In the Matter of:

Union Electric Company d/b/a Ameren Missouri's 3rd Filing ...

EO-2018-0211 VOL. II

November 28, 2018



www.tigercr.com 573.999.2662

1	STATE OF MISSOURI
2	PUBLIC SERVICE COMMISSION
3	
4	
5	TRANSCRIPT OF PROCEEDINGS
6	On-The-Record Presentation
7	November 28, 2018
8	Jefferson City, Missouri
9	Volume 2
10	
11	
12	
13	In The Matter Of Union Electric) Company d/b/a Ameren Missouri's) File No. EO-2018-0211
14	3rd Filing To Implement) Regulatory ChangesIn Furtherance)
15	Of Energy Efficiency As Allowed) By MEEIA)
16	
17	NANCY DIPPELL, Presiding
18	SENIOR REGULATORY LAW JUDGE
19	RYAN A. SILVEY, Chairman DANIEL Y. HALL,
20	SCOTT T. RUPP, COMMISSIONERS
21	COMMISSIONERS
22	
23	REPORTED BY: Beverly Jean Bentch, CCR No. 640
24	TIGER COURT REPORTING, LLC
25	

```
1
                       APPEARANCES
     JAMES M. FISCHER, Attorney at Law
 2
            Fischer & Dority, PC
 3
            101 Madison, Suite 400
            Jefferson City, Missouri 65101
            573.636.6758
 4
             Kansas City Power & Light Company and GMO
      FOR:
     JOHN COFFMAN, Attorney at Law
            871 Tuxedo Boulevard
 6
            St. Louis, Missouri 63119
 7
            573.424.6779
             Consumers Council of Missouri
      FOR:
 8
     MICHAEL B. LANAHAN, Acting General Counsel
            301 West High Street
 9
            Jefferson City, Missouri 65102
            573.522.3304
10
            Missouri Division of Energy
      FOR:
11
     NATHAN WILLIAMS, Chief Deputy Public Counsel
12
            PO Box 2230
            Jefferson City, Missouri 65102
            573.526.4975
13
           Office of the Public Counsel
      FOR:
14
     KEVIN A. THOMPSON, Chief Staff Counsel
15
            200 Madison Street, Suite 800
            PO Box 360
            Jefferson City, Missouri 65102-0360
16
            573.751.4140
             Staff of the Missouri Public Service Commission
17
      FOR:
18
     ANDREW LINHARES, Senior Counsel
            3115 S. Grand Blvd.
19
            Suite 600
            St. Louis, Missouri 63118
2.0
            314.471.9973
      FOR:
             National Housing Trust and
21
             Tower Grove Neighborhood Community Development
             Corp.
22
     TIMOTHY OPITZ, Staff Attorney
            409 Vandiver Drive
23
            Building 5, Suite 205
2.4
            Columbia, Missouri 65202
            573.825.1796
           Renew Missouri
25
      FOR:
```

1	APPEARANCES (Continued)
2	L. RUSSELL MITTEN, Attorney at Law
3	Brydon, Swearengen & England PC 312 East Capitol Avenue
4	PO Box 456 Jefferson City, Missouri 65102-0456
5	573.635.7166 FOR: Union Electric Company d/b/a Ameren Missouri
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

PROCEEDINGS

JUDGE DIPPELL: Let's go ahead and go on the record. Good morning. This is November 28, 2018, and we're here today for an on-the-record stipulation presentation in Case No. E0-2018-0211, In the Matter of Union Electric Company, d/b/a Ameren Missouri's 3rd Filing to Implement Regulatory Changes in Furtherance of the Energy Efficiency as Allowed by MEEIA.

My name is Nancy Dippell and I'm the
Regulatory Law Judge presiding over this presentation.
We're going to begin by making entries of appearance.
Before we get started with that, if you would let us
know who you brought with you today as possible
witnesses that might give testimony. We talked before
we went on the record just about procedural items, and I
think we'll do a group swearing in of the people who
might testify. If you will identify those people and
then because of the technical nature I think the experts
might have more to say today than the attorneys. We'll
see if that's possible.

Let's begin with entries of appearance.

Ameren Missouri?

MR. MITTEN: Your Honor, appearing on behalf of Union Electric Company d/b/a Ameren Missouri is L. Russell Mitten, Brydon, Swearengen & England, 312 East

1	Capitol Avenue, Jefferson City, Missouri, 65102.
2	JUDGE DIPPELL: Do you have experts with you
3	today, Mr. Mitten?
4	MR. MITTEN: Yes. William Davis is here with
5	me today. If the Commission wants, he's available for
6	questioning.
7	JUDGE DIPPELL: Okay. Thank you. Commission
8	Staff?
9	MR. THOMPSON: Thank you, Judge. Kevin A.
10	Thompson for the Staff of the Missouri Public Service
11	Commission, Post Office Box 360, Jefferson City,
12	Missouri, 65102. With me today are Natelle Dietrich, J
13	Luebbert and John Rogers, also Brad Fortson, excuse me,
14	and Robin Kliethermes. More experts than I thought I
15	had.
16	JUDGE DIPPELL: Okay. Office of Public
17	Counsel?
18	MR. WILLIAMS: Nathan Williams appearing on
19	behalf of the Office of the Public Counsel and the
20	public. I provided my information to the court
21	reporter. And I have Dr. Goeff Marke available for any
22	questions or information the Commission may desire from
23	the Office of the Public Counsel.
24	JUDGE DIPPELL: Consumers Council of Missouri?
25	MR. COFFMAN: Yes. John B. Coffman

1	representing the Consumers Council of Missouri. The
2	court reporter has my information.
3	JUDGE DIPPELL: Kansas City Power & Light,
4	GMO?
5	MR. FISCHER: Yes. On behalf of KCPL and GMO,
6	James M. Fischer. I've given the contact information to
7	the court reporter.
8	JUDGE DIPPELL: Division of Energy?
9	MR. LANAHAN: Thank you, Your Honor. Michael
10	Lanahan on behalf of the Division of Energy, address 301
11	West High Street, Suite 680, Jefferson City, Missouri,
12	65102. And with us today are Mr. Martin Hyman and Ms.
13	Jane Epperson from the Missouri Division of Energy.
14	JUDGE DIPPELL: MECG asked to be excused and
15	that was granted. National Housing Trust?
16	MR. LINHARES: Morning, Your Honor. This is
17	Andrew Linhares appearing on behalf of National Housing
18	Trust, as well as Tower Grove Neighborhoods Community
19	Development Corporation. I'll make sure the court
20	reporter gets my information.
21	JUDGE DIPPELL: National Resources Defense
22	Council is also excused as is Spire. Renew Missouri?
23	MR. OPITZ: Thank you, Judge. For Renew
24	Missouri, I'm Tim Opitz and I've provided my information
25	to the court reporter

1	JUDGE DIPPELL: Did I miss anyone? All right.
2	Then what I'd like to do is begin by swearing in all of
3	the witnesses who might testify later. So if you would
4	just stand, Mr. William Davis, John Rogers, Robin
5	Kliethermes, J Luebbert, Brad Fortson, Dr. Marke, Martin
6	Hyman, Jane Epperson. Did I miss anybody?
7	MR. THOMPSON: Natelle Dietrich.
8	JUDGE DIPPELL: Natelle Dietrich. Anyone
9	else? If you would please raise your right hands.
10	(Witnesses sworn.)
11	JUDGE DIPPELL: You are all sworn. Thank you.
12	You may be seated. I will ask that if you speak that
13	you go ahead and let the court reporter know who you
14	are, identify yourselves and come to a microphone to
15	answer a question. You can use this one at the podium
16	or one at one of the counsel tables if you're near one.
17	So then I'd like to go ahead and begin. Can I
18	ask Ameren to begin with kind of a summary of the
19	presentation and where we are?
20	MR. MITTEN: Thank you, Your Honor. If it
21	pleases the Commission. I want to take a few minutes to
22	provide a high-level overview of the Stipulation and
23	Agreement filed in this case that if approved will
24	define the MEEIA programs Ameren Missouri will offer for
2.5	the next three to six years

Following my overview, Ameren Missouri and representatives of the other parties to this case will be available to answer questions from the Commissioners, if they have any.

2.5

Before I talk about any specifics, I'm going to provide some context for the stipulation that's been submitted for your approval. Ameren Missouri filed its MEEIA application on June 4 of this year. That filing consisted of hundreds of pages explaining in detail the terms of the Company's proposal, its costs and the benefits it would provide to customers.

The Company supplemented that filing with written surrebuttal testimony by three witnesses consisting of more than 150 pages of testimony and supporting schedules. I would also note the Company sought input from interested parties over the six months immediately preceding its filing.

Over the almost five-month period following the filing, the 11 non-Ameren Missouri parties conducted an exhaustive review of the Company's application. The Staff report alone was more than 75 pages long and was supplemented and supported by the filed testimony of six Staff witnesses.

Other parties in this case who filed testimony include the Office of the Public Counsel, the Division

of Energy, the National Housing Trust, Tower Groves
Neighborhood Community Development Association,
Consumers Council of Missouri, the National Resources
Defense Council and Renew Missouri.

I bring these facts to the Commission's attention for one purpose, to emphasize the process that ultimately led to the stipulation and agreement; that that process took place after all issues relevant to Ameren Missouri's MEEIA proposal had been fully vetted by all parties and after all parties had been given full opportunity to make known their views on those issues.

Not all parties signed this stipulation but no party objected to it. And under the Commission's rules, a non-unanimous stipulation that was not opposed may be treated as a unanimous stipulation. Having set the stage, I'd like to now outline some of the key features of the stipulation the parties are asking you to approve.

The specific programs that make up the proposed MEEIA plan are shown on page 3 of the stipulation and are discussed in the revised MEEIA plan which is attached to and incorporated into the stipulation. Although many of the programs shown there would be in effect for approximately three years from March 2019 through December 2021, low-income energy

efficiency programs would remain in effect from March 2019 through December 2024, a period of almost six years.

2.5

Under the stipulation, budgets for low-income programs have nearly tripled and programs have been added to reach single family homes, including mobile homes. The addition of new low-income programs and the agreement to allow those programs to remain in effect for almost six years allows a stronger focus on deeper energy savings that can take much longer to plan for and implement especially in the low-income multifamily sector.

COMMISSIONER HALL: Quick question there.

MR. MITTEN: Yes, Judge.

COMMISSIONER HALL: It's my understanding that the Company's original filed application was six years for all of the programs and a number of parties were not comfortable with the six-year time period and evidently everyone has agreed on three years but six years for the low-income programs. What is it about the low-income programs that make it so important that they be six years whereas all the others can still be three?

MR. MITTEN: I can't speak for all the parties. Ameren when it made its original filing believed a six-year term for all programs was

appropriate because it allowed for implementation of 1 2 programs that took longer time to develop. Because of 3 the objections expressed by some of the parties, we were willing to cut back to three years the time frame for 4 5 all programs except for low income. We still believe 6 six years is a good time frame, but in the spirit of 7 compromise we were willing to reduce all non low-income 8 programs to the three years that have been approved in 9 prior MEEIA cases. 10 COMMISSIONER HALL: My question is, and maybe 11 this is better directed at one of your witnesses, what 12 is it about the low-income program that make it so 13 unique that it needs the six years whereas the other ones can survive at three? 14 15 MR. MITTEN: With your permission, I will 16 defer that question to Mr. Davis. 17 COMMISSIONER HALL: Okay. Thank you. MR. DAVIS: This is William Davis from Ameren 18 Missouri. Commissioner Hall, I think that there's 19 20 interest in keeping the low-income programs in the 21 market even as we transition from one cycle to the next 22 but also Russ mentioned that some of these projects,

COMMISSIONER HALL: Relatively larger and

especially the multifamily projects, can be relatively

large and relatively slow to develop that pipeline.

23

24

2.5

relatively slower than other programs?

2.5

MR. DAVIS: That's correct. And given the issues that we face in terms of financing and other things for some of those larger projects to get the projects going that it made sense to have a longer time period to build pipelines that will continue to drive savings as opposed to what would typically happen which is over the first two and into the third program year try to build up as much savings as we can and then kind of start to cut off the program, because there's uncertainty about what's going to happen in the next three years. So having them available for a six-year time period prevents that from happening.

COMMISSIONER HALL: Okay. Thank you.

MR. MITTEN: In addition to performance metrics for low-income programs would be based on savings per property which is a new way to judge program performance to ensure meaningful savings are achieved for those customers who participate.

Lastly, the savings goal for multifamily properties increases to 15 percent per property which is almost enough savings to eliminate two monthly electric bills per year. This is a very tough performance goal and the Company looks forward to working with the parties to achieve it.

2.5

The agreed upon budget for all programs proposed in the stipulation, including the first 34 months of the low-income programs, is approximately \$195 million. This represents a reduction of more than \$32 million from the budget Ameren Missouri originally proposed for the comparable period, yet the stipulation retains nearly all the programs Ameren Missouri originally proposed.

Also, in an effort to avoid future disagreements, for the first time this stipulation is accompanied by a fully revised MEEIA plan that is consistent with the terms of the stipulation and full of other details about agreed upon programs. The stipulated plan includes several key elements to control costs for customers.

Although MEEIA rules allow actual expenditures above budget to increase by up to 20 percent before the parties are required to come back to the Commission for additional approval, the cap in the stipulation is 5 percent above budget. Performance metrics in the stipulation are limited to 125 percent performance on demand savings and 115 percent on energy savings.

The 115 percent cap on energy savings and the program cost variance cap of 5 percent work together to control throughput disincentive costs. And the

stipulation also reduces Ameren Missouri's earnings opportunity target by a full third from the amount originally filed for the 2019-2021 period to reflect the reduced budget targets and compromises reflected in the stipulation.

The stipulated plan includes demand response programs for both residential and business customers. The residential program is a unique comfort centric program that leverages smart thermostats installed in MEEIA's 2016 through 2018 program while the business program is an aggregator style program, which is a type of program that has been discussed in at least one of the Commission's pending workshop dockets.

The parties also agree to engage in collaborative discussions to explore opportunities to keep demand response programs implemented for the long term and by that I mean beyond 2021. Ameren Missouri has committed to hold at least three collaborative discussions on this topic and to file in this docket within 12 months of the stipulation's approval a report summarizing issues explored in those meetings with recommendations for actions necessary to maintain demand response for the long term.

The stipulation also commits the Company to hold additional collaborative meetings to systematically

explore additional energy efficient savings opportunities and to file by June 1, 2020 a report detailing the results of those meetings. The timing of those discussion fits with the Company's next market potential study and also the next integrated resource plan filing.

Because energy efficiency is a key component of the Company's planning process to meet future customer demand for electricity, the stipulation also obligates Ameren Missouri to differently analyze demand-side resources included within alternative resource plans as part of its 2020 IRP filing. That filing will also include additional analyses to support avoided transmission and distribution estimates to be utilized in the Company's next MEEIA filing.

In its testimony in this case, Consumers

Council of Missouri requested demographic and usage
information that could be used to further study how
energy efficiency programs affect and benefit low-income
customers.

As part of the stipulation, Ameren Missouri will file such data in the docket so it can be used by any party desiring to further study those issues. The stipulation requires the Company to request by December 31 of this year Commission approval of an updated

technical resources manual and an updated deemed savings table to reflect the results of program year 2017 EM&V results. This will ensure the MEEIA 2019 through 2021 plan starts with the latest EM&V results available.

2.5

Finally, the stipulation identifies three

Commission rules for which waivers may be necessary in order to implement the proposed MEEIA plan. Those rules are identified on page 9 of the stipulation along with the parties' rationale for the requested waivers.

As I indicated at the beginning of my summary, this stipulation and agreement was reached after a thorough review of all issues relevant to the MEEIA filing Ameren Missouri made in June of this year. It's a compromised solution that reflects the thoughtful consideration of the signatories, as well as the conscious decision of each non signatory party not to oppose the stipulation.

By adopting the stipulation, the Commission will ensure energy efficiency programs based on this thoughtful compromise will continue to be available to Ameren Missouri's customers beginning March 2019. The parties estimate the net benefit to all customers from the stipulated plan would be about \$324 million using the utility cost test and about \$219 million using the total resource cost test.

1	That's the spirit and purpose underlying the
2	stipulation, and it's on that basis the parties request
3	approval of the stipulation by the Commission. That
4	concludes my opening statement, Your Honor.
5	JUDGE DIPPELL: Thank you. Are there
6	additional Commissioner questions at this time?
7	COMMISSIONER HALL: Yeah.
8	JUDGE DIPPELL: Commissioner Hall?
9	COMMISSIONER HALL: Thank you. The DR
10	program, I guess I'll start with the residential demand
11	response program, this would be a retail tariff as
12	opposed to a wholesale tariff; is that correct?
13	MR. MITTEN: Correct.
14	COMMISSIONER HALL: And is it anticipated that
15	this will be Who's going to administer the
16	residential program? Are you going to do that yourself
17	or are you going to hire someone to do it?
18	MR. MITTEN: I believe we're going to hire,
19	but if I may again defer to Mr. Davis for details on the
20	program.
21	MR. DAVIS: Yes, we will hire someone to run
22	both the residential and business demand response
23	portfolio.
24	COMMISSIONER HALL: And so will the
25	participants in the residential DR program have to have

1	a smart meter?
2	MR. DAVIS: They won't be required to have a
3	smart meter. They will be required to have a smart
4	thermostat.
5	COMMISSIONER HALL: And how do you How many
6	customers do you anticipate enrolling in this program?
7	I saw a chart somewhere, but I can't remember now.
8	MR. DAVIS: That's a good question. I'd have
9	to look it up, but I'm thinking we had I'm thinking
10	we were targeting about 7,000 per year.
11	COMMISSIONER HALL: Incrementals of 7,000 and
12	14?
13	MR. DAVIS: Yes.
14	COMMISSIONER HALL: Can you explain to me the
15	concept of using as a baseline 50 percent of those
16	customers and then figuring out the savings compared

concept of using as a baseline 50 percent of those customers and then figuring out the savings compared with the other 50 percent? I think that's an interesting approach, but it's just not one I'm familiar with.

MR. DAVIS: Well, I'm not sure where you're seeing the 50 percent, but really the concept is that there needs to be a baseline. And the intent is that you have people who are in the program and so they know they may be called for demand response events, but we hold them out so when we call an event we have some

```
customers who are in the controlled group for measuring
 1
 2
     the demand savings of the program.
               COMMISSIONER HALL: Did I hallucinate the 50
 3
 4
     percent or isn't that in the --
               MR. DAVIS: That's what I was looking for in
 5
 6
     terms of where exactly that was.
 7
               MR. MITTEN: Do you recall where in the
 8
     stipulation that was, Commissioner Hall?
               COMMISSIONER HALL: I think it's in one of the
 9
10
     appendices.
11
               MR. DAVIS: It could have been in the report
12
     as well.
13
               MR. LUEBBERT: It talks about a partition, but
14
     I don't think it necessarily says 50 percent.
15
               THE COURT REPORTER: Could I have your name,
16
     please?
17
               MR. LUEBBERT: Yeah. Sorry. J Luebbert, PSC
     Staff.
18
19
               THE COURT REPORTER:
                                    Thank you.
20
               MR. DAVIS: It's page 8.
21
               MR. LUEBBERT: On page 8, I think you're
22
     referring to partitioning into two groups, but I don't
23
     think the two groups are necessarily 50 percent.
24
     will just be a controlled and a test group.
2.5
               COMMISSIONER HALL: That makes sense. So on
```

1	the business DR program, that is actually anticipated to
2	be something that will be bid into MISO?
3	MR. DAVIS: That is correct, in terms of the
4	aggregate portfolio itself, yes.
5	COMMISSIONER HALL: And it would be bid into
6	MISO for both capacity and energy?
7	MR. DAVIS: Right now I think we're looking at
8	it on the basis of capacity only is my recollection.
9	There may be some energy benefits associated with times
10	we call it but right now it's mostly capacity based
11	program.
12	COMMISSIONER HALL: Okay. Next line of
13	questions is I'm wondering if someone can walk me
14	through Appendix C which is the avoided costs.
15	MR. DAVIS: Appendix C is basically a
16	reflection of the same avoided costs that were used in
17	the Company's 2017 integrated resource plan. We just
18	have columns of the individual components that are
19	pretty normal for what we look at which is the avoided
20	energy.
21	COMMISSIONER HALL: Well, that I understand.
22	But go to avoided capacity and explain to me.
23	MR. DAVIS: Avoided capacity is really about
24	what I would call maybe avoided generation capacity. So
25	the capacity of generation resources to meet peak demand

requirements whereas avoided --1 2 COMMISSIONER HALL: How does that result in actual savings? How is that an avoided cost if it's a 3 4 plant that is up and running that -- well, it may not be 5 running but ratepayers are paying depreciation on it. How is that an avoided cost? 6 7 MR. DAVIS: Sure. Well, because we bid -- We 8 put all of our load in the market. So we have to buy capacity to meet those load requirements. By having 9 10 lower load, we have lower requirements to buy capacity. 11 COMMISSIONER HALL: Okay. So by "capacity," 12 you are referring to the capacity market? 13 MR. DAVIS: That's correct. COMMISSIONER HALL: Okay. Avoided 14 15 transmission? MR. DAVIS: Avoided transmission is an 16 estimate of the avoided investment needs in the 17 18 expansion of the transmission system over a long period 19 of time given the fact that we are reducing load so 20 there would be less requirements for transmission infrastructure and the same with distribution. 21 COMMISSIONER HALL: Okay. So on the 22 23 transmission, you're referring -- So that's transmission 24 that you will not need to build or at least transmission 2.5 that you will not need to pay for?

1	MR. DAVIS: That's correct. It's mostly about
2	the investment in the infrastructure. It's more about
3	the build requirements.
4	COMMISSIONER HALL: It has nothing to do with
5	transmission lines that are already up and cost
6	allocated. We're talking about new transmission?
7	MR. DAVIS: That's correct. Some of those
8	existing transmission costs are baked into the avoided
9	energy costs. Actually as we went through the case we
10	did find some transmission costs that were excluded from
11	that avoided energy cost that ultimately just were
12	included in my testimony but aren't included in the
13	numbers here.
14	COMMISSIONER HALL: And that's actually where
15	I was confused because if we're talking about
16	transmission lines already built, transmission lines
17	that are already cost allocated, Ameren customers using
18	less energy doesn't reduce what all Ameren customers
19	have to pay for that transmission line. So I'm confused
20	as to where the avoided transmission costs are.
21	MR. DAVIS: That's why that avoided
22	transmission cost that you see separated out is about
23	investment in the infrastructure.
24	COMMISSIONER HALL: In new infrastructure?
25	MR. DAVIS: That's correct. The avoided

1	transmission expense that we may get from let's say
2	MISO, for example, to the extent our load is lower than
3	it otherwise would be, then our allocation percent would
4	go down.
5	COMMISSIONER HALL: But not on MVPs. Which
6	transmission projects are you talking about?
7	MR. DAVIS: Well, I'm just talking about maybe
8	like load losses, transmission losses, some things like
9	that.
10	COMMISSIONER HALL: And then on avoided
11	distribution, it's the same concept that this would be
12	investment that you do not need to make?
13	MR. DAVIS: That's correct.
14	COMMISSIONER HALL: Okay. I have a couple
15	more questions about the low-income programs. First of
16	all, I very much appreciate their inclusion in this
17	settlement, but what I don't understand is are there
18	increased incentives for, say, a thermostat or for
19	appliances, et cetera. Are there increased incentives
20	compared to non low-income customers?
21	MR. DAVIS: Yes, quite a bit increase.
22	COMMISSIONER HALL: Where is that explained?
23	MR. DAVIS: Give me just a moment. Just bear
24	with me. I'm just going to put together an example so
25	we can see the difference.

I'm looking in particular at Appendix D. 1 2 looking at page 4 and page 5 in particular. 3 Appendix D are the incentive ranges because as we get closer to implementation we zero in on the exact 4 5 incentive we expect to offer. But even just looking at 6 the ranges, you can see some differences. And I just 7 was going to pick on one of the ones I saw first which 8 was the ductless air-conditioner. 9 COMMISSIONER HALL: I'm sorry? You're in 10 Appendix B? 11 MR. MITTEN: D. 12 MR. DAVIS: D as in dog. 13 COMMISSIONER HALL: I apologize. Okay. 14 MR. DAVIS: So for example, any measure that 15 was on both lists we could look at. I just happen to pick ductless -- AC, which is ductless air-conditioner. 16 17 You see on page 4 you have a range of \$100 to \$800. 18 our expected incentive will be in that range. But on 19 page 5, you have the same measures but with a different 20 range and you'll see there for the ductless AC 200 to 21 full cost. So in a lot of cases we'll see the incentive 22 come in a lot higher. Full cost isn't just incremental 23 cost. It may be the cost to install, which would include labor as well. 24 COMMISSIONER HALL: Okay. And then could you 2.5

explain to me the multifamily low-income program? I understand trying to facilitate financing and one-stop shopping, et cetera, et cetera, but what are the increased incentives there?

2.5

MR. DAVIS: Well, we're going through that. In fact, we're largely redesigning that program, because it's a difficult market because you have the tenants versus the landlord situation in terms of who pays the energy cost. Part of it is dealing with that. The way we anticipate this working is building packages of savings which include lights all the way up to maybe heating and cooling upgrades and provide incentives more like a custom project so cents per kilowatt hour based on how those packages are built up. So the more savings that the property owner may subscribe to the more incentives that that customer would get.

I was looking at here really quickly to see where we see that on here. For example, if you were to look at page 6, page 6 is where you see some of those ranges and they change because, for example, I'm looking at the HVAC measure, which is about right in the middle, and you see a measured incentive range of 5 cents to 30 cents a kilowatt hour. That's from a program design standpoint for customers that were doing heating and cooling upgrades that they would get a higher cents per

kilowatt hour for that type of project.

2.5

COMMISSIONER HALL: Okay. Next line of questions. What is Ameren going to be doing differently in conjunction with Staff and the other parties as it relates to the coordination of IRP and MEEIA? I understand from looking at some testimony that that was kind of an important issue. It's an important issue at least to me. And I appreciate the interest in trying to coordinate those better, but I can't quite understand what it is that has been agreed to.

MR. DAVIS: I think it's going to happen in a couple different ways, and it's going to start with our new market potential study. So we've sent out the request for proposal for that already, but how we build that plan up and the market research we do, number one, is we're working as a collaborative to actually define the scope of what that primary market research is. That's the number one way we'll be working differently together.

Even as we go through that going into the integrated resource plan we're going to build alternative resource plans in a different way. What we've done in the prior integrated resource plans is take that portfolio from our market potential study and use that as an alternative resource plan. What you see

1	reflected in here as a way of doing that differently is
2	what we call the dynamically optimized portfolio. What
3	we're going to do is build new alternative resource
4	plans that build a demand-side management portfolio from
5	bottom up based on resource needs in the capacity
6	position. That's a totally way of doing it. We're
7	going to have to work as a group as we start to build
8	those alternative resource plans probably in early 2020
9	to figure out exactly what that means and how we're
10	going to do it. It's going to be done in a couple
11	different ways. We haven't done it that way yet.
12	COMMISSIONER HALL: Is that something that
13	other utilities in other states have been doing for
14	awhile?
15	MR. DAVIS: Not that I'm aware of.
16	COMMISSIONER HALL: Who is going to be doing
17	the EM&V?
18	MR. DAVIS: Right now we're in discussions
19	with a company called Opinion Dynamics. We're working
20	through exactly who's going to do it. We're going
21	through that process as we work towards approval and
22	execution of the plan.
23	COMMISSIONER HALL: Does the stipulation
24	require a third-party independent EM&V?
25	MR. DAVIS: I don't think the stipulation

does. I think the Commission rules do. 1 2 COMMISSIONER HALL: I thought that there was at some point there was -- that was a contested issue as 3 to whether or not Ameren could do it itself or whether 4 it needed a third party. 5 6 MR. MITTEN: I believe the stipulation calls 7 for collaboration on improvements in the EM&V process 8 going forward. MR. DAVIS: Maybe, Commissioner Hall, you're 9 talking about the cost effectiveness analysis? 10 11 COMMISSIONER HALL: Uh-huh. 12 MR. DAVIS: Is that in particular again? 13 would expect that to go through Opinion Dynamics. 14 may decide to subcontract that out, but actually we're 15 going to also have that done by our evaluator for 16 program year 2018 as well. 17 COMMISSIONER HALL: I think my last question 18 for the Company, which is a question I'll also be asking 19 the Staff and maybe some of the other parties as well, 20 and I believe that you alluded to this in your opening, 21 but can you explain to me how this stipulated program --22 stipulated-to program is beneficial to all customers, 23 even those customers who are not taking advantage of the 24 programs?

I can.

MR. MITTEN:

2.5

First of all, let me talk

about the direct benefits. We believe based upon the data that we've analyzed that since I believe 2009 approximately 70 percent of Ameren Missouri's customers have participated in one or more of its energy efficiency programs.

As far as the other customers are concerned, they benefit in a number of ways. First of all, to the extent we're able to defer investment in generation and in transmission and distribution, those investments are not going to show up in the rate base that's used to set rates. So the rates for customers would be lower than they otherwise would be.

I think Mr. Davis mentioned a moment ago in terms of what we would have to buy from MISO in terms of capacity and actual energy. To the extent our needs in those areas are reduced, all customers would benefit from that lower level of expense as well.

COMMISSIONER HALL: Ameren is long on capacity. So in the capacity market it currently makes money. So is the assumption that it will make more money and that's the benefit at least on generation?

MR. DAVIS: In the short term, that is correct. In terms of Ameren making more money, it's reducing costs to customers that what happens, but really what we saw is also that these programs

especially with the focus on long-lived measures which is in the agreement and in the earnings opportunity performance metrics that the programs will also influence the future capacity needs and in addition impact the investment and transmission and distribution over the long term.

2.5

COMMISSIONER HALL: The last time Ameren was before this Commission with regards to MEEIA, and there was an order issued by the Commission, the Commission made it very clear that there needed to be a reduction in supply-side investment connected to any kind of performance incentive.

I don't see that the parties have taken that to heart in the settlement, or am I missing something?

MR. MITTEN: There isn't a specific reduction in supply side that's included as part of the stipulation, no.

COMMISSIONER HALL: Does someone want to spin that in a way that is of some value to the stipulation? I appreciate the honesty, though, I must say.

MR. DAVIS: Commissioner Hall, I just wanted to reiterate a point I made earlier which was in the earnings opportunity performance metrics, we have one of the metrics is very heavily weighted towards the peak demand savings on long-life measures, specifically

measures of 15 years or more and the belief was that 1 2 focusing on those measures increases the likelihood of the impact on future investment, specifically in 3 4 generation resources. 5 MR. MITTEN: I would also add that I think the 6 parties are in agreement that there are benefits to all 7 customers based upon the plan that's being proposed in 8 the stipulation even though there is not a specific 9 reduction in supply-side resources. 10 MR. LUEBBERT: This is J Luebbert. Just to 11 add on to that, I think the agreement that we made 12 regarding collaboration with demand response over the 13 long term also goes toward that deferral of the 14 supply-side resource. And just to echo what Bill said, 15 focusing on those long-term assets as far as the 16 earnings opportunity and the program design went a long 17 way as well. 18 COMMISSIONER HALL: Okay. I have no further 19 questions. Thank you. 20 MR. HYMAN: If I may, Commissioner. I think 21 -- sorry, Martin Hyman. 22 JUDGE DIPPELL: Can you maybe come forward, 23 Mr. Hyman, so the -- Thank you. MR. HYMAN: Get to sit next to Bill. I think 24 2.5 from the Division's perspective there are a number of

2.5

benefits to all customers. The first and most obvious being those avoided costs both in terms of the short-term avoided capacity and energy payments as well as those long-term deferrals or reductions in investments. There are a number of others that I would point to that maybe aren't directly quantified here such as giving customers better control over their bills, the ability to participate in these programs. They added planning flexibility for the utility.

DSM programs give the utility the ability to more reasonably look at things such as early generation retirements, which was something that you see in their IRP filing. They looked at some scenarios with Meramec, I'm sure I'm butchering that, retiring a few years earlier in conjunction with the RAP-level portfolio. And then there are just all of the non energy benefits that are there as well such as reduced emissions. So that from our perspective there are a lot of benefits to all customers.

to the Commission question at this point? Ms. Dietrich?

MS. DIETRICH: Natelle Dietrich, Commission

Staff. I would also add, Commissioner Hall, that for

Staff one of the key provisions was the reduction for

most of the programs from six years to three years which

JUDGE DIPPELL: Are there any other responses

allows the Commission to review all this in a more timely manner recognizing the rapidly changing industry and technology.

2.5

JUDGE DIPPELL: Mr. Marke or Dr. Marke?

DR. MARKE: Geoff Marke, OPC, G-e-o-f-f.

Thank you. One thing that I would add is I think there is benefit in not having to start or cease a program in its entirety. So the fact that we are continuing programs we're obviously operating in a dynamic world, things are changing, and I think there's a recognition that when we revisit the IRP in a couple years that we might be seeing something very different. The opportunity to move forward with a demand response in any different manner, perhaps more aggressively, would be easier given the fact that we've got programs in place as opposed to having to start from scratch.

JUDGE DIPPELL: Mr. Coffman?

MR. COFFMAN: Just one more point of clarification. At least I hope it is. This is really more in response, I guess, to Commissioner Hall's initial question about the low-income programs. It's our interpretation of the stipulation that while it preapproves the low-income programs in the original application for a period of six years, it would not preclude this Commission nor preclude parties from

1	proposing additional low-income programs three years
2	from now in the case that will be filed in 2021. We
3	believe it's very important that the Commission review
4	this and that there's public accountability at least
5	every three years. So that's very important to us and
6	the new tracking which Ameren has been so good to work
7	with us on to track the impact on low-income families
8	over the next three years we hope to bring back to the
9	Commission and show in some graphic ways in three years
10	and hopefully that will guide decisions at that point.
11	I just want to make it clear that at least as far as we
12	understand, if someone else disagrees they can speak up
13	later, but it's our understanding that there would be an
14	opportunity in three years to look at the low-income
15	programs. While these particular programs would be
16	going on for six years, there is the opportunity to look
17	at new or different programs as well in three years.
18	MR. MITTEN: The Company concurs with
19	Mr. Coffman's interpretation.
20	JUDGE DIPPELL: Are there any other questions
21	for Ameren at this specific time from the Commissioners?
22	Thank you, Mr. Mitten.
23	Would Staff like to make any presentation or
24	add any comments about the stipulation?
25	MR. THOMPSON: I don't have a presentation,

1	Judge. I can simply say that Staff opposed the Ameren
2	application initially as is reflected by Staff's
3	extensive rebuttal report; but through negotiation,
4	Staff has signed onto the stipulation and agreement
5	because Staff's concerns have been addressed.
6	Attached to the stipulation is a revised
7	report, which is frankly a complete rewrite of the
8	original proposal. Thank you.
9	JUDGE DIPPELL: Thank you. Commissioners,
10	were there any questions for Staff at this point?
11	Commissioner Hall?
12	COMMISSIONER HALL: Thank you. Mr. Thompson,
13	you say that Staff's concerns were completely addressed
14	in the stipulation?
15	MR. THOMPSON: I don't think I said
16	completely. I think I said that they were addressed to
17	the point where Staff was able to join in the
18	stipulation and support the program.
19	COMMISSIONER HALL: Can you explain to me how
20	the stipulation addressed the concern raised in
21	Mr. Luebbert's testimony and Ms. Dietrich's testimony
22	and in the rebuttal, in Staff's rebuttal report
23	concerning avoided cost estimates related to supply-side
24	resources?
25	MP THOMPSON: I helieve Mr Luebhert can

1	address that for you, Mr. Commissioner.
2	MR. LUEBBERT: J Luebbert, PSC Staff.
3	Specific question about the avoided capacity cost, is
4	that?
5	COMMISSIONER HALL: Yes.
6	MR. LUEBBERT: Okay. So Staff recognizes that
7	there is potential revenues to be gained from due to
8	Ameren's participation in MISO because of the capacity
9	market.
10	COMMISSIONER HALL: And you were unaware of
11	that before?
12	MR. LUEBBERT: No, I wasn't unaware of it, but
13	the assumption that there's an avoided cost to me is
14	slightly different than a missed opportunity for
15	revenue. There is a benefit there. And through, if you
16	read Matt Michels' surrebuttal testimony, their
17	market-based approach does seem to be reasonable because
18	of that avoided or that potential revenue.
19	COMMISSIONER HALL: So are you saying, in
20	essence, that Staff was persuaded by the Company on this
21	issue or was there something that was changed in the
22	stipulation to address your concern?
23	MR. LUEBBERT: I'd say I don't think
24	there's anything in the stipulation that changes my
25	position on that. It was more so the market provision

```
section of the rule that I guess from my perspective I
 1
 2
    wasn't looking at it from that perspective in rebuttal
 3
    testimony.
               COMMISSIONER HALL: Do you believe that the
 4
    performance incentive is connected to a reduction in
 5
 6
     supply-side investment?
 7
               MR. LUEBBERT: There is -- Through the program
 8
    design looking at those long-term or long-lived measures
 9
     and really driving the investment towards those, there
10
     is modeled a supply-side deferral.
11
               COMMISSIONER HALL: I'm looking at the seven
12
    metrics used in the earnings opportunities. Can you
    point out to me where that is?
13
14
               MR. LUEBBERT: Give me just a moment. You're
15
     looking at Appendix N?
16
               COMMISSIONER HALL: Actually I'm looking at
17
     the revised plan.
18
               MR. LUEBBERT: I don't have that in front of
19
    me.
20
               COMMISSIONER HALL: I'll look wherever you
21
     tell me to look.
22
               MR. LUEBBERT: Okay. If you look at Appendix
23
    N for the portfolio level.
24
               COMMISSIONER HALL: Appendix N to the
25
     stipulation?
```

```
MR. LUEBBERT:
 1
                              Yes.
 2
               COMMISSIONER HALL:
                                   И3
 3
               MR. LUEBBERT: N as in Nancy. It's an Excel
     file.
 4
 5
               COMMISSIONER HALL: I don't have that.
     Explain it to me. I don't have it in front of me.
 6
 7
               MR. LUEBBERT: I can give you a copy.
 8
               COMMISSIONER HALL: You might need it to
 9
     explain it to me.
10
               MR. LUEBBERT: So the final three rows in
11
     that, I guess three of the final four because there's a
12
     total line, are energy efficiency coincident megawatts
     for those measures with lives between 10 and 14 years.
13
14
     The next row down are the energy efficiency coincident
15
     megawatt reduction for measures with 15 years and longer
16
             And those are evaluated either in the final year
     lives.
17
     of that measure life or in the 15th year depending on
18
     which category that falls under. And then that final
19
     metric would be the demand response megawatt reductions,
20
     which as I said earlier the discussion toward having
21
     some sort of understanding on how to continue demand
22
     response other than just in three-year segments, that
23
     would also lead to a further deferral of a supply-side
24
     investment potentially.
               COMMISSIONER HALL: So it's an indirect
2.5
```

relation to a deferral of a supply-side investment. 1 2 It's not an actual deferral of a supply-side investment. I'm not critical because of that distinction, because I 3 don't know how you would actually design it the way I'm 4 5 describing. So it seems like what you're doing and what 6 the parties have agreed to is an attempt to comply with 7 the Commission's prior order that there has to be a 8 connection to a supply-side -- to a reduction in 9 supply-side investment without actually doing it 10 directly. 11 MR. LUEBBERT: Let me clarify. 12 COMMISSIONER HALL: Does that make sense to you because I'm not sure it made sense to me. 13 14 MR. LUEBBERT: I think I understand but let me 15 clarify. What you're -- I think the scenario that 16 you're discussing where you would defer an actual 17 supply-side investment would be if you were to need a 18 supply-side investment today. 19 COMMISSIONER HALL: Or retire something early. 20 MR. LUEBBERT: Right. And in this scenario, I 21 think yes, your assumption is right that we're saying 22 there's a potential supply-side investment at a given 23 date in the future and that would be deferred. So you 24 would essentially avoid that investment. 2.5 COMMISSIONER HALL: My memory is that this

1	plan includes retiring one facility two years early, is
2	that correct, from 36 to 34?
3	MR. LUEBBERT: It would be avoiding I
4	believe it's avoiding investment of a combined cycle
5	unit. The assumption for the retirement date I believe
6	remained the same between the base plan and the MEEIA
7	plan.
8	MR. DAVIS: Commissioner Hall, if I may. Just
9	thinking about your question and the way we've analyzed
10	it, from the testimony I provided most of that analysis
11	was based on the six-year plan. One of the things we
12	explored quite a bit at least when we were looking at a
13	six-year plan and successive MEEIA plans was the fact
14	that they all contribute to deferrals of those
15	supply-side resources, and at least from my perspective
16	there's one of the things we were discussing in
17	testimony is about how you attribute those deferrals to
18	a particular MEEIA plan. So for example, this
19	COMMISSIONER HALL: That's the relay metaphor
20	that you used, right?
21	MR. DAVIS: That's correct. So this
22	particular example we're talking about a three-year plan
23	and with the focus on 15-year life, this plan, and I
24	don't think we actually did the alternative resource
25	plan for just the three-year plan. So it may have

1	deferred that 2034 combined cycle plan, you know, two			
2	years something in that time from year, two years. Part			
3	of the reason why I think you see kind of that indirect			
4	connection is that with the energy efficiency portfolios			
5	from the past and even moving forward that it's the			
6	continuation and sustained investment in energy			
7	efficiency that really is what accomplishes those			
8	deferrals and maximizes that deferral benefit.			
9	COMMISSIONER HALL: Okay. Thank you.			
10	JUDGE DIPPELL: Thank you. Are there any			
11	other Commissioner questions for Staff at this time?			
12	All right then. Office of Public Counsel, did you have			
13	anything you would like to add at this time?			
14	MR. WILLIAMS: No, I do not, but Dr. Marke is			
15	available should the Commission have any further			
16	questions of him.			
17	JUDGE DIPPELL: Are there additional questions			
18	for the Office of the Public Counsel? Commissioner			
19	Hall?			
20	COMMISSIONER HALL: Probably just a few. What			
21	did OPC get out of the stipulation?			
22	DR. MARKE: I think in terms of the			
23	stipulation we were largely in alignment with Staff			
24	throughout. We relied on Staff's analysis quite a bit.			
25	In terms of specific provisions, it was a priority for			

us that the earnings opportunity be reduced, we believe that was, to a level we were comfortable with.

2.5

We had some productive conversations in terms of EM&V moving forward that I think that we've got a collective understanding. When you're talking about money this large and with the understanding that MEEIA is an ongoing process, there's a pre-stage, continuous stage and a future stage. We're still dealing with MEEIA Cycle 2. We're in MEEIA Cycle 3. Almost immediately they're going to be planning for MEEIA Cycle 4.

All of those interdependencies mattered and we felt like we made progress along those lines. We had a specific carved out request regarding prepay and it being treated not as a MEEIA measure or a program for future consideration. And I believe its Section 9 on the stipulation that speaks to that.

I think the focus on demand response and long-lived measures, again you've heard this a lot, about 15 years, but that is the trend that you're seeing in a lot of utilities. You're seeing, quote, unquote, deeper savings that are being realized and that would be reflected and it's reflected in the earnings opportunity.

We very much support the low-income programs.

2.5

We feel like it's a very positive direction, and I'm very optimistic about Consumers Council's request which included an energy efficiency equity based line, a concept pioneered by Dr. Tony Reames out of the University of Michigan. Dr. Reames had previously done work on the City of Kansas City that looked at energy efficiency adoption rates across zip codes and income classes.

We feel like being able to visualize that just like on a GPS mapping level we'd have a better understanding of really accomplishing what you were talking about before which is getting the savings for all customers and ensuring that. Right now it's always been a concern that the energy efficiency programs have a degree potentially of overaggressive nature because a lot of people don't have that up-front capital to adopt those measures.

So we're hoping that that will shed some new light and move forward with the IRP process.

COMMISSIONER HALL: Was Public Counsel pushing for a reduction in program costs?

DR. MARKE: Initially we were largely against the program as it was initially designed. We felt -- I think at a very, very high level we were very skeptical about six years -- the six-year program. And we reached

1	out to feedback from outside parties and nationally
2	recognized groups. ACEEE comes to mind and whether or
3	not six years made sense. The response that we
4	overwhelming got was no, that we needed you needed to
5	be able to be flexible and a lot can happen in three
6	years so could we be in a position where if the market
7	fundamentally changes and we need to be more aggressive,
8	absolutely, but the concern there was being locked into
9	six years wasn't good. Did we move for a lower budget?
10	We did.
11	And again, I believe that's largely and
12	that's largely borne out by I would argue allocating
13	those costs towards those long-life measures as opposed
14	to lighting measures or the shorter life measures.
15	That's a net win from our perspective.
16	COMMISSIONER HALL: Thank you.
17	DR. MARKE: Thank you.
18	JUDGE DIPPELL: Any other questions for Public
19	Counsel? Is there anything further from the Consumers
20	Council? Mr. Coffman?
21	MR. COFFMAN: Not at this time. We support
22	the stipulation and feel like it addresses all of our
23	issues. We're very happy with it.
24	JUDGE DIPPELL: Were there any questions for
25	Mr. Coffman? Kansas City Power & Light, anything to

add? 1 2 MR. FISCHER: Judge, we have no opening 3 statement. I would just say that we are a nonsignatory 4 but are pleased to see the efforts of the parties to 5 resolve the issues in this case and I'll leave it at 6 that. 7 JUDGE DIPPELL: Anything for Mr. Fischer? 8 COMMISSIONER HALL: If Mr. Caisley was here 9 maybe -- If Mr. Caisley was here maybe but no, no 10 questions. 11 MR. FISCHER: Okay. Thank you. 12 JUDGE DIPPELL: Division of Energy? MR. LANAHAN: Yes, Your Honor. As stated, the 13 14 Division of Energy supports this stip, and I'll defer to 15 Mr. Hyman to provide some more elaboration into the 16 reasons why. 17 MR. HYMAN: Thank you. I think there are a 18 number of policy goals that were accomplished with the 19 stipulation that got us to the point where we were 20 willing to sign on. The MEEIA funding level is 21 increased over Cycle 2 and thus low-income programs will 22 run for six years in Cycle 3 to enable deeper savings. 23 Another important point for us, and Ms. Epperson can 24 speak to this more if needed, is that CHP will continue

to be an eligible measure under the business custom

2.5

program and Ameren has also agreed to notify us of customers that are interested in CHP, or combined heat and power, excuse me.

2.5

There's going to be support from the Company for both a circuit rider program and building operator certification training.

Circuit rider, if you're not familiar with it, is basically someone who would go around the Ameren territory and help local building officials, builders, et cetera, with code compliance. This grew out of a study that we did in conjunction with the Midwest Energy Efficiency Alliance, the other MEEA, and Pacific Northwest National Labs that found a surprising rate of noncompliance on a number of measures in the new residential construction sector.

And then building operator certification training, or BOC, is basically what it sounds like. Helping those who are in charge of building operations and maintenance run more efficiently. The stipulation lastly includes a mechanism where stakeholders will get together and discuss new savings opportunities kind of like how we had in Cycle 2. We were pleased with that and the outcomes of that.

We're hopeful that stakeholders can work towards implementing additional measures and programs in

1	order to pursue all cost effective savings under the
2	MEEIA statute. That was mostly what I had.
3	JUDGE DIPPELL: Thank you. Are there
4	Commissioner questions for Mr. Hyman?
5	COMMISSIONER HALL: No questions. Thank you.
6	JUDGE DIPPELL: Thank you, Mr. Hyman.
7	Is there anything else from National Housing
8	Trust and Tower Grove?
9	MR. LINHARES: Yeah, just briefly, Judge. I
10	would just like to say comment specifically on the
11	low-income multifamily program, which myself and my
12	clients have been able to work with the Company very
13	closely over a number of months. This program really
14	represents an affirmation of the success of the
15	multifamily program in Cycle 2 and an expansion on that.
16	There's a number of things that make us really
L7	confident that this program will be more successful and
18	will be able to accomplish the goals because it is a
19	hefty expansion over the Cycle 2 program. Some of those
20	things are that we are really going to be doubling down
21	on the one-stop shop approach here.
22	The Company is going to be able to, and you
23	can see this in the report, the description of the
24	multifamily program. The Company is going to be able to
25	do everything from hiring, suggesting and hiring

contractors for the building owners and property managers, figuring out the financing, packaging all of the available rebates for them so they don't have to apply separately and have it be confusing. We think this is just really going to streamline the delivery of the program for this segment of customers that need it the most and have been traditionally left out of efficiency programs.

2.

2.2

And then the last part that I will highlight, which has already been mentioned, but in the earnings opportunity portion of this filing there's a specific term for the multifamily -- the low-income programs in general and the multifamily program specific where we're really going after deep savings for each building. So the Company specifically incentivized to achieve a high percentage of savings per participating customer. This gets us beyond direct install light bulbs and faucet aerators. We're going to be really working on building envelope and appliance replacement. This is where you get deep savings and you can make a real difference in tenants and building performance.

We fully support the stipulation. We really
-- We're happy to work with the Company closely on that
program. I'd be happy to answer any questions on that.

JUDGE DIPPELL: Are there any questions for

1	National Housing Trust and Tower Grove Neighborhood
2	Community Development Corporation?
3	COMMISSIONER HALL: No questions. Thank you.
4	JUDGE DIPPELL: All right. Thank you. Is
5	there anything from Renew Missouri?
6	MR. OPITZ: Thank you, Judge. I'll just say
7	that Renew Missouri supports the stipulation and was a
8	signatory to it. Thank you.
9	JUDGE DIPPELL: Any questions from the
10	Commissioners?
11	COMMISSIONER HALL: No questions.
12	JUDGE DIPPELL: Is there any other party that
13	would like to make any final remarks?
14	Seeing none. Is there anything further from
15	the Commission? Commissioner Hall?
16	COMMISSIONER HALL: Very briefly. I want to
17	congratulate the parties for putting this together. I
18	think this is a tremendous agreement. I think there's a
19	number of extremely valuable components. The demand
20	response program is excellent. The low-income programs
21	are excellent. Connecting the IRP better with MEEIA
22	going forward is long overdue.
23	I personally wish there had been a little bit
24	more of a focus on a reduction in supply-side investment
25	tied to the performance incentive, but I understand the

1	difficulty in doing that and appreciate the parties'				
2	attempt to comply with that concern raised in the				
3	Commission's prior order. So I fully anticipate				
4	supporting approval of the stipulation and again				
5	congratulate the parties for putting it together.				
6	JUDGE DIPPELL: Anything further from the				
7	Commission? All right. Then I believe that that will				
8	conclude our presentation today and we can go off the				
9	record. Thank you all very much.				
10	(Off the record.)				
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

1	CERTIFICATE OF REPORTER
2	
3	I, Beverly Jean Bentch, RPR, CCR No. 640,
4	Certified Court Reporter with the firm of Tiger Court
5	Reporting, LLC, within the State of Missouri, do hereby
6	certify that I was personally present at the proceedings
7	had in the above-entitled cause at the time and place
8	set forth in the caption sheet thereof; that I then and
9	there took down in Stenotype the proceedings had; and
10	that the foregoing is a full, true and correct
11	transcript of such Stenotype notes so made at such time
12	and place.
13	Beverly Jean Bentch
14	
15	Beverly Jean Bentch, CCR No. 640
16	
17	
18	
19	
20	
21	
22	

23

24

25

	2021 24:25 29:17 31:3		adopt 58:16
\$	49:2	8	adopting 31:18
\$100 39:17	2024 25:2	8 34:20,21	adoption 58:7
\$195 28:3	2034 56:1	, 	advantage 43:23
\$219 31:24	28 19:3	9	affect 30:19
\$32 28:4	3	9 31:8 57:16	aggregate 35:4
\$324 31:23			aggregator 29:11
\$800 39:17	3 24:20 57:9 60:22	Α	aggressive 59:7
	30 40:22	ability 47:0.40	aggressively 48:14
1	301 21:10	ability 47:8,10	agree 29:14
1 30:2	31 30:25	absolutely 59:8	agreed 25:19 28:1,13
10 53:13	312 19:25	AC 39:16,20	41:10 54:6 61:1
10 53.13 11 23:19	34 28:2 55:2	accompanied 28:11	agreement 22:23
115 28:22,23	36 55:2	accomplished 60:18	24:7 25:8 31:11 45:2 46:6,11 50:4
12 29:20	360 20:11	accomplishes 56:7	ahead 19:2 22:13,17
125 28:21	3rd 19:6	accomplishing 58:11	air-conditioner 39:8,
14 33:12 53:13		accountability 49:4	16
	4	ACEEE 59:2	alignment 56:23
15 27:21 46:1 53:15 57:20	4 23:8 39:2,17 57:11	achieve 27:25	Alliance 61:12
15-year 55:23		achieved 27:18	allocated 37:6,17
150 23:14	5	actions 29:22	allocating 59:12
15th 53:17	5 28:19,24 39:2,19	actual 28:16 36:3	allocation 38:3
	40:22	44:15 54:2,16	allowed 19:8 26:1
2	50 33:15,17,21 34:3,	add 46:5,11 47:23	alluded 43:20
2 57:9 60:21 61:22	14,23	48:6 49:24 56:13 60:1	alternative 30:11
20 28:17	6	added 25:6 47:8	41:22,25 42:3,8 55:24
200 39:20		addition 25:7 27:15 45:4	Ameren 19:6,22,24 22:18,24 23:1,7 24:9
2009 44:2	6 40:19	additional 28:19	25:24 26:18 28:5,7
2016 29:10	65102 20:1,12 21:12	29:25 30:1,13 32:6	29:1,17 30:10,21 31:13,21 37:17,18
2017 31:2 35:17	680 21:11	49:1 56:17 61:25	41:3 43:4 44:3,18,23 45:7 49:6,21 50:1
2018 19:3 29:10 43:16	7	address 21:10 51:1, 22	61:1,8
2019 24:25 25:2 31:3,	· · · · · · · · · · · · · · · · · · ·	addressed 50:5,13,	Ameren's 51:8
21	7,000 33:10,11	16,20	amount 29:2
2019-2021 29:3	70 44:3	addresses 59:22	analyses 30:13
2020 30:2,12 42:8	75 23:21	administer 32:15	

analysis 43:10 55:10 Avenue 20:1 **bills** 27:23 47:7 carved 57:14 56:24 avoid 28:9 54:24 bit 38:21 55:12 56:24 case 19:5 22:23 23:2, analyze 30:10 24 30:16 37:9 49:2 avoided 30:14 35:14. **BOC** 61:17 60:5 analyzed 44:2 55:9 16,19,22,23,24 36:1,3, **borne** 59:12 6,14,16,17 37:8,11,20, cases 26:9 39:21 **Andrew** 21:17 21,25 38:10 47:2,3 **bottom** 42:5 category 53:18 **anticipate** 33:6 40:10 50:23 51:3,13,18 **Box** 20:11 **cease** 48:7 avoiding 55:3,4 anticipated 32:14 Brad 20:13 22:5 35:1 centric 29:8 aware 42:15 bring 24:5 49:8 apologize 39:13 **cents** 40:13,22,23,25 awhile 42:14 brought 19:13 appearance 19:11,21 certification 61:6,16 Brydon 19:25 В appearing 19:23 cetera 38:19 40:3 20:18 21:17 **budget** 28:1,5,17,20 61:10 29:4 59:9 back 26:4 28:18 49:8 appendices 34:10 change 40:20 budgets 25:4 **baked** 37:8 **Appendix** 35:14,15 changed 51:21 39:1,3,10 52:15,22,24 **build** 27:6,9 36:24 base 44:10 55:6 **changing** 48:2,10 37:3 41:14,21 42:3,4,7 appliances 38:19 **based** 27:16 31:19 **charge** 61:18 builders 61:9 35:10 40:13 42:5 44:1 application 23:8,20 chart 33:7 46:7 55:11 58:3 25:16 48:24 50:2 building 40:10 61:5, CHP 60:24 61:2 9,16,18 **baseline** 33:15,22 approach 33:18 **built** 37:16 40:14 **circuit** 61:5,7 51:17 basically 35:15 61:8, 17 **approval** 23:7 28:19 **business** 29:7.10 **City** 20:1,11 21:3,11 29:20 30:25 32:3 32:22 35:1 60:25 58:6 59:25 basis 32:2 35:8 42:21 butchering 47:14 clarification 48:19 bear 38:23 approve 24:18 **buy** 36:8,10 44:14 **clarify** 54:11,15 begin 19:11,21 22:2, approved 22:23 26:8 17,18 classes 58:8 approximately 24:24 С **beginning** 31:10,21 clear 45:10 49:11 28:3 44:3 **behalf** 19:23 20:19 closer 39:4 **Caisley** 60:8,9 **areas** 44:16 21:5,10,17 **code** 61:10 call 33:25 35:10,24 **arque** 59:12 belief 46:1 42:2 **codes** 58:7 assets 46:15 believed 25:25 called 33:24 42:19 Coffman 20:25 48:17, Association 24:2 beneficial 43:22 18 59:20,21,25 calls 43:6 assumption 44:20 benefit 30:19 31:22 **Coffman's** 49:19 cap 28:19,23,24 51:13 54:21 55:5 44:7,16,21 48:7 51:15 coincident 53:12,14 56:8 capacity 35:6,8,10, attached 24:22 50:6 22,23,24,25 36:9,10, collaboration 43:7 **benefits** 23:11 35:9 attempt 54:6 11,12 42:5 44:15,19 46:12 44:1 46:6 47:1,16,18 45:4 47:3 51:3,8 attention 24:6 collaborative 29:15, **bid** 35:2,5 36:7 capital 58:16 attorneys 19:19 18,25 41:16 **Bill** 46:14,24 Capitol 20:1 attribute 55:17 collective 57:5

columns 35:18 **combined** 55:4 56:1

61:2 comfort 29:8

comfortable 25:18 57:2

comments 49:24

Commission 20:5,7, 11,22 22:21 28:18 30:25 31:6,18 32:3 43:1 45:8,9 47:21,22 48:1,25 49:3,9 56:15

Commission's 24:5, 13 29:13 54:7

Commissioner

25:13,15 26:10,17,19, 25 27:14 32:6,7,8,9, 14,24 33:5,11,14 34:3, 8,9,25 35:5,12,21 36:2,11,14,22 37:4,14, 24 38:5,10,14,22 39:9, 13,25 41:2 42:12,16, 23 43:2,9,11,17 44:18 45:7,18,21 46:18,20 47:23 48:20 50:11,12, 19 51:1,5,10,19 52:4, 11,16,20,24 53:2,5,8, 25 54:12,19,25 55:8, 19 56:9,11,18,20 58:20 59:16 60:8

Commissioners 23:3 49:21 50:9

commits 29:24

committed 29:18

Community 21:18 24:2

company 19:6,24 23:12,15 27:24 29:24 30:24 42:19 43:18 49:18 51:20 61:4

Company's 23:10,20 25:16 30:4,8,15 35:17

comparable 28:6

compared 33:16 38:20

complete 50:7

completely 50:13,16

compliance 61:10

comply 54:6

component 30:7

components 35:18

compromise 26:7 31:20

compromised 31:14

compromises 29:4

concept 33:15,21 38:11 58:4

concern 50:20 51:22 58:14 59:8

concerned 44:6

concerns 50:5,13

concludes 32:4

concurs 49:18

conducted 23:19

confused 37:15,19

conjunction 41:4 47:15 61:11

connected 45:11 52:5

connection 54:8 56:4

conscious 31:16

consideration 31:15 57:16

consisted 23:9

consistent 28:12

consisting 23:14

construction 61:15

Consumers 20:24 21:1 24:3 30:16 58:2

59:19

contact 21:6

contested 43:3

context 23:6

continuation 56:6

continue 27:6 31:20 53:21 60:24

continuing 48:8

continuous 57:7

contribute 55:14

control 28:14,25 47:7

controlled 34:1,24

conversations 57:3

cooling 40:12,25

coordinate 41:9

coordination 41:5

copy 53:7

Corporation 21:19

correct 27:2 32:12,13 35:3 36:13 37:1,7,25 38:13 44:23 55:2,21

cost 28:24 31:24,25 36:3,6 37:5,11,17,22 39:21,22,23 40:9 43:10 50:23 51:3,13

costs 23:10 28:15,25 35:14,16 37:8,9,10,20 44:24 47:2 58:21 59:13

Council 20:24 21:1, 22 24:3,4 30:17 59:20

Council's 58:2

counsel 20:17,19,23 22:16 23:25 56:12,18 58:20 59:19

couple 38:14 41:12 42:10 48:11

court 20:20 21:2,7,19, 25 22:13 34:15,19

critical 54:3

custom 40:13 60:25

customer 30:9 40:16

customers 23:11 27:19 28:15 29:7 30:20 31:21,22 33:6, 16 34:1 37:17,18 38:20 40:24 43:22,23 44:3,6,11,16,24 46:7

47:1,7,19 58:13 61:2

cut 26:4 27:10

cycle 26:21 55:4 56:1 57:9,10 60:21,22 61:22

D

d/b/a 19:6,24

data 30:22 44:2

date 54:23 55:5

Davis 20:4 22:4 26:16,18 27:2 32:19, 21 33:2,8,13,20 34:5, 11,20 35:3,7,15,23 36:7,13,16 37:1,7,21, 25 38:7,13,21,23 39:12,14 40:5 41:11 42:15,18,25 43:9,12 44:13,22 45:21 55:8, 21

dealing 40:9 57:8

December 24:25 25:2 30:24

decide 43:14

decision 31:16

decisions 49:10

deemed 31:1

deeper 25:9 57:22 60:22

Defense 21:21 24:4

defer 26:16 32:19 44:8 54:16 60:14

deferral 46:13 52:10 53:23 54:1,2 56:8

deferrals 47:4 55:14, 17 56:8

deferred 54:23 56:1 direct 44:1 6 58:3.6.14 60:12.14 Ε 61:11 define 22:24 41:16 directed 26:11 **engage** 29:14 **degree** 58:15 direction 58:1 earlier 45:22 47:15 England 19:25 53:20 demand 28:22 29:6, directly 47:6 54:10 enrolling 33:6 16.22 30:9 32:10.22 early 42:8 47:11 54:19 disagreements 33:24 34:2 35:25 55:1 28:10 **ensure** 27:18 31:3,19 45:25 46:12 48:13 earnings 29:1 45:2, 53:19,21 57:18 disagrees 49:12 ensuring 58:13 23 46:16 52:12 57:1, demand-side 30:11 **discuss** 61:21 entirety 48:8 23 42:4 discussed 24:21 **easier** 48:15 entries 19:11,21 demographic 30:17 29:12 **EO-2018-0211** 19:5 **East** 19:25 depending 53:17 discussing 54:16 **Epperson** 21:13 22:6 echo 46:14 55:16 depreciation 36:5 60:23 effect 24:24 25:1.8 discussion 30:4 describing 54:5 equity 58:3 53:20 effectiveness 43:10 design 40:23 46:16 essence 51:20 discussions 29:15, **efficiency** 19:8 25:1 52:8 54:4 19 42:18 essentially 54:24 30:7,19 31:19 44:5 designed 58:23 53:12,14 56:4,7 58:3, disincentive 28:25 **estimate** 31:22 36:17 7,14 61:12 desire 20:22 distinction 54:3 estimates 30:14 efficient 30:1 desiring 30:23 50:23 distribution 30:14 efficiently 61:19 detail 23:9 36:21 38:11 44:9 45:5 evaluated 53:16 effort 28:9 detailing 30:3 **Division** 21:8,10,13 evaluator 43:15 23:25 60:12,14 efforts 60:4 details 28:13 32:19 **event** 33:25 Division's 46:25 elaboration 60:15 develop 26:2,24 **events** 33:24 docket 29:19 30:22 **electric** 19:6,24 27:22 Development 21:19 evidently 25:18 dockets 29:13 24:2 electricity 30:9 **exact** 39:4 **Dietrich** 20:12 22:7,8 dog 39:12 elements 28:14 **Excel** 53:3 47:21,22 **drive** 27:6 eligible 60:25 excluded 37:10 Dietrich's 50:21 driving 52:9 eliminate 27:22 **excuse** 20:13 61:3 difference 38:25 **DSM** 47:10 **EM&V** 31:2,4 42:17, **excused** 21:14,22 differences 39:6 24 43:7 57:4 ductless 39:8,16,20 execution 42:22 differently 30:10 emissions 47:17 **due** 51:7 41:3,18 42:1 exhaustive 23:20 emphasize 24:6 dynamic 48:9 difficult 40:7 existing 37:8 enable 60:22 dynamically 42:2 **Dippell** 19:2,9 20:2,7, expansion 36:18 **energy** 19:8 21:8,10, 16,24 21:3,8,14,21 **Dvnamics** 42:19 13 24:1,25 25:10 **expect** 39:5 43:13 22:1,8,11 32:5,8 46:22 43:13 28:22,23 30:1,7,19 47:20 48:4,17 49:20 expected 39:18 31:19 35:6,9,20 37:9, 50:9 56:10,17 59:18, expenditures 28:16 11,18 40:9 44:4,15 24 60:7,12 47:3,16 53:12,14 56:4,

expense 38:1 44:17 **experts** 19:18 20:2,14 **explain** 33:14 35:22 40:1 43:21 50:19 53:6, explained 38:22 explaining 23:9 **explore** 29:15 30:1 **explored** 29:21 55:12 expressed 26:3 extensive 50:3 extent 38:2 44:8,15 F

face 27:3 facilitate 40:2 facility 55:1 fact 36:19 40:6 48:8, 15 55:13 **facts** 24:5 **falls** 53:18 familiar 33:18 61:7 families 49:7 family 25:6 features 24:16 feedback 59:1 feel 58:1,9 59:22 felt 57:13 58:23 figure 42:9 figuring 33:16 file 29:19 30:2,22 53:4

filed 22:23 23:7,22,24 25:16 29:3 49:2 **filing** 19:7 23:8,12,17, 19 25:24 30:6,12,13, 15 31:13 47:13

final 53:10,11,16,18 Finally 31:5 financing 27:3 40:2 **find** 37:10 **Fischer** 21:5,6 60:2,7, 11

fits 30:4 five-month 23:18 flexibility 47:9 flexible 59:5

focus 25:9 45:1 55:23 57:18 focusing 46:2,15

Fortson 20:13 22:5

forward 27:24 43:8 46:22 48:13 56:5 57:4 58:19

found 61:13 frame 26:4,6 frankly 50:7 front 52:18 53:6

full 24:10 28:12 29:2 39:21,22

fully 24:9 28:11

fundamentally 59:7 funding 60:20

Furtherance 19:7

future 28:9 30:8 45:4 46:3 54:23 57:8,16

G

G-E-O-F-F 48:5

gained 51:7 generation 35:24,25 44:8,21 46:4 47:11 Geoff 48:5 **give** 19:14 38:23

47:10 52:14 53:7 giving 47:7 **GMO** 21:4,5 goal 27:20,23 **goals** 60:18 Goeff 20:21 **good** 19:3 26:6 33:8 49:6 59:9 **GPS** 58:10 granted 21:15 graphic 49:9 grew 61:10 group 19:16 34:1,24 42:7 **groups** 34:22,23 59:2 **Grove** 21:18 Groves 24:1 guess 32:10 48:20

Н

52:1 53:11

guide 49:10

Hall 25:13,15 26:10, 17,19,25 27:14 32:7,8, 9,14,24 33:5,11,14 34:3,8,9,25 35:5,12,21 36:2,11,14,22 37:4,14, 24 38:5,10,14,22 39:9, 13,25 41:2 42:12,16, 23 43:2,9,11,17 44:18 45:7,18,21 46:18 47:23 50:11,12,19 51:5,10,19 52:4,11,16, 20,24 53:2,5,8,25 54:12,19,25 55:8,19 56:9,19,20 58:20 59:16 60:8

Hall's 48:20 hallucinate 34:3

hands 22:9

happen 27:7.11 39:15 41:11 59:5

happening 27:13

happy 59:23

heard 57:19

heart 45:14

heat 61:2

heating 40:12,24

heavily 45:24

Helping 61:18

high 21:11 58:24

high-level 22:22

higher 39:22 40:25

hire 32:17,18,21

hold 29:18,25 33:25

homes 25:6,7

honesty 45:20

Honor 19:23 21:9,16 22:20 32:4 60:13

hope 48:19 49:8

hopeful 61:24

hoping 58:18

hour 40:13,23 41:1

Housing 21:15,17 24:1

hundreds 23:9

HVAC 40:21

Hyman 21:12 22:6 46:20,21,23,24 60:15, 17

ı

identified 31:8 identifies 31:5 identify 19:17 22:14 immediately 23:17 57:10

impact 45:5 46:3 49:7 implement 19:7 25:11 31:7 implementation 26:1 39:4 implemented 29:16 implementing 61:25 **important** 25:21 41:7 49:3.5 60:23 improvements 43:7 incentive 39:3,5,18, 21 40:22 45:12 52:5 **incentives** 38:18.19 40:4,12,16 include 23:25 30:13 39:24 40:11 included 30:11 37:12 45:16 58:3 includes 28:14 29:6 55:1 61:20 including 25:6 28:2 inclusion 38:16 income 26:5 58:7 incorporated 24:22 increase 28:17 38:21 **increased** 38:18,19 40:4 60:21 increases 27:21 46:2 incremental 39:22 Incrementals 33:11 independent 42:24 indirect 53:25 56:3 individual 35:18 industry 48:2 influence 45:4 information 20:20,22 21:2,6,20,24 30:18

infrastructure 36:21

initial 48:21 initially 50:2 58:22,23 input 23:16 **install** 39:23 installed 29:9 integrated 30:5 35:17 41:21,23 **intent** 33:22 interdependencies 57:12 interest 26:20 41:8 interested 23:16 61:2 interesting 33:18 interpretation 48:22 49:19 investment 36:17 37:2,23 38:12 44:8 45:5,11 46:3 52:6,9 53:24 54:1,2,9,17,18, 22,24 55:4 56:6 investments 44:9 47:5 **IRP** 30:12 41:5 47:13 48:11 58:19 **issue** 41:7 43:3 51:21 **issued** 45:9 **issues** 24:8,11 27:3 29:21 30:23 31:12 59:23 60:5 items 19:15 J **James** 21:6 **Jane** 21:13 22:6 Jefferson 20:1,11

21:11

John 20:13,25 22:4

37:2.23.24

join 50:17 **leave** 60:5 led 24:7 judge 19:2,10 20:2,7, 9,16,24 21:3,8,14,21, **level** 44:17 52:23 57:2 23 22:1,8,11 25:14 58:10,24 60:20 27:17 32:5,8 46:22 47:20 48:4,17 49:20 leverages 29:9 50:1,9 56:10,17 59:18, **life** 53:17 55:23 59:14 24 60:2,7,12 **light** 21:3 58:19 59:25 **June** 23:8 30:2 31:13 lighting 59:14 Κ lights 40:11 likelihood 46:2 **Kansas** 21:3 58:6 limited 28:21 59:25 **lines** 37:5,16 57:13 **KCPL** 21:5 **Linhares** 21:16.17 keeping 26:20 lists 39:15 **Kevin** 20:9 lives 53:13,16 key 24:16 28:14 30:7 47:24 **load** 36:8,9,10,19 kilowatt 40:13,23 38:2,8 41:1 local 61:9 kind 22:18 27:9 41:7 locked 59:8 45:11 56:3 61:21 long 23:21 29:16,23 Kliethermes 20:14 36:18 44:18 45:6 22:5 46:13,16 long-life 45:25 59:13 L long-lived 45:1 52:8 57:19 labor 39:24 long-term 46:15 47:4 **Labs** 61:13 52:8 **Lanahan** 21:9,10 longer 25:10 26:2 60:13 27:5 53:15 landlord 40:8 **looked** 47:13 58:6 large 26:24 57:6 **losses** 38:8 largely 40:6 56:23 **lot** 39:21,22 47:18 58:22 59:11,12 57:19,21 58:16 59:5 larger 26:25 27:4 low 26:5 lastly 27:20 61:20 low-income 24:25 latest 31:4 25:4,7,11,20 26:7,12, 20 27:16 28:3 30:19 **Law** 19:10 38:15,20 40:1 48:21, lead 53:23 23 49:1,7,14 57:25

60:21 maximizes 56:8 **middle** 40:21 Ν lower 36:10 38:2 meaningful 27:18 Midwest 61:11 44:11,17 59:9 means 42:9 million 28:4,5 31:23, Nancy 19:9 53:3 Luebbert 20:13 22:5 24 measure 39:14 40:21 Natelle 20:12 22:7,8 34:13,17,21 46:10 53:17 57:15 60:25 mind 59:2 47:22 50:25 51:2,6,12,23 measured 40:22 minutes 22:21 52:7,14,18,22 53:1,3, Nathan 20:18 7,10 54:11,14,20 55:3 measures 39:19 **MISO** 35:2,6 38:2 **National** 21:15,17,21 Luebbert's 50:21 44:14 51:8 45:1,25 46:1,2 52:8 24:1,3 61:13 53:13.15 57:19 58:17 missed 51:14 nationally 59:1 59:13,14 61:14,25 М **missing** 45:14 **nature** 19:18 58:15 measuring 34:1 Missouri 19:22,24 made 25:24 27:5 necessarily 34:14,23 **MECG** 21:14 20:1,10,12,24 21:1,11, 31:13 45:10,22 46:11 **needed** 43:5 45:10 mechanism 61:20 13,22,24 22:24 23:1,7, 54:13 57:13 59:3 59:4 60:24 19 24:3,4 26:19 28:5,7 **MEEA** 61:12 maintain 29:22 29:17 30:10,17,21 negotiation 50:3 **MEEIA** 19:8 22:24 31:13 maintenance 61:19 Neighborhood 24:2 23:8 24:9,20,21 26:9 **Missouri's** 19:6 24:9 **make** 21:19 24:11,19 28:11,16 30:15 31:3,7, Neighborhoods 29:1 31:21 44:3 25:21 26:12 38:12 12 41:5 45:8 55:6,13, 21:18 44:20 49:11,23 54:12 18 57:6,9,10,15 60:20 **Mitten** 19:23,25 20:3, net 31:22 59:15 4 22:20 25:14.23 makes 34:25 44:19 **MEEIA's** 29:10 26:15 27:15 32:13,18 non-ameren 23:19 making 19:11 44:23 meet 30:8 35:25 36:9 34:7 39:11 43:6,25 non-unanimous 45:15 46:5 49:18,22 management 42:4 meetings 29:21,25 24:14 mobile 25:6 30:3 manner 48:2,14 noncompliance modeled 52:10 megawatt 53:15,19 manual 31:1 61:14 megawatts 53:12 moment 38:23 44:13 mapping 58:10 nonsignatory 60:3 52:14 memory 54:25 March 24:25 25:1 **normal** 35:19 money 44:20,21,23 31:21 mentioned 26:22 Northwest 61:13 57:6 44:13 **Marke** 20:21 22:5 note 23:15 monthly 27:22 48:4,5 56:14,22 58:22 Meramec 47:13 59:17 notify 61:1 months 23:16 28:3 metaphor 55:19 29:20 market 26:21 30:4 November 19:3 meter 33:1,3 36:8,12 40:7 41:13,15, morning 19:3 21:16 **number** 25:17 41:15, 17,24 44:19 51:9,25 metric 53:19 18 44:7 46:25 47:5 move 48:13 58:19 59:6 60:18 61:14 metrics 27:16 28:20 59:9 market-based 51:17 45:3,23,24 52:12 **numbers** 37:13 moving 56:5 57:4 Martin 21:12 22:5 Michael 21:9 multifamily 25:11 46:21 0 26:23 27:20 40:1 Michels' 51:16 Matt 51:16 **MVPS** 38:5 Michigan 58:5 objected 24:13 Matter 19:5 microphone 22:14 objections 26:3 mattered 57:12

obligates 30:10 obvious 47:1 offer 22:24 39:5 **Office** 20:11,16,19,23 23:25 56:12.18 officials 61:9 on-the-record 19:4 one-stop 40:2 ongoing 57:7 **OPC** 48:5 56:21 opening 32:4 43:20 60:2 operating 48:9 operations 61:18 **operator** 61:5,16 **Opinion** 42:19 43:13 **Opitz** 21:23,24 opportunities 29:15 30:2 52:12 61:21 opportunity 24:11 29:2 45:2,23 46:16 48:13 49:14,16 51:14 57:1,24 **oppose** 31:17 opposed 24:14 27:7 32:12 48:16 50:1 59:13 optimistic 58:2 optimized 42:2 order 31:7 45:9 54:7 original 25:16,24 48:23 50:8 originally 28:5,8 29:3 outcomes 61:23 outline 24:16 overaggressive 58:15

overview 22:22 23:1

overwhelming 59:4
owner 40:15

P
Pacific 61:12

Pacific 61:12
packages 40:10,14
pages 23:9,14,21
part 30:12,21 40:9
45:16 56:2

participants 32:25 participate 27:19 47:8

participated 44:4 participation 51:8

parties 23:2,16,19,24 24:10,12,17 25:17,24 26:3 27:25 28:18 29:14 31:22 32:2 41:4 43:19 45:13 46:6 48:25 54:6 59:1 60:4

parties' 31:9 partition 34:13

partitioning 34:22

party 24:13 30:23 31:16 43:5

past 56:5

pay 36:25 37:19

paying 36:5

payments 47:3

pays 40:8

peak 35:25 45:24

pending 29:13

people 19:16,17

33:23 58:16

percent 27:21 28:17, 20,21,22,23,24 33:15, 17,21 34:4,14,23 38:3 44:3

performance 27:15, 18,23 28:20,21 45:3, 12,23 52:5

period 23:18 25:2,18 27:6,13 28:6 29:3 36:18 48:24

permission 26:15

perspective 46:25 47:18 52:1,2 55:15 59:15

persuaded 51:20

pick 39:7,16

pioneered 58:4

pipeline 26:24

pipelines 27:6

place 24:8 48:16

plan 24:20,21 25:10 28:11,14 29:6 30:6 31:4,7,23 35:17 41:15, 21,25 42:22 46:7 52:17 55:1,6,7,11,13, 18,22,23,25 56:1

planning 30:8 47:9 57:10

plans 30:12 41:22,23 42:4,8 55:13

plant 36:4

pleased 60:4 61:22

pleases 22:21

podium 22:15

point 43:3 45:22 47:6, 21 48:18 49:10 50:10, 17 52:13 60:19,23

policy 60:18

portfolio 32:23 35:4 41:24 42:2,4 47:15 52:23

portfolios 56:4

position 42:6 51:25 59:6

positive 58:1

Post 20:11

potential 30:5 41:13, 24 51:7,18 54:22

potentially 53:24 58:15

power 21:3 59:25 61:3

pre-stage 57:7

preapproves 48:23

preceding 23:17

preclude 48:25

prepay 57:14

presentation 19:5,10 22:19 49:23,25

presiding 19:10

pretty 35:19

prevents 27:13

previously 58:5

primary 41:17

prior 26:9 41:23 54:7

priority 56:25

procedural 19:15

process 24:6,8 30:8 42:21 43:7 57:7 58:19

productive 57:3

program 26:12 27:8, 10,17 28:24 29:8,9,10, 11,12 31:2 32:10,11, 16,20,25 33:6,23 34:2 35:1,11 40:1,6,23 43:16,21,22 46:16 48:7 50:18 52:7 57:15 58:21,23,25 61:1,5

programs 22:24 24:19,23 25:1,5,7,8, 17,20,21,25 26:2,5,8, 20 27:1,16 28:1,3,7,13 29:7,16 30:19 31:19 38:15 43:24 44:5,25 45:3 47:8,10,25 48:9, 15,21,23 49:1,15,17 57:25 58:14 60:21 61:25

progress 57:13

project 40:13 41:1

projects 26:22,23 27:4,5 38:6

properties 27:21

property 27:17,21 40:15

proposal 23:10 24:9 41:14 50:8

proposed 24:20 28:2, 6,8 31:7 46:7

proposing 49:1

provide 22:22 23:6, 11 40:12 60:15

provided 20:20 21:24 55:10

provision 51:25

provisions 47:24 56:25

PSC 34:17 51:2

public 20:10,16,19, 20,23 23:25 49:4 56:12,18 58:20 59:18

purpose 24:6 32:1

pushing 58:20

put 36:8 38:24

Q

quantified 47:6

question 22:15 25:13 26:10,16 33:8 43:17, 18 47:21 48:21 51:3 55:9

questioning 20:6

questions 20:22 23:3 32:6 35:13 38:15 41:3 46:19 49:20 50:10

56:11,16,17 59:18,24 60:10

Quick 25:13 quickly 40:17 quote 57:21

R

raise 22:9

raised 50:20

range 39:17,18,20 40:22

ranges 39:3,6 40:20

RAP-LEVEL 47:15

rapidly 48:2

rate 44:10 61:13

ratepayers 36:5

rates 44:11 58:7

rationale 31:9

reach 25:6

reached 31:11 58:25

read 51:16

realized 57:22

Reames 58:4,5

reason 56:3

reasonable 51:17

reasons 60:16

rebuttal 50:3,22 52:2

recall 34:7

recognition 48:10

recognized 59:2

recognizes 51:6

J

recognizing 48:2

recollection 35:8

recommendations

29:22

record 19:3.15

redesigning 40:6

reduce 26:7 37:18

reduced 29:4 44:16 47:17 57:1

reduces 29:1

reducing 36:19 44:24

reduction 28:4 45:10, 15 46:9 47:24 52:5 53:15 54:8 58:21

reductions 47:4 53:19

referring 34:22 36:12,23

reflect 29:3 31:2

reflected 29:4 42:1 50:2 57:23

reflection 35:16

reflects 31:14

Regulatory 19:7,10

reiterate 45:22

related 50:23

relates 41:5

relation 54:1

relay 55:19

relevant 24:8 31:12

relied 56:24

remain 25:1,8

remained 55:6

remember 33:7

Renew 21:22,23 24:4

21.22,2021.

report 23:21 29:20 30:2 34:11 50:3,7,22

reporter 20:21 21:2,7, 20,25 22:13 34:15,19

representatives 23:2

representing 21:1

represents 28:4

request 30:24 32:2 41:14 57:14 58:2

requested 30:17 31:9

require 42:24

required 28:18 33:2,3

requirements 36:1,9, 10,20 37:3

requires 30:24

research 41:15,17

residential 29:7,8 32:10,16,22,25 61:15

resolve 60:5

resource 30:5,12 31:25 35:17 41:21,22, 23,25 42:3,5,8 46:14 55:24

resources 21:21 24:3 30:11 31:1 35:25 46:4, 9 50:24 55:15

response 29:6,16,23 32:11,22 33:24 46:12 48:13,20 53:19,22 57:18 59:3

responses 47:20

result 36:2

results 30:3 31:2,3,4

retail 32:11

retains 28:7

retire 54:19

retirement 55:5

retirements 47:12

retiring 47:14 55:1 revenue 51:15,18

revenues 51:7

review 23:20 31:12

48:1 49:3

revised 24:21 28:11 set 24:15 44:10 specifically 45:25 stipulation's 29:20 50:6 52:17 46:3 settlement 38:17 **Street** 21:11 revisit 48:11 45:14 specifics 23:5 stronger 25:9 rewrite 50:7 **shed** 58:18 **spin** 45:18 **study** 30:5,18,23 rider 61:5.7 shopping 40:3 **Spire** 21:22 41:13,24 61:11 Robin 20:14 22:4 **short** 44:22 **spirit** 26:6 32:1 **style** 29:11 Rogers 20:13 22:4 short-term 47:3 **Staff** 20:8,10 23:21,23 subcontract 43:14 34:18 41:4 43:19 submitted 23:7 row 53:14 shorter 59:14 47:23.24 49:23 50:1.4. subscribe 40:15 rows 53:10 **show** 44:10 49:9 10,17 51:2,6,20 56:11, 23 rule 52:1 **shown** 24:20,23 successive 55:13 **Staff's** 50:2,5,13,22 rules 24:13 28:16 side 45:16 **Suite** 21:11 56:24 31:6.7 43:1 **sign** 60:20 summarizing 29:21 **stage** 24:16 57:8 run 32:21 60:22 61:19 signatories 31:15 summary 22:18 stakeholders 61:20, running 36:4,5 31:10 24 signatory 31:16 **Russ** 26:22 supplemented **stand** 22:4 signed 24:12 50:4 23:12,22 Russell 19:25 standpoint 40:24 **simply** 50:1 **supply** 45:16 **start** 27:10 32:10 single 25:6 S supply-side 45:11 41:12 42:7 48:7,16 sit 46:24 46:9,14 50:23 52:6,10 started 19:12 53:23 54:1,2,8,9,17, **savings** 25:10 27:7,9, situation 40:8 18,22 55:15 17,18,20,22 28:22,23 **starts** 31:4 six-year 25:18,25 30:1 31:1 33:16 34:2 **support** 30:13 50:18 **stated** 60:13 27:12 55:11,13 58:25 36:3 40:11,14 45:25 57:25 59:21 61:4 57:22 58:12 60:22 skeptical 58:24 **statement** 32:4 60:3 supported 23:22 61:21 **states** 42:13 slightly 51:14 supporting 23:15 scenario 54:15,20 stip 60:14 slow 26:24 supports 60:14 scenarios 47:13 slower 27:1 **stipulated** 28:14 29:6 surprising 61:13 schedules 23:15 31:23 43:21 **smart** 29:9 33:1,3 surrebuttal 23:13 **scope** 41:17 stipulated-to 43:22 51:16 solution 31:14 scratch 48:16 stipulation 19:4 sort 53:21 survive 26:14 22:22 23:6 24:7,12,14, seated 22:12 sustained 56:6 15,17,21,23 25:4 28:2, **sought** 23:16 section 52:1 57:16 6,10,12,19,21 29:1,5, **sounds** 61:17 Swearengen 19:25 24 30:9,21,24 31:5,8, **sector** 25:12 61:15 11,17,18 32:2,3 34:8 **speak** 22:12 25:23 swearing 19:16 22:2 segments 53:22 42:23,25 43:6 45:17, 49:12 60:24 sworn 22:10,11 19 46:8 48:22 49:24 **sense** 27:5 34:25 **speaks** 57:17 50:4,6,14,18,20 51:22, **system** 36:18 54:12,13 59:3 24 52:25 56:21,23 **specific** 24:19 45:15 systematically 29:25 separated 37:22 57:17 59:22 60:19 46:8 49:21 51:3 56:25 61:19 57:14 Service 20:10

	third-party 42:24	typically 27:7	
T	Thompson 20:9,10		w
table 31:2	22:7 49:25 50:12,15, 25	U	waivers 31:6,9
tables 22:16	thought 20:14 43:2	Uh-huh 43:11	walk 35:13
taking 43:23	thoughtful 31:14,20	ultimately 24:7 37:11	wanted 45:21
talk 23:5 43:25	three-year 53:22	unanimous 24:15	ways 41:12 42:11
talked 19:14	55:22,25	unaware 51:10,12	44:7 49:9
talking 37:6,15 38:6,7	throughput 28:25	uncertainty 27:11	weighted 45:24
43:10 55:22 57:5 58:12	Tim 21:24	underlying 32:1	West 21:11
talks 34:13	time 25:18 26:2,4,6	understand 35:21	wholesale 32:12
target 29:2	27:5,13 28:10 32:6 36:19 45:7 49:21 56:2,	38:17 40:2 41:6,9 49:12 54:14	William 20:4 22:4 26:18
_	11,13 59:21		
targeting 33:10	timely 48:2	understanding 25:15 49:13 53:21	Williams 20:18 56:14
targets 29:4	times 35:9	57:5,6 58:11	win 59:15
tariff 32:11,12	timing 30:3	Union 19:6,24	witnesses 19:14 22:3,10 23:13,23
technical 19:18 31:1	today 19:4,13,19	unique 26:13 29:8	26:11
technology 48:3	20:3,5,12 21:12 54:18	unit 55:5	wondering 35:13
tenants 40:7	Tony 58:4	University 58:5	work 28:24 42:7,21
term 25:25 29:17,23 44:22 45:6 46:13	topic 29:19	unquote 57:21	49:6 58:6 61:24
	total 31:25 53:12	up-front 58:16	working 27:24 40:10
terms 23:10 27:3 28:12 34:6 35:3 40:8	totally 42:6	updated 30:25 31:1	41:16,18 42:19
44:14,23 47:2 56:22,	tough 27:23	upgrades 40:12,25	workshop 29:13
25 57:3	Tower 21:18 24:1	usage 30:17	world 48:9
territory 61:9	track 49:7	utilities 42:13 57:21	written 23:13
test 31:24,25 34:24	tracking 49:6	utility 31:24 47:9,10	Υ Υ
testify 19:17 22:3	training 61:6,17	utilized 30:15	·
testimony 19:14 23:13,14,22,24 30:16	transition 26:21	utilized 30.13	year 23:8 27:8,23
37:12 41:6 50:21	transmission 30:14	V	30:25 31:2,13 33:10 43:16 53:16,17 56:2
51:16 52:3 55:10,17	36:15,16,18,20,23,24		years 22:25 24:24
thermostat 33:4	37:5,6,8,10,16,19,20, 22 38:1,6,8 44:9 45:5	variance 28:24	25:3,9,16,19,22 26:4,
38:18		versus 40:8	6,8,13 27:12 46:1 47:14,25 48:11,24
thermostats 29:9	treated 24:15 57:15	vetted 24:9	49:1,5,8,9,14,16,17
thing 48:6	trend 57:20	views 24:11	53:13,15 55:1 56:2
things 27:4 38:8 47:11 48:10 55:11,16	tripled 25:5	visualize 58:9	57:20 58:25 59:3,6,9 60:22
·	Trust 21:15,18 24:1		
thinking 33:9 55:9	type 29:11 41:1		

Z	
zip 58:7	