 COMMISSIONER CLAYTON: Okay. Mr. Zdellar,
- 24 getting back to circuit level reporting.
- Now, Ameren collects the indices that are

- 1 set out on page 1 of the majority version of the rule
- 2 today subject to those -- the other exclusions in
- 3 Subsection 5.
- 4 Does it collect the data at any other level
- 5 or smaller universe beyond its systemwide --
- 6 MR. ZDELLAR: Yes, we do.
- 7 COMMISSIONER CLAYTON: Can you set out how
- 8 you collect it and at what levels, down to the small
- 9 smallest?
- 10 MR. ZDELLAR: We collect it at the district
- 11 level in the State of Missouri. The Central Ozarks here
- 12 in the Jefferson City area, the division is made up of two
- 13 districts, one is the Jefferson City area and the other is
- 14 the Lake area. So we would have comparable data
- 15 collection for each of those two areas on these four
- 16 measures on a monthly basis.
- 17 COMMISSIONER CLAYTON: Okay. How many
- 18 districts does Ameren have in Missouri?
- 19 MR. ZDELLAR: I believe it's fifteen right
- 20 now.
- 21 COMMISSIONER CLAYTON: Fifteen districts and
- 22 that makes, what, seven and a half divisions or eight
- 23 divisions?
- 24 MR. ZDELLAR: Something like that.
- 25 COMMISSIONER CLAYTON: Seven and a half

- 1 divisions doesn't make any sense.
- 2 Okay. So you do not collect the data at the
- 3 circuit level right now?
- 4 MR. ZDELLAR: The data -- we can if we need
- 5 to do that, and we do that in terms of what -- we look for
- 6 worst-performing circuits.
- 7 But I just did a quick back-of-the-envelope
- 8 thing here with the State of Missouri, and I think, you
- 9 know, looking at this data on a reporting requirement, a
- 10 monthly basis on reporting requirement, if you multiply
- 11 the twelve times the two, you know, times the 3,600
- 12 circuits in the State of Missouri, you're talking about,
- 13 you know, putting in, like, 200,000 pieces of data on
- 14 circuit information for Staff to look at, most of which
- 15 doesn't have a problem.
- So, you know, going back to that earlier
- 17 conversation about trying to look at things and report on
- 18 an annual basis on circuit data, that really seems to be
- 19 killing an awful lot of trees to not get what you want to
- 20 get to. And for us to look at 110 or 120 circuits every
- 21 year in detail analysis, that's quite a bit of work.
- 22 COMMISSIONER CLAYTON: Well, how do you
- 23 determine when there is a problem and when there is not a
- 24 problem?
- 25 You suggested that, you know, you're going

- 1 to have these 5 percent worst performing. But for the
- 2 other 95 percent, how do you determine if there is a
- 3 problem there?
- 4 MR. ZDELLAR: Well, again, we look at the --
- 5 and quite often the problem that occurs on a circuit may
- 6 not be the whole circuit. It's the subset of a circuit
- 7 someplace. You might have a tap that you have a problem
- 8 with animals, where you have to get and put animal
- 9 protection and various transformers, things like that.
- 10 You might have a cable going bad in a given subdivision.
- 11 Most of the corrective actions in terms of
- 12 what I'll call the rifle approach to reliability are
- 13 things that are aimed at smaller subsets of customers and
- 14 not typically on this whole circuit.
- 15 COMMISSIONER CLAYTON: So down at what
- 16 level, if not the circuit level?
- 17 MR. ZDELLAR: Well, we look at customers at
- 18 the tap level and at the individual customer level. We
- 19 have programs in place, that we look at customers that
- 20 have repetitive outages over a period of years.
- 21 COMMISSIONER CLAYTON: So if you are
- 22 required under this rule to identify the worst-performing
- 23 circuits at 5 percent -- I mean, if you're the
- 24 6th percentile and statistically you're really no
- 25 different than the 5 percent that are worst, you're not

- 1 going to get any improvement. What causes you to look at
- 2 those circuits that wouldn't fall under this?
- 3 MR. ZDELLAR: Well, again, it would be a
- 4 subset of the circuit that you might look at. It could be
- 5 complaint kind of issues that are out there.
- 6 COMMISSIONER CLAYTON: So somebody has to
- 7 tell you; somebody has to complain to you that --
- 8 MR. ZDELLAR: Not necessarily.
- 9 If we track, again, repetitive outages on
- 10 pieces of circuits and the districts have to respond to
- 11 that as they get these repetitive outages in some period
- of time as to what they're going to do about it. So
- 13 that's out there.
- 14 The second piece is this 5 percent, assuming
- 15 you do something with them, that's not the 5 percent next
- 16 year. The number -- the one that is No. 6 now moves into
- 17 the No. 1 through 5 category and gets some action next
- 18 year in terms of the overall worst-performing circuits.
- 19 COMMISSIONER CLAYTON: Well, hopefully. But
- 20 then that would suggest that someone whose having very
- 21 similar problems would have to wait another year.
- 22 Would Ameren have a problem of changing the
- 23 number to 10 percent rather than 5 percent?
- MR. ZDELLAR: Well, it's a lot more work to
- 25 look at all those circuits and detail everything. I'm not

```
1 sure what you'll get out of it at the end of the day.
```

- 2 COMMISSIONER CLAYTON: Well, improving
- 3 service for the 5 percent that may be statistically
- 4 receiving the same level of service.
- 5 I don't know what the data looks like. It's
- 6 just the number was changed, and if we're going to focus
- 7 on the worst-performing circuit, we've narrowed it down --
- 8 I mean, if Ameren has 3,100 circuits, then we're talking
- 9 about a very small number of circuits in the overall
- 10 system that are going to get any attention in this rule.
- MR. ZDELLAR: When you say get any
- 12 attention, keep in mind we have a vegetation management
- 13 rule in place that requires some significant changes with
- 14 what we do in vegetation management.
- 15 COMMISSIONER CLAYTON: But it didn't really
- 16 change --
- 17 MR. ZDELLAR: It did.
- 18 COMMISSIONER CLAYTON: It didn't really
- 19 change --
- 20 MR. ZDELLAR: It changed dramatically.
- 21 We're spending a lot more money --
- 22 COMMISSIONER CLAYTON: You're still on
- 23 cycles. You still cut the same amount of distance. I
- 24 mean, you-all were doing that before.
- 25 MR. ZDELLAR: We're moving a significant

1 number of trees. We're removing an awful lot of overhang

- 2 that we didn't do before.
- 3 COMMISSIONER CLAYTON: I don't want to go
- 4 through the tree-trimming stuff again.
- 5 MR. ZDELLAR: But the question was, do you
- 6 address circuits? And we have a circuit inspection
- 7 program too now that is mandated in the State of Missouri,
- 8 and we're all on those programs.
- 9 That's going to have an impact on all of us.
- 10 There is no question about it.
- 11 And I think, you know, looking back at the
- 12 majority rule that's out there right now, it really does
- 13 allow a development of data over -- over a period of time
- 14 and puts some transparency in where are the outages, what
- 15 are the statistics, what are the measures, how do we
- 16 compare with other indices on a national basis or
- 17 whatever.
- 18 And maybe at some point three or four years
- 19 down the road it's time to set some stronger guidelines in
- 20 some areas. But right now the data out there is awfully
- 21 weak and awfully spotty, and we're doing all these other
- 22 programs at the same time. So we're seeing significant
- 23 improvement --
- 24 COMMISSIONER CLAYTON: Well, Mr. Zdellar, I
- 25 mean -- but I think you're already collecting this data in

- 1 the first place. I mean, there are no changes in this
- 2 data.
- 3 So, I mean, Ameren is not going to make any
- 4 changes other than filing one report on an annual basis.
- 5 So tell me how this is going to impact Ameren's
- 6 reliability.
- 7 MR. ZDELLAR: Well, I think the reliability
- 8 aspect of it is really done with the other programs. This
- 9 is a reporting tool that really puts transparency into
- 10 what is going on across our system that's not available to
- 11 the Commission today.
- 12 I think, as you stated earlier, today the
- 13 Commission has -- has no normal knowledge, no normal
- 14 reporting about reliability in the State of Missouri.
- 15 It's all ad hoc based on what the Staff asked for. For
- 16 the first time this rule puts that in myself.
- 17 COMMISSIONER CLAYTON: I mean, this rule
- 18 only mandates improvement in the 5 percent
- 19 worst-performing circuits. You'd agree with this?
- 20 MR. ZDELLAR: This particular rule.
- 21 COMMISSIONER CLAYTON: Well, I understand
- 22 your concerns with the tree trimming, that we're going to
- 23 get -- I mean, when we started this process, I mean, we
- 24 were told that tree trimming wasn't the problem in the
- 25 first place and now tree trimming is going to solve the

- 1 problem.
- 2 That's frustrating to me, because we were
- 3 told one thing early on and now it's kind of different.
- 4 This is the last -- the last opportunity that we're going
- 5 to have to look at reliability probably for some time.
- 6 MR. ZDELLAR: Well, the whole issue of trees
- 7 and the discussion that took place numerous times is kind
- 8 of a two-part discussion.
- 9 One is around major storms and major events
- 10 which have impacted all of Missouri significantly in the
- 11 last four or five years, well above what we've ever seen
- 12 in the past.
- 13 And the ice storms that we saw, for
- 14 instance, in the last three years, we've got all kinds of
- 15 evidence in the pictures. The significant amount of ice
- on those lines, those lines are coming down with trees or
- 17 without trees. It doesn't have anything to do with -- if
- 18 trees are there, they bent over and you get more of
- 19 them. There is no question about that. But, overall, you
- 20 know, big -- a big issue in terms of major.
- 21 The other was repetitive outages to
- 22 customers, where, in fact, when you get a lot of little
- 23 storms that goes through and then break out, you get those
- 24 outages.
- 25 Tree trimming is going to affect that.

```
1 Removal of the overhang is going to reduce some of that
```

- 2 effort, and it also will improve the restoration process.
- 3 COMMISSIONER CLAYTON: Mr. Zdellar, let me
- 4 ask you this: You've got Operation Power On. Is that the
- 5 name of the project?
- 6 MR. ZDELLAR: That's correct.
- 7 COMMISSIONER CLAYTON: And it boasts that a
- 8 billion dollars is being spent on reliability
- 9 improvements.
- 10 Do you have the figures of where that
- 11 billion dollars is being spent, which portion is on tree
- 12 trimming, which portion is on undergrounding, that sort of
- 13 thing?
- 14 MR. ZDELLAR: The \$300 million of that is on
- 15 undergrounding, I believe 145 million on tree vegetation
- 16 management, 87 on circuit inspections and repairs, and
- 17 about 500 million is really environmental.
- 18 COMMISSIONER CLAYTON: And is that -- over
- 19 how many years is that \$1 million?
- 20 MR. ZDELLAR: That's over three years.
- 21 COMMISSIONER CLAYTON: So I have 300 million
- 22 on undergrounding, 145 million on tree trimming, 87 on
- 23 circuit inspections and then the remainder was
- 24 environmental upgrades?
- MR. ZDELLAR: Right. That's correct.

```
1 COMMISSIONER CLAYTON: So another 400 some
```

- 2 odd million, I guess, a big chunk of that, almost half,
- 3 does not even address reliability. Right?
- 4 MR. ZDELLAR: Yes, that's correct.
- 5 COMMISSIONER CLAYTON: So basically we've
- 6 got 500 and carry the one, 536 over three years.
- 7 Mr. Beck, is Staff satisfied with
- 8 expenditures such as those in terms of improving
- 9 reliability? Is Staff -- I don't want to say impressed.
- 10 But, I mean, the program that we just
- 11 discussed with Mr. Zdellar, is that something that Staff
- 12 believes is leading to improve reliability?
- MR. BECK: Well, I think that, for example,
- 14 I believe the 135 million number for tree trimming was the
- 15 number that was agreed to as part of AmerenUE's last rate
- 16 case, and Staff agreed to that number.
- The project --
- 18 COMMISSIONER CLAYTON: So that's not new
- 19 money. That's money that's built into rates. Is that --
- 20 MR. BECK: That's my understanding.
- 21 COMMISSIONER CLAYTON: Okay. Do you dispute
- 22 that, Mr. Zdellar?
- MR. ZDELLAR: Not at all.
- 24 COMMISSIONER CLAYTON: Okay. Go ahead.
- 25 MR. BECK: So the largest dollar amount

1 that's, you know, directly applicable to reliability then

- 2 is the 300 million.
- 3 I guess the part that I would note is
- 4 that -- is the 300 million toward a program that's going
- 5 to work on undergrounding specific lines, but there's --
- 6 still that doesn't include the usual maintenance that
- 7 Ameren -- usual level of maintenance that Ameren does for
- 8 their distribution system.
- 9 And so, you know, it doesn't really kind of
- 10 tell you the whole picture. It's a reflection of kind of
- 11 additional expenditures that I guess what I'd call maybe
- 12 nontypical as compared to the past.
- 13 COMMISSIONER CLAYTON: Is the undergrounding
- 14 already built into rates or is that new money?
- MR. BECK: Some level of undergrounding is
- 16 but that's new money.
- 17 COMMISSIONER CLAYTON: Do you know what --
- 18 this is the 300 --
- MR. BECK: Yes.
- 20 COMMISSIONER CLAYTON: -- the 300 is?
- MR. BECK: That's -- yes.
- 22 COMMISSIONER CLAYTON: How about the circuit
- 23 inspection?
- MR. BECK: I believe that will also be new
- 25 money, that that's, you know, part of the rules that just

```
1 went -- went over to the Secretary of State's Office.
```

- 2 COMMISSIONER CLAYTON: So that 87 million
- 3 would be divided by three. So that's 24 million a year,
- 4 Mr. Zdellar?
- 5 MR. ZDELLAR: It depends -- some of the
- 6 inspection was already being done. I don't recall the
- 7 percentage of the 87 that is already in rates, but there
- 8 is some percentage of the 87 already in rates.
- 9 COMMISSIONER CLAYTON: Okay.
- 10 MR. ZDELLAR: The 300 is new though.
- 11 COMMISSIONER CLAYTON: And do you recall
- 12 what the fiscal impact of the initial proposed
- infrastructure rule would cost per year?
- 14 MR. ZDELLAR: I don't recall.
- 15 COMMISSIONER CLAYTON: You don't recall.
- And you've got almost 50 million a year in
- 17 tree trimming. Do you know what the initially proposed
- 18 tree trimming rule would have cost?
- 19 MR. ZDELLAR: Oh. I think that was
- 20 something in the order of \$300 million I think the first
- 21 year.
- 22 COMMISSIONER CLAYTON: Do you think that's
- 23 an accurate figure?
- MR. ZDELLAR: I think for the state, that's
- 25 the number I recall.

```
1 COMMISSIONER CLAYTON: For statewide, not
```

- 2 for Ameren?
- 3 MR. ZDELLAR: No. I don't remember exactly.
- 4 Ours was probably the biggest chunk of that.
- 5 COMMISSIONER CLAYTON: In Subsection 9 --
- 6 does everyone have a copy of the dissent rule, the dying
- 7 rule?
- 8 Subsection 9 on page 13 and 14.
- 9 Subsection C sets out initial minimum reliability
- 10 standards.
- 11 Does anybody meet those standards today that
- 12 they can tell me?
- 13 MR. ZDELLAR: My first question is, is that
- 14 the adjusted numbers? Do those include storm data?
- 15 That's my first question.
- 16 COMMISSIONER CLAYTON: Well, that's a good
- 17 question. And I'd have to say, are there adjustments in
- 18 the rule?
- 19 As I recall, we drafted these indices to be
- 20 done on both an adjusted and nonadjusted basis. We
- 21 weren't -- initially when we started we weren't sure how
- 22 to draft it, so, I mean, you throw to include everything.
- 23 Well, assuming either way. I mean --
- 24 MR. ZDELLAR: Let me just -- if you take out
- 25 the major events, I can talk about SAIFI, which is the

- 1 customer interruption frequency.
- 2 At Ameren we meet the safety of the 1.2.
- 3 We're less than 1.2 on the Missouri total basis.
- 4 But going back to the division basis or the
- 5 district basis, where the measure is 1.4, we do not meet
- 6 that in all of the divisions.
- 7 COMMISSIONER CLAYTON: Okay. Do you know on
- 8 the others, the CAIDI, the SAIDI or the CAIFI?
- 9 Actually there is operating area. Do you
- 10 have operating area or is that a district?
- 11 MR. ZDELLAR: We have divisions that are
- 12 major operating areas, and within a division we may have
- one or more -- one or more districts.
- 14 COMMISSIONER CLAYTON: So you've got
- 15 actually operating area right underneath that, that we had
- 16 SAIFI at 1.4.
- 17 MR. ZDELLAR: That's what I just -- I just
- 18 said we will not meet that --
- 19 COMMISSIONER CLAYTON: Oh, you won't meet
- 20 that one.
- 21 MR. ZDELLAR: We'd meet it in some of the
- 22 areas but not all.
- 23 COMMISSIONER CLAYTON: Not all of them.
- 24 Okay?
- 25 MR. ZDELLAR: And at the present time we

- 1 don't meet the CAIDI either at the Missouri level or at
- 2 the operating levels typically.
- 3 COMMISSIONER CLAYTON: By a few minutes or
- 4 is it -- I mean, do you think you're significantly --
- 5 MR. ZDELLAR: It's pretty significant.
- 6 COMMISSIONER CLAYTON: Okay. How about
- 7 everyone else? Does anyone have any -- give me a little
- 8 feedback on what these mean to you.
- 9 MR. HERDEGEN: Sure. Kansas City Power &
- 10 Light. SAIDI, we would be well within that. SAIFI, we
- 11 would be well within that. We don't track CAIFI at this
- 12 point.
- CAIDI, you know, I see that in the industry
- 14 quite a bit as around 90 minutes, and I would say we would
- 15 probably bounce around that number. So sometimes we would
- 16 be above it; sometimes we'd be below it.
- 17 MR. CONNELL: Aquila would be -- would not
- 18 meet SAIFI or SAIDI. I think we would probably be pretty
- 19 close on CAIDI.
- 20 The difference for us, I think, is that
- 21 we're more rural. And if we take a look at our various
- 22 districts as an example, our urban districts close to the
- 23 metropolitan area, the dense populated area, have better
- 24 indices than our rural districts that have very many miles
- 25 of rural.

```
1 COMMISSIONER CLAYTON: Is that consistent
```

- 2 for all utilities, that rural areas have less reliable
- 3 service than urban areas?
- 4 MR. ZDELLAR: For us it's not totally
- 5 consistent. There are some out-state areas that don't
- 6 have -- for instance, Northern Missouri, you don't have as
- 7 many trees and things like that and it's -- while it's
- 8 more dispersed, the reliability is fairly good.
- 9 In other areas you have a lot of density,
- 10 very high density. For instance, in some of the suburban
- 11 areas, in St. Louis County, a lot of construction, those
- 12 areas present other issues, even though there is dense
- 13 population.
- MR. PALMERS: From Empire's standpoint, the
- 15 urban areas have more opportunity for switching in between
- 16 substations to feed circuits from different directions,
- 17 that it's not as available in the rural areas, and
- 18 certainly the amount of line per customer, the distance of
- 19 line per customer in the rural areas is much greater, so
- 20 the exposure for problems may be greater for those folks.
- 21 COMMISSIONER CLAYTON: Have you been
- 22 listening to the testimony at the local public hearing
- 23 next door?
- MR. PALMER: Not today. I was there last
- 25 night.

```
1 COMMISSIONER CLAYTON: You may want to take
```

- 2 a look at it.
- 3 Okay. In terms of reliability, in terms of
- 4 reporting and collecting data, there is a difference in
- 5 what utilities have in place to collect data.
- 6 There has been a lot of discussion around
- 7 here. Mr. Zdellar and I have talked about it briefly,
- 8 about AMI and smartgrid technologies and Department of
- 9 Energy policies and the congressional incentives that are
- 10 in place to try to upgrade the grid and things like that.
- 11 Generally speaking, I want to ask all four
- 12 of the utility representatives: Should Missouri be more
- 13 aggressive in moving forward with new technologies?
- 14 I'm not saying move forward in an
- 15 irresponsible manner but move forward in a responsible
- 16 manner of upgrading technology, upgrading methods of
- 17 communication from circuit to headquarters and take
- 18 advantage more of what's being offered at least from
- 19 Washington in terms of AMI?
- Is there merit to moving forward? Is there
- 21 not? Is it irrelevant? I guess, could you give me some
- 22 feedback? I'm asking it here today as it relates to
- 23 reliability, but I'm interested in your comments.
- I'll start with someone other than Ameren
- 25 just because I keep putting him on the spot.

```
1 Sir.
```

- 2 MR. PALMER: I think we continuously need to
- 3 look at what technology brings us.
- 4 We've implemented new technologies over the
- 5 last several years that have been very beneficial and
- 6 helpful.
- 7 The outage management system I mentioned
- 8 earlier helps us understand the magnitude of the storm
- 9 much earlier in the restoration process. It helps us
- 10 determine how many out-of-town crews we might need to get
- 11 in and help us.
- 12 And I'm convinced in the major ice storms we
- 13 had in 2007, that this system shaved off many, many days
- 14 of additional outage for our customers due to this
- 15 ability.
- 16 So I think we need to continuously look. We
- 17 have looked at AMI for years. It's about a \$30 million
- 18 price tag for our company, at a time when we're also
- 19 seeing fuel costs increase and the customers are being hit
- 20 with many other cost increases also.
- 21 But the justification of AMI alone for meter
- 22 reading is not there, but if the justification is for some
- other purposes also, I think that helps get the economics
- 24 in there.
- 25 COMMISSIONER CLAYTON: Can Empire put a

- 1 dollar value on different components of improved
- 2 infrastructure? I mean, certainly you probably come up
- 3 with a dollar value of savings for AMR for just meter
- 4 reading.
- 5 But beyond that, can Empire identify
- 6 additional savings or quantify improved reliability that
- 7 would justify moving beyond just reading meters to
- 8 smart-- more smartgrid technology or, you know, being able
- 9 to track a lot of this data to help you provide, you know,
- 10 safe and adequate service?
- 11 MR. PALMER: Some of the things we've talked
- 12 about versus putting in a complete AMI system to all
- 13 customers, and I think some companies in certain parts of
- 14 the company have done this, where at the end of the
- 15 circuit the very last customer on a circuit puts some type
- of device there, where you know when that circuit is
- 17 reenergized and complete or not.
- 18 Some companies do a calling program to spot
- 19 check customers on the circuits to see -- to try to see
- 20 when certainly that the power was restored, to get a more
- 21 timely clock setting for the indices that we're tracking.
- 22 I think -- I think there may be some other
- 23 ways to do it besides the broad-scale installation of some
- 24 of these services.
- 25 At our company we've looked at other

```
1 justifications besides reading meters or disconnects and
```

- 2 reconnects or what we call read in and read out in a large
- 3 apartment complex.
- 4 We have an example in the Branson area, a
- 5 400-unit apartment that has a very high turnover rate.
- 6 If we had automated meters in there, we could take a
- 7 rating on the day somebody moves out versus sending out a
- 8 pretty expensive lineman and line truck to actually get a
- 9 reading or do a disconnect, and then saying when a new
- 10 customer moves in there, to get an automatic read that
- 11 date, I think there is a lot of savings there.
- 12 I think if we head towards time-of-use rates
- 13 in Missouri, and I think there will be a trend on that
- 14 nationwide, that automated meters will be a very important
- 15 necessity for that to help determine, did customers indeed
- 16 cut back their usage during the hours of 3:00 and 4:00.
- 17 COMMISSIONER CLAYTON: If that's the
- 18 national trend, are we ready for that trend? I mean, are
- 19 we anywhere ready if that happens, if things start moving
- 20 that way?
- 21 MR. PALMER: I think again, from our
- 22 standpoint, it would be a pretty expensive upfront cost to
- 23 get things in place to do that.
- 24 COMMISSIONER CLAYTON: Aquila.
- MR. CONNELL: Aguila, we'll agree with

- 1 everything Empire would say.
- 2 We have no automated metering at all today
- 3 other than our large-value customers, those with 500 kW
- 4 demand and larger. We have initiatives and a budget going
- 5 forward to start automating more and more of our systems
- 6 as far as distribution automation.
- 7 We don't have but about 60 percent in our
- 8 Missouri Public Service area of our substation breakers.
- 9 So over the next several years we would be planning on
- 10 automating those other distribution breakers.
- 11 So the combination of, you know, AMI and
- 12 distribution automation would be very beneficial. It is
- 13 very expensive.
- 14 COMMISSIONER CLAYTON: Mr. Herdegen.
- 15 MR. HERDEGEN: I would tend to agree that as
- 16 you continue to look at improving operations, you're
- 17 always looking to see how you can leverage technology to
- 18 make things easier for yourself, No. 1.
- I agree with all of the things we've seen,
- 20 you know, savings in costs of not having to send somebody
- 21 out to read a final meter.
- 22 We tend to -- if one customer calls in on a
- 23 nice, sunny day and they're out of service, we can talk
- 24 them through, checking their breaker.
- 25 We just saw that we can reduce the amount of

```
1 okay and arrival trips by 40 percent, saving us $300,000 a
```

- 2 year. So there is a lot of side benefits to having some
- 3 of that technology in place.
- 4 One of the things that we've done recently
- 5 as part of our comprehensive energy plan is install some
- 6 automated switches on a 34 kV system. Typically those are
- 7 in the rural areas. They run for 30, 40 miles.
- And we've been able to remote operate and --
- 9 and monitor some of those, so that in the event that there
- 10 is a problem in one part of the circuit, we can switch
- 11 around fairly quickly and restore a large number of
- 12 customers, plus reducing the impact of them on outages,
- 13 and then concentrate on the one area where there is the
- 14 immediate problem. So we're seeing some of those things.
- 15 COMMISSIONER CLAYTON: What percent of those
- 16 customers have some sort of smart meter in KCP&L's
- 17 territory?
- 18 MR. HERDEGEN: For us I want to say --
- 19 COMMISSIONER CLAYTON: More than just AMR?
- 20 MR. HERDEGEN: Oh, more than --
- 21 COMMISSIONER CLAYTON: Just start with AMR.
- MR. HERDEGEN: AMR. We have probably 85 to
- 90 percent of our customers have some form of automated
- 24 meter reading.
- 25 I would say one of the other things that

```
1 we're -- we're continuing to do is all of the capacitor
```

- 2 banks in our metro area are able to be monitored and
- 3 controlled remotely.
- 4 We've just installed the dynamic voltage
- 5 control which allows us to raise and lower the voltage of
- 6 a bus, a substation bus, to mitigate a load on the very
- 7 hot days in the summertime.
- 8 You have to marry that up with some kind of
- 9 monitoring at the end of the circuit so you're not
- 10 violating voltage for the last customer on the circuit.
- 11 We've talked in the past about underground,
- 12 our underground network on monitoring and control.
- 13 So there is some of these things that you
- 14 can do, but it's the cost benefit relationship. What are
- 15 you getting out of it versus how -- how far has the
- 16 technology improved so that it's affordable.
- 17 And I think, you know, when we're talking
- 18 AMR, I mean, you're going from a \$20 meter to -- well, the
- 19 simplest AMR is about 50. So it's two and a half times.
- 20 And more sophisticated AMIs are -- I'm seeing now are in
- 21 the 150 to \$200 range.
- 22 And so, you know, count the number of
- 23 customers and multiply it by that and that's a pretty
- 24 expensive meal ticket.
- 25 COMMISSIONER CLAYTON: Mr. Zdellar.

```
1 Oh, I'm sorry.
```

- 2 MR. HERDEGEN: I was going -- you know, you
- 3 had mentioned about collecting customer data.
- 4 I think what some of this technology like
- 5 the outage management systems allows you to do is collect
- 6 the information on a customer basis.
- 7 In the past we used to be able to just count
- 8 how many times did a breaker open. So when we are looking
- 9 at data, you were looking at hardware from a utility
- 10 standpoint.
- I think many utilities now with this
- 12 technology, we can be more customer centric in how we look
- 13 at outage data, so that you can have a worst-performing
- 14 circuit that -- or any kind of a circuit that's performing
- 15 pretty well, but you could have a handful of customers,
- 16 like Mr. Zdellar said, that have horrendous -- horrendous
- 17 reliability. Those are the ones you really want to focus
- 18 on.
- 19 So it's a balance between taking a look at,
- 20 you know, system performance but also that that kind of
- 21 data allows you to look at, you know, who is the poor --
- 22 you know, I want to refer to that customer that has very
- 23 bad reliability that's unacceptable, what are we going to
- 24 do for those.
- 25 In some cases that's a very small pocket as

1 opposed to taking a look at the entire circuit. So it's a

- 2 balance between the two.
- 3 MR. ZDELLAR: I might just add to all of
- 4 that. We've done most of the things I think that you've
- 5 heard about already.
- We're doing some things right now with our
- 7 networking down in Downtown St. Louis to get data back on
- 8 a real-time basis on the network system.
- 9 I think that when you look at technology
- 10 from a broad standpoint, you really have to look at it
- 11 through the whole energy delivery business, from the
- 12 substation right on out to the customer.
- 13 And as we talked about earlier, try to
- 14 figure out where do you get the bang for the buck? Where
- 15 do you get the dollars?
- 16 And those of us that have automated meter
- 17 reading -- we have probably about -- 98 percent of our
- 18 customers have AMR both on the gas and electric side of
- 19 our business. So we've already got that in place.
- 20 If you wanted to swap that up to AMI, you're
- 21 talking about a couple hundred million dollar investment,
- 22 that you've already received the benefit of the automated
- 23 meter readings from. So the justification is difficult to
- 24 find.
- 25 I think that this whole issue on a national

- 1 scale about AMI, and particularly in the part where you
- 2 talk about customer response, I think that's -- that's
- 3 untested in my mind.
- A lot of people around the country are
- 5 talking about putting this stuff in. Some are actively
- 6 doing it. Some have done what I'll call a test, volunteer
- 7 customers, and have great success with volunteer
- 8 customers.
- 9 But keep in mind, people who volunteer for
- 10 this kind of thing, you're going to get the ones that want
- 11 to do it, the first starters, whatever you want to call
- 12 them.
- And I think that, you know, before we jump
- 14 too far into that customer environment, I think -- you
- 15 know, Missouri is the show-me state.
- I think we ought to see what happens in
- 17 other places in that regard. That's a huge investment.
- 18 And we better understand it.
- 19 If there really are load management
- 20 opportunities there that can help us in the future avoid
- 21 generation, things like that, that's great. But before we
- 22 jump in and spend the money, we ought to look at that.
- 23 Backing away from the customer on the
- 24 distribution system, though, I think there is a lot of
- 25 technologies coming out there.

- 1 You mentioned 34 -- Mr Herdegen mentioned
- 2 the 34 kV switches. We've been using that for some time.
- 3 In fact, we can go across the street and watch the
- 4 dispatchers operate those switches on a 34 kV system.
- 5 We're installing a lot more of those in the
- 6 metropolitan St. Louis area, and even some switches on the
- 7 distribution system at this point in time.
- 8 So I think there is a lot of opportunity to
- 9 do some things to shorten customer outages when they
- 10 happen in that basis.
- 11 There is also a lot of technology coming
- 12 into the substations as well, so that really looks at
- 13 faults and does a much -- a much more detailed analysis of
- 14 faults.
- Most of our equipment will close back in.
- 16 That's why you have the momentary interruption someplace
- 17 on our systems.
- 18 But every time you close in a system and
- 19 there is still a fault there, that puts tremendous stress
- 20 on the equipment and the substation, the breakers, as well
- 21 as the transformers themselves.
- 22 And I think we'll see a lot of savings in
- 23 terms of maintenance with some of the stuff coming down
- 24 the road in terms of technology that can be used in our
- 25 substations.

```
1 I think this is something we -- in Missouri
```

- 2 we have one forum where we kind of got together and kind
- 3 of talked about this, and I think that would be very
- 4 useful for us to do this on a routine basis across the
- 5 state, you know, looking at the technology.
- I think, again, as Mr. Herdegen mentioned,
- 7 many of our companies belong to different committees, the
- 8 EEI, other kinds of associations. We all deal with
- 9 different vendors in terms of what the product mix is that
- 10 is out there.
- 11 I think it would be very good to kind of do
- 12 some sharing around of the technology as we go forward.
- 13 That's pretty important.
- 14 COMMISSIONER CLAYTON: Where is this push
- 15 from DOE coming from? Why is DOE pushing this smartgrid
- 16 stuff with all this uncertainty?
- I mean, is it in favor of some vendor or the
- 18 vendors? I mean, what's -- if there is all this
- 19 uncertainty, the benefits associated with a smartgrid are
- 20 either not quantifiable or they're not there. Why is the
- 21 Federal government pushing this?
- 22 I mean, this is not -- it's not -- you know,
- 23 it's a relatively conservative administration. It's not
- 24 like they're doing it for some environmental cause.
- 25 I mean, why is that being pushed from DOE if

- 1 there is all this uncertainty and expense?
- 2 MR. ZDELLAR: Well, they probably don't
- 3 believe there is all that uncertainty to them. But I
- 4 think the people who are in the think tanks and perhaps
- 5 not in the field are looking at energy conservation as a
- 6 broad umbrella.
- 7 And this -- if you can get customers to
- 8 adjust their consumption habits, you can do some things
- 9 with conservation of energy and also mitigation of
- 10 building more construction in generation.
- I think that in some cases if you look
- 12 around the country and utilities have started to embrace
- 13 this whole thing, they're very high cost. They're in that
- 14 10 cents, 12 cents, 15 cents a kilowatt hour range right
- 15 now. And, you know, they're looking at, you know, some
- 16 ways to perhaps get some attention to the customers'
- 17 standpoint because of the cost basis.
- But, you know, where we are here in
- 19 Missouri, I think all of the utilities are pretty much
- 20 less than 7 cents average. That's hard -- that's hard to
- 21 get there.
- 22 COMMISSIONER CLAYTON: If energy was 10,
- 23 10 1/2 cents here in Missouri, would it make AMI more
- 24 attractive, smartgrid technology more?
- 25 MR. ZDELLAR: Well, it would only make it

- 1 more attractive if, in fact, customers are willing to
- 2 respond. I think in my mind that's the unanswered
- 3 question.
- 4 COMMISSIONER CLAYTON: Do they respond at
- 5 10 cents or 10 1/2 cents more than they would at 7?
- 6 MR. ZDELLAR: They may well.
- 7 COMMISSIONER CLAYTON: I mean, we could very
- 8 well be there --
- 9 MR. ZDELLAR: The other thing is -- you
- 10 know, and I've seen things around the country where people
- 11 have time -- have rates that were based on signals based
- 12 on energy costs, timely use rates, different times.
- 13 And customers may respond to that to a
- 14 point, but if it gets really hot, then they turn
- 15 everything on, and you're right back for -- to build the
- 16 capacity to serve that.
- 17 So I think where we are in Missouri right
- 18 now, all of the activity going on around what I'll call
- 19 inside the customer, behind the meter, I think we're far
- 20 better off to either do it on a pilot-type basis or really
- 21 watch others and see what they're doing.
- 22 And there is a number that have jumped out
- 23 and said they're making major commitments.
- 24 Commonwealth Edison in Chicago has made a
- 25 major commitment.

```
1 COMMISSIONER CLAYTON: I understand.
```

- 2 I think my greatest concern is if we do get
- 3 some bill out of Washington that increases our cost
- 4 because of the coal generation and we jump up to be
- 5 comparable to some of these more expensive states, that we
- 6 don't have anything ready to help mitigate that and then
- 7 we're going to be starting at ground level.
- 8 Is there anything we can be doing today in
- 9 preparation that is responsible, cost effective?
- 10 And I'm asking this based on reliability. I
- 11 don't want to get off and start talking about real-time
- 12 price. That's a different deal. But it does play a role
- 13 in reliability.
- 14 I mean, is there anything we can be doing
- 15 today?
- MR. ZDELLAR: As I mentioned, I think the
- 17 technologies that are out on the distribution system do
- 18 play in the reliability piece of it. So I think those are
- 19 the things we ought to be looking at.
- 20 COMMISSIONER CLAYTON: Mr. Beck, what do you
- 21 think of AMI, smartgrid stuff?
- 22 MR. BECK: I think there's some -- there is
- 23 some obvious benefits to AMI.
- It's kind of interesting that, you know, a
- 25 couple of our utilities did not put in AMR earlier, and so

1 that puts them in a different position than the utilities

- 2 that have it.
- The one thing that I'd say is that to
- 4 implement AMI you don't have to have every customer
- 5 automatically, immediately transferred to an AMI.
- 6 You could, for example, target the customers
- 7 who are interested in rates or programs that would require
- 8 that technology, put meters on those particular customers,
- 9 and the meters that those customers have could still be
- 10 used or -- or, you know, be phased out as -- as you go on.
- 11 So you wouldn't necessarily have to make a
- 12 full investment day one to move forward.
- 13 COMMISSIONER CLAYTON: Ms. Baker, you've
- 14 been sitting there for two hours. Do you have anything to
- 15 add?
- MS. BAKER: Not really.
- 17 COMMISSIONER CLAYTON: Does Public Counsel
- 18 support the majority version or the dissent version?
- 19 MS. BAKER: I've not been given an
- 20 indication that we support or oppose the dissent version.
- I believe that in the general concept of
- 22 rules like this, we are -- we are behind those. But I
- 23 don't think that Lewis Mills has had the ability to maybe
- 24 focus on these rules as much as he would like to given our
- 25 constraints within the size of our office.

```
1 COMMISSIONER CLAYTON: Well, I just want to
```

- 2 add, I am finished with my questions. This has been a
- 3 long exercise that began back in 2006. This is the final
- 4 leg of the trilogy.
- 5 And we're sitting through local public
- 6 hearings next door, much of the discussion about
- 7 reliability. We've been through reliability issues
- 8 elsewhere.
- 9 I certainly hope, even though I disagree
- 10 with my colleagues in approaching this, I do hope that we
- 11 get some reliability and the Missouri customers do receive
- 12 some confidence that service will either remain high or
- 13 will eventually get to be a high level of service, and I
- 14 hope everyone in the room is committed to do that
- 15 regardless of what version is voted out.
- So having said that, I will turn it back to
- 17 the judge and say thank you very much for your patience,
- 18 especially Mr. Beck.
- JUDGE DALE: Is there any other business
- 20 before us before I adjourn?
- 21 Seeing none, then we will adjourn.
- 22 Thank you.
- 23 WHEREUPON, the public hearing was adjourned.

24

| 1  | I N D E X                          |             |        |                |
|----|------------------------------------|-------------|--------|----------------|
| 2  |                                    | INDE        | Δ      |                |
| 3  | MITTINGCOO                         |             |        |                |
| 4  | WITNESSES                          |             |        |                |
| 5  | DANIEL I. BECK                     | 7. 1 1      |        | page           |
| 6  | Questions by Mr.                   | IIIIIams    |        | 7:1            |
| 7  |                                    | EVIITOTE TN | IDEN   |                |
| 8  |                                    | EXHIBIT IN  | IDEX   |                |
| 9  | Dubibit No. 1                      |             | MARKED | REC'D          |
| 10 | Exhibit No. 1<br>One-Page Document |             | 61:19  | 65 <b>:</b> 21 |
| 11 |                                    |             |        |                |
| 12 |                                    |             |        |                |
| 13 |                                    |             |        |                |
| 14 |                                    |             |        |                |
| 15 |                                    |             |        |                |
| 16 |                                    |             |        |                |
| 17 |                                    |             |        |                |
| 18 |                                    |             |        |                |
| 19 |                                    |             |        |                |
| 20 |                                    |             |        |                |
| 21 |                                    |             |        |                |
| 22 |                                    |             |        |                |
| 23 |                                    |             |        |                |
| 24 |                                    |             |        |                |
| 25 |                                    |             |        |                |

| 1  |  |
|----|--|
| 2  |  |
| 3  | CERTIFICATE OF REPORTER                                    |
| 4  |  |
| 5  | I, Patricia A. Stewart, RMR, RPR, CCR, a                   |
| 6  | Certified Court Reporter in the State of Missouri, do      |
| 7  | hereby certify that the testimony that appears in the      |
| 8  | foregoing transcript was taken by me to the best of my     |
| 9  | ability and thereafter reduced to typewriting by me; that  |
| 10 | I am neither counsel for, related to, nor employed by any  |
| 11 | of the parties to the action in which this hearing was     |
| 12 | taken, and further that I am not a relative or employee of |
| 13 | any attorney or counsel employed by the parties thereto,   |
| 14 | nor financially or otherwise interested in the outcome of  |
| 15 | the action.  |
| 16 |  |
| 17 |  |
| 18 |  |
| 19 | Patricia A. Stewart  |
| 20 | CCR No. 401  |
| 21 |  |
| 22 |  |
| 23 |  |
| 24 |  |
| 25 |  |