BEFORE THE PUBLIC SERVICE COMMISSION

STATE OF MISSOURI

TRANSCRIPT OF PROCEEDINGS

EVIDENTIARY HEARING

In the Matter of Union Electric Company d/b/a Ameren Missouri's 4th Filing to Implement Regulatory Changes in Furtherance of Energy Efficiency as Allowed by MEEIA) File No. EO-2023-0136

MONDAY, JULY 22, 2024

9:00 a.m.

Governor Office Building
200 Madison Street
Jefferson City, Missouri 65101

VOLUME 3

RON PRIDGIN, Presiding
DEPUTY CHIEF REGULATORY LAW JUDGE

KAYLA HAHN, Chair
MAIDA J. COLEMAN,
JASON R. HOLSMAN,
GLEN KOLKMEYER,
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Proceedings began at 9:03 a.m.:

JUDGE PRIDGIN: Good morning. We are on the record. This is the evidentiary hearing in File No. EO-2023-0136. And this is the -- in the matter of Union Electric Company d/b/a Ameren Missouri's Fourth Filing to Implement Regulatory Changes in Furtherance of Energy Efficiency as Allowed by MEEIA. This hearing is beginning July 22nd, 2024 in the Governor Office Building in Jefferson City, Missouri. The time is 9:03 a.m.

I would like to get entries of appearance from counsel please, beginning with Ameren Missouri.

MS. MOORE: Good morning, your Honor. Appearing on behalf of Ameren Missouri is Jennifer Moore, Jennifer Hernandez, and William Holthaus.

JUDGE PRIDGIN: All right, Ms. Moore. Thank you. Any appearance on behalf of the Staff of the Commission.

MR. PRINGLE: Thank you, Judge. Travis Pringle and Tracy Johnson on behalf of Staff.

JUDGE PRIDGIN: Mr. Pringle, thank you. Entry on behalf of Renew Missouri.

MR. LINHARES: Thank you, Judge. Andrew Linhares appearing on behalf of Renew Missouri Advocates. The court reporter has my info.

JUDGE PRIDGIN: Mr. Linhares, thank you. Any entry on behalf of NRDC? All right. Hearing none, any entry -- and I believe MECG's asked to be excused, but just in case, any entry of behalf MECG? Any entry on behalf of Consumers Council?

MR. COFFMAN: Yes, your Honor. John B. Coffman on behalf of the Consumers Council of Missouri.

JUDGE PRIDGIN: Mr. Coffman, thank you. Any entry on behalf of the Office of the Public Counsel.

MS. VANGERPEN: Yes. Thank you, your Honor. Lindsay VanGerpen on behalf of the OPC.

JUDGE PRIDGIN: Ms. VanGerpen, thank you. Have I overlooked anyone? Anything further from counsel or from the bench before we proceed to opening statements?

COMMISSIONER HOLSMAN: Judge, Commissioner Holsman has joined.

JUDGE PRIDGIN: Commissioner, thank you. All right. Hearing nothing from the parties or from the bench, Ameren Missouri, whenever you're ready.

MS. MOORE: Good morning, and may it please the Commission. I'm Jennifer Moore, appearing on behalf of Ameren Missouri. The Company's request is requesting approval of its fourth MEEIA plan under the Midwest -- excuse me -- Missouri Energy Efficiency Investment Act or MEEIA, which I will refer to throughout this opening. The MEEIA 4 plan represents a significant increase in the Company's commitment to energy efficiency and demand-side programs as a foundational part to serve customers in the most reliable and affordable way. The plan is consistent with the preferred resource plan C filed in the Company's 2023 Integrated Resource Plan or IRP, and the program portfolio is expected to produce 822,340 megawatt hours or 517 megawatt hours in net savings.

Maintaining the reliability of the electric system is paramount importance to the needs of the -- to be achieved in a way that also promotes customer affordability. This has always been true, but perhaps even more so because it's a more pressing issue today that it has been in recent years when the MEEIA cycles were approved.

The generation mix is transitioning industrywide and regionwide, and the reserve margins are tighter than we have seen in many years. This is only going to be exasperated [sic] by the rapid load-growth expectations that have emerged around large data centers which have occupied the talk of the industry today. However, this growth of useful applications of electricity does nothing to reduce the importance or efficacy of managing the existing load and driving out wasteful usage where the same level of end-user benefits can be achieved with less electricity. In fact, it increases the urgency to use energy efficiency and demand response to create more headroom for our system to serve those new loads and to -- that bring economic activity to our state.

Returning to the reliability challenge that we are wrestling today, the solution to reliability going forward requires a balanced but aggressive approach to prod -- to pursuing the development of all types of resources, both supply side and demand side, and including both dispatchable and clean energy resources on the supply side. Now is not the time to turn away from the tools in the reliability tool kit, and energy efficiency and demand response are exactly that, an important tool in the reliability tool kit.

If the Commission were not to approve the Company's MEEIA Four application, Ameren Missouri's capacity position in the 2025 MISO planning reserve auction would instantly become 200 megawatts shorter, exposing the Company's customers to the potential for high market clearing prices on every megawatt that's no longer available in the Company's portfolio and to increase reliability risks that go along with the smaller reserve margin that might result in this.

And while the effects of energy efficiency are not as instantaneously as the effects of demand response, energy efficiency's long-term impact on reliability and affordability as we manage the amount of load that is served over time is important, and energy efficiency is every bit as critical and foundational to our ability to reliably -- reliably and affordably serve our customers. Yes, we still must invest in new supply-side capacity, but for every megawatt saved, the efficacy of supply-side resources that we do develop is enhanced and our reserve margins improve and with it, so does reliability.

Our MEEIA 4 plan provides customer continuity by offering many of the same residential income and in -- residential income eligible and business programs offered under the current MEEIA 4 plan. And this plan also includes two new customer programs and an educational programs as outlined in our revised Appendix B. Of note is that the MEEIA 4 plan also increases the income eligibility -- eligible budget over the previous to build on the success that we've had in the Community Savers programs. A summary of the total resource cost test and the revised program summary cost are included in our revised Exhibit A.

The Company is requesting continuation of its demand-side investment mechanism or the DSIM which includes an earning opportunity and a throughput disin -- disincentive. Approving the DSIM is consistent with the Commission's statutory obligation to ensure the Company's financial incentives are aligned with helping customers use energy more efficiently and to provide the Company with timely earnings opportunity associated with the cost-effective measure -- measurable and verifiable energy savings.

The purpose or -- and efficiency savings as well.

The purpose to recover the costs of -- the Company proposes to recover the cost of the programs, the cost of reduced energy sales and incentives on the performance of the programs through the Energy Efficiency Investment charge. The Company has calculated customer impacts, and a residential customer using a thousand kilowatt hours of electricity a month will see a charge of approximately $2.07 per month in 2025. And that's all outlined in our revised Appendix L.

The Company's filing also includes a reliable evaluation, measurement, and verification or EM&V plans in the revised Appendix E. The EM&V plans continue the current process and modifies the EMV to allow prospective elements of deemed -- for deemed savings which places the risk on our program implementers and benefits customers through lower administrative fees. The EM&V plans are reasonable and allow for further stakeholder input prior to the start of the evaluation. The plan includes -- this EMV plan includes in continuing the review of the independent state auditor as required under the Commission rules.

And just as a reminder, in 2023 report, the independent state auditor, Evergreen Economics, found that Ameren's EM&V plans, after a review of the PY, or plan year, 2023 evaluation indicates that all evaluation reports were well-written, complete, and meet the minimum requirements for impact and process evaluations stipulated under the Commission rules.

So Ameren Missouri's EM&V plan is

designed to allow feedback so that the results of the plan evaluations continue to meet the requirements under the Commission's rules and are transparent to the Commission and all stakeholders.

The MEEIA statute allows energy efficiency and demand-side programs so long as those programs are approved by the Commission, result in measurable demand and energy savings, and are beneficial to all customers. The Commission is responsible for reviewing our MEEIA plan and de -- and determining whether the MEEIA plan accomplishes those goals under the statute. The Commission's IRP in the MEEIA rules set forth a framework for the Commission to evaluate the plan.

Now, under the Commission rules, the Commission shall consider the TRC test a preferred cost-effective test and for demand-side programs and plans that have a TRC greater than one, the Commission shall approve demand-side programs or program plans budgets and demand an energy-saving targets for each demand-side program it approves provided it finds the utility has met the filing and submission requirements and the demand-side programs have three elements: That they're consistent with the goal of achieving effective demand-side savings, have reliable evaluation and measurement, and are included in the electric utilities' preferred plan or have been analyzed through the integrated resource process under chapter 22 to determine the impact of the net present value on the revenue requirements of the electric utility.

In terms of the goal of achieving all cost-effective demand-side savings, the portfolio programs is designed to offer programs both to residential and business customers and includes a variety of programs to allow and encourage customer participation. The rebuttal testimony of Steven Wills shows two charts the MEEIA cycle impact of MEEIA 1 through 3 has had on the Company's load. As you can see, and this is -- and so I'd encourage the Commission to ask Mr. Wills some more questions around that.

So in addition to these load reduction benefits, MEEIA plan also produces 303 million of net benefits and creates over 2,710 jobs. And it has a portfolio TRC ratio of 1.64 showing benefits to all customers.

Now, the EM&V plan is consistent with MEEIA 3. And, as discussed earlier, the independent auditor reports confirmed the evaluation meets the re -- minimum requirements under the Commission rules. And the plan is also consistent with the realistic, achievable potential in the Company's most recent IRP, in the 2023 IRP as our preferred plan C.

So the decision before the Commission is whether to approve Ameren Missouri's MEEIA 4 plan or reject the plan as Staff and OPC recommend. Rejecting the plan will cost customers approximately four billion over higher investment costs on a net present value basis which is unreasonable and undermines the purpose of MEEIA. The MEEIA 4 plan is the option that decreases customers' bills, allows the Company to rely on demand size -- demand-side programs as an asset in its portfolio to provide safe and reliable service that's affordable for -- to customers. For this reason the Company respectfully requests the Commission approve its MEEIA 4 plan. Thank you.

JUDGE PRIDGIN: Ms. Moore, thank you. Any bench questions?

CHAIR HAHN: Good morning.

MS. MOORE: Good morning.

QUESTIONS

BY CHAIR HAHN:

Q. Just a couple. I'm interested, you

mentioned several times using the EM&V for Cycle 4 the same as you did for Cycle 3. I have the Cycle 3 reports, and I've reviewed them. I'm curious how the Company used those reports to inform its Cycle 4 plan, specifically on the programs that are underperforming. Or who -- who can I direct that set of ques -- those set of questions to?

A. That's a great question. So I think you -- for some of the program performances, you can ask Mr. Lozano, Mr. Via, and then for specific EM&V questions, please ask Mr. Neil Graser -- Graser.

But to your question, each -- it's important to keep in mind that each program year has its different challenges and there will be different results and that you have to look at in on a portfolio level, and Mr. Lozano can explain that. And so for those programs that, you know, didn't do as well in 2023, there's constant evaluation, a recorder that we meet with stakeholders and try to correct. So I'm happy that you asked that question because it goes -- MEEIA -- the Commission just doesn't approve our MEEIA plan. Our MEEIA plan is constantly tweaked and developed to improve it so that all the programs perform and meet those targets that we're aiming for and kind of look back and see

what went wrong and what can be improved upon.

Q. One other thing that you mentioned in your opening remarks was the amount -- I want to write down the exact amount you cited at the very beginning, the amount of megawatt hours saved. Can you repeat that for me?

A. 822,340 megawatt hours. So --

Q. Is what you estimate to be saved --

A. Uh-huh.

Q. -- through the Cycle 4?

A. Those are the net savings, but that's a net, not gross.

Q. Yeah. And then I'm assuming Matt Michels might be the witness to talk about the net savings and the plant additions that may otherwise be required?

A. Correct.

Q. Okay. The cost of this program to ratepayers, Ameren Missouri anticipates recovering approximately $626 million and variances of 20 percent should be anticipated because of the significant flexibility you've requested. How does that compare to Cycle 3?

A. Well, first I want to qualify that. We weren't asking -- the plan is asking for a 10 percent

variance on the budget so we can manage it better and not 20 percent. The $600 million also includes what our -- for the earnings opportunity. There's a maximum bend that includes that. If we don't hit targets, then we're not going to receive that. We'll be back at the normal level. And that's only if we hit those targets. And again, those are stretch goals, so keep that in mind as well. And the number amount isn't that, you know, different. So that's how -- I think I've got -- I wanted to make sure that I -- did I answer your question --

Q. Yes.

A. -- because I think I got lost in --

Q. I think that --

A. -- trying to make sure that I'm clear.

Q. How does that compare to Cycle 3?

A. It's -- it's -- we're spending more money, about 1.7 more, so the budgets have increased, but the earnings opportunity percentage amount is in the range about -- for the net sharing is about 15 percent and that compares the same.

In Cycle 3 though I do want to distinguish that we had a three-year plan and then we had the plan extensions. And the earnings opportunity and the spending were a little lower, so that you have

the whole picture.

CHAIR HAHN: Uh-huh. Okay. I think that's all my questions. Thank you.

MS. MOORE: Thank you.

JUDGE PRIDGIN: Chair Hahn, thank you. Any other further bench questions? Commissioner Holsman?

COMMISSIONER HOLSMAN: Judge. Yes, real briefly.

QUESTIONS

BY COMMISSIONER HOLSMAN:

Q. Thank you for the opening statement this morning. Who would be the best person to talk about, in detail, the strategies that Ameren is going to employ to improve customer participation in these programs and to explain why the participation has not been as -- as robust as what the Commission would like to see and what are the barriers to that participation? Is it systematic within the program that is keeping these -- the participation low? Is it -- have you identified those barriers and what can the Company do to remove those barriers so that we can see more customers take advantage of these programs?

A. Those would be great questions for

Mr. Lozano and as well as Timothy Via. And then if you have any EM&V questions in learning, then talk to Mr. Neil Graser.

COMMISSIONER HOLSMAN: All right. Thank you. Thank you, Judge.

JUDGE PRIDGIN: All right. Commissioner, thank you. Any further bench questions? All right. Hearing none --

COMMISSIONER MITCHELL: I have just a quick question.

JUDGE PRIDGIN: Yeah. Commissioner, yes, sir, go ahead.

COMMISSIONER MITCHELL: Thank you.

QUESTIONS

BY COMMISSIONER MITCHELL:

Q.   In your opening I thought I heard you say that if the Commission doesn't approve this plan, it results in about a 200 megawatt shortfall in clearing capacity. Did I hear that correctly?

A.   Yes. Yes, you did. That would represent our demand response programs, both residential and nonresidential, for next year, and we can't -- we can't present them in the MISO market until we have approval for that. And so does that answer your question? But those --

Q.   It does. It does.
A.   That's the anticipated savings in 2025 for those demand response programs.
Q.   And I guess the overall savings to the consumer in terms of I guess reduced risk and perhaps an avoidance in rate pressure, did I hear you say that that was about 4 billion over the -- over the life of the program, or did I hear that --
A.   It's -- it's -- Matt Michels will be able to give you the analysis better. That was done as part of the IRP analysis, and that is the Plan I. What will happen if we lose these savings is that we'll have to invest more and it might be, including over the next 20 years, two more generation plants. And again, Mr. Michels can address more to how the plan was put together and how the costs were calculated. But yes, it's not over three years, but it's the net present value of the revenue requirement for the next 20 years.
COMMISSIONER MITCHELL: Thank you. That helps me.
JUDGE PRIDGIN: Commissioner Mitchell, thank you. Chair Hahn, further questions?
QUESTIONS
BY CHAIR HAHN:

Q. Who would be the appropriate witness to ask on the Ameren side about calculations of cost with regard to the MISO market for the upcoming seasons?

A. Mr. Michels could address that and Mr. Wills might be able to also address some more questions in terms of, you know, rate impacts.

CHAIR HAHN: Thank you.

JUDGE PRIDGIN: Chair Hahn, thank you. Any further bench questions? Ms. Moore, thank you very much. Opening statement from Staff. When you're ready, counsel.

MS. JOHNSON: Thank you, Judge. Good morning, Chair Hahn, Commissioners, Judge Pridgin. May it please the Commission. My name is Tracy Johnson from the Staff counsel's office, and I'm honored to be appearing for you -- before you the first time today representing Staff in this case alongside Mr. Pringle. So let's get to it.

I'd like start by naming a challenge. Energy efficiency demand-side management is presumed to be a good thing. It sounds good. Sounds like it could only benefit everyone. Calling out this presumption is not popular and challenging it certainly does not make for good headlines. But in our analysis of energy efficiency, we need to keep an eye out for who bears the risk, who pays, and who gets paid.

Another challenge in this case, one specific to the Commission, is ensuring the application of the Missouri Energy Efficiency Investment Act is executed correctly. What a tall order. So how can Staff help establish the facts needed to get this right. Well, the devil's in the details. Staff have supported and the Commission has approved past MEEIA applications. So what's changed. For starters, the world; the availability of energy-efficiency products; the choices that consumers make to use those products, regardless of the incentives that they receive; the market. Our world has changed.

Certainly our understanding of the impacts of MEEIA on other regulatory mechanisms has changed. The nuance in the applicability of related rules has become advanced as we all gain more experience. And the most illuminating change, the increase in real specific evidence we have from the past implementation of MEEIA programs. It only makes sense that our analysis of MEEIA would become more nuanced and evolve with what we've learned and experienced. With what's happening in the real world around energy efficiency, how could it not change. The details of how programs are designed and who is impacted matter now more than ever.

You'll hear that Staff have gotten lost in the details and are manufacturing issues that have never before been brought up. Staff is focused on details because they impact the end result. Ignoring them is likely to result in ratepayer detriment.

You'll hear claims that ratepayers will be exposed to over 4 billion in additional costs over the next 20 years if you let Staff to torpedo MEEIA. First, the dollar figure should be dismissed offhand as it includes billions of cost that are not subject to this case, including seemingly unnecessary power plant additions. Staff does not intend to torpedo MEEIA, but this application fails on too many fronts. In fact, Staff offers a path to design a MEEIA portfolio in a manner that could comply with statutory directives.

You'll hear that reliability is at risk without this MEEIA Cycle 4 application being approved exactly as it is. This is a red herring to distract from the foundational flaws of Ameren's application.

You'll hear that Staff don't like MEEIA

and that they're creating false barriers to the continuation of MEEIA in the state of Missouri. The barriers in this case are constructed by Ameren and include poor assumptions, lack of citations for assumptions, and failure to account for how MEEIA programs will actually affect ratepayers.

On top of all that you'll hear that Ameren doesn't think this is the right time for this level of granularity. MEEIA is complicated and details matter. Ignoring them does not make them go away, but it does advance the risk of ratepayer harm. So let's make sure we stick to this application in this case with this company and get the analysis done right.

And don't forget, Ameren's MEEIA application has been rejected before. The Company assumes little risk in this application and in the rejection of this application. They came back to take another bite of the apple after Cycle 2 with a different application and more willingness to work with Staff. Ameren is too well-run of a company and the MEEIA statute is far too wealthy. They won't leave that money on the table. They'll come back with more detail and a better plan. The sky is not falling, but preventing negative outcomes does require a specific plan with attention to detail which is exactly what Staff are recommending that Ameren be made to do.

Staff has put in hundreds of hours of analysis and produced over 500 pages of testimony and work papers in this case to make sure that you have the details. Staff has attempted to work with Ameren to verify information and perform a thorough review of this application, even working through an extension to make sure that we had the time to get it right.

Staff is not satisfied with the application, work papers or answers that Ameren has provided. They are not satisfied with the level of detail. They are not satisfied with the assumptions made or the information that's been left out. And you shouldn't be either. So take advantage of Staff being here this week and the work they've put into this case. Ask them questions and get the details. Ask the same questions of Ameren because the devil is in the details.

So what details should you seek. Let's start with the basic goals of this MEEIA Cycle 4 application. What does the application hope to achieve. When will it happen. Where will the results take place and how. Still too vague and intangible? I thought so too.

This topic is complex. It's very easy to raise it to a 30,000-foot level and gloss over important pieces of information. So what information should you question. Information like the assumed numbers that feed the Deemed Savings Table. The basis of calculations in the Technical Resource Manual, the TRM. The way attributed values were calculated and used in the Integrated Resource Plan, the IRP. The estimates that feed every single cost-benefit analysis provided in this application and supporting documentation.

Staff asked these questions. A hundred and 61 data requests with 14 sub requests. That's 175 individual requests for information. Staff examined all of these responses and tried to understand where the numbers come from. The math isn't mathing. And it's not because Staff can't figure it out. It's because assumptions were made. It's because evaluation, measurement, and verification, EM&V, has not been satisfactorily planned and documented. There are too many unanswered questions around how EM&V is to be done.

If this application is to serve as the

foundation that we're locked into for demand-side management for every single Ameren ratepayer in the state of Missouri, let's make sure it's sturdy. Staff has found it to be full of cracks, and Ameren wants you to ignore that and approve building a house on top of it. And not just any house. A $600 million house. That's bigger than any rate case and funded by ratepayers, not investors. So ask questions. Look really closely for the cracks because the devil is in the details.

For the presentation of the issues in this case, the parties have agreed and Judge Pridgin has graciously allowed for this case to be organized into seven issues over five days. There's a lot of details that need to be understood. Each issue is going to receive its own shorter opening as agreed to, but for clarity I want to walk through all seven issues with you quickly now.

So issue number one is benefits. The work papers underlying Ameren's application drastically overstate the assumed benefits of the proposed programs. The ratepayer costs of MEEIA programs are far too high to rely on potential benefits that should not be expected to occur anywhere near the magnitude that Ameren would have you believe. Ameren has not shown its work and cannot identify the cancelation or deferment of any supply-side resources for its current application or any past application for that matter.

So who is benefiting and when. Participants? Nonparticipants? Under this application, it's always Ameren who benefits. Additionally, this application relies on a method to calculate avoided capacity costs that the Commission rejected in Evergy's Cycle 3 MEEIA application. Ask Staff witnesses Brad Fortson and J Luebbert what details they need to support a MEEIA application. Ask Ameren to identify the specific supply-side generation, transmission, or distribution investment that will be avoided or deferred if this Cycle 4 application is approved.

Issue number two: The Inflation Reduction Act, the IRA. This application ignores the impact of the IRA and, in turn, it asks you to ignore the IRA and attribute all impact on demand side to Ameren's MEEIA programs. Ameren's application does not address free ridership or attribution in relation to the IRA.

Issue three: Administrative overhead. Should there be a cap. Yes. There is one set out in the IRA at the federal level. Staff agrees with the Office of Public Counsel on this issue, specifically the information detailed by Dr. Geoff Marke. Dr. Marke points out two things regarding administrative overhead of energy efficiency programs. First, some past Ameren programs were allotted more funds for administrative overhead than they did for the actual energy-saving measure itself. Secondly, Ameren should be made to be efficient with the funds that ratepayers are forced to pay to support energy efficiency.

This carries us to issue four: The earnings opportunity. Is an earnings opportunity warranted, and if so, how much. The intent of the earnings opportunity as a component of MEEIA is to compensate shareholders for a return not earned on investments not made because the MEEIA cycle is reducing, deferring, or avoiding future investment opportunities. Inflated benefit estimates in this application give the appearance of cost-effective programs, but if the benefits are unlikely to ever be realized by ratepayers, the estimates should be rejected. Ameren Missouri ratepayers assume all the risks of Ameren not meeting its projected energy targets. Ask Staff witnesses Mr. Fortson, Mr. Luebbert, and Ms. Lange for details here. Ask Ameren for details on the certainty of the benefits for ratepayers. What details matter here.

This question leads us directly into issue number five. The details that matter must be thoroughly evaluated, measured, and verified. EM&V. We'll talk about that a lot. Overestimation gives inflated results and generalization excludes from the analysis concepts we know need to be addressed. Listen to Staff as they walk through these concepts and explain how ignoring them pads Ameren's application and increases risk for ratepayers.

To get this analysis right we need to know what Ameren has done to address the rebound effect, interactive effects, the principal-agent issue, interaction with the Inflation Reduction Act, operational inefficiencies, free ridership, spillover, the impact of time-based rates. These are known concepts that must be accounted for. This analysis is complex, and if we leave out those details, it's a windfall to Ameren of double, if not triple recovery, paid for in large part by ratepayers.

A large portion of the necessary evaluation, measurement, and verification has a

foundation in the Technical Resource Manual, the TRM, and the Deemed Savings Table. A closer look at both shows us that they are extensive and give the appearance of providing very accurate estimates of energy and demand savings, but don't be fooled. Ask for the details. Transparency around the sources utilized for thousands of assumption borne out of these two documents is lacking. Many of the numbers are hard coded without citations. The citations that do exist are no longer valid. And the ones that are still valid are cited by vague references to entire documents that are often hundreds of pages.

Staff attempted to interact with the data cited to support the TRM and the Deemed Savings Table. When they tried to trace it back and get the details, they found assumed values were not reasonable, reliance on outdated studies produced inaccurate results, and there was an extreme lack of justification for assumptions made within these two documents. Listen to Mr. Fortson and Mr. Luebbert as they walk you through the details or the lack thereof.

Issue number six: Throughput disincentive. Staff has proposed a new mechanism to address the vast number of customers on time-based rates. It's easier to use and it's based in the reality of what actually occurs over time. Staff witness Sarah Lange is the expert on this mechanism; she created it. Ameren has not wanted to explore this new mechanism. Why not. Perhaps it's because a throughput disincentive based in reality instead of this application is less advantageous to Ameren. Talk to Ms. Lange about the new mechanisms. Ask her why she doesn't stand by her initial support of the original mechanism. Get the details.

Lastly, issue number seven is programs. A MEEIA application should include programs that are reasonable, well-supported, and meet the statutory and regulatory requirements. This application fails to show any of those things. If you don't have the details spelled out in black and white for each of the programs, then you can't make a conclusion that ratepayers are better off paying for MEEIA Cycle 4 regardless of their participation in the programs offered. And this is what the statute requires.

Here we are back to the details. Are you tired of talking about details yet. This application is relying on our exhaustion over the details. So stick with me. What details should we be interested in for each of the programs offered in this portfolio? A thorough description of the purpose of the program including goals of implementation, the availability for each program, clear definition over the terms and conditions of the program. What about a program-level budget by year broken down in cost categories that cover incentive amounts, the amount allotted for administrative labor, the cost to measure and verify as is required for a proper program portfolio. How about a list of energy efficiency measures that are available through each program and the incentive amounts identified and tied to each measure offered in the program. A description of the recovery of program administrative incentive amounts, applicable rate restrictions for each program, an explanation of the evaluation of each program that discusses how achieved savings will be measured and verified. How will each program minimize free riders and maximize ratepayer benefits regardless of their participation. Where are those details within the proposed tariff sheets.

Ask these questions. Staff asked them. Ameren should be able to answer them. Pay close attention to the details, the ones you get, the ones Staff asked for but haven't received, and the ones that are glossed over in the claims and analysis put

forward by Ameren in this application, because the devil is in those details. Thank you.

JUDGE PRIDGIN: Ms. Johnson, thank you. Let me see if we have any bench questions. Chair Hahn. No questions, thank you. Commissioner Holsman?

COMMISSIONER HOLSMAN: No questions, Judge, thank you.

JUDGE PRIDGIN: Thank you. Commissioner Kolkmeyer? Thank you. Commissioner Mitchell? I'm not hearing any questions. Ms. Johnson --

COMMISSIONER MITCHELL: None for me, Judge.

JUDGE PRIDGIN: Thank you. Ms. Johnson, thank you.

COMMISSIONER HOLSMAN: Judge -- Judge, I do have one question.

JUDGE PRIDGIN: Yes, when you're ready, sir.

COMMISSIONER HOLSMAN: Thank you.

QUESTIONS

BY COMMISSIONER HOLSMAN:

Q.   Is it Staff's position that the 200 megawatts of capacity shortfall, is that an inaccurate statement by Ameren based on your -- your research?

A. I don't want to lead you down a path that's incorrect, so I'm going to defer that question to Staff. I believe that there are some accuracies, but I think the answer's a bit more complex than just simply saying yes or no.

COMMISSIONER HOLSMAN: All right. Thank you. Thank you, Judge.

JUDGE PRIDGIN: Commissioner, thank you. Any further bench questions? Ms. Johnson, thank you.

MS. JOHNSON: Thank you.

JUDGE PRIDGIN: Opening from Renew Missouri.

MR. LINHARES: Good morning. May it please the Commission. My name is Andrew Linhares. I'm representing Renew Missouri Advocates or Renew Missouri. And I'm happy to be here today. For -- for more than a decade now, Missouri's investor-owned utilities have been operating demand-side management programs under the Missouri Energy Efficiency Investment Act or MEEIA, a law whose primary function is to reverse the inherent disincentive for utilities to reduce their sales through energy-saving measures. Now, it's likely that other utilities' future portfolios will follow in the wake of the decision made in this case, so I don't need to tell the Commission of the wide-ranging impacts that could result.

Energy efficiency is often touted as the cheapest investment utilities can make in order to meet customer demand. The energy that doesn't need to be produced in the first place is the cheapest and the cleanest form of energy. So if utilities can offer incentives to help residential and business customers reduce usage, the MEEIA statute says that utilities can make a profit on these expenditures on par with profits on investments on the supply side of the grid. Under this framework, Missouri's IOUs have been in -- have invested hundreds of million dollars, generated far more in customer benefits, and led to job creation and the development of measure delivery pipelines and marketing channels that didn't exist prior to MEEIA.

Now, I say all of this just as context to remind us where we've been and where we are. This will, in fact, be my last hearing in front of the Commission as I've accepted -- at least for the time being -- as I've accepted a job that actually starts on Monday.

In one of my very first cases in front of the Commission was Ameren Missouri's MEEIA 1 portfolio in 2013 that we worked on and achieved approval at the Commission. And here we are again. This case presents the Commission with the decision of whether to continue with utility energy efficiency programs in Missouri. So we're asking this Commission to approve Ameren Missouri's MEEIA Cycle 4 DSM portfolio in order to continue the wild success of the MEEIA statute and to not throw away the energy efficiency infrastructure that's taken so long to develop.

Now, I want to zero in on a specific area. You'll find this as issue number two in the list of issues. That's whether utilities can combine utility rebates along -- or stack utility rebates with federal incentives for the same measures as well as how to approach the issue of attribution of savings, which I see as an EM&V issue. Now, these topics become relevant due to the passage of the Federal Inflation Reduction Act, administered by DOE in part. That was passed in 2022, and that includes several home energy rebate programs and other tax incentives for energy efficiency measures, some of which overlap with measures incentivized by Ameren Missouri's programs.

Now, Staff and Public Counsel have submitted testimony encouraging the Commission to deny the Company's filing. Part of the reason they point to is the coming federal IRA incentives. Staff and OPC witnesses are concerned about free ridership, which we'll hear a lot about in this hearing. And they even go so far as to call utility rebates handouts. The reasoning goes if some federal rebates could be larger than utility ones, then utilities aren't causing those measures to take place, thus utilities shouldn't receive attribution for that savings and, in fact, we don't actually need utility programs or MEEIA any longer at all.

So in responding to this general line of argument, I want to emphasize how important it is to remember how central the utility is to energy efficiency infrastructure and delivery in our state. Utility energy efficiency programs are -- they're much more than checks that go out to customers. For most customers their electric utility is still the first place they turn to seek ways to lower their bills or make their homes or businesses more efficient. Utilities function as the basic entry point to the universe of energy efficiency products, measures, financing, locating contractors, et cetera.

Without the utilities' involvement, the efficiency space looks very different. I don't know how many people have been practicing back to 2009 or before, but it was a very different world. The infrastructure that took many years to develop and wouldn't be in place without the MEEIA statute and incentive framework, we -- we have MEEIA to thank for that. The Commission should consider carefully whether -- whether it wants to scrap this infrastructure because of federal incentives that do not yet exist in Missouri, will likely not hit the market in Missouri until late 2025, will go away after a few short years, and are ultimately uncertain due to the changing federal political climate.

Renew Missouri recommends that the Commission embrace and approve the stacking or braiding of utility rebates with federal IRA incentives. Particularly for some of the income-qualified sectors or markets, stacking utility and IRA incentives will allow energy efficiency measures to finally reach some residents or building owners who need it the most, but who have never taken advantage due to the up-front cost barrier.

The National Consumer Law Center supports the braiding of federal and nonfederal incentives as a way to eliminate up-front costs for low and moderate income households and there's a lot to refer to there. And I've prepared a presentation here that outlines some of the federal guidance to stacking incentives. The Federal Department of Energy recommends allowing and encouraging stacking rebates so long as the total rebated value does not exceed the total project cost. And Renew Missouri recommends that the Commission follows this federal guidance.

And actually, let's see if I can advance -- this is more guidance from the Federal DOE. It's clear that they're envisioning cofunding these measures. Now, the -- the one federal resource that I want to make sure to direct the Commission's attention to is the FAQs here on the DOE site. This is actually under the SCEP function of the DOE. Stacking home energy rebates with nonfederal funds or utility funds is generally allowable and encouraged if the total rebated value does not exceed total project costs. Now, there's -- there's far more there we can look into on the DOE, but I just wanted to briefly mention that here.

Moreover, another Midwestern state that we could look at as a corollary to Missouri, the state of Wisconsin are explicitly embracing stacking and are currently rolling out a statewide efficiency program with the provider Focus on Energy. That will be cofunded using IRA home energy rebates and the state rebates. The state of Maine is also embracing stacking, planning for the IRA home energy rebates to complement existing state energy efficient incentives and federal tax credits. Both states are essentially ready to offer the IR rebates -- IRA rebates this summer, a little ahead of Missouri. They're providing delayed states like Missouri a chance to observe and learn from them. So this is a solvable issue, this issue of the IRA and stacking rebates. And clearly stacking is an anticipated and encouraged practice by other states, by the federal government, by third-party resources.

Now, the attribution of savings issue I see as separate. It should be viewed separately from whether rebates should be allowed to stack. And that's best -- best dealt with in the EM&V, the evaluation, measurement, and verification process. And I think the parties can work together on how to determine the best way to attribute savings when both incentive streams are being deployed for a particular measure.

Now, there is an emerging body of literature, guidance, real world models that State regulators can use to figure out how to approach the attribution issue. The Northeast Energy Efficiency Partnership or NEEP, this is a regional energy efficiency partnership similar to the Midwest one, MEEIA. SWEEP I believe is the southwest one. They -- NEEP released a long document just this month, it's brand new. I'll be offering it as an exhibit when -- when appropriate. This provides guidance for regulators on the various ways to approach attribution for this exact case where both the federal and utility funding streams are employed.

In considering attribution during the EM&V process, Renew Missouri wants to encourage regulators to be open minded here and consider the crucial functions that utilities are serving, which I mentioned before. Serving as the primary hub for each step in the efficiency process from estimates to locating contractors and selecting contractors to providing the actual incentive payments and ultimately in measure evaluation at the end.

So even in the case where nonutility centives -- incentives are larger than the utility share of the total incentive, it's still reasonable I would argue that the measure would not occur but for the utilities' involvement. So that's the central point I want to get across here.

So in closing I want to just reiterate a sense of caution here in putting an end to the MEEIA framework after all the years of work it's taken to get us to this point, especially given a lot of uncertainty around the IRA home energy rebates and the political situation at the federal level. Renew Missouri believes, we still believe in the value of utility-sponsored energy efficiency, and I -- I do believe it would be a mistake to change course at this point.

So thank you. I'd be happy to entertain what questions the commissioners may have. I also, I do have a few exhibits to offer. I have heard from I believe all the parties that they do not have any cross-examine for my two witnesses, so if appropriate, Judge, I'd offer their exhibits at this point. But I'm -- again, I'm happy to entertain questions first.

JUDGE PRIDGIN: Yeah. Let's see if we have any bench questions first. Chair Hahn, any -- any bench questions? Thank you. Commissioner Holsman?

COMMISSIONER HOLSMAN: Yes, briefly, Judge.

JUDGE PRIDGIN: Whenever you're ready.

QUESTIONS

BY COMMISSIONER HOLSMAN:

Q. Thank you. Thank you for the presentation today. First off, appreciate all the time you've spent in the state of Missouri working on behalf of these issues and good luck in your next endeavor.

A. Thank you. Thank you very much, Commissioner.

Q. Do you -- do you -- does Renew Missouri have an opinion on the capacity issue if these programs were to be not approved on the 200 megawatt shortfall?

A. Well, I believe the capacity issue is going to see a major change in the next decade. There are gas plants in -- in utility IRPs that are before us. There's a major change in terms of consumer demand. We've heard about data centers. We've heard about electrification. All these things are going to change the demand picture quite a bit. I believe that the distributed energy space is going to have a major role to play here.

But the key thing -- I suppose I don't

have a particular reaction or position that's germane to your question there, Commissioner, but I just would say that I really think it's important for the utility to be -- to continue to be involved with the infrastructure that it has to be able to be in a position to offer demand response programs and price signals to customers. And I think MEEIA is responsible for most of that, right. So the caution that I'm offering, that I'm recommending here is to make sure that utilities stay engaged at that level. And I think MEEIA is the way to do that, to be able to affect customer demand through -- through programs.

So I hope that's responsive. I don't have a particular position to offer on your exact question.

Q.   You recommend -- (poor connection).

A.   Sorry, Commissioner. We're having trouble hearing you.

JUDGE PRIDGIN: Yeah. Commissioner Holsman, I don't -- we can't hear you. I'm afraid you're cutting out, Commissioner. We can hear you a little, but we can't hear your question.

COMMISSIONER HOLSMAN: Sorry. I just turned off my video.

JUDGE PRIDGIN: There you go. You're still cutting out, Commissioner Holsman. I'm sorry.

COMMISSIONER HOLSMAN: Ask if anybody else has any questions. Let's see if I can get another tower.

JUDGE PRIDGIN: All right. Very good, Commissioner. Thank you. Commissioner Kolkmeyer, any questions? Commissioner Mitchell?

COMMISSIONER MITCHELL: Yeah, just -- just a quick question.

QUESTIONS

BY COMMISSIONER MITCHELL:

Q. With regard to the notion of stacking, I'm really trying to understand it a little bit myself here. How -- the earning opportunity on, you know, the utility investment, I understand the capital comes from the utility to support these investments, but the capital that might come in from the Inflation Reduction Act or other federal sources, is there an earning opportunity associated with -- with that as well and do any of the other states separate the two -- the two funding sources --

A. Right.

Q. -- to determine earning opportunity?

A. Right. So my understanding here is no,

there's no earnings opportunity on the expenditure or the, you know, the incentive amount that's coming from say the federal government here. But there would be an earning opportunity on the utility portion, the attributed savings that is determined to be attributed to the utility, right.

So the point of disagreement is whether the utility should get full attribution or partial attribution or no attribution in a case where there is a large federal incentive and a utility incentive at play for the same measure.

So one -- there's one issue of whether the utility should be allowed to issue a rebate, offer a rebate for a measure that's already receiving federal funding. That's the issue of stacking or whether we can braid two sources of incentive for a single measure. Then the issue of attribution comes in essentially whether the utility should re -- should be seen as causing that measure, whether -- whether it should be attributed the savings that that measure causes. I see that issue as for evaluation, measurement, verification on the back end rather than just the decision on whether to allow two sources of incentive to -- to be in play for a measure.

So I'm trying to distinguish there, but I

hope that answers the question. I'm happy to clarify further.

COMMISSIONER MITCHELL: It does. That -- that helps me understand a lot better. I appreciate it. Thanks. I don't have any other questions, Judge.

JUDGE PRIDGIN: Commissioner Mitchell, thank you. Commissioner Holsman, did you want to -- did you have any other questions?

COMMISSIONER HOLSMAN: Yeah. I should be in good shape. I got five full bars and 5Gs. So I'm on I-70 headed your way; I'll be there in about 45 minutes.

QUESTIONS

BY COMMISSIONER HOLSMAN:

Q. So back to my question. And Commissioner Mitchell kind of touched on it a little bit. You're recommending stacking the rebates. Does that mean if we don't stack them, that there are existing federal resources that are going underutilized?

A. Well, I -- I will tell you I believe there's a danger of that, yes. I mean, I -- you know, we -- our Division of Energy is in the process of applying for those funds. I believe they'll have a third party involved in helping them administer

them. But I think the challenge -- the major challenge there is, you know, with what sales and outreach and evaluation infrastructure that's going to be done, and we're talking about hundreds of millions of dollars, and to my mind, the entities that are capable of administering hundreds of millions of dollars or tens of millions of dollars are the utilities, full stop. I don't believe there's a government agency that's prepared to do that sort of function, at least at -- at the time being.

And here we are with the infrastructure existing in the utilities with knowledge of the market and their consumer base, with experience building pipelines and seeing those measures through. And I believe that tasking a state agency with -- unaided by utilities, because that's what we're talking about is getting rid of MEEIA, I believe that that's a serious challenge and it's hard to imagine us administering all of that money without the involvement of the utilities.

Q. Do you think that this potential resources that could come our way through the IRA could be used for other projects that might otherwise inhibit the energy efficiency program like, you know, holes in the roof or other issues that tend to keep a customer from participating in energy efficiency unique to build resources that stack could address some of the those barriers?

A. That's a great question, Commissioner. I mean, you're referring to, you know, sometimes called walk-away issues, you know, issues that are, you know, conditions in the home or the business that are barriers to doing the actual efficiency measure. Now, a lot of those things like repairing a roof or removing contaminants, those don't have energy savings associated with them, so it's tough to imagine utility resources being used to that because you're going to have a high TRC score there. You're going to -- you're going to price yourself out of cost effectiveness without generating savings.

And as to whether federal resources can be used for those sorts of things, I don't think I'm knowledgeable enough personally. There may be witnesses that know the answer to that. I do not know the IRA programs inside and out. I believe there's some evaluation associated with those programs as well and reporting on how the money was used.

So I don't want to speak to that, but I

believe that is going to be a challenge. But the key here is they can be used to get very close to eliminating the entire up-front cost of a measure, which is the challenge. That's the challenge for a lot of low-income or income-eligible buildings. And we've talked a lot about the split incentive in this state over the years which is, you know, in the affordable housing sector where the building owner is not the meter holder; they're not paying the bill, and so they don't necessarily have the same incentive to invest in the building. And the meter holder, the tenant doesn't own the building, so they don't have the incentive to invest in a building that's not theirs. How do you overcome that issue. And you've got to eliminate a lot of the up-front costs in order for the building owner to see the value in it.

So there may be a lot of neglected and untouched-by-MEEIA buildings out there that allowing these funds to stack could -- could finally reach. So while --

Q. Would you say that that -- is that -- is the up-front cost -- because we look at some of the efficiency of this program and the performance of this program, and some of them is -- it is pretty abysmal in its output. Would you say that up-front

cost is the number one barrier?
A. I don't know about the number one barrier and --
Q. As opposed to -- as opposed to education, you know, awareness of the programs, you know, other -- other factors that go into why someone doesn't choose to utilize it.
A. Right. Well, I certainly -- I wouldn't want to speak for all building -- or, you know, the entire market, but I'm -- I'm speaking for the income-eligible sector and specifically affordable housing. I believe that up-front cost, yes, I believe that's the number barrier there. Certainly awareness and, like, understanding of how programs work is another barrier, but I see that as taken care of by the sales teams at the utilities.
I mean, what we've been working on with Ameren Missouri and other utilities is a concierge approach rather than just a making the program available and accepting all comers. We believe that using data, market data, energy burden data, we can identify the customers most in need and do targeted outreach for those buildings, some of those buildings that have been untouched by MEEIA programs in the past. That's the model that I see being successful.

So I don't see education and awareness as that big of a barrier as I do the up-front cost barrier for that affordable housing sector.

COMMISSIONER HOLSMAN: All right. Thank you very much. Thank you, Judge. Those are all the questions I have.

MR. LINHARES: Thank you, Commissioner.

JUDGE PRIDGIN: Commissioner Holsman, thank you. Any further bench questions? Mr. Linhares, I'm sorry, did I understand you wanted to offer some exhibits?

MR. LINHARES: If that's acceptable to you, Judge, yeah, I -- I would do that at this moment.

JUDGE PRIDGIN: That's perfectly fine with me. I believe you've been assigned exhibit numbers 400 through 449?

MR. LINHARES: Yes. And I have Exhibits 400 through 405 to offer. And I'm happy to run those down for you.

JUDGE PRIDGIN: Please.

MR. LINHARES: Okay. So Exhibit -- I have marked as Exhibit 400 the rebuttal testimony of Emily Piontek. As 401 I have marked the rebuttal testimony of Dana Gray. As 402 I have marked the surrebuttal testimony of Emily Piontek. And 403 would be the surrebuttal testimony of Dana Gray. So that's -- that's the test -- the four pieces of testimony Renew Missouri's offered.

As 404 I've marked my presentation today which includes links to federal resources, the Wisconsin and -- and Maine examples, if that's of interest to the commissioners. And then my final Exhibit marked as 405 would be the NEEP report which is entitled Expanding the Energy Savings Pie, Attribution Frameworks to Align IRA Home Energy Rebates and State Programs. So that's published July 2024. It's a brand new resource that I'd love to offer as an exhibit today.

JUDGE PRIDGIN: All right. Exhibits 400 through 405 have been offered. Any objections?

MR. PRINGLE: Is there a, just a copy of 405 we could look at real fast, Andrew or?

MR. LINHARES: Absolutely. I have it here.

MS. MOORE: Andrew, do you have another copy?

MR. LINHARES: I'm sorry. I do not. I can send a digital copy.

MS. MOORE: When you get a chance, that

would be great. Thanks.

JUDGE PRIDGIN: Does Counsel need more time to review the exhibit?

MS. VANGERPEN: Judge Pridgin, we would like just a few minutes as well.

JUDGE PRIDGIN: Certainly.

MS. VANGERPEN: Thank you.

MR. LINHARES: Judge, I'm happy to offer it at a later time or we can take the time now for people to page through it. Either way is all right with me.

JUDGE PRIDGIN: I'm wondering if we could proceed to other openings? Will that distract you from reviewing the exhibits?

MS. VANGERPEN: We'll try to be very quick, your Honor.

JUDGE PRIDGIN: Okay. I'll just give you a few minutes. Thank you.

MS. VANGERPEN: Thank you.

MR. LINHARES: So I would move to offer these exhibits into the record.

JUDGE PRIDGIN: Okay. Exhibits 400 through 405 have been offered. Any objections? All right. Hearing none, Exhibits 400 through 405 are admitted into evidence.

(Renew Missouri Exhibits 400 through 405 were admitted and made a part of this record.)

JUDGE PRIDGIN: All right. Thank you. Any -- excuse me. Opening statement from NRDC.

MS. RUBENSTEIN: Good morning. Just checking my connection here. Hopefully you all can see me and hear me okay.

JUDGE PRIDGIN: Yes, good morning. Whenever you're ready.

MS. RUBENSTEIN: Morning. May it please the Commission. My name is Sarah Rubenstein and in this case I represent Natural Resources Defense Counsel, commonly known as NRDC. NRDC takes a position in this matter only with respect to issue number seven, programs.

NRDC respectfully asks that the Commission approve Ameren Missouri's proposed MEEIA energy efficiency plan with modifications. In this proceeding NRDC submitted the direct and rebuttal testimony of Stacy Sherwood who has 15 years of experience in the energy sector related specifically to the review and development of energy efficiency and demand response programs and policies. As outlined in detail in Sherwood's testimony, Ameren Missouri's MEEIA plan has good attributes putting forward a wide-ranging portfolio of programs and measures across different rate-paying classes. However, as the projected demand savings from the program drop off after 2025, NRDC believes the plan leaves room for improvement. Ms. Sherwood's testimony recommends modifications that would expand the reach of the plan and increase its demand-savings opportunities.

First, the plan should be expanded to reach a minimum of 1 percent annual energy savings. The plan projects annual energy savings of .8 percent which is lower than savings achieved by the Company in 2021 and declines from prior years annually. Additional cost-effective energy savings may be available that could bring the program closer to the level of savings projected by the Commission's MEEIA demand-side savings goals, closer to savings achieved by other similarly-situated large electric utilities, and closer to levels Ameren itself has achieved in prior years.

Second, NRDC believes the plan should be modified to limit residential lighting programs to direct installation in income-eligible properties and to utilize a measure life assumption of one year. The high-efficiency lighting discounts proposed in the plan are no longer necessary in light of the fact that LEDs now serve as the baseline.

Third, the Company's residential demand response program should be expanded to offer winter-demand response opportunities and to include small business customers. This could be accomplished for residential customers by expanding the current program, which operates from May through September, to include winter events using the same thermostat that is already in use. In addition, the Company should consider expanding the residential demand response program to include small businesses. Thermostats for small business customers could be enrolled and direct-load control switches could be installed for such customers without requiring new program designs.

Finally NRDC recommends braiding or leveraging programs that promote the common goal of reducing energy consumption and demand with MEEIA programs rather than supplanting them. This is especially true because cost is one of the greatest barriers to the implementation of energy efficiency measures for both households and businesses. Thank you very much.

JUDGE PRIDGIN: Ms. Rubenstein, thank

you. Let me see if we have any questions. Chair Hahn.

QUESTIONS

BY CHAIR HAHN:

Q. Good morning. I do, just based upon that, have a couple questions. You said that the target should be 1 percent annual savings and that this current plan is just the goal of .8 percent and that that goal declined from prior years. What were the prior years goals, do you know?

A. I don't know off the top of my head, but our witness, Ms. Sherwood, will certainly know. She's performed that analysis. So I would direct you to her when we present her testimony.

Q. Thank you. And as far as the cost for expanding demand response to the winter season, which does make sense to me, would that have additional cost?

A. Again, I would direct you to Ms. Sherwood or to the Company with that question for specifics, but we believe the -- you know, it would be such an easy model to just continue those -- those thermostats that are already being used for that purpose. That is -- that is sort of the thought process behind that, that that would be a very easy,

low-cost option that could be implemented in theory very quickly.

CHAIR HAHN: Great. Thank you so much.

MS. RUBENSTEIN: And -- And --

CHAIR HAHN: Oh, so sorry.

MS. RUBENSTEIN: Thank you.

JUDGE PRIDGIN: Chair Hahn, thank you. Commissioner Holsman?

COMMISSIONER HOLSMAN: No questions.

JUDGE PRIDGIN: Thank you. Commissioner Kolkmeyer? Commission Mitchell?

COMMISSIONER MITCHELL: No questions for me, Judge.

JUDGE PRIDGIN: All right. Thank you. I'm going to now proceed to opening -- I think MECG has been excused, but just in case, does MECG have an opening? Hearing nothing, any opening from Consumers Council?

MR. COFFMAN: Thank you, your Honor. We will not have an opening at this time. Consumers Council is generally convinced by testimony from Staff and Public Counsel. We're adopting the Public Counsel position here, so no opening at this time. Thanks.

JUDGE PRIDGIN: Thank you. Chair Hahn

any questions.

CHAIR HAHN: Yes.

BY CHAIR HAHN:

Q.   Mr. Coffman, in the last proceeding that you participated in before this Commission was the Ameren securitization proceeding in which you also adopted the position of Public Counsel, but during which the proceeding you were largely absent and did not make additional filings. But I did read your opinion of the Commission's case in a major news media outlet. That being said, I'm curious if you're planning to be present during this hearing or proceeding and if you plan to make additional filings in the case.

A.   We have no plans to make additional filings in the case. My plan is to be here today and -- but may not be here for all of the proceeding, the remaining proceedings.

JUDGE PRIDGIN: Chair Hahn, thank you. Any further questions? Commissioner Holsman? Hearing none, Commissioner Kolkmeyer? Commissioner Mitchell? All right. Thank you. Any opening from the Office of the Public Counsel?

MS. VANGERPEN: Yes, your Honor.

JUDGE PRIDGIN: Ms. VanGerpen, when

you're ready.

MS. VANGERPEN: Good morning, Chair Hahn, Commissioners, Judge Pridgin. May it please the Commission. My name is Lindsay VanGerpen, and I'm here this morning on behalf of the OPC. Before I begin this morning, I want to make something very clear. The OPC is not anti-energy efficiency. Rather what we are is anti-inefficiency and that, Commissioners, is what we see in Ameren's amended application and why we're here this week asking that you reject it.

So with that being said, let's dive in. I'll break my time up with you this morning into three parts. First, a short history of MEEIA. You'll see as I go through this, Commissioners, it's a history that's fairly collaborative amongst the parties. Next I'll address the inefficiencies we see in the amended application with a brief discussion of the seven issues. Finally I'll turn to the options that we see for moving forward.

So to get started, let's look at how we got here. In 2009 the Missouri legislature passed the MEEIA statute. Stakeholders then worked together to draft the MEEIA rules and in January 2012 Ameren filed an application for its first cycle of MEEIA programs. Over about the next eight months or so, parties worked together to find a mutually-agreeable resolution and the case ultimately settled, but then the first EM&V came in and there were problems. This was a highly contentious, labor-intensive disagreement amongst the parties.

At roughly the same time, in December 2014, Ameren filed its application for its Cycle 2 programs. The parties had some challenging experiences as I mentioned with the Cycle I programs when they started considering the application for Cycle 2. The case ultimately resulted in competing stipulations: One known as the utility stipulation and the other as the nonutility stipulation. When the parties' continued settlement discussions ended at an impasse, the Commission ultimately rejected Ameren's utility stipulation finding in part that its lack of retrospective EM&V process and high earnings opportunity resulted in a plan that simply wasn't cost effective for Ameren's ratepayers.

In its Report and Order issued in October 2015, the Commission specifically recognized MEEIA was never intended to be a blank check. Then in concluding that Report and Order, the Commission encouraged Ameren to consider its decision and to present a plan that all parties and the Commission could support.

In accordance with that directive, the parties worked together again and approximately four months later in February 2016 the Commission approved the parties' stipulation for Ameren's Cycle 2 programs. Immediately after that, the Commission revised its MEEIA rules in their entirety based off of all of the collective experience with Cycle 1.

About two and a half years later in June 2018 Ameren filed an application seeking a third cycle of MEEIA programs. Again, the parties worked together and reached an amicable solution which this Commission approved in December of 2018.

The parties then worked together again as Cycle -- as the Cycle 3 programs approached their initial end date and ultimately agreed to extend the Cycle 3 programs for three additional years for program year 2022, 2023, and 2024. In each ex -- in each extension the parties increased the efficiencies of the program and essentially trimmed the fat off of them. We're now about halfway through that last one-year extension of the Cycle 3 programs.

As you can see, Commissioners, the history of Ameren's MEEIA programs has been at most times a collaborative one, but the importance of this history is the learning and evolving as we go. The MEEIA programs have to evolve.

So knowing that history of collaboration that has existed in the past MEEIA programs, why are we here this week. Again, the OPC is not anti-energy efficiency, but, Commission, this amended application is riddled with inefficiencies that rise to the level of unacceptable.

The parties have identified seven sets of problems which Staff also referenced in their opening, and these are our seven issues this week. They are benefits, the IRA and other market dynamics, administrative overhead, the earnings opportunity, the EM&V process, the throughput disincentive, and the programs themselves. Now, I also don't want to take a lot of time to do a deep dive into all of these because you're going to hear from me a lot this week, but I do want to give you just a broad overview of where we're at with each of these issues.

So first and perhaps most importantly is the issue of benefits. As I briefly mentioned earlier, the MEEIA statute requires the programs to be beneficial to all customers regardless of participation. You'll see that statutory here --

standard here on the screen. Now, Ameren has told this Commission that their cost-benefit analyses show that programs are cost effective, but I implore you, Commissioners, to remember that those analyses are just a guess and they fail to account for important factors such as free riders, alternatives, or the diminishing returns associated with a saturated market. This is certainly enough to question those cost-benefit analyses.

Further, as the testimonies of the OPC's Ms. Lena Mantle and Staff's Mr. J Luebbert describe, Ameren has failed to consider how the distribution of benefits through its FAC will affect its ratepayers. Importantly, as Ms. Mantle's analysis shows, situations exist where a reduction in energy will actually increase the cost to nonparticipants. That's in direct contravention of the MEEIA statute.

Further, as the OPC's Mr. Jordan Seaver and Staff's Mr. Brad Fortson explain, it's unlikely that Ameren will actually avoid or defer any supply-side investment with this portfolio. MEEIA, Commissioners, as I will discuss later, is a situation where those who bear the risk will likely receive none of the reward. These problems are certainly enough for the Commission to reject the amended application as failing the statutory standard.

But if you disagree with us, you should -- we also ask that you consider the IRA or the Inflation Reduction Act and other market dynamics. Now, the easiest way to describe these issues is to say that alternatives exist and standards have changed such that -- such that Ameren's programs will result in significant free riders or those who would have made the energy efficiency upgrades regardless of Ameren's programs. Simply put, fewer people are installing ener -- inefficient equipment because it just doesn't exist anymore.

Commissioners, you are well-aware of the situation facing Ameren's ratepayers. Ameren has to build generation to continue to provide reliable service to its customers. This will come at a time when those same ratepayers are facing significantly higher costs across other sectors of their lives as inflation remains high. We have to be cautious with what we ask ratepayers to spend their money on. It has to provide the benefits it claims, and it should be something that they can't get anywhere else. The generous tax breaks and incentives through programs like the Inflation Reduction Act and the Low Income Weatherization Assistance Program as well as the changed codes and standards that promote and require energy efficiency are yet another reason to reject Ameren's amended application.

The next issue is the administrative cost. As Dr. Marke explains, based on prior MEEIA cycles Ameren will likely spend about 45 percent of its program budget on administrative costs. Here that means that customers will spend over $160 million to, in many cases, simply write somebody a check. This amount of administrative cost is in direct contrast to the 20 percent cap on administrative costs found in the Inflation Reduction Act. Again, this high percentage of administrative cost stands as yet another reason to reject the amended application.

Next I'll turn to the earnings opportunity. Ameren asks this Commission to approve an earnings opportunity of about $70 million. Here, Commissioners, I want to come back to that idea of risk reward. Who bears the risk that Ameren will fail to meet its goals that it set for itself. Unlike almost any other aspect of utility regulation with MEEIA, that's 100 percent borne by the ratepayers. These programs are effectively funded by 100 percent ratepayer capital such that Ameren's shareholders bear zero risk.

This is in direct contrast to something like a new generating unit where shareholders have their own dollars on the line if something catastrophic were to occur. In that instance, shareholders are rewarded handsomely through the return on equity for bearing that risk. With MEEIA though, shareholders bear zero risk and still receive a handsome reward. Ameren's proposed earnings opportunity here is yet another reason to reject the amended application.

The next problem on our list is the evaluation, measurement, and verification or EM&V process. Now, the EM&V is supposed to be used to determine whether the programs actually worked as they were supposed to. But, Commissioners, that's hard, really hard. We're trying to prove a counterfactual here. The customer would not have made the energy efficiency upgrade without Ameren's programs. Ameren's proposal to do a prospective EM&V moves all the risk to its ratepayers, and again, the Commission must reject it.

The throughput disincentive is the next

issue. And here I would direct you to the testimonies of Staff's Ms. Sarah Lange. She discusses in detail the many problems associated with Ameren's proposed throughput disincentive mechanism, but suffice it to say that the adoption of TOU rates or time-of-use rates and Ameren's deployment of AMI meters have changed the circumstances that led to Ameren's past throughput disincentive mechanism. Ameren's proposal to continue to use it here should be rejected.

And finally for our seventh problem, the programs themselves. Throughout his rebuttal testimony Dr. Marke points out the many problems with Ameren's proposed programs. For instance, he describes how some programs are redundant with available free-market alternatives. That's programs like the Business Demand Response Program which overlaps with this Commission's decision to partially remove the prohibition on aggravators of retail customers or ARCs participating in Missouri. Further, some programs have been shown to result in significant free ridership, like the Whole Home New Construction Program which caters to developers who specialize in Energy Star homes. This is on top of significant overlap between the programs in Ameren's amended application and those in the Inflation Reduction Act and the Low-Income Weatherization Assistance Program that I mentioned earlier.

Commissioners, if you want individual utility sponsored energy efficiency programs to continue here in Missouri, the OPC says this is not the suite of programs to do that.

So with all that in mind you might be wondering what is -- what is it that the OPC asks you to do, Commission. So as we see it, there are three different options. The first, you could simply ignore everything I just said and what we'll say this week and approve the application anyway. Now, for all of the reasons that I've discussed, and again that we'll talk about this week, we see that as the worst outcome for ratepayers.

Option two is you could say no and reject the amended application for any one of the reasons that I've discussed or a combination of them. Given the option between what the Company has put forward and no MEEIA, the OPC says no MEEIA. This is a step back, not a step forward. Though this may sound harsh, as I've referenced this morning, saying no to this amended application is not a no to energy efficiency. There are alternatives that exist, and in many cases the market has changed such that only energy efficient equipment exists.

Finally, as option three you could approve Ameren's amended application with the modifications Dr. Marke sets out in his surrebuttal testimony.

Dr. Marke has been doing this work a long time. He has been instrumental in improving MEEIA programs to date, and he continues to do so here by describing an alternative proposal that allows Ameren to continue to offer programs while being cognizant of the cost flown to ratepayers and trying to correct the problems we've discussed this morning.

With this proposal the OPC also asks the Commission to encourage the utilities to work toward -- to work together in an attempt to move towards a statewide program that would increase efficiencies, among them, cut down on costs. That's the best practices option, and I encourage you to ask Dr. Marke any questions that you have about it.

So again, Commissioners, Judge Pridgin, I realize I've thrown a lot at you this morning, but before I leave you I want to encourage you to ask questions of the witnesses. We have a lineup of witnesses this week who have been doing this work for a long time. They're experts in this field and they're happy to answer your questions.

And I do want to take just a brief moment to introduce the OPC's witnesses. First up we have Mr. Jordan Seaver whose Master's in philosophy helped him explain the flawed reasoning Ameren used to support its amended application.

We also have Ms. Lena Mantle. She's a professional engineer who's an expert on the fuel adjustment clause and helped to draft the rules that govern it. It's really no exaggeration to say that there's probably no one in this building who knows more about the FAC than Ms. Mantle. In addition to her familiarity with the FAC though, she also has experience with energy efficiency. Please ask her any questions that you may have, but especially those about how the FAC affects the distribution of MEEIA benefits.

And finally, Commissioners, we have Dr. Geoff Marke. Now, I want to spend just a little bit more time introducing Dr. Marke because I believe he's a witness on every issue that we have this week so we'll be hearing from him a lot. And really, that's for good reason. He's been involved in MEEIA since Cycle 1 and has likely written more testimony on MEEIA than anyone else. He's been an active stakeholder involved in each ratepayer-sponsored program in Missouri since the inception of MEEIA. He has the lived experience that allows him to effectively function as a sort of decoder ring for the Commission for this complicated but extremely important issue.

Far from being anti-energy efficiency, Dr. Marke is arguably the reason why Missouri can claim to be the first state in the United States to have a statewide inclusive on-tariff financing in the form of the Pay as you Save program or the PAYS program. He has also been recognized nationally by pro demand response -- I apologize -- pro demand-side management advocacy groups. Dr. Marke has spoken nationally, regionally, and at the state level in various energy efficiency venues such as in the Midwest -- such as ACEEE's National Energy Efficiency Finance Forum and others. He is certainly a wealth of knowledge and experience, especially when it comes to MEEIA.

So, Commissioners, I want to leave you where we started. As you're considering this case, please remember the OPC is not anti-energy efficiency. We have worked diligently with other stakeholders throughout the years trying to make MEEIA into something that meets the goals of all the parties and the requirements of the MEEIA statute. Even in this case Dr. Marke has put forth an alternative plan that meets those goals. The OPC is, however, anti-inefficiency, and Ameren's application is just that, a collection of inefficiencies. The OPC asks this Commission to reject Ameren's amended application, or in the alternative, prove it up with the modifications listed in Dr. Marke's surrebuttal testimony.

Thank you for your time this morning, and I'm happy to answer any questions.

JUDGE PRIDGIN: Ms. VanGerpen, thank you. Let me see if any have any bench questions. Chair Hahn? No. Commissioner Holsman?

COMMISSIONER HOLSMAN: Just real briefly, Judge.

QUESTIONS

BY COMMISSIONER HOLSMAN:

Q. Thank you for your opening statement. In previous cases in front of this Commission very recently, OPC has taken the position that they lack the capacity indicates or presents a risk to the ratepayer so much that it was intervention in the last -- in the last case on that issue. What is OPC's position on Ameren's -- on the Company's statement that there will be a 200 megawatt shortfall and they will not have resource adequacy if this is not approved?

A. Thank you, Commissioner. So before I begin, I do want to encourage you to also ask this question of Dr. Marke, but I will attempt to give you a preview. So as I understand it, our position is that there may be an immediate reduction in capacity associated with the demand response program which is different from the energy efficiency programs themselves. So I believe, if I understand Ameren's statement earlier, that reduction in capacity is associated with the demand response programs only.

And you'll see in Dr. Marke's testimony that we do support the demand response programs. But as I understand it, Ameren does not have to have a MEEIA in order to do demand response. And then there is also a market alternative which this Commission has recently opened in the form of ARC participation.

COMMISSIONER HOLSMAN: All right. Thank you. Thank you, Judge.

JUDGE PRIDGIN: Commissioner Holsman, thank you. Commissioner Kolkmeyer, any questions?

Commissioner Mitchell?

COMMISSIONER MITCHELL: Yeah, just a couple.

QUESTIONS

BY COMMISSIONER MITCHELL:

Q. Thank you for your statement. The question I had, the -- the proposed 45 percent administrative costs that are proposed in the application compared to the cap in the Inflation Reduction Act of 20 percent I guess surprises me a bit. Do you know off the top of your head, or do you know who we should ask what has been the previous MEEIA cycle admin costs, and have they been in the same range?

A. Again, I want to start off by again encouraging you to ask that -- that question of Dr. Marke. I believe the high administrative cost has been a problem with prior MEEIA cycles as well although I don't, Commissioner, have those numbers in front of me. But I -- I'm happy to do -- to get those numbers for you if that would be helpful.

Q. It would. It would. In the earning opportunity in this application, same question. Can you -- can you kind of express that as a percentage of program cost, and how does that compare to previous cycles?

A. That question, Commissioner, I -- I think I would need a bit more time to -- to do. I don't believe we've conducted the math necessary as to say what percentage of the EO as a -- as to administrative co -- or to program costs, I apologize, I'm kind of fumbling my way through that math in my head. But again, I'm happy to do that research and get that back to you. And again, I would encourage you to ask Dr. Marke on that question.

Q. Yeah. Fair enough. Fair enough. And I guess my last question, I guess we heard from Renew Missouri that a potential disapproval of the application, my impression from the -- from the opening was that that -- that really throws MEEIA just out the window. And that's really not what we're talking about here, is it? I mean, there's -- we can disapprove it but the effect of that is that the parties go back to the drawing board and continue to work on a -- a more palatable program. Is that -- is that the -- is that really the mechanics of what would happen in the event of a disapproval?

A. Commissioner, I can't say for certain because I -- I certainly don't know the future, but

I can tell you that that is what happened in the Cycle 2 program. So the Commission rejected the Cycle 2 application for -- for various reasons and then the -- the parties went back, worked together, and a subsequent Cycle 2 proposal was put forward and approved by the Commission.

COMMISSIONER MITCHELL: Thank you. That's very helpful. I appreciate it.

MS. VANGERPEN: You're very welcome.

JUDGE PRIDGIN: Commissioner Mitchell, thank you. Any further bench questions? Chair Hahn.

QUESTIONS

BY CHAIR HAHN:

Q. Also a logistics question similar to Commissioner Mitchell's question. There may be a host of things that the Commission thinks differently on, whether it's the programs that are offered in -- by Ameren. Some seem to be more efficient than others. Whether it's, you know, administrative costs. If the Commission does have positions on those things, can -- I guess could ask Staff too. I don't know who to ask. But can the Commission order particular things and also reject certain programs in an order instead of throwing everything out or how -- what's the logistics of that?

A. I will -- it is my understanding that you can. So I believe -- I don't have the MEEIA statute in front of me, but I believe the language is approve, approve with modifications, or reject. So I believe if -- if you -- the Commission have things, changes that you would like to see, that is something that you could include in that order. However, as I understand it, the MEEIA statute is voluntary, so it would then be up to Ameren to decide whether or not they wanted to implement that modified program. And I -- I would encourage you to ask that same question of the other attorneys as well. That's just my understanding of the statute.

CHAIR HAHN: Thank you so much.

MS. VANGERPEN: You're very welcome.

JUDGE PRIDGIN: Any further bench questions? Hearing none, Ms. VanGerpen, would you be able to get your opening statement filed in EFIS for further review?

MS. VANGERPEN: The --

JUDGE PRIDGIN: Your Power Point.

MS. VANGERPEN: Oh, the Power Point. Yes, yes of course.

JUDGE PRIDGIN: No hurry. Just at some point.

MS. VANGERPEN: Sure. Yeah. Would you like me to offer that as an exhibit now?

JUDGE PRIDGIN: That's up to you whether to offer it as an exhibit or not. I don't know what objections you would have. But I do think the Commission would want to review it at some point.

MS. VANGERPEN: Okay. I think that might be the cleanest way to do it. So we would offer that as an exhibit, just as a -- just as a demonstrative exhibit, not as an evidentiary exhibit.

JUDGE PRIDGIN: And I would show that as Exhibit No. 300. And that has been offered. Does anyone have any objections? Hearing none, Exhibit 300 is admitted into evidence.

(OPC Exhibit 300 was admitted and made a part of this record.)

MS. VANGERPEN: Thank you.

JUDGE PRIDGIN: Ms. VanGerpen, thank you. This looks to be a perfect time to take a midmorning break. I show the time to be 10:37, so let's try to resume at 11:00 a.m. Anything further from counsel or the bench before we go to break? All right. Hearing nothing, we will be off the record until 11:00 a.m. Thank you. We're off the record.

(Off the record.)

JUDGE PRIDGIN: Good morning. We are back on the record. I believe the first witness on my list of witnesses is Mr. Michels from Ameren Missouri. Is there anything further from counsel or from the bench before we proceed to Mr. Michels' testimony?

MS. VANGERPEN: Your Honor, this is Lindsay with OPC. I believe the parties have reserved the right to do mini openings for each of the issues. And the OPC does have a mini opening for the benefits question.

JUDGE PRIDGIN: Okay. Any other parties wishing to make a mini opening statement?

MR. PRINGLE: Staff does as well, Judge.

JUDGE PRIDGIN: I assume you do too, Ameren Missouri, or no?

MS. MOORE: I'm going to go along. Yes, your Honor.

JUDGE PRIDGIN: Sure. Why not. Whenever you're ready.

MS. MOORE: Yes, your Honor. In terms of the benefits and when we discussed this, Staff counsel had said some of the things about MEEIA are in the details. And one of the things that I want to remind the Commission is that there are benefits to

MEEIA which we can't put into the program because it's not -- there isn't a rule for it. And those are benefits like creating 2,700 jobs; the benefits that we don't get to claim, and that would be when we go into some of the income-eligible programs and some of the home energy saving kits include water aerators and ways to save money on natural gas. And so the societal benefits that energy efficiency approves should also considered by the Commission.

And then finally I do want to direct the Commission's attention that MEEIA is to value demand-side resources on the same level as supply side. Supply-side resources go out 20 years or longer and can be used by the Company. So that's why in the Commission rules in chapter 20, section 94.4, subsection I, that number 3 that says, The -- the demand-side programs are included in the electric -- electric utilities' preferred plan and have been analyzed through the integration process required under chapter 2260 to determine the impact of demand-side programs and program plans on the net present value of the revenue requirement of the electric utility.

And that's 20 years. I know that Staff doesn't want you to look at this detail, but this is an application of the Commission's rule. And the Company has looked at that net present value. And the benefits to the customers are real when you look at the investment in energy efficiency that it will have over the long run. And again, the resources that need to be built, energy efficiency enhances those resources so that we are able to use that in our reliability tool kit and use our resources to the greatest potential.

And then finally I do want to point out for any questions regarding how the earnings opportunity is calculated, the Commissioners -- I think Commissioner Mitchell had a question, the revised Appendix N has the calculations of the earnings opportunity and that will show the different bands and the percentages including an incentive bonus. So if there are any further questions, you know, and the witnesses, it might be handy to have that.

And in terms of any of the administrative costs, you can find those in our revised Appendix A, which is a summary table of the programs and the costs associated with them all broken down.

And then any specific, you know, program benefits or the benefits, our revised Appendix B has the program, templates and it'll the measures. And then our Appendix D outlines the incentive ranges for the plan.

With that, I don't have anything further. Thank you.

JUDGE PRIDGIN: Thank you. Any bench questions for Ameren's counsel? Hearing none, thank you. Any mini opening from Staff?

MR. PRINGLE: Yes, Judge. I'm going to get up to the podium if you don't mind. Good morning, and may it please the Commission. My name is Travis Pringle and I will be representing Staff in today's proceeding with Tracy Johnson for the mini opening regarding benefits.

MEEIA is authorized under section 393.1075 RSMo. Subsection 4 of that statute explicitly states quote, the Commission shall permit electronic -- electric corporations to implement Commission-approved demand-side management programs proposed pursuant to this section with the goal of achieving all cost-effective demand-side savings. Recovery for such programs shall not be permitted unless the programs are approved by the Commission, result in energy or demand savings, and are beneficial to all customers in the customer class in which the programs are proposed regardless of whether the programs are utilized by all customers.

This morning we need to focus on that latter sentence. Beneficial to all customers regardless of whether the programs are utilized by all customers. This is not the first time that Staff has contested an Ameren MEEIA application's assertions of benefits for all customers. Ameren's MEEIA Cycle 2 application, filed under and initially rejected by the Commission in Docket No. EO-2015-0055, had the same problem. The evidence in that case as here shows that most Ameren Missouri customers will likely receive very little, if any, overall net benefits from this application. Even accepting Ameren's Missouri other estimates regarding benefits and even assuming that program costs are properly treated as what are called transfer payments, Ameren Missouri's total resource cost test, or the TRC, results include a mathematical error in the treatment of these program costs as transfer payments.

To obtain a TRC result above 1, in this case 1.64, Ameren Missouri divided $729 million in benefits by $446 million in nonprogram costs. However, if program costs were being treated as a transfer payment, the proper math would be to divide $909 million of benefits by $625 million in costs producing a TRC result of 1.45. However, also keep in mind that Ameren Missouri shareholders are on the risk for zero dollars in this calculation. This is ratepayer money.

For purposes of statutory compliance, it is not reasonable to treat program costs as transfer payments. The MEEIA statute allows approval of a demand-side program investment mechanism or a DSIM only if the MEEIA cycle is beneficial to all customers in the customer class in which the programs are proposed, regardless of whether the programs are utilized by all customers. The TRC results of program costs are considered a cost, not a transfer payment, are $729 million in benefits divided by $625 million in costs, which now lowers the TRC result to 1.1 -- 1.16. Sorry.

Now, Ameren Missouri's modeling as presented in its Appendix A includes a mismatch between models, earnings opportunities, recovery, and production of benefits. Correction of this error results in a reduction of the TRC results to a range of 1.03 to .93, relying on Ameren Missouri's avoided cost assumptions. In addition, the ratepayer impact measure test, otherwise known as the RIM test, results in Ameren Missouri's, with the result provided in Ameren Missouri's Appendix A of its application, provides a portfolio total result TRC of .70. Because the RIM result is less than one and by Ameren Missouri's own modeling, the program costs customers more than it benefits them. In order for all customers to benefit, customers pay-through MEEIA rates should be lower than the increase in general rates otherwise would be due to a new supply-side investment.

Historically the statutory language has been interpreted to mean an earnings opportunity to be based on foregone earnings opportunity for avoiding or deferring a supply-side investment. Ameren Missouri in this situation has not done that analysis and, therefore, cannot show its work identifying the specific supply-side generation investment that will be avoided or deferred if its MEEIA Cycle 4 application is approved.

The concept behind MEEIA is that all customers pay certain amounts a day with an expectation that all customers will avoid potential costs in the future. The basic premise of MEEIA is that all customers may benefit from avoided costs in the future in exchange for socializing energy efficiency costs in utility incentives today. The avoided costs used to evaluate MEEIA programs are not reasonable estimates. The benefits realized by ratepayers through demand-side programs, the underlying premise falls apart.

Ameren's Missouri alleged support for the application, the attached report, and its work papers utilize -- utilized to estimate and quantify benefits are unrealistic, inappropriate estimates that should not be considered reliable. This is especially true considering the lack of specific citations and sources that are prevalent throughout the work papers that Ameren Missouri provided Staff.

The assumed avoided capacity transmission and distribution benefits are unlikely to ever be realized by ratepayers. Ameren Missouri's calculation of benefits in its application grossly overstates the application of benefits, and approval is likely to result in ratepayer harm through implementation of programs that are just not cost effective.

Ameren Missouri's approach to estimating these avoided capacity costs is nearly identical to the approach that was employed by Evergy and recognized as inappropriate by this Commission during Evergy's Cycle 3 MEEIA application, EO-2019-0132.

Furthermore, an important part of this application, that it lacks retrospective EM&V, the evaluation, measurement, and verification. While Staff will go into greater detail during the EM&V portion of this hearing, Ameren Missouri currently has the perverse incentive to implement programs with high deemed energy reduction, but low actual energy reduction. The Company's application had the same issue in Cycle 2 and was summarily rejected. Without retrospective EM&V it is impossible for anyone to know just how much Ameren Missouri collects from customers for energy savings that were never materialized.

The realized ratepayer costs of MEEIA programs are far too high to rely on potential benefits that might occur when, in reality, Ameren Missouri is actively investing billions of dollars with plans to invest billions more in traditional utility infrastructure while seeking rate recovery of those investments regardless of the impacts of the MEEIA programs.

Ameren Missouri's current analysis ignores the effects of the fuel adjustment clause, or the FAC. The FAC cannot be ignored in attempting to quantify the avoided costs associated with a given MEEIA program. Consideration should be given by this Commission to, at a minimum, the relative value of wholesale energy purposes expected to be avoided by any given measure and the classes that benefit from avoided cost and then the classes that pay for the creation of the avoided cost through demand-side programs.

Ameren Missouri's current analysis ignores the literal program -- program costs, ignores the impact of the fuel adjustment clause on redistributing avoided energy benefits among customers, and relies on unreasonable avoided cost assumptions.

Based on Ameren Missouri's work papers, Staff understands that Ameren Missouri anticipates recovering approximately $600 million from MEEIA Cycle 4 through the rider Energy Efficiency Investment Charge, the EEIC. Further, Ameren Missouri requests significant flexibility in program implementation, so variances of up to 20 percent should be anticipated.

Staff has taken the rate estimates prepared by Ameren Missouri and calculated Ameren

Missouri's quantification for annual bills per a thousand kilowatt hours per month of usage which demonstrates that ratepayers in the residential small general service and large general service classes will be worse off if Ameren Missouri's MEEIA Cycle 4 application is approved.

I ask you to -- I implore you to ask the questions of Staff witnesses on this matter: Mr. Justin Tevie, Mr. J Luebbert, Mr. Brad Fortson, and Ms. Sarah Lange about the analysis they have done regarding these benefits. And at this time I'm happy to entertain any additional questions the Commission may have.

JUDGE PRIDGIN: All right. Thank you, Mr. Pringle. Any bench questions? Hearing none, all right. Thank you, sir. Any opening statement from Renew Missouri?

MR. LINHARES: Thank you, Judge. No opening statement on this issue.

JUDGE PRIDGIN: Thank you. Any opening statement from NRDC?

MS. RUBENSTEIN: No, thank you.

JUDGE PRIDGIN: Very good. Consumers Council?

MR. COFFMAN: No opening, your Honor.

JUDGE PRIDGIN: Thank you. Public Counsel?

MS. VANGERPEN: Yes, just briefly. Good morning again, Commissioners, Chair Hahn, Judge Pridgin. I'm here again this morning to talk to you about the question of benefits. Now, the statute mandates that a utility can only recover for its MEEIA programs if it can be shown that they are beneficial to all customers regardless of participation. There's a lot of testimony in this case from Ameren, Staff, and the OPC about how we determine whether that's true. But I want to take a step back from some of the micro-level arguments about the TRC and the FAC distribution of benefits. Don't get me wrong. Those are very important issues, and I really want to encourage you to follow up with the witnesses that you'll hear from today about any questions that you have.

But I want to talk to you about two macro level arguments here. The first is risk and reward and the second is diminishing returns.

Now, as I previously mentioned, the OPC asks this Commission to reject Ameren's amended application. It's simply too rich for Ameren. To show this I want to first talk to you about the concept of risk and reward. Now, many talk about risk avoidance, but the best -- best investors won't tell you to avoid risk completely in your diversified portfolio. And why is that. Because risk is closely tied with the idea of reward. Risky investments can have a big pay out. So to meet your financial goals, you'll want a diversified portfolio with at least some risk to it.

Where am I going with this. In utility regulation we often talk about the idea of risk in the context of the return on equity in rate cases. There we try to answer the question of what do shareholders need as a return on their investment to take the risk and invest in the utility stock. That typically falls between 8 and 10 percent.

But we're not talking about a rate case this week. This week we're talking about MEEIA. And who bears the risk when it comes to MEEIA. Ratepayers. Ratepayers effectively bear 100 percent of the risk when it comes to MEEIA. They bear the risk that MEEIA programs won't work, that they will fail to defer or avoid any supply-side investment. And if these programs fail, then ratepayers will have paid not only for the cost of the MEEIA programs and the EO and the throughput disincentive, but they'll also have to pay for the new generating unit which, of course, also has its own mountain of costs.

Ameren on the other hand effectively bears no risk with these programs. It recovers not only its program costs, but an earnings opportunity for its shareholders and a throughput disincentive as well. So it seems pretty clear that ratepayers are the ones bearing the risk with MEEIA.

So let's move on to reward. As I mentioned, in a rate case shareholders typically receive about an 8 to 10 percent return for assuming a risk that comes with investment. What do ratepayers receive as a reward for bearing the risks of MEEIA. They get a maybe. Maybe Ameren will defer a generating plant for a few years or maybe Ameren will avoid paying market rate for additional energy. But also maybe not. There's certainly no guarantee of any of that actually happening. Who knows what the market will look like in a few short years. MEEIA is just a maybe. A very risky, very expensive maybe.

So ratepayers are making a risky investment and may get no reward. But you'll remember what I said just a moment ago. There is an earnings opportunity with MEEIA. Who gets that. Shareholders do. They're the ones who bear effectively no risk, but get a handsome pay out as part of these programs.

So where does that leave us. You might remember my seesaw in -- in my initial opening. It's certainly leaves us at a point where the risk-reward balance is off kilter. It seems as if the ratepayer is left with all of the risk, and shareholders get all of the reward. And that's just one of the reasons why the OPC as the ratepayers' advocate is here today asking you to reject Ameren's amended application.

Now, before I leave you again, I want to talk to you about diminishing returns. Again, the MEEIA statute requires that benefits for all customers regardless of participation. Ameren has filed its amended application at a unique time. The market has changed since prior MEEIA cycles. As Dr. Marke explains, codes and standards as well as generous direct incentive and tax incentive programs from the federal government have moved the market to a place where inefficient equipment simply doesn't exist anymore, or at least in the way it once did. In many circumstances, efficient options are the only options. The cost-benefit analyses that supported MEEIA in the past must be questioned as we move toward the future.

As both Dr. Marke and Mr. Fortson describe in their testimonies, the various MEEIA cycles and extensions have been an attempt -- have been attempts at making things better.

Again, the history of MEEIA has been mostly a collaborative one, but the time has come where the OPC cannot support Ameren's amended application. The risk-reward analysis is simply too rich for the Company and too risky for its ratepayers. It hit a point of diminishing returns. MEEIA must adapt so that it can provide benefits in this environment.

Again, Commissioners, I encourage you to ask the witnesses any questions that you have. They're -- they're eager to discuss this with you. For this question you will hear from all three of the OPC's witnesses: Mr. Jordan Seaver, Ms. Lena Mantle, and Dr. Marke. And again, the OPC asks this Commission to reject Ameren's amended application. Thank you again, and I'm also happy to answer questions that you might have.

JUDGE PRIDGIN: Ms. VanGerpen, thank you. Any bench questions? Hearing none. All right. Thank you, Counsel.

Anything further before Mr. Michels comes forward to be sworn? All right. Mr. Michels, if you'll come forward please.

(Witness sworn.)

MATTHEW MICHELS

the witness, having been first duly sworn, testified as follows:

JUDGE PRIDGIN: Thank you very much. Please have a seat. Counsel, when you're ready.

MR. HOLTHAUS: Judge, one preliminary before we begin. Mr. Michels' prefiled testimony addresses more than one issue. His prefiled testimony chiefly addresses benefits but his testimony also briefly addresses earnings opportunity. Do we want to add his testimony to the record now or after he's been on the stand for all issues to which he will testify?

JUDGE PRIDGIN: I have no preference and I don't know how counsel feels. If you want to try to introduce it now, if you'll get any objections or -- I'll leave that up to you.

MR. HOLTHAUS: I suggest we -- I know at the securitization hearing in April, the parties agreed to move to admit testimony into the record once the witness appeared for the last time. So

without -- I suggest we stick with that procedure.
JUDGE PRIDGIN: That works for me. Thank you.
MR. PRINGLE: And that would be Staff's preference as well, Judge.
JUDGE PRIDGIN: Okay. Very good. Thank you.
MR. HOLTHAUS: And just to clarify, once the witness is on the stand for the last time, we will -- we will move to admit all of their testimony, direct, rebuttal, surrebuttal all at the same time.
JUDGE PRIDGIN: That works for me. Thank you.

DIRECT EXAMINATION

BY MR. HOLTHAUS:
Q. Good morning, Mr. Michels. Would you please state your name and employer for the Commission.
A. My name is Matthew Michels, and I'm employed by Ameren Services.
Q. And are you the same Matthew Michels who prefiled rebuttal and surrebuttal testimony in this case marked for identification as Exhibits 100 and 101?
A. Yes, I am.

Q. Mr. Michels, do you have any corrections or additions to your prefiled testimony?

A. No, I don't.

Q. And if I were to ask you the questions that are contained within your prefiled testimony, Exhibits 100 and 101, would your answers today be substantially the same?

A. Yes.

Q. And those answers contain information that is true and correct to the best of your knowledge?

A. That's correct.

MR. HOLTHAUS: Okay. Tender the witness for cross.

JUDGE PRIDGIN: All right. Thank you. Any cross-examination, Renew Missouri?

MR. LINHARES: No. Thank you very much, Judge.

JUDGE PRIDGIN: Thank you. NRDC?

MS. RUBENSTEIN: No. Thank you, Judge.

JUDGE PRIDGIN: Thank you. Consumers Council?

MR. COFFMAN: No questions.

JUDGE PRIDGIN: Staff?

MR. PRINGLE: None at this time, Judge, thank you.

JUDGE PRIDGIN: Public Counsel?

MS. VANGERPEN: None at this time, your Honor.

JUDGE PRIDGIN: Okay. Any bench questions? Chair Hahn.

QUESTIONS

BY CHAIR HAHN:

Q. Good morning, Mr. Michels.

A. Good morning.

Q. There's been testimony and even discussion this morning of additional supply-side resources that would need to be constructed should this application be rejected. I'm hoping that you -- with an estimated price tag associated with those generation facilities of being $4 billion. I'm hoping that you can talk a little bit more about the math behind the 4 billion, the calculation of the addition of those resources, and those very specific years. So we can start there.

A. Absolutely. So in my -- in my rebuttal testimony on page 6 there's a small table that shows the supply-side resource additions for what we called Plan C, which was our preferred resource plan, and Plan I which is an alternative plan with no demand-side programs going forward. And -- and that

table shows that if we were not to engage in demand-side programs for the entirety of the planning horizon, that we would have to add generation in 2037, which would be a simple-cycle gas plant; 2043, which would be a combined-cycle gas plant; and we would also have to accelerate the combined-cycle gas plant that is in our preferred plan in 2033 to 2028.

The way that we come up with the 4 billion in costs is to compare the net present value revenue requirements of those two plants. So the net present value revenue requirements includes all of the costs for all of the resources contained in those plants. So for the demand-side programs, it includes all the programs costs, it includes -- there is -- there is no throughput disincentive because we assume full recovery of the revenue requirement. And then for supply-side resources, it includes the capital cost, which for a 1,200 megawatt combined-cycle plant today is, you know, in the one and a half to two billion dollar range for each one, each 1,200 megawatt plant.

And then we also include the operating maintenance costs for the supply-side resources and the fuel costs and the revenue from sales of energy into the market as well as a net capacity cost for an entire portfolio in each year. And what I mean by that is we look at the capacity position of a particular plan, each of these individually, and we say, Do we have -- you know, how much capacity and resources do we have relative to our demand and planning reserve margin. And that difference is priced out at the market price of capacity. So all of that is included in the revenue requirements in each year of the model and then we present value those back to today.

Q. Sounds like a lot of assumptions.

A. Yeah. Planning is all about assumptions and ranges.

Q. Talk to me about how the additions of those plants change when you're talking about that net capacity cost calculation that you just mentioned from present to what you're planning in 2037 and 2043.

A. Right. So we're looking at the capacity position. That's kind of a big deal. It's not the end all when we're looking at reliability needs, but we do that for summer and winter in particular to look at resource need. And then we also calculate a capacity position for fall and spring so we can see what the net cost is going to be.

And so for winter season, which is what tends to drive the need for resources, we see that we have needs for resources in the preferred plan in 2033, which is after we have assumed the retirement of the Sioux plant and then also in 2040 after we have retired some gas generation in Illinois and then 2043 when we retire the last two units at Labadie. And this is all under normal load conditions. If we look at extreme weather conditions, then we've also added simple-cycle gas generation to address those needs.

Q. I assume you might also be the person to talk about the MISO planning resource auction pricing periods and how it impacts costs and benefits to ratepayers. Is that --

A. That's fair.

Q. Okay. I think it's Staff's position, but it says, Ameren Missouri's application drastically overstates the avoided cost related to its expected demand reductions and its analysis does not include demand reduction totals for programs in the fall, winter, or spring MISO planning resource auction pricing period.

Can you talk directly about what you think Staff is saying, how you're overstating those avoided

costs and how you don't include those demand reduction totals?
A. I think so. My reading of Staff's testimony and position is that they don't believe that there are needs for resources the way that we've laid them out in our preferred resource plan. And I think the big disconnect is what I just described, which is the difference between planning for normal weather and planning for extreme weather.
So I mentioned the 800 megawatts of simple-cycle generation that we're planning to add. The big driver for that is what we've seen in terms of extreme weather events, which Staff has acknowledged in testimony have become more frequent and -- and longer. So we've included that also in our CCN application for the Castle Bluff project, which was made just last month, to address the need for capacity during those extreme weather events.
With regard to the seasonal aspect of it when we add resources, physical resources, we're adding them and they're there for the entire year. They don't come during the season you need them and go when you don't, so the cost is there for the entire year. Our avoided costs are based on the avoidance of those resources that we would otherwise

have to add, and so it's a full cost. It's not a market price of capacity, which in MISO is -- can be relatively small at times and which FERC has acknowledged previously represents a, sort of a residual capacity market, unlike some other more unregulated markets where it's a big driver of capacity builds.

So we want to compare the full cost of that supply-side resource to the cost of implementing programs when we're screening. And then when we include that in our integration analysis, we're getting a heads-up comparison of plans that include demand-side resources or additional supply-side resources so that we can get that direct comparison. As I -- and as I mentioned before, it's sort of the marginal capacity need deficit or shortfall that we price out at the market.

Q. I think I've gotten that written down. I may have to ask you again, but I think I've gotten it.

A. That's fine.

Q. Following up, Staff recommends relying on a market-based approach associated with demand reductions because supply-side resources -- resource investments are not expected to be avoided or deferred. Reliance on a market-based approach requires the ability to determine accurate demand reductions in each season and accounting for the FAC. Ameren has not provided evidence in this case that enabled such analysis to be done with reasonable accuracy.

Why hasn't that information been provided, or can you talk about that?

A. I -- I'm not quite sure what information is being alleged to be absent. But if I can elaborate a little bit more on the -- on the market-based cost aspect of it. You know, in years past when the market was long capacity, we were long capacity, the expectation that you were going to avoid resources in the near term was small to nonexistent unless you had a big retirement in the near term. And so market-based capacity prices can make sense in that situation. I would argue that when you're looking at resource comparisons, that it's probably better to compare to the cost of a supply-side resource because that's the long-run marginal cost of capacity. But there can be an argument made for looking at market-based capacity as well in the short term when -- when the market is long.

Q. And I should have finished too because it was to figure out the interaction of the FAC and the ratepayer benefits in order to determine if the programs meet the statutory requirement for benefits. So that might have helped you figure it out a little bit more.

A. Oh, okay. I think the questions about FAC may be better addressed by Mr. Wills.

CHAIR HAHN: Okay. I think that's all I have. Thank you.

JUDGE PRIDGIN: Chair Hahn, thank you. Commissioner Holsman.

COMMISSIONER HOLSMAN: Thank you.

QUESTIONS

BY COMMISSIONER HOLSMAN:

Q. Thank you. In Ameren's opening statement we were told that there's going to be a $200 million capacity shortfall if this program is not extended. And then OPC followed that up by saying those numbers are more accurately defined in the demand response, not in the energy efficiency program. Can you elaborate as to that 200 million is an accurate number and which part of the program that that does represent?

A. Let me just clarify. Are you talking

about the 200 megawatt --
Q. I'm sorry.
A. -- shortfall? Okay.
Q. Yeah. I meant megawatt.
A. That's what I thought; I just --
Q. My brain said million.
A. Yeah.
Q. Megawatt. Sorry.
A. Yes. So in our plan, the demand response impact for 2025 is 205 megawatts in the summer. It's relatively small in the winter. It's around 170 megawatts each in the spring and the fall which happen to be the seasons that we saw a shortfall on the local clearing requirement in the last planning resource auction.
COMMISSIONER HOLSMAN: Okay. Thank you.
JUDGE PRIDGIN: All right. Commissioner, thank you. Commissioner Kolkmeyer, any questions? Commissioner Mitchell?
COMMISSIONER MITCHELL: None for me, Judge.
JUDGE PRIDGIN: All right. Thank you. Chair Hahn.
QUESTIONS
BY CHAIR HAHN:

Q. Commissioner Holsman asking questions then brought up, speaking of the planned resource auction and the -- there's been conversations about demand response versus energy efficiency and that you don't actually have to have an energy efficiency set of programs under MEEIA to offer demand response from OPC. Is that correct?

A. I'm not sure. That might be better directed to Mr. Lozano.

Q. Okay. And then if you do -- so I should ask Mr. Lozano on all demand response programs?

A. I -- I think he'd be the best place to start.

CHAIR HAHN: Thank you.

JUDGE PRIDGIN: All right. Thank you. Any further bench questions for this witness? All right. Any recross based on bench questions? Renew Missouri?

MR. LINHARES: No. Thank you, Judge.

JUDGE PRIDGIN: Thank you. NRDC? Hearing nothing. Consumers Council?

MR. COFFMAN: No. Thank you, your Honor.

JUDGE PRIDGIN: Staff?

MR. PRINGLE: One moment, Judge.

JUDGE PRIDGIN: Certainly.

MR. PRINGLE: No -- no further cross from Staff, Judge. Thank you.

JUDGE PRIDGIN: Mr. Pringle, thank you. Public Counsel?

MS. VANGERPEN: One moment, Judge.

JUDGE PRIDGIN: Certainly.

MS. VANGERPEN: Just very briefly, your Honor.

RECROSS EXAMINATION

BY MS. VANGERPEN:

Q. Good morning, Mr. Michels.

A. Good morning.

Q. I just have a quick clarifying question. So Commissioner Holsman asked you about the 200 megawatt shortfall. And I just want to make sure I understand. That capacity shortfall, is that associated -- that's associated with the demand response program. Is that correct?

A. That's correct.

MS. VANGERPEN: Thank you. Nothing further, your Honor.

JUDGE PRIDGIN: Ms. VanGerpen, thank you. Any redirect?

MR. HOLTHAUS: Briefly, Judge.

REDIRECT EXAMINATION

BY MR. HOLTHAUS:

Q. Mr. Michels, you had some discussion with Chair Hahn about the comparison of IRP Plan C with IRP Plan I and certain supply-side resources that AMO -- I'm sorry -- Ameren Missouri intend to add to address extreme weather. Do you recall that discussion?

A. Yes.

Q. Did you discuss with Staff the planning for extreme weather in the IRP?

A. We did. We had -- we had a meeting last September about two weeks prior to the filing of the IRP. And -- and in that discussion we talked about the need to look at capacity needs for extreme weather. We showed capacity positions, which I show on my testimony as well, for winter in particular that demonstrate the need for additional resources to meet that requirement.

MR. HOLTHAUS: No further questions. Thank you.

JUDGE PRIDGIN: All right. Thank you. You may step down. And the next witness is Mr. Wills. If Mr. Wills will come forward and be sworn please.

(Witness sworn.)

STEVEN WILLS

the witness, having been first duly sworn, testified as follows:

JUDGE PRIDGIN: Thank you very much. You may have a seat. Counsel, when you're ready.

MS. HERNANDEZ: Thank you.

DIRECT EXAMINATION

BY MS. HERNANDEZ:

Q. Can you state your name for the record please.

A. Steven Wills.

Q. And where are you employed?

A. Ameren Missouri.

Q. And in what capacity?

A. As the senior director of regulatory affairs.

Q. And are you the same Steven Wills that caused to be prepared Exhibit Nos. 102 and 103?

A. Yes, I am.

Q. And that would be your rebuttal and surrebuttal testimony?

A. That's correct.

Q. And if I were to ask you those same questions contained in your testimony today, would

your answers be the same?
A. **Yes.**
Q. And are your answers true and correct to the best of your knowledge, information, and belief?
A. **Yes.**
Q. Oh, and you -- did you have any changes to your rebuttal or surrebuttal testimony?
A. **I do not have any changes.**
MS. HERNANDEZ: With that I will reserve offering his testimony until the last time he takes the stand and tender the witness for cross.
JUDGE PRIDGIN: All right. Ms. Hernandez, thank you. Cross-examination. Renew Missouri?
MR. LINHARES: None. Thank you, Judge.
JUDGE PRIDGIN: NRDC?
MS. RUBENSTEIN: None, thank you, your Honor.
JUDGE PRIDGIN: Thank you. Consumers Council? Staff?
MR. PRINGLE: One moment, Judge. No questions at this time. Thank you.
JUDGE PRIDGIN: Thank you. Public Counsel?
MS. VANGERPEN: None at this time, your

Honor.

JUDGE PRIDGIN: Thank you. Bench questions? Chair Hahn.

CHAIR HAHN: Just one.

QUESTIONS

BY CHAIR HAHN:

Q. Mr. Wills.

A. Good morning, Chair Hahn.

Q. Morning. I just have one question that's a follow up from the previous testimony. And that is Staff says that Ameren Missouri has not provided evidence in this case that a certain analysis be done and that is Staff recommends relying on a market-based approach associated with demand reductions because supply-side resource investments are not expected to be avoided or deferred. Reliance on market-based approach requires the ability to determine accurate demand reductions in each season and accounting for the interaction of the FAC and ratepayer benefits in order to determine if the programs meet statutory requirements for benefits.

Can you talk through why Ameren Missouri hasn't provided enough analysis to do that?

A. I'm not sure I would say we haven't provided certain analysis on that, but when you look

at the -- the market -- so the entirety of our cost-benefit analysis is looking at the market-based avoided cost for energy. And in the IRP it looks at the market-based avoid cost for capacity. Mr. Michels explained why we used the long-run marginal cost of capacity in the screening analysis, but in the IRP it absolutely does look at the market-based cost of both energy and capacity.

Now, Staff seems to be of a mind that -- that the FAC complicates that. And, you know, at the end of the day, all of those avoided costs get back to customers by lower rates, right. And those lower rates are either going to occur in the fuel adjustment clause or in base rates.

Now, I think there's been a misperception, you know, kind of perpetuating through this case that the FAC is the primary mechanism that those benefits get to customers. I describe this in my rebuttal testimony that the FACs in Missouri by their very nature are what I would character as a transient mechanism. They're just tracking differences in costs between the last rate case and today. And so, you know, if I -- if a customer installs an energy efficient measure today, it's going to impact the FAC for about the next -- you know, we've got a -- we have a rate case pending right now, so if it goes in today, the benefits of that will flow through the FAC until about June of next year. And then for the remaining 12 years of the measure life, they'll flow through base rates.

But another -- you know, a more important thing here is which mechanism they go through. In both cases they're lowering rates for customers. And how are they allocated? Well, in the FAC, benefits that reduce the rate are spread back to customers based on loss-adjusted kilowatt hours because that's the billing unit used to allocate changes in net energy costs through the FAC, right. Well, if we go into a rate case, I mean, ultimately how those are allocated is going to be subject to a Commission determination on cost allocation. But Ameren Missouri's approach to allocating those benefits is on loss-adjusted kilowatt hours. It's the same allocation whether it's in base rates or the FAC.

And again, the FAC is going to impact a very short amount of the period of time. I don't -- I just don't see there being a need for an incremental analysis to say that if these are impacting base rates versus the FAC, at least our proposal in a rate case is going to be that it's going to be allocated in the same way either way.

The FAC mechanics are complicated, and there was a lot said about that in this case. And I think we all agree about what the mechanics are.

You know, one of the concerns that Staff raised was there's -- there's two separate concerns about the IVC, right. One was that FAC rates could go up as a result of this. I -- I did some analysis for rebuttal testimony because, I mean, intuitively as a ratemaker I knew that that was a highly, highly unlikely occurrence. But in response to hearing the allegation that that would be likely to happen, I actually did the explicit analysis of that in rebuttal testimony to look at the specific times that each measure avoids energy costs and what are the market prices at those times, an hourly-level analysis. And it demonstrated that even using our lowest price scenario for avoided energy costs from our IRP, every single measure is expected to produce savings in the FAC rather than rate increases through the FAC.

And then the second element that they were concerned about with the FAC is how it impacts the allocation of those benefits across classes. And that's what I already alluded to, that at least from

Ameren Missouri's approach to recommending ratemaking, it's the same in base rates or the FAC.

I -- I mean, to be quite frank with you, I mean, I -- I do think the FAC is important, but the fact that it's a confounding factor, and this is really a red herring to me, those benefits are going to come through the customers in the form of lower rates for a little bit of time in the FAC and then for a long period of time in base rates, and the allocations are going to be very similar.

CHAIR HAHN: Thank you for helping me understand that better.

THE WITNESS: Sure.

JUDGE PRIDGIN: Chair Hahn, thank you. Commissioner Holsman?

COMMISSIONER HOLSMAN: Thank you.

QUESTIONS

BY COMMISSIONER HOLSMAN:

Q. Thank you. So we've established that the bulk of the megawatt shortfall would be in demand response. Is it true that you could offer demand response outside of MEEIA if MEEIA was not extended?

A. I -- I believe, yeah. We've had energy efficiency programs outside of MEEIA in the past; there's no legal restriction on it. The problem

being that demand-side programs by -- by the MEEIA law, the MEEIA law is what gives us the ability to value them equally with supply side, right. So can we, yes. Do the tools ex -- I mean, we would still have to seek some form of cost recovery. The MEEIA gives us a framework to do that and to value the programs equally to --

Q. Is there any other benefit in including demand response in the MEEIA?

A. Is there --

Q. Is that -- is that the primary reason why --

A. It's -- it's all cost-effective demand-side savings that we're, you know, we're tasked with getting under the MEEIA statute. I think they fit under the umbrella of MEEIA in a way that actually aligns the Company's incentives with pursuing that and provides a path, you know, for cost recovery on it. I -- I mean, my lawyers may weigh in. I don't think there's a legal restriction to us doing demand response outside of MEEIA, but we would have to be in here talking about how are we going to recover our costs and how does this compare to supply side. You know, all the same issues would -- would be present I think.

Q. Do you have an idea what the value of the shortfall would be outside of demand response? Like what would be --
A. Yeah. So -- so demand re -- so I actually had this in my surrebuttal testimony, the reference to the demand response shortfall. The reason we're focusing on the demand response shortfall is because in -- we have an existing pool of customers who are on the demand response program that are today a capacity resource for us in essence. And if the programs don't go forward, that -- that 200 megawatts, like, literally just goes away that we already have.
Energy efficiency will build a capacity resource over time, but it -- like Day One, energy efficiency -- so these programs are not going to have an impact on our capac -- or a significant impact on our capacity, this is on Day One. It will grow over time as we implement the -- so, right. We're -- I'm trying to make sure I am clear about this.
For demand response, this is existing resource customers that are participating today will not be available to participate because we won't have a framework under which to offer that. Under energy efficiency, we're going to be seeking new

participation that will build and grow capacity offsets over time, but on Day One that doesn't cause any additional shortfall. It causes a shortfall over the years that the -- the savings would grow, if that makes sense.

Q. So this legislation was passed in 2009 and we're on now getting ready to do Cycle 4. Isn't the fact that there isn't a shortfall in, you know, the additional savings capacity an indication that the program has a lot of work to do to -- to get to be a benefit to the ratepayer?

A. I don't fully understand your question.

Q. So I'm saying if, you know, if the program were more successful and we were seeing more participation and the -- essentially OPC has said, We're not against energy efficiency; we're against the way that Ameren's doing it and if they're going to do it, here's another way of doing it. And I'm saying if the way you were doing it was successful, wouldn't there be an indication that more capacity would be potentially lost because it would reflect the amount of savings that the program had generated since the bills -- since the legislation has been passed since 2009 which is, you know, 15 years of an opportunity to generate that offset.

A. I'm -- you know, I'm not sure exactly what the OPC claim is there, but I don't know that I accept the premises that our programs haven't been successful. In terms of demand response, I don't -- Cycle -- Cycle 1 we didn't even start off on demand --

Q. I'm not talk -- I'm necessarily talking about demand response.

A. Okay.

Q. I think demand response is a proven, you know, entity --

A. Sure.

Q. -- in terms of strategy.

What I'm talking about is energy efficiency, like, you know, ongoing finances and other things that you do that hasn't shown participation. And my question is is have the barriers of entry, whether they be education, whether they be -- we talked with Renew Missouri, you know, the up-front costs to enter the program, have these barriers been identified with a strategy that's going to remove those barriers, so that way that the return on this -- these programs are such that the ratepayer's seeing a benefit?

A. I think specifics on the barriers to

participation might be better addressed by either Mr. Lozano or Mr. Via. But I mean, yeah, of course every different program has different levels of success in attracting customers, but I think if you look broadly at our portfolio, I think our participation is outstanding. We've had very success -- a lot of success in creating those energy savings. As far as if there's a particular program that could be performing better, I know our team is looking at that and -- and going to make the improvements where they can.

But I -- I'm not sure that I agree with the characterization that we haven't been successful across the portfolio in generating a lot of participation and benefits.

COMMISSIONER HOLSMAN: Thank you very much. Thank you, Judge.

JUDGE PRIDGIN: Commissioner, thank you. commission Kolkmeyer, any questions? Commissioner Mitchell.

COMMISSIONER MITCHELL: Yes.

QUESTIONS

BY COMMISSIONER MITCHELL:

Q. Thank you, Mr. Wills, and good morning. I heard in opening from OPC that, you know, if the application, even if the application were approved, that it would be unlikely that Ameren would avoid any supply-side investments and that, in fact, Ameren would need to build capacity regardless. And could you respond to how Ameren or how you view that statement?

A. Yeah, absolutely. And, you know, this gets into a lot of the discussion that Mr. Michels had when he was on the stand as well.

But, you know, we are in a phase where we do have to be adding capacity and building capacity. And so, you know, MEEIA programs aren't designed to offset, you know, all supply-side investment, but to the extent that we have higher loads because we're not managing that load through MEEIA programs, there will be more supply-side investment needed to meet those higher loads with the higher reserve margins that go along with them.

I -- I mean, this all is grounded really in the discussion Mr. Michels had, you know, around our IRP where our Plan I where we don't do new demand-side management programs going forward requires the addition of two additional gas plants and the acceleration of a third.

You know, our IRP, you know, there's been

a lot of talk about, you know, getting into the details, you know, of these programs and the details of our resource planning. Our IRP is incredibly detailed, and I think Mr. Michels, you know, alluded to some of that in terms of the, you know, the analysis we're doing around extreme weather events. But beyond that we're doing an 8,760-hour-a-year reliability modeling. We're looking at a whole host of environmental regulations that have different potentials to impact our plants. And so all of that, the planning that we do for what resources we would have to build is -- is really influenced by all that analysis.

And, you know, I think a lot of the parties speculate that we might not need those resources, but I don't think they have a plan that -- that has been through the kind of robust analysis that we have done to show the needs that we're going to expect to have to meet based off of the, you know, the changes in the energy market landscape that we're wrestling with. There's really no doubt in my mind that if our load is, you know, hundreds of thousands of megawatts higher, hundreds of megawatts of peak demand higher, that we will need more resources and we will have to build new supply side and those will

avoided by doing these programs.

Q. So fair to say it's not a matter of whether those resources will be needed, it's timing?

A. Absolutely. And that's why the Integrated Resource Plan is -- is so important because, you know, we consider all the different risks. The risk of increased load growth. We're seeing in the industry, you know, talk of significant increases in load forecast. We need to be prepared to meet that higher load if it materializes. We need to be prepared to meet our load if the environmental regulations cause a coal plant retirement sooner than it might otherwise be.

So the risk not just that we, you know -- you know, there's -- the risk really is that, you know, if we're not doing this, we're not doing the things to prepare for the risks that our customers might face in terms of the, you know, balance of supply and demand on our system.

Q. Thank you. Thank you. I want to switch gears for a second. And I think we also heard from OPC that as energy efficiency regulations evolve and mature that things like, you know, premium efficiency motors and high-efficiency lighting and architectural standards for new building envelopes improve, that --

that we're incentivizing through some of the programs things that are already required, that are required as really sort of a baseline condition. So with regard to programs, how -- I mean, how would Ameren respond to that statement?

A. Yeah. Thank you, Commissioner. I think, you know, there's this concept that people are talking about of diminishing returns. And, yes, there was a lot more of what we call low-hanging fruit of energy efficiency in past years, but if you look at -- and I wish I had some of the, you know, numbers associated with past cycles in front of me. But I will tell you the cost-effectiveness ratios were even higher then because there was a lot more headroom between the codes and standards of efficient appliances and what was on the market.

But the reason that our -- our cost-effective ratios have come down from past cycles but are still positive and net beneficial is that we account for those changes in baselines in our market potential study. And so when I say that, our market potential study is a -- is a study where we do detailed analysis of the measures that are available to manage customer loads and what are -- you know, that's compared to baselines of what are the current

legal standards, what are the current kind of marketplace norms in terms of what efficiency is offered. And we adjust our potential to compare to those evolving standards. That's part and parcel of our -- of our market potential study.

So yes, there's -- you know, there's less potential than there was ten years ago because we did a lot of good efficiency work in, you know, over those years and standards have done some work as well. But we make those updates through our market potential study to figure out what are the current baselines, what's being offered in the market and, you know, and what potential exists above and beyond those things that might naturally occur based on what's going on the market and what's the current codes and standards.

Q. Sure. Sure. And I think that kind of gets back to Commissioner Holsman's question about participation I think as the number -- or as the diminishing returns kind of reduce the overall numbers, I think that the -- one of the keys is to get, you know, more customers participating to get the overall impact -- to recover the overall impact of the programs. Not -- not so much a question; it's just an observation here.

A. Yeah. And I'll just agree with you and also, you know, suggest that that's maybe a reason that we want to think carefully about this balance.

And I know this is an issue for another day, but the balance of the administrative versus the incentive costs, a lot of getting that participation up is making sure that the, you know, that the infrastructure is there, the marketing is there. And so, you know, just -- just think about that, you know. I know that, you know, folks are touting that the IRA has a clause that the administrative costs have to be capped at 20 percent. We haven't seen if the IRA can actually deliver savings, you know, based off of that. What we have seen is that marketing and the administrative costs are a needed part of our programs to drive that participation.

COMMISSIONER MITCHELL: Thank you, Mr. Wills. That's helpful.

THE WITNESS: Thank you.

COMMISSIONER MITCHELL: No other questions, Judge.

JUDGE PRIDGIN: Commissioner Mitchell, thank you. Commissioner Holsman.

COMMISSIONER HOLSMAN: Thank you.

QUESTIONS

BY COMMISSIONER HOLSMAN:

Q. Just want to follow up on that. So the diminishing opportunities, does that affect the goal? Like on your business portfolio that you -- that I have here in front of me, the goal and target achieved, is that a moving number that is -- that is then reflecting those depreciated opportunities?

A. I think if I'm understanding your question right, I think the answer is yes. I mean, we update it with every market potential study, but I do believe that, you know, in terms of like our evaluation, that'll even get further updated with new baselines as -- if a new code or standard were to be passed, you know, that would get updated into our evaluation. But in terms of our goals, you know, we set those based off of market potential study.

Q. Are these numbers that I'm looking at through 2022 or through 2023? It looks like 2023.

A. Which -- which are you looking at?

Q. I'm looking at the June 7, 2024, volume 1 portfolio impact summary, the annual EM&V report. So I assume it's -- it says 2023 so I'll assume that's correct.

So then back to my original line of

questioning. You know, looking at these numbers, it's clear that based on these numbers like the resource capability for the business DR program is at 131 percent of its goal. So you set a goal. You exceeded it by 131 percent. The -- and I would say that's a huge success. The residential DR program's at 79 percent of goal. So that's -- that's good. That's -- that's -- I would say that that is a successful program. But when you do look at the breakouts and you see that, you know, the PAYS is at 7 percent of goal and you see that the MFMR --- which is the multifamily is at 39 percent of goal and then the SBDI is at 31 percent of goal and RCX is 51 percent of goal, that tells me that there's a lot of room that you could be -- if you set -- you set the goal. Right? We didn't set the goal; you set the goal. Right?

A. Yeah. I mean -- I -- yeah, I believe that's correct. I mean, as far as the specific program level, that may be questions that are better suited to Mr. Lozano or --

Q. Okay.

A. -- Mr. Via.

But yeah. Obviously, you know, each of those programs they're going to be looking at

independently and trying to make sure that we drive that participation, but as far as, you know, their actions on that, they would be better --

Q. I'll hold off until I get to Mr. Lozano.

A. Yeah, sure.

COMMISSIONER HOLSMAN: Thank you.

JUDGE PRIDGIN: All right. Thank you. Any further bench questions? Mr. Wills, I think I will have just a few questions.

QUESTIONS

BY JUDGE PRIDGIN:

Q. Do you have your surrebuttal with you?

A. I do.

Q. And I'm just going to refer to page 45 in case you need to refer to it, but I believe you state on page 45 of your surrebuttal that the proposed DSM portfolio should result in lower FAC rates when compared to the base factor set in your last rate case. Is that correct?

A. Yes.

Q. Would you agree that the FAC base factor that will be set in your current rate case will not include the impact of any of the proposed DSM portfolio in the 2025 to 2027 MEEIA plan?

A. Yes. I mean, I don't expect the true-up

data, the base factor should not have any of that included.

Q. Have you reviewed OPC's witness Lena Mantle's rebuttal testimony?

A. Yes.

Q. And I don't know if you will need this to answer my question. If you do and you don't have it, please let me know so you can get a copy. But on page 26 of her rebuttal she has a Table 9 that contains an analysis that states that MEEIA nonparticipants will not benefit if the average kilowatt hour cost is less than the FAC base factor. Would you agree with that or have you found any errors in her analysis or her schedules?

A. No. I think that's the basis of my conclusion was based off my own analysis of exactly that phenomenon.

JUDGE PRIDGIN: Very good. Thank you. Any further bench questions? Recross based on bench questions. Renew Missouri?

MR. LINHARES: Thank you, Judge, none.

JUDGE PRIDGIN: NRDC?

MS. RUBENSTEIN: No, thank you.

JUDGE PRIDGIN: Consumers Council?

MR. COFFMAN: No, thank you, your Honor.

JUDGE PRIDGIN: Staff?

MR. PRINGLE: No, thank you, Judge.

JUDGE PRIDGIN: Public Counsel?

MS. VANGERPEN: No, thank you, your Honor.

JUDGE PRIDGIN: Any redirect?

MS. HERNANDEZ: No redirect, thank you.

JUDGE PRIDGIN: Ms. Hernandez, thank you. Mr. Wills, you may step down.

This looks to be a convenient opportunity to take a lunch break. I'm showing it's just about five minutes or so after 12:00. I'd like to resume at 1:00 p.m. Is there anything further from counsel or from the bench before we go into recess? All right. Hearing nothing, we will resume at one o'clock. Thank you. We're off the record.

(Off the record.)

JUDGE PRIDGIN: Good afternoon. We are back on the record. I believe we are ready for Ameren Missouri's witness Mr. Lozano. Is there anything further from counsel before we proceed to his testimony? All right. Hearing nothing, Mr. Lozano, if you'll come forward and be sworn please, sir.

(Witness sworn.)

ANTONIO LOZANO

the witness, having been first duly sworn, testified as follows:

JUDGE PRIDGIN: Thank you, sir. Please have a seat. Counsel, when you're ready.

MS. MOORE: Thank you, your Honor.

DIRECT EXAMINATION

BY MS. MOORE:

Q. Good afternoon. Could you please state your name for the record.

A. Antonio Lozano.

Q. Mr. Lozano, what -- by whom are you employed and in what capacity?

A. Ameren Missouri, and I am director of energy efficiency and the demand response.

Q. And did you file direct testimony, rebuttal testimony, and surrebuttal testimony in this docket? And it's been identified as Ameren Exhibit 104, 105, and 106.

A. Yes, I did.

Q. Do you have any changes or corrections to your testimony?

A. Yes, I do. On direct testimony on page 25, lines 4 and 5, I mention two additional combined cycles -- two additional combined-cycle

plants. I'd like to remove the words "combined-cycle plants" and replace that with the word "resources." I misspoke there.

And then on rebuttal, I have two of the same change. The first is on page 8, line 3 where I mention 2,400 megawatts of additional generation. That number should actually be 2,350 megawatts. And that number is again mentioned and should be updated on page 9, line 20.

And as it was tied to my direct testimony, I want to remind everybody on Friday night we filed an updated Figure 38 on page 80 of the amended application. Figure 38 was updated to match the wording above the figure to show the earnings opportunity as a percent of program costs for the full cycle.

Q. Okay. Thank you. If I were to ask you the same questions contained in your direct, rebuttal, and surrebuttal testimony today, would your answers be the same?

A. Yes, they would.

Q. And to the best -- and are these question and answers true responses to the best of your knowledge?

A. Yes, they are.

MS. MOORE: With that I tender Mr. Lozano for cross-examination.

JUDGE PRIDGIN: Ms. Moore, thank you. Any cross from Renew Missouri?

MR. LINHARES: No, your Honor.

JUDGE PRIDGIN: Thank you. NRDC?

MS. RUBENSTEIN: No, thank you.

JUDGE PRIDGIN: Consumers Council? Staff?

MR. PRINGLE: Not at this time, Judge, thank you.

JUDGE PRIDGIN: Public Counsel?

MS. VANGERPEN: Not at this time, your Honor. Thank you.

JUDGE PRIDGIN: All right. Thank you. Let's see if we have any bench questions. Commissioner Holsman.

COMMISSIONER HOLSMAN: Thank you.

QUESTIONS

BY COMMISSIONER HOLSMAN:

Q. So you've got a chance to listen to a little bit of the testimony and some of the questions that we've had so far.

A. Yes, sir.

Q. So help me understand. You set the

goal --

A. Yeah.

Q. -- for these programs and then you're -- the portfolio that I'm looking at tells me how successful you've been at achieving a percentage of that goal. That's right?

A. Yes, sir.

Q. So if I look at demand response, I'm seeing on the capac -- on the capacity side, 131 percent and with the 80 percent, we're looking at a blended 110 percent total for resource capability. Is that right?

A. I believe you're looking at the 2023 EM&V report?

Q. Correct.

A. That sounds right. I don't have it in front of me, but --

Q. Okay.

A. -- that sounds right.

Q. But then when it drops down to the energy savings megawatt hours saved, the residential DR program says it's at 13 percent of the goal target achieved and the business DR program's at 46 percent. So help me understand why the capability and the savings have such a big Delta.

A. Absolutely. Yeah. I think there are a variety of data points to consider. One is when those energy and demand savings goals are set, often those are stretch goals for us to help test the market to see what's -- what's capable there. In the last couple years, and we're in one year -- one here with the one-year extensions, those certainly make it a little bit tougher for some of those projects that maybe are a little bit longer to -- to get that participation as well. And lately with inflation, that has made prices a little bit tougher too. That is, to be frank, sometimes made savings more expensive. To give you an example there --

Q. What's the difference between savings and capability?

A. Can you help me understand when you say capability?

Q. So I have two performance indicators. One says, Resource capability in megawatts. And one says, Energy savings in megawatt hours.

A. Okay. Yeah. So I believe when you're saying capability, you're talking about our demand capability tied as a capacity resource?

Q. So is this the contracts that you have with the residents or the businesses that are willing to throttle down when you need them to do so? Is that what that's saying?

A. Our demand savings partially comes from that. We also get demand savings from our energy efficiency program as well.

Q. But the capability is who you could ask to reduce load, and the savings is who you have asked to reduce load. Is that a fair?

A. I think that is -- that is mostly fair. The savings also, since they come from the energy efficiency side, from who have implemented certain measures, and we see energy and demand savings come from those reductions.

Q. Okay. And then as I'm looking through some of the other programs, SBDI, 31 percent; RCX, 51 percent; the M -- the multifamily market rate is at 39 percent of goal; PAYS is at 7 percent of goal. So clearly PAYS is the lowest one.

A. Yeah.

Q. You know, the -- the Pay as You Save program, in my estimation, I don't know, in my background I helped draft and pass the PACE legislation --

A. Okay.

Q. -- which allowed for, you know, a

financing mechanism to be offered from a third party that was able to put on the lien.

So I'm familiar with the process by which the intended goal of this program is. And so clearly I support, you know, the outcomes of -- of a program like this. We've heard up-front costs as a reason why there might not be as much participation in this program. You know, I gotta believe on some level, education awareness have to be, you know, the fact that the customers know that this is available to them has got to be another reason. What are some of the barriers and challenges -- is the program itself -- and I want to talk about PAYS specifically.

A. Okay.

Q. And we can talk about why the other ones have lower goals percentages. But the PAYS specifically, you know, what is the barrier to entry here that's causing you to leave 93 percent of your goal on the table?

A. I do think that copay often is -- is something that is not palatable to customers. And I'm going back to -- there's a statewide collaborative going on right now to try to understand what these barriers are and to try to help improve PAYS across the state. Dr. Marke actually lays out

some of these in his testimony, and I mention that in mine, that I agree with those and I believe others exist.

I think the timing of it also is a barrier. Customers are often coming into PAYS when they need something and they need it right away. And -- and right now we're not able to accommodate that yet. And so we're looking at ways that we can do that. That would be another barrier.

Q. Okay. So the other -- the other programs, the multifamily and the small business and the RCX, why are they all under 50 percent performing?

A. At a high level, I would talk about those factors I mentioned earlier. One of the things I would note is not only is our portfolio cost effective as it shows in that report, but every one of our programs that we offer is cost effective with a TRC over one except for PAYS and single-family income eligible. So -- so I would look at that cost effective and as well as the participation that we've shown in these programs and the 80,000-plus that we've seen across our portfolio and say that -- that we've been able to generate some success and we're continuing to work through not only those one-year extensions, but trying to design ways to increase

that participation --

Q. How --

A. -- to help generate more.

Q. How often is the goal updated? Because earlier testimony I asked if -- you know, we -- we understood there were some depreciating opportunities because of technology and because, you know, a lot of the lower-hanging fruit had already been taken. Does this goal -- my two-part question. One, does this goal reflect the fact that there is a depreciating opportunity for energy efficiency?

A. The goal itself, you know, we're setting these goals and we're following these goals on an annual basis. You'll be able to see those in the Appendix A. Our team is working regularly throughout the year, entry year, to look at each program that we have in the portfolio to see if there are any adjustments that need to be made, certainly within the program, and adjustments across the portfolio, taking into account the variety of considerations.

Now, at a broader level we've talked about the changing nature of energy efficiency. Mr. Wills talked about that market potential study. That is every three years, and we start there with the bottoms-up approach to look at each measure in the

program and in the portfolio including at a cost-effective level. We then take that and we go out to the market, request for proposals with implementers that work with many more utilities in many more states than just us. And then we take that to our team to them help set those initial goals and then refine them.

Q. If this Commission approves this next MEEIA, do you have concrete plans on how to improve these percent of goals? Like, do you -- do you have an idea of how to remove the challenges and barriers that exist that have kept these numbers suppressed?

A. On a program-by-program basis?

Q. Yes.

A. We do, yes, sir.

Q. Okay. And this may be a question you don't have the answer to, but I think you could probably get an answer to this question.

A. Okay.

Q. We heard that it's 200 megawatts of shortfall that would happen, but that's attributed to the demand response program. Do you have an idea if all of your goals were hit, if these were hundred percents across the board, how much megawatt savings there would be?

A. For 2025 or is this for the life of the amended application?

Q. I would say -- I mean, we can't do anything about the past, so 2025.

A. Yeah. For 2025 it would be an additional 126 megawatts across demand response and energy efficiency on top of that 205 megawatts.

Q. But take demand response out of it because I think we've also established that you can do demand response.

A. Okay.

Q. We may have to figure out how you're going to recover if you were to do it separately. And I understand that MEEIA provides you a framework to do that, so I get -- I understand why you don't want to decouple the two.

A. So outside of demand response?

Q. Outside of demand response.

A. I can get that. I don't have that off the top of my --

Q. Okay. I would be curious to see what is the megawatt projected savings if you hit your goals for the energy efficiency portion --

A. Okay.

Q. -- of MEEIA.

A. I can get that for you.

COMMISSIONER HOLSMAN: All right. Thank you, Judge.

JUDGE PRIDGIN: Commissioner, thank you. Commissioner Kolkmeyer, any questions? Commissioner Mitchell?

COMMISSIONER MITCHELL: Just one quick question.

QUESTIONS

BY COMMISSIONER MITCHELL:

Q. You mentioned that you had a chance to tabulate the EO as a percent and program costs. What did that figure wind up at?

A. Yes, Commissioner. Subject to check I believe it's just over 15 percent, maybe 15.2. I'm happy to check here if you give me a second.

Q. That's okay. Round numbers are fine.

A. Yeah. Just above 15 percent.

COMMISSIONER MITCHELL: Thank you.

THE WITNESS: You're welcome.

JUDGE PRIDGIN: All right. Thank you. Any further bench questions? All right. Any recross based on bench questions. Renew Missouri?

MR. LINHARES: No questions. Thank you, your Honor.

JUDGE PRIDGIN: NRDC?
MS. RUBENSTEIN: No questions. Thank you.
JUDGE PRIDGIN: Thank you. Consumers Council? Staff?
MR. PRINGLE: One moment, Judge.
JUDGE PRIDGIN: Certainly.
MR. PRINGLE: Yeah. Brief, Judge.

RECROSS-EXAMINATION

BY MR. PRINGLE:
Q.   Mr. Lozano, you mentioned programs being cost effective. When were avoided costs used in the cost-benefit analysis derived?
A.   Are you talking about 2023, or are you talking about this amended application?
Q.   For this amended application.
A.   When were avoided costs used to determine cost effectiveness?
Q.   Oh, sorry. For Cycle 3. Sorry, Mr. Lozano. That was for Cycle 3.
A.   I would have to confirm that. I don't know that answer off the top of my head.
Q.   Would it -- would it -- I guess would it be fair to say that's typically what happened at the beginning of Cycle 3?

A. It's certainly the first time it would be looked at.

Q. And then after that, at the beginning of the cycle, the learn actually updated after the cycle starts. Correct?

A. I don't think I could speak to that. I would need to check with Mr. Michels and a few folks on my team.

Q. All right.

A. I can tell you along those lines our original application on this cycle, we used what were the other -- the older avoided cost numbers. We filed our updated IRP in September 2023, and we updated the avoided costs accordingly.

MR. PRINGLE: Thank you, Mr. Lozano. No further questions, Judge.

JUDGE PRIDGIN: Mr. Pringle, thank you. OPC, any questions?

MS. VANGERPEN: Just one moment, your Honor. Thank you, your Honor.

RECROSS-EXAMINATION

BY MS. VANGERPEN:

Q. Good afternoon, Mr. Lozano. Just really quickly, what is the full amount of the EO that Ameren has proposed, if you achieve the entire EO?

A. Target and max?
Q. Yes.
A. Just over 70 million. I don't have the exact number in front of me. I can get that in Appendix N. But it's just over 70 million. The target is just over 56 million.
Q. And is that reflective in Figure 38 that you just previously mentioned?
A. Figure 38 reflects the target.
MS. VANGERPEN: Okay. Thank you.
JUDGE PRIDGIN: I'm sorry, Ms. VanGerpen, any further questions?
MS. VANGERPEN: Oh, I apologize, your Honor. No, no thank you.
JUDGE PRIDGIN: Quite all right. Thank you. I neglected to ask a few questions. I'll have a few, and then I'll give another opportunity for recross based on bench questions.
QUESTIONS
BY JUDGE PRIDGIN:
Q. Mr. Lozano, I don't think you'll need any documents to answer these. But if you do, please let me know and I'll give you --
A. Okay.
Q. -- a chance to look at those.

Just going over the revised plan, on page 22 the application states, A community products delivery channel will also be made available to income-eligible communities that will offer discounted LEDs through retail establishments and community-based organizations such as local food banks.

How exactly would this work to target Ameren Missouri's single-family income-eligible consumers at retail establishments?

A. I would need Mr. Via to answer that question.

Q. Okay. thank you. I appreciate that. And I should have said that's also an acceptable answer. If somebody else can answer it, that's fine.

Has Ameren Missouri exhausted a similar light bulb program available to all consumers in prior MEEIAs?

A. In my experience, now it is not near what Mr. Via's is, we've had other light bulb programs on the residential side for non-income-eligible which is no longer available. And we've also had a targeted community lighting light bulb program which is no longer available.

Q. Thank you. And again, you may need the application to answer this. And if you do, please let me know so someone can get you a copy. But in revised Appendix D, Incentive Ranges, can you explain the difference between the low and high incentives and how those amounts were determined?

A.   I would ask Mr. Graser to answer that question.

Q.   Okay. And he may be better suited to answer this question. But do you know how it would be determined if a customer is eligible for the low or high incentive?

A.   Yeah. I apologize. I would -- I would ask Mr. Via and Mr. Graser to answer those questions.

Q.   Thank you. I appreciate it.

A.   You're welcome.

JUDGE PRIDGIN: Those are all the questions I have. I'm sorry. Any further bench questions? Any recross based on bench questions? Renew Missouri?

MR. LINHARES: No, thank you, Judge.

JUDGE PRIDGIN: NRDC?

MS. RUBENSTEIN: No, thank you.

JUDGE PRIDGIN: Staff?

MR. PRINGLE: Yes, Judge. One moment.

FURTHER RECROSS-EXAMINATION

BY MR. PRINGLE:
Q. Mr. Lozano, regarding the incentive ranges, how are the cost-benefit analyses for this application set up as it pertains to incentive amounts?
A. I am not able to answer that question. I believe that Mr. Via and Mr. Graser can help answer those.
MR. PRINGLE: Thank you. Thank you, sir. No further questions, Judge.
JUDGE PRIDGIN: Mr. Pringle, thank you. Public Counsel?
MS. VANGERPEN: Nothing. Thank you, your Honor.
JUDGE PRIDGIN: All right. Thank you. Any redirect?
MS. MOORE: No, your Honor, thank you.
JUDGE PRIDGIN: All right. Thank you. Mr. Lozano, thank you. You may step down. I believe our next witness, is it Mr. Tevie? Am I pronouncing that correctly?
MR. PRINGLE: Tevie.
JUDGE PRINGLE: Tevie, excuse me. If Mr. Tevie could come forward and be sworn.
(Witness sworn.)

JUSTIN TEVIE

the witness, having been first duly sworn, testified as follows:

JUDGE PRIDGIN: Thank you very much. Please have a seat. And, Mr. Pringle, when you're ready, sir.

MR. PRINGLE: Thank you, Judge. And just going to ask for your preference when it comes to the exhibits. We had listed them out in an alphabetical order but because my witnesses aren't actually taking the stand in alphabetical order, would you like for me to give them the numbers as they appear?

JUDGE PRIDGIN: I have no preference, whichever you prefer. Thank you.

DIRECT EXAMINATION

BY MR. PRINGLE:

Q. Good afternoon.

A. Afternoon.

Q. Please state and spell your name for the record.

A. Justin Tevie, J-u-s-t-i-n, last name T-e-v-i-e.

Q. Thank you, Mr. Tevie. And by whom are you employed, in what capacity?

A. The Missouri Public Service Commission and

I'm economist analyst.

Q. Thank you, Mr. Tevie. And are you the same Justin Tevie who caused to sponsor direct, rebuttal, and surrebuttal in this proceeding which have been premarked as Staff Exhibits 200, 201, and 202?

A. Yes.

Q. At this time do you have any corrections to make to Exhibits 200, 201 or 202?

A. Yes. I have some corrections to make to my rebuttal testimony. So the first is on page 5, line 5. The word should be "calculate." The next one appears on page -- on page 10, line 7. The word should be "subsequently." And the last one appears on page 11, line 18. The word should be "accurate."

Q. And do you have any additional corrections to make to your testimony at this time, Mr. Tevie?

A. No.

Q. And is the information contained in your direct, rebuttal, and surrebuttal true and accurate to the best of your belief and knowledge?

A. Yes.

Q. If I were to ask you the same questions contained within Exhibits 200, 201, and 202, would your answers be similar or substantially similar to those contained therein?

A. Yes.

MR. PRINGLE: Thank you, Mr. Tevie. Mr. Tevie will be taking the stand again, Judge, so we will be not moving to enter his testimony on the record yet. But at this time I tender Mr. Tevie for cross-examination.

JUDGE PRIDGIN: All right. Mr. Pringle, thank you. Cross-examination, Public Counsel?

MS. VANGERPEN: Nothing. Thank you, your Honor.

JUDGE PRIDGIN: Thank you. Renew Missouri?

MR. LINHARES: Nothing. Thank you, your Honor.

JUDGE PRIDGIN: NRDC?

MS. RUBENSTEIN: No, thank you.

JUDGE PRIDGIN: Ameren Missouri?

CROSS-EXAMINATION

BY MS. MOORE:

Q. Can I just get a couple clarifications on your changes so that I'm following it right. So when you say page 5, line 5, are you inserting the word "calculate"? Oh, calculate. I see. Okay.

A. Yeah.

Q.   So you're just striking the D?
A.   Yeah, the D.
Q.   Okay.
A.   So these were typos.

MS. MOORE: Okay. Great. Those are all my only questions. Nothing further, your Honor.

JUDGE PRIDGIN: Ms. Moore, thank you. Any bench questions? Commissioner Coleman? Commissioner Holsman? Commissioner Kolkmeyer? Commissioner Mitchell? All right. Hearing no questions.

Thank you very much. You may step down. And I believe Ms. Lange is the next witness.

MR. PRINGLE: That is correct, Judge. Staff calls Ms. Lange to the stand.

JUDGE PRIDGIN: Ms. Lange, if you'll come forward to be sworn please.

(Witness sworn.)

SARAH LANGE

the witness, having been first duly sworn, testified as follows:

JUDGE PRIDGIN: Thank you very much. Please have a seat. And, Mr. Pringle, when you're ready.

MR. PRINGLE: Thank you, Judge.

DIRECT EXAMINATION

BY MR. PRINGLE:

Q. Good afternoon.

A. Good afternoon.

Q. Please state and spell your name for the record.

A. Sarah Lange, S-a-r-a-h L-a-n-g-e.

Q. Thank you, Ms. Lange. And by whom are you employ and in what capacity?

A. The Commission as member of the technical staff. I am an economist.

Q. And are you the same Sarah Lange who caused to sponsor in these proceedings direct, rebuttal, and surrebuttal testimony that have been premarked Exhibits 203, 204, and 205?

A. Would it be -- oh, yes.

Q. And do you have any corrections to your direct, rebuttal, or surrebuttal testimony at this time?

A. Not that I am aware of.

Q. Is the information contained within your direct, rebuttal, and surrebuttal testimony true and believed to the best of your -- true and correct to the best of your belief and knowledge?

A. It is.

Q.   If I were to ask you the same questions within your direct, rebuttal, and surrebuttal testimony, would your responses be similar or substantially similar to those contained therein?

A.   They would.

MR. PRINGLE: Thank you, Ms. Lange. And, Judge, Ms. Lange will also be taking the stand after this, so I will not be entering her exhibits on the record at this time. But Staff does tender Ms. Lange for cross-examination.

JUDGE PRIDGIN: Thank you. Cross-examination, Public Counsel?

MS. VANGERPEN: Yes, your Honor, just briefly.

CROSS-EXAMINATION

BY MS. VANGERPEN:

Q.   Good afternoon, Ms. Lange.

A.   Good afternoon.

Q.   In a rate case who -- who gets the benefits from an energy efficiency program impacted by the allocation factors used to allocate other costs?

A.   I'm trying to think if the answer is different for energy efficiency versus demand response.

Q. Perhaps it's best maybe just to talk through one.

A. I'll -- I'll do that, and I'll --

Q. Okay.

A. -- see if it changes.

Well, so generally speaking, the benefits are avoided costs. It's not like there's going to be a line in the EMS or in an accounting schedule titled Benefits that would get allocated. So to the extent that installing enough -- you know, if -- if enough heat pumps today drive that there will not be a need for a new substation five years from now, it would just be that there's not the cost for a new substation to allocate five years from now.

To the extent that energy is avoided in the near term, well, over any term, to the extent that energy is avoided and we're to a rate case so we've gone through the FAC portion, Staff has, at least for the last decade or so, allocated energy on wholesale energy cost by class. Ameren and some of the utilities do some netting before they allocate energy on loss-adjusted kWh, but again it would be that the rate case would allocate what the cost actually is, not the difference between what the cost is and what it could have been.

So I guess as I'm thinking it through, I don't know that any benefits get allocated in a rate case. It's just a question of when you get to a point in time where something would have happened that you're not allocating a cost that didn't happen. And I think a slight caveat to that would be with demand response because those programs -- I would defer to Mr. Luebbert -- I think the case is that a lot of, like any market avoided costs -- I'm sorry -- auction results change in MISO capacity is going to be going through the FAC first. And then it would just be that you're not allocating a plant that isn't built, you know, in 2033 or whenever it might be if a plant is actually not built.

Q. Okay. Thank you. Does weather normalization also impact the energy allocation factors?

A. Well, it would depend at least in part on whether the Cycle 2 TDNSB, that's throughput net shared benefit mechanism, is used or the mechanism that I've recommended in this case. Because I think that there are parties who have done different sequencing on this, but part of the existing TDNSB is a rate case annualization. And so in a rate case we assume that the shape of a measure and the number of installations of a measure and the timing of those installations of the measure as that shape was reflected in the TRM, that's Technical Resource Manual, that those occurred exactly as they occurred, if you will. Or I'm sorry, exactly as modeled in the TRM.

And so -- I'm trying not to talk with my hands because I know it doesn't show up in the transcript, but this is really a talk with your hands moment, so. The TRM has a shape that's assuming for when people are heating, when people are cooling, when they're using their toasters, what have you. And then weather has a shape. And so the point in time if you adjust the measure shape out or in first, then you normalize for weather, you're going to get a different billing determinate revenue result than you would if you do it in the opposite order.

So, yeah. In reality, no year is going to have the savings shape -- even if everybody did everything great, you're never going to have that savings shape that was assumed in the TRM based on the end-use shape. So whether the Company comes out ahead or behind through the throughput disincentive and then through the resulting revenues, because whatever you adjust into the billing determinants and

revenues gets perpetuated, it will have an impact, but I don't know what it will be sitting here today.

MS. VANGERPEN: Okay. Thank you. Nothing further.

JUDGE PRIDGIN: Ms. VanGerpen, thank you. Any cross from Renew Missouri?

MR. LINHARES: None, thank you, Judge.

JUDGE PRIDGIN: Ameren Missouri?

MS. MOORE: None. Thank you, your Honor.

JUDGE PRIDGIN: Thank you. Let me see if we have any bench questions. Chair Hahn, any questions for this witness? Commissioner Coleman? Commissioner Holsman? Commissioner Kolkmeyer? Commissioner Mitchell?

COMMISSIONER MITCHELL: No questions, Judge.

JUDGE PRIDGIN: Thank you. Any redirect?

REDIRECT EXAMINATION

BY MR. PRINGLE:

Q. Ms. Lange, you stated Cycle TDNSB. Did you mean NTD or net throughput disincentive?

A. I'm going to confuse myself on acronyms right now. So what I was referring to is the throughput disincentive mechanism that was in place for Cycle 2. And I don't want to give the wrong

designation of name on that. I believe it's net throughput disincentive.

MR. PRINGLE: Thank you, Ms. Lange. No further redirect from Staff, Judge.

JUDGE PRIDGIN: Mr. Pringle, thank you. Ms. Lange, thank you very much. You may step down. I believe Mr. Fortson's the next witness. Come forward and be sworn please.

(Witness sworn.)

BRAD FORTSON

the witness, having been first duly sworn, testified as follows:

JUDGE PRIDGIN: Thank you very much, sir. Please have a seat. And, Mr. Pringle, when you're ready.

MR. PRINGLE: Thank you, Judge.

DIRECT EXAMINATION

BY MR. PRINGLE:

Q. Good afternoon.

A. Good afternoon.

Q. Please state and spell your name for the record.

A. It's Brad Fortson, B-r-a-d, F-o-r-t-s-o-n.

Q. Thank you, Mr. Fortson. And by whom are you employed and in what capacity?

A. Missouri Public Service Commission Staff as a regulatory compliance manager.

Q. And are you the same Brad Fortson who caused to sponsor in these proceedings direct, rebuttal, and surrebuttal testimony that have been premarked Staff Exhibits 206, 207, and 208?

A. Yes.

Q. Do you have any corrections to make to either Exhibit 206, 207, or 208 at this time?

A. A few minor changes. The first is in my direct testimony, page 8, line 2. The word "products" should be "projects." Rebuttal testimony, page 4, line 10. Instead of 2023, it should be 2024. And in surrebuttal, page 7, line 22. Instead of "CC," it should be "SC."

Q. Thank you, Mr. Fortson. And do you have any additional corrections to make at this time?

A. I think that was it.

Q. And is the information contained within Exhibits 206, 207, and 208 true and correct to the best of your belief and knowledge?

A. They are.

Q. If I were to ask you the same correct -- the same questions within Exhibits 206, 207, and 208, would your answers be the same or substantially

similar?
A. They would.
MR. PRINGLE: Thank you, Mr. Fortson. And, Judge, also Mr. Fortson will be taking the stand again during these proceedings, so at this time I tender Mr. Fortson for cross-examination.
JUDGE PRIDGIN: All right. Mr. Pringle, thank you. Cross-examination, Public Counsel?
MS. VANGERPEN: Yes. Again, just very briefly, your Honor, thank you.

CROSS-EXAMINATION

BY MS. VANGERPEN:
Q. Good afternoon, Mr. Fortson.
A. Afternoon.
Q. Does Staff believe that Ameren needs to build generation?
A. I think I would answer that by, you know, if you look at Plan C compared to Plan I as was mentioned earlier and you take certain assumptions into account, I mentioned in my -- in testimony, I think it was my rebuttal testimony, that their winter position illustrates that they are worse off with their -- or than their summer position, but when you look at Plan C and Plan I, there's a capacity shortfall for '25 through '27 regardless of what plan

you look at. And they've got a -- as a part of -- they currently have an application in front of the Commission for a new gas plant to be online, I believe it was 2028. But when you look at the capacity balance positions, you know, for Plan C and Plan I, that plant wasn't included, which, you know, brought some confusion to Staff as to why that wouldn't be included. And there was analysis done as to, you know, what -- what their plans look like once you include that.

Depending on whether you're looking at weather normalized position or the, you know, extreme weather event position what was -- was what I understand was the determining factor whether Ameren included it or not. We opted to include it because it is a plant that is going to -- that is anticipated to be built, so it needed -- should be included in the -- a part of their capacity position.

As part of that 800 megawatts gas plant in 2028 they -- they have stated that that is needed for reliability purposes for, to potentially cover a 600 megawatt extreme winter weather event. But when you -- taking that into account, you know, instead of historically looking at maybe a peak summer day when we're, you know, not talking near that amount of -- of peaking, you know, of a peaking day or peaking days and now looking at that amount, you also need to consider that, you know, once that plant is built to cover the reliability for those few days of a winter weather event, you know, absent those days, the plant is still on system, can be called upon. So I think that calls into question, you know, why you have that plant online. The demand-side management that's been proposed seems substantially less necessary. I know that was a longwinded answer, but.

Q.   No. I appreciate the explanation. So you mentioned in your explanation Plan I versus Plan C. So as I understand it -- I guess could you explain the difference between the Plan I and Plan C? Let's start there.

A.   Yeah. I guess at the -- at the highest level, Plan -- Plan C is the -- is Ameren's preferred resource plan. They've -- they ran a Plan I as they've stated as a comparison to Plan C. And if you -- Plan C includes DSM; Plan I doesn't.

I can't speak to all of the different assumptions that were made as a part of -- as a part of those, you know, the comparison of those plans, but again, at a high level, Plan I doesn't include

DSM. If you look at my surrebuttal testimony in comparison -- or in comparing Plan C and Plan I, I did include the 800 megawatt simple cycle in 2028, which again, by all appearances, the Company didn't. From what I understand they were again comparing or they were looking at it as planning for normal weather as opposed to extreme weather. However, in taking extreme weather into account, that's where the 800 megawatts comes into play.

So once we included the 800 megawatt simple cycle, it started to really show the difference between what Plan C and Plan I really appeared to be. And the DSM, that just anticipated throughout the planning horizon, the 20-year planning horizon could be delayed till I think it was 2024 to potentially defer a new supply-side gas plant in 2037.

Q. So would it be fair to say that both of those plans include a lot of assumptions though?

A. A lot of assumptions.

MS. VANGERPEN: Okay. Nothing further. Thank you, your Honor.

JUDGE PRIDGIN: Ms. VanGerpen, thank you. Any cross-examination, Renew Missouri?

MR. LINHARES: No cross. Thank you,

Judge.

JUDGE PRIDGIN: Thank you. All right. I've lost track. Yeah. We're down to Ameren Missouri. Excuse me.

MS. HERNANDEZ: No questions. Thank you.

JUDGE PRIDGIN: All right. Thank you. Any bench questions? Chair Hahn.

QUESTIONS

BY CHAIR HAHN:

Q. Good afternoon, Mr. Fortson.

A. Good afternoon.

Q. I'm going to take Staff counsel's lead and ask about the details, which I know you're more knowledgeable than myself. But in Staff counsel's opening arguments under this issue of Benefits, counsel stated that Ameren overstates the benefits of the MEEIA plan that they've offered and to specifically ask about Ameren's avoided capacity cost calculation. So I'm going to do that.

So can you just tell me about how Ameren calculated the benefits of its MEEIA plan for customers and maybe how it could have overstated the benefits and then Staff's view of that calculation?

A. Sure. I can start and then Mr. Luebbert can continue next. So it gets a little confusing in

my mind. The Company calculated -- or in their analysis, I guess if you start it at Plan I and the couple plants that they are assuming are -- potentially could be avoided, I took a few steps back and went back to, I think I went back to starting in 2014 in that tri-annual IRP and started comparing those plans and said, What are the take of Plan C and Plan I, DSM versus no DSM for, you know, the 2023 IRP. I thought I'd go back and just see if we could determine whether actually comparing those plans is a fair comparison.

And throughout several pages in my rebuttal testimony I point out that most, if not all, of the plans, the way I viewed it, you know, taking a certain plant in a certain year and then seeing what has happened over the years, mainly all of the renewables that have come online, are anticipated to come online, the dispatchable that we now know is -- is anticipated and even in application currently in front of the Commission for -- for a new supply side. I took those -- those previous years, compared it to the 2023 preferred resource plan and what they're assuming and planning for in the near and long-term future. And it illustrates to me that nothing has come to fruition like it has been planned.

And if you look at the 2023 plan and, you know, take into account what they are planning even coupled with the DSM as planned, again as planned through the IRP for 20 years, not, you know -- not solely looking at the MEEIA Cycle 4 proposal, when they talk about displacing or avoiding a plant in 2037 and 2043, that's a long ways out. But there's also, as I point out in my direct, thousands of megawatts coming on for renewable generation. And we now, you know, have the 2028 simple cycle that's planned or an actual application coupled with other plants that they have planned in their -- in the preferred plan.

When you take that all into account and, you know, looking at big picture throughout the years and years to come, the avoided capacity cost just isn't there. It hasn't been there. So that's where -- that's where my criticism of previous avoided capacity cost and the cost effectiveness of the programs given the -- the likely little or no avoided capacity cost and how that affects the cost effectiveness of previous programs, which at this point it is what it is, but when, you know, looking forward with the application that -- that is in front of the Commission right now and the analysis that I

and other Staff members have done as far as avoided capacity costs go, I guess the fact of the matter is, you know, if you -- looking at it from our position, there are little to no avoided capacity costs. So, therefore, the -- the benefits from that TRC or the cost-benefit calculation don't exist.

So that's where our concern lies with cost effectiveness. But then again, you take it a step further. If you have no avoided capacity costs, you're not avoiding new generation, you then, you know, inherently then have no foregone earnings from those -- from those -- from that new supply side. So that's where my criticism of the earnings opportunity came from as far as avoided capacity costs go.

CHAIR HAHN: I think that answers everything I had. Thank you.

JUDGE PRIDGIN: Chair Hahn, thank you. Any further bench questions? Commissioner Coleman? Thank you. Commissioner Holsman? Commissioner Kolkmeyer? Commissioner Mitchell, any questions?

COMMISSIONER MITCHELL: Yes.

QUESTIONS

BY COMMISSIONER MITCHELL:

Q. And I'm not sure, but I think this goes toward the discussion of supply-side investments.

But Mr. Pringle talked a bit about -- (poor connection.)

COURT REPORTER: I can't hear him.

JUDGE PRIDGIN: And, Commissioner Mitchell, I'm sorry; the court reporter's having a tough time hearing you. Could you repeat that question please?

COMMISSIONER MITCHELL: Sure.

BY COMMISSIONER MITCHELL:

Q. Mr. Pringle discussed RIM as a performance metric, and I'd like to know what that means and why it's important.

A. Sure. I can attempt. Again, Mr. Luebbert might be able to clean this up a little bit when he comes up. But the ratepayer impact measure test is another test in the cost-effective sort of test tool kit. The TRC and Commission rules is stated as a -- the primary cost-effective test. But when you look at ratepayer impact measure test, it looks more specifically at the ratepayer impacts of the -- of the costs for DSM, the cost versus benefits.

I don't recall off the top of my head what exactly is taken into consideration in that calculation. It is most often always less than the TRC and other cost-benefit calculations because it's

looking more, again, specifically at the -- the impacts to the actual ratepayers as opposed to the TRC I believe takes into account for costs the incremental cost to customers and the admin costs, and the ratepayer impact measure test takes into account more ratepayer costs into that calculation.

COMMISSIONER MITCHELL: Thank you.

JUDGE PRIDGIN: Commissioner Mitchell, thank you. Commissioner Coleman, any questions?

COMMISSIONER COLEMAN: Yes, thanks.

QUESTIONS

BY COMMISSIONER COLEMAN:

Q.   Mr. Fortson, I'm not sure if you're the right person to ask at this time this question, but as I was driving in and listening to the testimony this morning, I know -- and the judge and I agree on this -- that none of you all are shy and you're quite willing to say you should talk to someone else about that. So my question is do you believe it's prudent for Ameren to base its ability to meet its load requirements through energy efficiency instead of generation capacity?

A.   That's an interesting question. The only thing that gives me pause is -- is, you know, speaking to the, you know, that specific word

"prudent." I mean, in -- in their planning, you know, there are certain requirements, you know, to take into account energy efficiency, you know, as a part of integrated resource planning. And there's different variations and different levels that they're required to test against. So while I think it's, you know, it -- it makes sense, it's, you know, as part of the requirements for the integrated resource planning to take into account energy efficiency, I think the question comes more to, you know, to what level and at what cost.

And I mean, I really do think we're getting -- you know, the -- that prudency question is becoming more and more into play. And I think -- I mean, throughout the hundreds of pages of testimony that we've filed, I mean, I think it's easy to see that we are starting to question whether it's prudent to -- you know, I'd -- I'd say it's prudent to take into account and to analyze, but I would question the prudency of -- of utilizing something that -- if you're using it in a way that is detrimental to ratepayers and is not compliant with the statute and the rule, then yes, there's absolutely a prudency issue there.

Q. This is a question I might end up asking a few people, so we'll see where the opinion falls.

A. Sure.

COMMISSIONER COLEMAN: Thank you. Judge.

JUDGE PRIDGIN: Commissioner Coleman, thank you. Any further bench questions? Recross based on bench questions. Public Counsel?

MS. VANGERPEN: Just very briefly.

RECROSS-EXAMINATION

BY MS. VANGERPEN:

Q. Mr. Fortson, Commissioner Mitchell asked you about the RIM test, the repair impact measurement test I believe. Is there any other witness that could also speak to the inputs on that test?

A. Sure. I don't want to put Mr. Luebbert on the spot; he may be able to. Dr. Marke when he gets up here later, he's been heavily involved in cost effectiveness, testing those inputs throughout the years.

MS. VANGERPEN: Okay. Thank you so much. Thank you, your Honor.

JUDGE PRIDGIN: Ms. VanGerpen, thank you. Any recross, Renew Missouri?

MR. LINHARES: None. Thank you, Judge.

JUDGE PRIDGIN: NRDC?

MS. RUBENSTEIN: No, thank you.

JUDGE PRIDGIN: Ameren Missouri?

MS. HERNANDEZ: No questions, thank you.

JUDGE PRIDGIN: All right. Thank you. Any redirect. Staff?

MR. PRINGLE: No redirect, Judge. Thank you.

JUDGE PRIDGIN: All right. Thank you. Mr. Fortson, thank you. You may step down. And I believe Mr. Luebbert is the next witness. If you'll come forward to be sworn, please, sir.

(Witness sworn.)

J LUEBBERT

the witness, having been first duly sworn, testified as follows:

JUDGE PRIDGIN: Thank you very much, sir. Please have a seat. Mr. Pringle, when you're ready.

MR. PRINGLE: Thank you, Judge.

DIRECT EXAMINATION

BY MR. PRINGLE:

Q.   Good afternoon.

A.   Good afternoon.

Q.   Please state and spell your name for the record.

A.   My name is J Luebbert. It's the letter J, Luebbert, L-u-e-b-b-e-r-t.

Q. Thank you, Mr. Luebbert. And by whom are you employed and in what capacity?
A. I'm employed by the Missouri Public Service Commission, and I am the manager of the tariff and rate design department.
Q. And are you the same J Luebbert to -- who caused to sponsor in these proceedings direct, rebuttal, and surrebuttal testimony?
A. Yes, I am.
Q. And the direct and rebuttal, public and confidential, have been premarked Staff Exhibits 209 and 210. And Mr. Luebbert's surrebuttal have been premarked as Staff Exhibit 211.
At this time, Mr. Luebbert, do you have any changes or corrections to make to any of those three exhibits?
A. I do have a few changes. I think most of them are fairly minor, but I want to make sure that everything is really clear in this case. So on -- in my direct, page 28, line 18, need to replace the word "energy" with the word "capacity." On page 30, line 15, the words "this result" should be deleted. Page 41, line 4, the word "measures" should be replaced with "measured."
And then I also had changes that were

reflected in schedule JLS-1 attached to my surrebuttal testimony regarding the FAC.

In rebuttal page 8, line 7 I have a date that is 12/31/2025. That should actually be 12/31/2027.

And in surrebuttal page 19, line 5, there is a reference to Mr. Fortson's rebuttal and that should be a reference to his surrebuttal.

Q.   Thank you, Mr. Luebbert. Are there any further additions or corrections to make to your testimony at this time?

A.   I don't believe so.

Q.   And is the information contained in Exhibits 209, 210, and 211 true and correct to the best of your belief and knowledge?

A.   Yes.

Q.   If I were to ask you the same questions within Exhibits 209, 210, and 211 would your answers be the same or substantially similar?

A.   They would.

MR. PRINGLE: Thank you, Mr. Luebbert. And, Judge, like the other witnesses, Mr. Luebbert will be taking the stand again, so at this time I tender the witness for cross-examination.

JUDGE PRIDGIN: All right. Mr. Pringle, thank you. Cross-examination. Public Counsel?

MS. VANGERPEN: Yes, thank you, your Honor.

CROSS-EXAMINATION

BY MS. VANGERPEN:

Q. Mr. Luebbert, I want to talk to you about benefits. So would you walk through the timeline from the time a participant implements a measure to when they and a nonparticipant receives a benefit?

A. Sure. So that timeline is going to vary, and it depends on not only the utility but also the actual energy and demand savings kind of profile for a given measure installation. So I'm going to start -- and I think as we're talking through benefits, it's really important to kind of keep in mind whose benefits you're looking at.

In the case of a participant, there may be some immediate bill impacts, right. So if you've installed a measure at your home and you start using less energy the following month, you're going to have some bill savings that are associated with that. But you'll also have an impact through, like in Ameren's case what -- what they -- their rider is called the Energy Efficiency Investment Charge, so your rider EEIC. You're also going to have some impact through

that where some costs are going to increase as a result of program costs, throughput disincentive, and earnings opportunity that are tied to that.

For a nonparticipant, I think I -- I spent a great dealing of time in my testimony trying to explain kind of the intricacies here, right. And I -- and it's because I think it's so important for everybody to understand that for this case before -- before a cycle gets approved. To maximize the opportunity for a nonparticipant to benefit from a MEEIA cycle, it's imperative to be able to identify actual investments that can be avoided and identify the timing of those investments in order to reasonably calculate whether or not they'd have a benefit.

Without doing so, the result is -- if there isn't an actual investment avoided and a MEEIA portfolio is largely premised on avoided energy costs from MISO purchases or enabled capacity revenues through the MISO PRA or avoided capacity costs through the MISO PRA, any benefit from that prior to the following Ameren rate case is going to flow through the FAC on the basis of loss-adjusted energy.

The reason that's important is that you have -- well, there are -- there are several reasons that's important. One of them is that you have to account for whether or not programs are beneficial to all customers within a class regardless of their participation. And so you end up with this potential for socialization of any of those benefits that flow through the FAC on the basis of loss-adjusted energy not only to other rate classes, but also to very large customers who are the only ones that have the opportunity to opt out of paying the EEIC. It makes it incredibly difficult to demonstrate a nonparticipant net benefit if an avoided investment isn't identified.

Q. Okay. I think -- I think I understand. Thank you. So in this particular case, Ameren puts forward a TRC of greater than one that it appears like Staff takes an issue with that. And can you explain why that is?

A. Yeah. The -- the issue with Ameren's cost-benefit analysis in this case is really foundational to their application and the flaws that are contained therein. The way that benefits are calculated by Ameren is estimating the energy savings and demand savings from a given measure over the life of that measure.

So I'm going to kind of walk through how that works for a -- for a single measure. If you install one measure that you expect to last for ten years and you calculate the estimated energy savings in each of those years and the estimated demand savings in each of those years, that estimate is then multiplied by an avoided cost value in several categories, one of them being the energy and then the other being capacity. So the way that Ameren's calculated their benefits, they multiply their estimated demand savings by a value for avoided capacity costs and add in avoided transmission costs and avoided distribution costs over the entire life of that measure.

The problem is that every single one of those calculations in this case depends on the accuracy and reliability of the TRM, the Deemed Savings Tables, and the avoided cost estimates. The TRM and the Deemed Savings Tables aren't accurate or reliable, and the avoided cost estimates are much higher than what is reasonably to be expected for any ratepayer to see as a benefit.

So when you're looking at the TRC, all of the benefits that went into that calculation aren't reasonable. And so the resulting calculation, whether it's 4 or .7, the number isn't a reasonable

estimation or approximation of the cost and benefits in this case.

MS. VANGERPEN: Thank you, Mr. Luebbert. Nothing further, your Honor.

JUDGE PRIDGIN: All right. Ms. VanGerpen, thank you. Any cross from Renew Missouri?

MR. LINHARES: No, thank you, your Honor.

JUDGE PRIDGIN: NRDC, any cross?

MS. RUBENSTEIN: No, thank you, your Honor.

JUDGE PRIDGIN: Ameren Missouri?

MR. HOLTHAUS: No cross.

JUDGE PRIDGIN: All right. Thank you. See if we have any bench questions. Chair Hahn.

QUESTIONS

BY CHAIR HAHN:

Q. Thank you, Mr. Luebbert, appreciate that. I try to write it all, but -- and you're very slow and thorough; I appreciate that very much. Tell me how this calculation that you just described, and you described it as not being reliable because you can't basically rely on the elements that went into the calculation, how is this calculated in previous MEEIA cycles?

A. Well, what I was describing as far as the estimation of benefits I think is probably -- I think kind of the process of relying on the TRM to come up with an estimated energy savings amount and an estimated demand savings amount is probably the same process that was done in Cycle 3. What I think -- if you are looking for a large difference between cases, what Staff has come to realize -- well, I -- I think we've known this for some time, but MEEIA's very complicated and what we see within a given company's application doesn't explain it very well. And so we really kind of took a deep dive and started to look at some of the TRM assumptions, because it's really driving all of their assumed benefits that they're -- they're wanting you to rely on to say this is a good program or it isn't.

As we started to dive through that TRM document and the Deemed Savings Table document in March of last year when they first filed, we knew that there were problems with citations, that there wasn't reasonable citation included for hundreds, if not thousands, of assumptions. And we -- we told the Company very early on, You need to fix this. We've gotta have something that we can have that's reliable.

My guess is that may have been a problem in Cycle 3 as well unfortunately. I don't -- I know that we didn't kind of spend the time in testimony describing it, but it doesn't mean that it wasn't an issue before. One of the things that I know that I'm sure you've heard many of the Staff witnesses and maybe some others say is, you know, we're always reserving the right to get smarter and to get better at our job. These are the type of things that the Commission needs to know before they approve something, especially when the Company's asking you to approve the entirety of that TRM document and the entirely of the that Deemed Savings Table document that we know has flaws. We've pointed out a few of them, but not all of them because we -- we didn't have time, right. That's the first part. And I'm sorry that this is a longwinded answer. The first part is the energy savings and demand savings estimate.

The seconds part of the product to come up with benefits is avoided costs. And the big thing that's changed here from Cycle 3 to now for Ameren is that they've gone away from their estimate of market-based avoided cost for capacity, and they've pivoted to the cost of new entry or the estimated cost of new entry from MISO. Now, there's a few reasons why that's really important, but one of them is that the Commission in Cycle 3 told Evergy it wasn't reasonable to do so. And yet Ameren's doing it today. Now, the Company isn't avoiding the cost of new entry. They're not assuming that they're avoiding the cost of new entry when they're doing their actual IRP analysis. They're assuming that they're avoiding the market cost from the MISO PRA.

An important aspect of that now is the seasonality of the MISO PRA. And that's a new aspect that we didn't have to deal with in Cycle 3, but it's one that we better get a grasp on for Cycle 4 or any future cycle as long as MISO has that -- that construct. Ameren's application just fails to do it. They're looking at summer demand impacts and they largely ignore the demand impacts that occur or might occur or plan -- or, you know, plan to avoid some of those costs in winter, spring, and fall. And those can be the most impactful seasons. It's problematic, and it needs to be planned for. When we're talking about this level of money that are going to come out of ratepayers' pockets to fully fund this -- this project or this application, the justification should be there and it just isn't.

JUDGE PRIDGIN: Chair Hahn, thank you.
Commissioner Coleman?

COMMISSIONER COLEMAN: Thank you.

QUESTIONS

BY COMMISSIONER COLEMAN:

Q.   All right. So I may have this wrong and need you to give me some input on it, but when I was driving in this morning, drinking coffee, listening to the testimony and trying to watch the road at the same time, one of the things I think I heard in Ms. Johnson's opening statements was something along the lines that Staff has lots of questions to Ameren's application. And I want to believe I heard a number that was a hundred -- over a hundred questions, over a hundred inquiries and that you all had reached out and Ameren did respond but the responses were not necessarily as forthcoming as Staff would have liked them to be. So if I got that right, my question now is have you ever gotten the information to the level of satisfaction that Staff needs?

A.   You're asking specifically about this case. Right? I -- I touched on this a little bit, but I think -- I'm really glad that you asked.

When we had the initial application from

Ameren, the very first data request that I sent, I wrote it, and it said, Provide support and citations for all of the hard-coded numbers that are included in your work papers.

We didn't get that. We were told we weren't going to get that. And that was part of the impetus from -- at least from staff's perspective of putting a bit of a pause and seeing if we could bide time so that we could have a reasonably supported application. Now, we went months and months and we had several discussions with Ameren. We explained the issue. And we got the -- the new application, I think it was earlier this year, and a lot of the numbers that were included in those work papers are hard coded again. And so we sent a follow up that was essentially the same question, a little bit pared back because they had provided a little bit more information, but essentially the same question. Provide justification, provide citations for all of these assumptions, hundreds, thousands of assumptions that drive what the estimated demand in energy savings are going to be. They directly impact what the costs are going to flow straight to the ratepayers from Day One for Cycle 4. And they won't -- they can't provide it.

What they have provided is a folder full of, I want to say 200 documents, PDF documents with no page citations to any of it saying, This is exactly where we got this assumption for this measure.

It's not reasonable. It -- it just isn't reasonable for this level of planned program expenditure to not have a well-thought out and a well-documented plan in place before they ask for the Commission to give them their blessing, give them your blessing. So I think the answer is we've gotten some of the answers -- or some of the questions answered, but we've got some really foundational issues that the Company just can't answer. They don't -- either don't have the answers, or they've refused to provide them.

Q. Okay. So that was going to be my next question. Do you think this is a matter of it being difficult for the Company to forecast that information that you're asking?

A. Well, for the -- the TRM and the Deemed Savings Table, basically it -- if you want to look at it, it's in their application as Appendix -- I want to say it's Appendix F, G, H, and I. Appendix F is a PDF, but we've -- we've been provided an Excel

version, right, but it -- if you look at, it's got just a plethora of different assumptions that are included within that. And the -- the result of that appendix is to come up with a number for energy saved from a single measure if you installed one of them in Year One versus Year Two versus Year Three. You have to be able to provide justification for the assumptions you're using to come up with energy savings from a measure.

If you can't do that -- there are other issues, but that's a foundational issue with their application, and it has to be fixed well before -- it should have been fixed prior to them filing their application. And we gave them the heads up that they needed to fix it and they just haven't done it.

COMMISSIONER COLEMAN: Thank you. Thank you, Judge.

JUDGE PRIDGIN: Commissioner Coleman, thank you. Further bench questions? Commissioner Holsman? Commissioner Kolkmeyer? Commissioner Mitchell? Hearing none. I don't have any questions. Any recross based on bench questions? Public Counsel?

MS. VANGERPEN: No, thank you, your Honor.

JUDGE PRIDGIN: Renew Missouri?
MR. LINHARES: No, thank you, your Honor.
JUDGE PRIDGIN: NRDC?
MS. RUBENSTEIN: No, thank you.
JUDGE PRIDGIN: Ameren Missouri?
MR. HOLTHAUS: A few questions, Judge.
JUDGE PRIDGIN: When you're ready.

QUESTIONS

BY MR. HOLTHAUS:

Q. Mr. Luebbert, in your discussions with the commissioners you mentioned several times that Staff was dissatisfied with the level of detail of information that it received from Ameren Missouri. To your knowledge, did Staff ever assert its dissatisfaction or claim that Ameren was not complying with its discovery request via a discovery dispute?

A. We -- we discussed the potential for -- for raising the issue in front of the Commission through a discovery dispute. We didn't, but by -- because by the time we got kind of between the timing of direct being filed for the Company and direct and rebuttal being filed for us after the amended application, there were -- there were discussions, and it sounded like there was a potential that they

were -- the Company was going to be providing us some of the information, so we kind of held off a little bit. And unfortunately, we held off long enough that we got to the point that it was time to file testimony, and so we did. I documented some of these issues within my testimony, but we didn't formally raise it as a discovery concern in front of the Commission.

Q. Thank you. You also discussed with the commissioners the TRM document. To your knowledge, did Staff have any hand in working on that TRM?

A. I don't know -- I don't know.

Q. To the best of your knowledge, is the TRM a form that is prescribed by a third-party, specifically VIEC, which stands for -- I'm sorry -- VEIC which stands for Vermont Energy Investment Corporation?

A. I'm sorry, can you repeat your question? You asked if it's a form that was prescribed?

Q. Correct. Is -- is the TRM a form prepared by a third-party, VEIC, that Ameren is to fill out?

A. I think the TRM, the cover of all three chapters of the TRM have Ameren Missouri on the front. I don't know the -- I don't know that I would characterize it in the way that you've asked the

question.

Q. I misspoke. It's not a form. Is it not a manual that's provided by a third party?

A. It is -- it is three appendices that Ameren filed and requested approval for within its application.

Q. And do you know if Ameren actually prepared that or was it provided to Ameren by a third party?

A. I don't know.

Q. Okay. You also had some discussion with the commissioners regarding the -- you mentioned a switch from market-based capacity approach to valuing, avoided capacity versus a capacity-based approach, and I wanted to talk about with you a little bit about that. You had also said that Ameren -- Ameren's MEEIA 4 application has not shown that any supply-side resources will be avoided. You -- I believe you evaluated Ameren Missouri's winter capacity position in the analysis presented on pages 21 through 25 of your rebuttal testimony. Correct?

A. Subject to checking the page numbers. I know I talked about winter capacity position in my rebuttal testimony, but I don't know off -- off the

top of my head which pages number.

Q. Would it help if I provided you with a copy of your rebuttal?

A. I've got a copy. If you give me a few minutes, I can get there. Okay. I think I'm -- I'm in the general vicinity within my testimony. If you've got a specific question, I'd be happy to answer it.

Q. Yes. On page 22 of your rebuttal testimony, lines 8 through 11, you conclude that Ameren Missouri is short on winter capacity in years 2025 through 2027. But then the short position is resolved in 2028 by the addition of a substantial supply-side resource.

Did I summarize that correctly, sir?

A. I think the -- the line number references are probably -- at lines 8 through 11 I'm talking about a negative winter capacity position, years '25 through '27. But then I -- I talked about the summer capacity position a little bit later on.

I do want to point out that the basis for all of these charts was the -- the Ameren Missouri preferred resource plan, capacity balance sheets from the IRP. So that was kind of the source data that I was relying on.

Q. And did you -- did you add to that source data the 800 megawatt simple-cycle plant that is -- that Ameren would like to add in 2028?

A. I did not add those values to the document itself. However, whenever I was looking at the actual capacity position, I have included those megawatts within that capacity position consistent with how all of the other resources within a capacity balance sheet are treated.

Q. And --

A. I -- I followed that same -- same methodology here.

Q. And you're aware that that 800 megawatt capacity resource is chiefly intended to address extreme winter weather. Correct?

A. If -- if it's chiefly intended to address extreme winter weather, it doesn't take away from the fact that it will exist once it's in rate base and it will be available whenever it's needed. So it, by all accounts, should be accounted for when you're looking at the capacity balance of a utility.

Q. Does your analysis reflected in Figures 2, 4, 6, and 7 of your rebuttal testimony reflect normal weather loads or extreme weather loads?

A. So this reflects the load that Ameren utilizes in its capacity balance sheets as part of the IRP.

Q. And is it your understanding that that Ameren's capacity balance sheet reflected normal weather supply side as compared to normal weather load?

A. I think Mr. Fortson looked into this little bit more than I did. It wouldn't surprise me if it was weather normalized, but I can't say with certainty.

Q. Do you have any reason to doubt that the analysis -- in your analyses reflected in Figures 2, 4, 6 and 7, there is an additional supply-side resource included by way of the 800 megawatt simple-cycle natural gas plant that is intended to address extreme weather and that is being compared to normal weather load?

A. Can I clarify your question?

Q. Please.

A. Are you asking if in Figures 2, 4, 6, and 7, if the capacity position I've reflected includes the capacity from a simple-cycle addition in 2028?

Q. Yes.

A. That's your question?
Q. Yes. That's part of my question.
A. Yes. Yes. They -- those charts all include the capacity additions from that plant.
Q. Then the other part of my question is do you have any reason to doubt that those same figures, which are all related to winter capacity position, reflect normal weather loads?
A. If the load that's included in Ameren's capacity balance sheets as part of its IRP are weather normal loads, then yes, that is the case. I relied on Ameren's capacity balance sheets as the starting point for looking at these -- these charts.
Q. So assuming that's an accurate assumption, if you were to factor in extreme weather load into these graphs, how would that change your analysis which indicates there's no shortage of winter capacity between 2027 and 2037?
A. It would be highly dependent on when you add load, the magnitude of that load addition. Yeah. There are a lot of factors there that would have to be considered. What time period you're looking at. Those are all things that have to be factored in.
Q. Okay. Next I'd like to ask you about your surrebuttal testimony. And this is again relevant to

your discussion with the commissioners about a market-based approach. You say at page 8 of your surrebuttal, lines 8 through 11 -- I'll give you a minute to get there. You state, quote, Staff recommends relying on a market-based approach to valuing avoided costs associated with demand reductions because supply-side resource investments are not expected to be avoided or deferred.

Now, assume for purposes of this question that a utility submits a MEEIA application to Staff and that application does indeed indicate that supply-side resources are intended to be avoided. Under this scenario, would you still recommend a market-based approach to valuing avoided capacity costs?

A. Okay. So your question is assuming that a MEEIA application is -- is before the Commission and Staff's reviewing it and it -- there are reasonable assumptions and reasonable justification that an actual investment can be deferred?

Q. Yes.

A. Then would we -- would we propose doing a market-based approach?

Q. Yes.

A. And is -- is the assumption that that

utility is operating in the MISO ISO as opposed to maybe an SPP?

Q. Yes.

A. And that the -- okay. I think in that scenario if -- if the estimates were reasonable, and that is obviously one of -- one of the large issues that we're bringing up in this case is that the -- the estimates of energy and demand savings that Ameren's put forward are not reasonable, and if you were actually avoiding the installation of let's say a simple-cycle gas turbine or deferring a simple-cycle gas turbine for two to three years, two to eight years, something like that, I think it would be reasonable to consider alternatives to a market-based approach. Now, how those values are calculated is important, just like everything else within kind of the context of an application, the details are really important, but I think, you know, there's -- there are scenarios that something other than a market-based approach might be reasonable.

MR. HOLTHAUS: No further questions. Thank you.

JUDGE PRIDGIN: Thank you, Counsel. Any redirect?

REDIRECT EXAMINATION

BY MR. PRINGLE:

Q. Mr. Luebbert, going back to that hypo you just responded to from Ameren, would that be for the duration of the study period?

A. Oh, that's -- that's a really good question. The answer -- the short answer is no. It should only be considered for the period of time that you're actually avoiding that investment. To the extent that that investment gets deferred let's say two to three years, right, it might be reasonable to assume that avoided cost of something other than the market-based amount for those first two or three years. But if a new plant is kind of on the heels of that anyway and that can't be deferred any further, then it doesn't make sense to say you're avoiding that plant that we're actually including in rate base right then, right. So yeah, it -- it would only be for the period of time that you're actually avoiding that type of investment. Past that, it doesn't make sense in that scenario to look at something other than the market-based avoided cost for capacity.

Q. And what about before that, Mr. Luebbert?

A. Prior to avoiding that -- that resource, it wouldn't make sense to do anything other than looking at an avoided capacity cost based on what the

results of the MISO PRA and accounting for the seasonality.

I think that is a important aspect that we -- we're going to have to keep considering and coming back to because of this -- this change that's happened with MISO. We can't just look at what the -- what the demand impact might be for a single hour in a year. Different measures have different characteristics. Some may have energy savings that occur at a certain time and more frequently during the summer, and others may be better suited for winter. It may be even harder still to find kind of measures that are good at reducing spring peaks because they're -- they may tend to be a little bit more variable.

Q. Thank you, Mr. Luebbert. And I kind of wanted to go back to some of the questions that Chair Hahn asked you.

A. Sure.

Q. When she was asking you about calculations, have transmission and distribution always been included?

A. Avoided transmission and distribution have not always been included in utility filings. Obviously that -- there's been some variability in

what different utilities have decided to include and how they come up with their estimates, not only among utilities, but among cycles. As we talked about, Ameren kind of changed their methodology for capacity costs. I think they've also changed methodology from what they were using for avoided transmission and distribution costs.

That being said, we're in -- we're in a situation with Ameren's current investment strategy of -- and I mentioned it in my testimony -- we're looking at billion of dollars in transmission and distribution investment over the next few years. The -- the best assumption is that that's probably going to continue. You can't avoid costs that are going to happen anyway, so to include those in the benefit analysis just really doesn't make sense in the current environment. And I think that's something that we have to consider.

Q. And then also if you could also kind of explain these acronyms as well in this question. Why does it matter that the PRA was used in the IRP, but for here CONE was used?

A. Yeah. This is -- this is impactful for a couple of reasons. Let's start with, you know, the requirement that you -- that you're looking at supply-side resources on an equivalent basis as demand side, right. From the perspective -- I think what we heard from Mr. Wills and -- well, I -- from the perspective of looking at what's -- what is actually coming out of the IRP, what Mr. Michels was explaining is that they took -- they took a look at the net capacity position in a given year and they multiplied that by what their assumed market price of capacity was. So obviously a reduction from demand-side programs is going to change that net position.

And what we're saying is that you should be using -- you should be looking at the market -- the market price of capacity.

Now, when you compare that to what they're asking for the Commission to approve in this case, is they're wanting you to approve an avoided capacity cost that's three to five hundred percent of what that actual value is estimated to be over the entire course of a 20-year period. That's not reasonable. The Company hasn't included that when its done its IRP analysis, but they do want to include it for all of their cost effectiveness tests, not only within the course of this application, but through the course of evaluation, measurement, and verification, throughout the entire course of the cycle, three to five years, however long it may be. They want to utilize that value of CONE to look at whether or not it's cost effective.

Now, we know that it's not reasonable to assume that they're actually going to be avoiding the cost of CONE for capacity that happens next year. And yet that's what -- that's exactly what Ameren wants you to approve and our recommendation is you shouldn't. You should -- you -- you shouldn't approve any avoided cost that's more than what their expected market price is for capacity.

I guess the only other thing, and I'm going to probably sound like a broken record. And we have to account for the seasonality. The seasonality has become so much more important. And frankly, the -- I talked a lot about hard-coded values, right. Ameren's Deemed Savings Table includes a hard-coded value for every single measure to come up with a, quote, unquote, demand impact. That by its nature has to vary by season for a vast majority of the measures, and Ameren doesn't have that within its application. And it has to have that to do -- well, and it needs to be reasonably supported in order to come up with any reasonable estimate of that.

Q. Thank you, Mr. Luebbert. And those differences you outlined, how do they relate to the $4 billion difference Ameren mentioned between Plan C and I?

A. I know there's been quite a bit of discussion about looking at Plan C versus Plan I, and -- and frankly within kind of the context of looking at this case, the comparison of those two plans isn't the comparison you need. It doesn't give you that much information. It includes so many assumptions that aren't relevant to this -- this hearing today.

Now, first, Am -- or Staff is not proposing for Ameren to never do a MEEIA cycle again. That's not what we've proposed. And, in fact, that's why we took the approach in direct to explain what it might look like to do something reasonable. The expectation is that they're going to come back in for a cycle, even if you reject it or if you modify it in a way that they don't like. They'll go back and they'll try to figure out what they can live with or what they decide they can live with and come back for another application. That's the first one.

The second one is the comparison of those two plans, there are so many other moving parts

including billions of dollars of generation resources that are being included. I know Mr. Fortson talks about the validity of doing some of those comparisons, and we have issues with that as well.

The -- the last piece is that looking at those two plans and just specifically kind of honing in on DSM or demand side, it's looking at doing a level of DSM reductions over a 20-year period versus not doing any at all. And what it isn't looking at is trying to identify the timing and the magnitude of when you can do demand-side reductions in a way that meaningfully benefits ratepayers.

Now, if I -- now if I can get others to take away nothing else from this hearing, the timing and the magnitude of any addition or subtraction from a balance position is so important. We have to be accounting for that, and I know you've heard me talking about that in some of the CCN cases. The timing has to be accounted for.

Commissioners, I know you asked earlier about the 200 megawatt demand response impact. I mean, speaking of timing, when I'm looking at what their expected demand response impact is --

MR. HOLTHAUS: Judge, objection that this is going a little beyond the scope of the commissioners' questions on Mr. Luebbert's appearance here today.

JUDGE PRIDGIN: Mr. Pringle?

MR. PRINGLE: I believe there was questions about timing from the bench. I would argue that the answer is perfectly in line with questions from the bench.

JUDGE PRIDGIN: I'll overrule.

THE WITNESS: When we're looking at the demand impact from demand response, Ameren's own capacity balance look in their IRP shows that the impact from demand response is targeted to summer. The impact in the winter is a fraction, and I mean a small fraction, maybe 5 percent, if that, of what the expected impact is in the summer. So when they're talking about the potential for a 200 megawatt drop off in the summer, what you're looking at is maybe, you know, 10 megawatts in the winter. And we don't have a transparent look at what they're looking at in spring and fall, but we know that if that demand response is tied to heating or cooling, that that may not be available to the same extent in spring or fall.

Now, one of the things that -- that Staff pushed for as a result of the -- the last extension

for Cycle 3 was that Ameren had to start looking at seasons other than winter. Or I'm sorry, other than summer because we knew that this is going to be so much more important going forward as MISO changed it's PRA. We don't see that reflected. It's not accounted for in the application.

BY MR. PRINGLE:

Q.   Thanks, Mr. Luebbert. And this is just -- I want to make sure we have this definition in the record, but what is TRM?

A.   Technical Resource Manual, sometimes called a Technical Reference Manual. In this case when I refer to TRM, I'm talking about the appendices that Ameren attached to their application.

Q.   And in general, what is the point of a TRM?

A.   A TRM can be a document to estimate energy or demand savings. Ideally it's going to have the ability to include lots of variables to account for what actually occurs and limit the amount of times that you assume a default value whenever you're determining what -- what actually happens. Whether or not that occurs is -- that can vary by utility and by cycle.

Q.   And did the TRM submitted by Ameren

Missouri in this proceeding, did that match the ideal scenario you just described?
A. Well, the TRM that -- that Ameren provided isn't ideal for a lot of reasons. One of them, it's lengthy; it's a lengthy set of three documents. It feeds into the demand -- or the Deemed Savings Tables. It includes a lot of measures that Ameren has said they don't intend to actually implement, and yet they request your approval for. A lot of measures that Ameren's own figures and charts don't consider as a possibility of being included, and yet they request approval for those. But by and large the -- the largest issues is the assumptions that are included within that aren't well-supported. It's a long document, there are a lot of numbers, and Ameren doesn't have the support for it.
Q. And what do you mean by Ameren does not have the support for it?
A. I'll get -- I'll give you an example, and it is an example that is fairly prevalent through the Deemed Savings Table. So the Deemed Savings Table reportedly takes the TRM equations and provides the formulas in Excel format. In many, many instances the assumptions for a given measure are hard -- hard-coded numbers. And so there might be a -- a

number with decimal places out to ten, ten places, and there isn't a citation for where that assumption came from. Or maybe there's a citation, but the link doesn't work anymore. Or there's a link that refers to a 2008 appliance study. I think we all know that appliances have changed since 2008.

These are the type of examples that are just -- they're prevalent throughout that entire document. And it's not acceptable to then charge ratepayers as if those energy sales would have happened but for the installation of that measure through the throughput disincentive. And it's not reasonable to assume that those energy and demand savings occurred when you're looking at whether or not a program's cost effective, because it's not supported.

MR. PRINGLE: Thank you. Thank you, Mr. Luebbert. No further questions from Staff, Judge. Thank you.

JUDGE PRIDGIN: Mr. Pringle, thank you. I do think I'm going to have another quick question or two.

QUESTIONS

BY JUDGE PRIDGIN:

Q.   Mr. Luebbert, I think you've spoken to the challenges with the hard coding of values in Ameren's TRM which involved deemed savings, do you think there's a more meaningful or more accurate way to account for program savings?

A. Well, I -- I guess the answer is yes. And, but I would say that the answer probably depends on the purpose that you're looking for. Staff has offered up an alternative to Ameren's proposed net throughput disincentive which I think would, one, it'll be simpler to implement; two, it won't have the issues that are -- that are relevant and prevalent frankly with the NTD that come from time variant rates, and it'll be based on what actually occurs and not a -- a presumption of what occurs based on a deemed value.

Now, that being said, even if you were to move forward with a TRM and Deemed Savings Table, there are simple ways to improve it. Show your work, provide, you know, page-specific citations for the assumptions that you utilized, allow other parties to look and see what those assumptions are so that we can inform the Commission whether or not we think those are reasonable.

The evaluators are going to need to do the same thing if the outcome of that evaluation is

determining whether or not it's a reasonable estimate. If they're not looking at that, then you should start questioning the results of the evaluation. And I think that's part of -- you know, I don't want to get too far afield from the issues within today, but I think those are all things that we need to be thinking about.

JUDGE PRIDGIN: Mr. Luebbert, thank you. Any -- any further bench questions? Recross? Hang on. Well, Mr. Luebbert, I'm sorry.

BY JUDGE PRIDGIN:

Q. Does the utility have the necessary data to evaluate savings in this manner? I mean, are you speaking to a measured savings model?

A. I'm -- I want to make sure I'm answering your question. Do I think that the utility has the ability to provide support for their assumptions in the TRM? I --

Q. Yes.

A. -- think if they spent the time and they didn't have the expectation of getting an application approved without showing their work, that they would have already done it.

I think that -- I think they're capable of doing it. Now, to do it in a timely manner, maybe it

takes them finding what the really important measures are and starting there and asking for approval of those and not having this giant document that includes tons of measures that are -- the Company doesn't expect to -- to implement and yet they want you to approve them and approve the ability for them to implement them whenever they want as long as it's within the incentive range that they've also asked you to approve. That's not the model that needs to be taken, right. Show your work, provide the documentation, explain why you're using the assumptions. These are not, you know, groundbreaking concepts. It's the bare minimum.

JUDGE PRIDGIN: All right. Mr. Luebbert, thank you. Any further bench questions? Any cross based on my bench questions? Public Counsel?

MR. HOLTHAUS: Yes, Judge.

JUDGE PRIDGIN: Sorry, Public Counsel.

MR. HOLTHAUS: Sorry.

JUDGE PRIDGIN: That's all right.

MR. HOLTHAUS: Apologies. I jumped the gun there.

JUDGE PRIDGIN: Quite all right.

MS. VANGERPEN: No. No, thank you, your Honor.

JUDGE PRIDGIN: Consumers Council?

MR. COFFMAN: No questions.

JUDGE PRIDGIN: Renew Missouri?

MR. LINHARES: No questions, thank you.

JUDGE PRIDGIN: NRDC?

MS. RUBENSTEIN: No, thank you.

JUDGE PRIDGIN: And Ameren Missouri.

RECROSS-EXAMINATION

BY MR. HOLTHAUS:

Q. Mr. Luebbert, real briefly, do you have any reason to doubt that Ameren Missouri did provide Staff with an opportunity to view the TRM before it was filed last year in September of 2023?

MR. PRINGLE: Objection; beyond the scope of bench questions.

JUDGE PRIDGIN: Yeah. I'm going to sustain that. I don't think I asked about that.

MR. HOLTHAUS: No further questions.

JUDGE PRIDGIN: Thank you. Redirect?

MR. PRINGLE: No redirect, Judge, thank you.

JUDGE PRIDGIN: All right, thank you. Mr. Luebbert, you may step down. We seem to be at a very good time for a midafternoon break. I show the time about 3:02 so let's resume about 3:15. Anything further from counsel or from the bench before we take a break? All right. We will be in recess until 3:15. Thank you. We're off the record.

(Off the record.)

JUDGE PRIDGIN: Good afternoon. We are back on the record. A couple of housekeeping matters. Before I forget, because I keep forgetting, as a reminder, I think I put this in a prior order, the Commission's holding a rulemaking hearing tomorrow morning I believe at 10:00 a.m. and so we will not resume this hearing until 1:00 p.m. or perhaps even after if the rulemaking hearing goes later. So I just wanted to remind everyone of that.

I will not be on the bench tomorrow; I will be out. Judge Dippell has graciously agreed to preside over the hearing tomorrow and then I will be back with you Wednesday.

I'm pretty comfortable with the pace at which we were proceeding, but obviously if we start going slower, we may need to consider to go -- consider going late later in the week. I don't intend to do that today I don't think; I think we're about on schedule, but I just wanted to remind you of -- of that, so.

Anything from counsel before we proceed

to Ms. Mantle taking the stand? All right. Ms. Mantle, if you'll come forward to be sworn please.

(Witness sworn.)

LENA MANTLE

the witness, having been first duly sworn, testified as follows:

JUDGE PRIDGIN: Thank you very much. Please have a seat. Ms. VanGerpen, when you're ready.

MS. VANGERPEN: Thank you, your Honor.

DIRECT EXAMINATION

BY MS. VANGERPEN:

Q. Good afternoon, Ms. Mantle.

A. Good afternoon.

Q. Can you please state your name and spell it for the record.

A. My name is Lena M. Mantle. Lena is L-e-n-a, Mantle is M-a-n-t-l-e.

Q. By whom are you employed and in what capacity?

A. I'm employed by the office of the Public Counsel as senior analyst.

Q. Are you the same Lena Mantle who caused to be prepared rebuttal testimony in this case?

A. Yes.

Q. Do you have any corrections or additions to your written testimony?

A. I have one. At the bottom of page 12, footnote 16, I -- the case number is EO-2024-0020. That's it.

Q. Thank you, Ms. Mantle. If I asked you those same questions that are included in your rebuttal testimony today, would your answers be the same?

A. Yes.

MS. VANGERPEN: Thank you. Your Honor, this is the only time that Ms. Mantle will be with us this week, so I would offer her rebuttal testimony which has been marked as Exhibit 301, 301P and 301C, for the public and confidential versions for admittance. And I would tender the witness for cross.

JUDGE PRIDGIN: And I'm sorry, that's Ms. Mantle's rebuttal. Is that correct?

MS. VANGERPEN: That is correct, your Honor.

JUDGE PRIDGIN: All right. 301, 301P, and 301C have been offered. Any objections? Hearing none, Exhibits 301, 301P, and 301C are admitted into

evidence.
(OPC Exhibits 301, 301P, and 301C were admitted and made a part of this record.)
JUDGE PRIDGIN: Cross-examination. Staff?
MR. PRINGLE: Thank you, Judge.
CROSS-EXAMINATION
BY MR. PRINGLE:
Q. Good afternoon, Ms. Mantle.
A. Good afternoon.
Q. So your counsel said you're the person to question about FAC, so I have just a few of those about you. What is the FAC?
A. The FAC is an interim rate mechanism that allows, if granted by the Commission, electric utilities to return a portion of cost -- or a portion of the difference between actual fuel and purchase power costs and what was included in rates.
Q. And do you know, was use of an FAC authorized by the General Assembly before the MEEIA statute was passed?
A. Yes, it was.
Q. Are you aware if there has been any prior MEEIA dockets that had the FAC as an issue?
A. There was a MEEIA docket with, I think it

was Evergy West at that time, where there was the subject of a demand response program that had not been called upon. I believe Staff filed imprudence in that case; it was a MEEIA prudence case. And the Company objected and said it was better to be handled in an FAC case. And so when the FAC case came up, the Office of Public Counsel brought that issue to the Commission.

Q. And do you know, what did the Commission rule on that issue?

A. The Commission found that Evergy West should have taken advantage of its demand response program. It had been paying its customer, but not ever calling on them to reduce their energy. And they found that that was imprudent, and there was an adjustment in the FAC because -- for that MEEIA program.

Q. And just to be clear, that was in a MEEIA prudence review?

A. There was a MEEIA prudence review, and there was an FAC prudence review. I believe the adjustment due to imprudence was made in the FAC.

Q. And I guess then for this matter, what is the concern with the FAC?

A. Energy efficiency programs impact the

energy and capacity of a utility. If -- if -- the whole idea behind a demand-side program is that the utility will induce customers to use energy in a more cost effective manner. And that should reduce their fuel and purchase power cost. And because there is this interim rate mechanism that returns any savings or recovers any additional cost in between rate cases, the benefits of those energy efficiency programs, until they go into permanent rates, will flow through the FAC regardless of -- I mean, unless the programs are designed -- I don't know how you would do it without it flowing through the FAC.

So benefits -- the benefit of saving energy, which means you pay less on the energy market, that flows back to the customers through the FAC.

Q. And when should a utility account for that, for that interaction with the FAC and MEEIA?

A. It should be accounted for when cost benefit is calculated. It -- and as Mr. Wills said this morning, it does flow the FAC, but when it's in permanent rates, then it's flowed through regular rates too. But it's my understanding that a hundred percent of the benefits are assumed to flow back to the class for which the program was designed, where

in actuality because the FAC is based on energy usage, only a portion of that will go back to that customer class. So automatically for -- until those costs get into rates, permanent rates, the customer class will only receive a portion of the benefits, and other customers of the utility regardless of -- of whether or not they pay for the program get to receive the benefits.

Q. And then if that interaction is not accounted for, should an application be approved?

A. No, it should not.

MR. PRINGLE: Thank you, Ms. Mantle. No further questions.

JUDGE PRIDGIN: Okay. Mr. Pringle, thank you. Any cross from Renew Missouri?

MR. LINHARES: No, thank you very much, Judge.

JUDGE PRIDGIN: Consumers Council?

MR. COFFMAN: No questions, your Honor.

JUDGE PRIDGIN: NRDC?

MS. RUBENSTEIN: No, thank you.

JUDGE PRIDGIN: Ameren Missouri?

MS. MOORE: No questions, your Honor.

JUDGE PRIDGIN: All right. Thank you. Let me see if we have any bench questions. Chair

Hahn, any questions? Commissioner Coleman, any questions? Thank you. Commissioner Kolkmeyer? Commissioner Mitchell? I think I have just a few questions for you, Ms. Mantle.

QUESTIONS

BY JUDGE PRIDGIN:

Q. If I could -- do you have your rebuttal testimony with you?

A. Yes.

Q. Could I direct you to page 6 of that.

A. I'm there.

Q. Thank you. On line 8 you state, Customer B uses 100 kilowatt hours each hour.

Should that be 100 kilowatts instead?

A. Yes.

Q. Thank you. I believe Mr. Wills was asked some questions, in fact, I think I asked him some questions about your rebuttal on page 26 on Table 9 and your schedules where your analysis indicated that MEEIA nonparticipants don't benefit when the average kilowatt hour cost is below the FAC factor. Did you have any comments on his response?

A. His response, he did agree that this analysis is correct, but then he went on, if I understood correctly, to talk about how he went back

and looked at the energy efficiency measures, and -- and surprisingly all of -- almost all of them were in hours that the -- he estimated the average price would be greater, the average price of the kilowatt hour saved would be greater than what was in the calculation of the FAC. I -- I'm not that familiar with all of the measures, but having listened to Mr. Luebbert of the Staff talk about the multitude of measures that they have, I find that hard to believe. But even so, he's the one that did the analysis.

The one thing that I would point out too, and that's in this table, is the Company also benefits above what comes through the DSIM, the throughput disincentive, all those -- because of the FAC the Company benefits when there's a reduction in usage at prices that are greater than the average that was used to calculate the FAC. And that's because of the incentive mechanism that the Commission has approved for the utilities for their FAC. So 5 percent of any savings goes back to the Company through this. I do not believe that's accounted for anywhere in MEEIA.

Q. And I -- and I don't have a line reference, but I do want to direct you to page 30 of your rebuttal. If you could let me know when you're

there please.
A. Okay.
Q. And you -- and you state in reference to your analysis of Mr. Luebbert's direct testimony, The increase in costs for nonparticipants and the Company shown in the third scenario are not intuitive.
Can you explain what you mean by the statement beyond what you simply stated in your testimony?
A. We typically think that an inter-- kilowatt hour of energy saved is a good thing. It's going to save money. It's going to save natural gas, coal. But, so that's what typically people think of. Oh, you're saving a kilowatt hour. You're going to save money. And actually if that's saved in let's say a time in March when the wind is blowing and you've got zero variable costs energy, you're -- you're not saving anything. Because for one thing that's the marginal unit, and so, therefore, you know, there's -- it's not a benefit. It's not. It may be actually a detriment if the participant actually got less services.
So, but like I said, intuitively we think kilowatt hours saved is good and will decrease costs. But at a time when the average cost is below what's

in the FAC, that means you've got fewer kilowatt hours under a cost, and it actually results in an increase in the FAC rate.

JUDGE PRIDGIN: All right. Thank you. I think those are all the questions I have. Let me see if we can have any recross based on bench questions. Any questions from Staff?

MR. PRINGLE: No questions, Judge, thank you.

JUDGE PRIDGIN: Thank you. Consumers Council?

MR. COFFMAN: No, your Honor.

JUDGE PRIDGIN: Renew Missouri?

MR. LINHARES: No, thank you, Judge.

JUDGE PRIDGIN: NRDC?

MS. RUBENSTEIN: No, thank you.

JUDGE PRIDGIN: Ameren Missouri?

MS. MOORE: No questions. Thank you, your Honor.

JUDGE PRIDGIN: Any redirect?

MS. VANGERPEN: Just very, very briefly, your Honor.

REDIRECT EXAMINATION

BY MS. VANGERPEN:

Q. Ms. Mantle, you mentioned both in your response to Staff and in response to bench questions about a return of a portion. Could you explain what you mean by that, how a portion of the benefits get returned to the customers through the FAC?

A. That portion would be based on, let's say it's the small general service class, just -- that pays for then a hundred dollars for a program, but actually they only use 80 per -- or let's say 10 percent the total kilowatt hours in that -- over that time period. That means only 10 percent of the benefits will go to the SGS class even though they paid for a hundred percent of the cost. Ninety percent of the benefits go to the other classes. All the customers benefit whether they're the class that is paying for the program or not.

Q. And just so I understand, you also mentioned a 5 percent of savings in your response to the bench questions. Could you explain how that plays into this?

A. That 5 percent of the savings is part of the FAC. The Commission has sta -- given the utilities an incentive that they can keep 5 percent of the difference between actual energy cost and the costs that are billed into rates if there's a savings. So if there's a savings of a hundred

dollars, so because of the implementation of a program, they save a hundred dollars, then the utility gets to keep five -- five of those dollars and then the other 95 goes back to all the customers, not just the one that -- not just the class that paid for it.

MS. VANGERPEN: Thank you, Ms. Mantle. That's very helpful. Nothing further, your Honor.

JUDGE PRIDGIN: All right. Thank you. All right. Ms. Mantle, thank you very much. You may step down. I believe Mr. Seaver is the next witness. If you'll come forward to be sworn, please, sir.

(Witness sworn.)

JORDAN SEAVER

the witness, having been first duly sworn, testified as follows:

JUDGE PRIDGIN: Thank you very much. Please have a seat. And, Ms. VanGerpen, when you're ready, please.

MS. VANGERPEN: Thank you, your Honor.

DIRECT EXAMINATION

BY MS. VANGERPEN:

Q. Good afternoon, Mr. Seaver.

A. Good afternoon.

Q. Please state your name and spell it for

the record.
A. Jordan, J-o-r-d-a-n, Seaver, S-e-a-v-e-r.
Q. By whom are you employed and in what capacity?
A. Office of the Public Counsel as a policy analyst.
Q. Are you the same Jordan Seaver who caused to be prepared surrebuttal testimony in this matter?
A. Yes.
Q. Do you have any additions or corrections to your written testimony that has been premarked as Exhibit 302?
A. Yeah, just one minor one. On page 5, line 16 in that second sentence, the second word is "we" and it's italicized; it shouldn't be italicized, just normal font. And that's all.
Q. Thank you. If I asked you those same questions today, would your answers be the same?
A. Yes.
MS. VANGERPEN: Your Honor, this is also Mr. Seavers only time up with us for this hearing, so I offer Exhibit 302 for admittance and tender him for cross.
JUDGE PRIDGIN: Ms. VanGerpen, thank you. Exhibit 302 has been offered. Any objections?

Exhibit 302 is admitted.
(OPC Exhibit 302 was admitted and made a part of this record.)
JUDGE PRIDGIN: Cross-examination from Staff?
MR. PRINGLE: No questions, Judge. Thank you.
JUDGE PRIDGIN: Any questions from Consumers Council?
MR. COFFMAN: No, thank you, your Honor.
JUDGE PRIDGIN: Renew Missouri?
MR. LINHARES: No, thank you, your Honor.
JUDGE PRIDGIN: NRDC?
MS. RUBENSTEIN: No, thank you.
JUDGE PRIDGIN: Ameren Missouri?
MS. MOORE: No questions. Thank you, Judge.
JUDGE PRIDGIN: All right. I don't think I have any questions. Any bench questions? No bench questions? Commissioner Mitchell, any questions? Hearing none --
COMMISSIONER MITCHELL: No, Judge.
JUDGE PRIDGIN: All right. Thank you. Mr. Seaver, thank you very much. You may step down. I believe that'll bring us to Dr. Marke. I believe

he's the last witness scheduled for today.

(Witness sworn.)

DR. GEOFF MARKE

the witness, having been first duly sworn, testified as follows:

JUDGE PRIDGIN: Thank you very much, sir. Please have a seat. Ms. VanGerpen, when you're ready.

DIRECT EXAMINATION

BY MS. VANGERPEN:

Q. Good afternoon, Dr. Marke.

A. Good afternoon.

Q. Please state your name and spell it for the record.

A. My name is Geoff, G-e-o-f-f, Marke, that's M-a-r-k-e.

Q. By whom are you employed and in what capacity?

A. The Missouri Office of Public Counsel, I'm the chief economist.

Q. Are you the same Dr. Geoff Marke that caused to be prepared direct, rebuttal, surrebuttal testimony in this matter?

A. Yes, I am.

Q. Do you have any corrections or additions to your written testimony?

A. I do not.

Q. If I asked you those same questions today, would your answers be the same?

A. Yes.

MS. VANGERPEN: And, Judge Pridgin, as I've mentioned, Dr. Marke will be up a lot this week, so we are not moving to enter his testimony at this time, but I do tender him for cross.

JUDGE PRIDGIN: Ms. VanGerpen, thank you. Cross-examination from Staff?

MR. PRINGLE: Yes. Thank you, Judge.

CROSS-EXAMINATION

BY MR. PRINGLE:

Q. Good afternoon, Dr. Marke.

A. Good afternoon.

Q. Now, what are the -- what are the challenges of valuing demand-side investments on an equivalent basis as supply-side investments?

A. Well, that's a good question. So we talk about, a lot about how do we value both demand side and supply side, and I think for the Commission's understanding you need to recognize that there's just some fundamental differences between the two that -- that make this a challenge.

So the first, right off the bat, would be that Missouri's not an energy efficiency resource standard state. So when Renew Missouri got up and started talking about Maine and started talking about Massachusetts and other places, these are states that their legislative body said, You're going to do energy efficiency no matter what. These are your targets and you're going to hit them each and every year.

In Missouri it's a voluntary program. In Missouri the munis and co-ops don't do energy efficiency. Those -- that little thing matters. And that's why you hear from Staff and OPC that that second clause of the MEEIA statute that says it needs to show benefits to all participants matters so much.

The second thing is gas plants -- it's naturally-occurring energy efficiency. So if there was no MEEIA, people are still going to put in efficient HVACs. People are still going to go ahead and do energy audits and the other things that the program supports. Nobody's going -- there are no naturally-occurring gas plants, okay. Big difference, right. So you -- but that's -- but that's -- that's a second thing.

The third issue here is that risk-reward.

And Ms. VanGerpen kind of touched on this a little bit here in her opening. You know, we typically talk about, you know, return on equity for an investment. So if you're Ameren, you want to go ahead and build something, you've got to attract capital. So you -- the ROE element of that, that equity element is attracting shareholders to go ahead and sell that stock. Now, they expect to get a return. And typically utility investments for the last couple decades, anywhere between 8 and 10 percent, somewhere around those ranges, depending on the risk model that's embedded within that, and interest rates and everything else.

In this case shareholders aren't putting up any capital. There -- there is no capital being put up. It's being put up entirely by ratepayers. So this is singularly unique in the sense that ratepayers are effectively the investors on this.

So from an investment standpoint, the next question is is well, what's the risk. Well, the risk is -- is pretty considerable because Ameren's got two parts to this case. And it's easy to get the two confused. There's the demand side; there's the energy side. So when Ameren came up and said, Hey, we're going to be short 200 megawatts if you don't approve this, like, we're -- we're in trouble, that's a very short term look. And as Mr. Luebbert talked about, there's seasonal issues, you know, involved with that and some certain assumptions. But that's all demand response. That's just telling large, industrial customers, Hey, we're going to cut your power for a couple hours during peak hours and then you can turn it back on. It's a very reliable source. We did that before MEEIA. It's just a curtailable rate. There's tariff in place for that. It's nothing special. If you look at the germination of how demand response became part of MEEIA, you know, that's a separate and side story.

But, so the risk there is how important is it for us to actually point to an actual deferral of investment. Are we going to not be able to build something steel in the ground, right. So that second part, that's a big part of this. Because if you just take demand response out of the MEEIA application, that cost-benefit ratio goes out the window. It's extremely cost effective just to tell people, those industrial customers, Don't do this. It's all of the other bids that become much, much more complicated.

And consider this. It's dependent on not one, not two, not three, not four, put multiple

MEEIAs going forward. So it's a sunk-cost argument that we're not going to be able to defer anything off of this investment. We're going to have to do the exact same thing again in another three years, in another three years, in another three years. And if you do that collectively, then we might be able to postpone something for a little bit longer.

That -- the assumptions there come with a lot of risk. And again, the ratepayers are putting their skin in the game on this. Their -- their skin is on the line here because if it doesn't come to fruition, if things don't move forward, then that's money we would otherwise have either gone in our pockets or we could have put toward supply-side investment where we have some certainty surrounding that.

One element that bears just talking about just very briefly on that is that the profit motive on this. So it makes sense to go ahead and assign a decent size ROE to investors, right. They want something they could otherwise invest in something else. The profit motive on this case if Ameren hits all of their targets, and the extras that they have put on there is close to 20 percent of an ROE. Now, consider that for a second. A 20 percent ROE where there's no skin in the game. So ratepayers have to bear the risk and then have to pay a financial reward to shareholders on top of it at roughly double what they would on a supply-side investment. So this is the sort of stuff that gives us heart palpitations when we say we're valuing it on an equivalent basis.

There's one -- there's two other things I'd like to focus on on that question, and that's -- so we talked about it's not being an energy efficiency resource state. We talked about the multiple applications. We talked about the risk-reward. The fourth thing would be what -- you gotta ask yourself this question, putting aside -- and I agree with everything Mr. Luebbert said. But putting aside all of his stuff, if you just dismissed it out of hand and said, you know, I agree with Ameren more than I do with Mr. Luebbert on those issues, ask yourself this. If there was no MEEIA, would these programs -- would people adopt stuff in the absence of this.

Now, consider for a moment the tax incentives associated from the IRA are up to $8,000. At most, an Ameren rebate is $900. We've gotta -- we'll talk more about this on EM&V, but that attribution, how much do you give the $8,000 credit to and how much do you give the $900 credit to in Ameren? It's lopsided. And if you factor all of that in, we have very little confidence with the TRC. And I say this because there's a timing issue with the TRC. We talk about the TRC in the present day, and what we're talking about is a ratio that came together from a market potential study. That market potential study, huge volume, right here, all right. All of that predates the IRA. All of that predates the federal government going ahead and giving out tons of incentives, tons of investments moving forward. It predates a number of issues and challenges.

And if you don't want to read the hundreds of pages of testimony, I absolutely sympathize with it, but those challenges are articulated in my surrebuttal in just like the first five pages. There's 13 of them.

That's why we look at that TRC, and we can't -- we don't have a lot of confidence in it. There's a TRC that happens again. It happens on the back end. We don't talk about that, but that TRC is more reflective of what actually happened. So think about the TRC that we're talking about right now. It's aspirational. We think that this is what will

happen moving forward. That back-end TRC has to take into account all the free ridership and the attribution that could fall through with this.

So I'll leave it at those in terms of challenges of making demand side on an equivalent basis of supply side. Now, there are ways moving forward to value demand-side management that I articulate in my testimony. It's just -- it's not this.

Q. And thank you for that answer, Dr. Marke. And you brought up the TRC. Were you present during Ameren Missouri's opening statement?

A. I was.

Q. Do you recall discussion about the TRC score being at one?

A. Yes.

Q. I guess -- I guess my question to you is how can a TRC score hit one, but still not show benefits to all?

A. Right. I mean, the simple answer is that we don't actually agree with -- with the TRC, and that's total resource cost analysis. When you're making sense of these programs, how collectively we've made sense of these programs in the United States, I want to make -- just provide an

illustrative example for you to work from. It's perspective. So the California cost effective test is -- it's about five different tests. And the best way of looking at it is imagine you've got five lenses of sunglasses in front of you. One's blue tinted, one's red tinted, and so forth. You put it on and it distorts what you see and how you look at things. Each of these tests focus on a different element. So which test is best, which is appropriate. I mean, the answer to that is all the above. We need to look at all the tests to get a holistic perspective of this.

We say the TRC is the preferred test, and that's what our statute says. So when you look at the TRC, and I mentioned this before, we don't agree with those numbers because we challenge the assumptions behind the savings actually materializing at the level that they're talking about.

But another way of looking at this, and this goes back to Mr. Mitchell -- or Commissioner Mitchell's question about the RIM test, which is one of the five. So it's called the ratepayer impact measure test. The ratepayer impact measurement test is what I believe most people would say is the knee-jerk reaction when you think about cost and benefits.

So when we think about cost and benefits, the benefits are the exact same in the RIM test that they are in the TRC. That's -- that's consistent. It's the costs that are different. So what are costs being born by ratepayers. You know the three-legged stool analogy. Those are the costs. It's program costs, it's lost revenues, it's the earnings opportunity. Those are costs that are flown through the actual surcharge and that come on customers' bills. The TRC does not look at the throughput disincentive. It does not look at the earnings opportunity. It looks at one element, program overhead cost and the incremental cost associated with bringing that measure on. So you're missing a huge chunk of that cost at the end of the day.

Now, what's a challenge there is if -- when we have customers call up to our office and ask about the MEEIA surcharge, you know, one of the things that you have to wrestle with is does MEEIA result in rate increases or decreases. Well, it's an increase. I mean, it's -- no matter how you slice it, it's an increase. We justified it collectively and the General Assembly moved forward with proposing this statute under the premise that the bills will decrease overall for customers if we do this. Even though rates increase, your energy use goes down. That works if you're a participant. That works if you take advantage of it. It doesn't work if you don't have the money or you're not taking advantage of these programs. And that effectively just means their rates increase.

And that's the struggle with it. That's the struggle that I hear from the Commission with some of these programs that are not being done well or at the full capacity level. That's the challenge. Again, I think there are ways forward, of moving it, but that's the struggle.

And the last point I'll say to Mr. Pringle's, you know, question here, it's that deferral investment. Again, we've got to go 20 years out to the future. I can't even tell you what things are going to look like in November, but we're sitting here saying, Yeah, 20 years, this is good to go with what it is based off of a manual that was done that predates all the IRA, all this other stuff. That's what we're going to hang our hat on. I get it. It's a lot of -- it's a labor intensive and time-consuming activity, but it doesn't give us confidence in the inputs.

Q. And, Dr. Marke, just some clarification when you were talking about back-end TRC. Even assuming an application is approved and TRC is handled on the back end, wouldn't that TRC still be subject to any flaws or mistakes that were within the application prior to approval?

A. Yes. We talk about -- we've -- we've given a lot of lip service to the different cycles. So Cycle 1 was completely different. We had a lost revenue sharing mechanism that had no cap. I mean, really the Commission hit the reset button on MEEIA entirely after Cycle 1; there were so many problems with it.

Then we hit Cycle 2. Unfortunately -- it made sense when we -- when we moved forward with Cycle 2. Unfortunately two days after Cycle 2 was approved, Noranda went down. So we needed the -- we needed to avoid the cost. And then all of a sudden we were really long on generation, so we weren't avoiding anything.

We did Cycle 3, and that again was an agreement that came up between the parties moving forward. And then we had three additional years that were just one-year extension. And those one-year extensions are so completely different than what

Cycle 3 was. Now, the one common thread you've got through each one of those is an evolution. We've adapted just like you should in a market to changing circumstances.

What's being proposed in Cycle 4 here is to go back three additional years to how things were in that application. From our perspective that's moving backwards. That's not accurately taking in consideration what has occurred and what's really facing us moving forward.

Q. And I guess, Dr. Marke, when it comes to trying to capture savings as accurately as possible, what options exist in your expert opinion to demonstrate progress toward the goal of achieving all cost-effective demand-side savings?

A. I mean, I'm concerned. Like, let me just be flat out, like, I'm concerned about the generation shortfall. I think the Commission is too. I think you're seeing, you know, proactive effort on the Commission's part on that issue. And I can hear in -- if I was going into this blindly and hearing everything, I would have trepidation about moving off of something like the demand-side management. Again, the devil's in the details in what problems you're trying to actually solve for.

So we spent a considerable amount of time looking at what takes other place in other states and how other utilities deal with this issue. I can confidently say in Missouri we -- we do a lot of labor and time-intensive work. I can -- for all of the cases and the issues that I work on in front of the Commission, this takes up most of my time, you know. I think it takes up a huge amount of time for Staff. Think about the volume of testimony. And it's all done on an expedited schedule. A rate case, I get almost year to go ahead and prepare and do the discovery. A MEEIA case, boom. Roll out, you know, let's go ahead and weigh in on this.

So looking at other states, how do other states do this, what's a best practice effectively. You look at the states that we could emulate, assuming you don't have an energy efficiency resource standard. The best states in my opinion are ones that are done across the state.

So again, think of the TRC. There's avoided energy and capacity costs are the benefits, and the costs are the incremental costs associated with the measure and the administrative overhead. So how do we minimize those two elements, the incremental measure cost. One way of doing that is by economies of scale. So again, just lean on what a natural monopoly is. Instead of having an Ameren program, an Evergy program, a Liberty program, a Spire program, what if we just had a Missouri program. All of a sudden we are slashing that administrative overhead. All of a sudden instead of marketing it, instead of trying to do five different programs with duplicative services, we have a statewide program. Massachusetts, Maine, Wisconsin, these are all states that have achieved good demand-side management and have brought those costs, those overall costs, down as a result of that.

The second element of that is how can we lower the costs of these measures themselves. And I struggle with this. Like PAYS has had -- has had problems with this. I'll be, you know, more than happy to talk about that when we get to the programs section. But the short answer is that after COVID hit, there were supply chain constrains, and the price of everything went up. Interest rates went up. Inflation went up. It's expensive. And if you look at -- we have, we've looked at the market saturation of what an HVAC costs in Kansas City versus in St. Louis versus in Joplin versus just rural Missouri. And it varies considerably.

One way of bringing that down is just through using economies of scale and bulk buying. Again, a statewide program could go ahead and do that. You get that purchasing power where you -- all of a sudden we're bringing 30, 40 percent of those costs down through bulk buying. You might want to ask yourself, like -- and I've been asked this by the utilities -- well, what happens if we buy a bunch of Energy Star HVACs and they don't sell, right. Are we just stuck with that equipment. It's a fair question.

And my answer to that is we have another entity in this state who's tasked with actually implementing energy efficient HVACs in weatherization. We have about close to 30 community action agencies across the state that right now buy those HVACs at retail costs from Lowe's where they could buy it at wholesale costs if we had leftover HVACs. Those are all cost savings that could take place. And I'm not saying like you could just wave a wand and do it because quite frankly the -- what's been agreed to in the past is much richer than what would otherwise be here. But if the Commission is at all interested in that, I mean, just give the direction to the stakeholders. We have a history of

working together after these facts, and getting that direction can go a long way.

MR. PRINGLE: Thank you for that, Dr. Marke. No further questions from Staff.

JUDGE PRIDGIN: All right. Mr. Pringle, thank you. Any cross from Consumers Council?

MR. COFFMAN: No questions, your Honor.

JUDGE PRIDGIN: Renew Missouri?

MR. LINHARES: Perhaps just a few, Judge.

CROSS-EXAMINATION

BY MR. LINHARES:

Q. So, Dr. Marke, at the end of your response there to Mr. Pringle you were mentioning what a statewide energy efficiency program or regime might look like. And I want to ask you about that concept. I want to stay away from asking you to speculate, but ask your opinion of what you would prefer to see as an alternative here. So you mentioned a statewide energy efficiency program. Can you explain further what that would look like?

A. So if I had a magic wand and was doing this with also let's say being pragmatic about it too, like realistic, you know, and my testimony goes into this in surrebuttal to some extent, but it would be -- you would have a bridge program. We would have

a bridge program here for a couple years for the utility to effectively transfer that program into a third-party operator. I believe it was former chairman Robert Kenney during Cycle 1 who said, you know, I still struggle with the idea of the utilities conducting these programs when it should be held by somebody else. There just seems to be a conflict of interest.

And this is coming from, you know, the president of Xcel Colorado at this point, right. The man, you know, is well-versed on the utility side. I agree with that. Most states actually agree with that. You have some other entity do this, and you make the investment. In that sense, Mr. Linhares, it would be, you know, Evergy, Ameren, Liberty who quite frankly really need something like this. They would all be investing into this. We'd all have a position. We'd all -- let me rephrase this. We would copy best practices. Mass Saves, Focus Energy in Wisconsin all have a blueprint for how to move forward with this.

Q.   Well, that -- this is where I want to stop you.

A.   Okay.

Q.   So I'm -- I, you know, in an ideal world a huge fan of this concept, but those states that you mentioned have statutes on the books requiring some of this stuff. I'm not sure about Wisconsin, but I think so. I think they have an all cost-effective energy efficiency requirement. Regardless, they have -- they have a statewide program in place with a third-party implementer. We do not have such statute on the books. So are you contemplating a legislative change with this --

A. I believe --

Q. -- proposal?

A. -- it would -- it would ultimately have to be a legislative change, and that's why I would recommend like a two-year bridge program to move forward with that.

You know, and I realize that comes with a degree of risk. I would counter that by saying the risk borne by ratepayers in approving the application that's in front of the Commission is infinitely greater. There's -- there is no downside to the utility in not pursuing energy efficiency or a MEEIA program. It's only upside. It's just like leaving that $20 on the street sort of concept. Anything they get is more than nothing. And I think that the financial incentive is there for the utilities to

move forward with a program like that. And then ultimately that's at the will of the General Assembly, but I think it does help to have the consumer advocate office come out and publicly say that this is a path forward, for what that's worth. And maybe that's nothing.

MR. LINHARES: Okay. Well, okay. Those are -- those are all my questions for now. Thank you.

JUDGE PRIDGIN: All right. Thank you. Any cross from NRDC?

MS. RUBENSTEIN: No, thank you.

JUDGE PRIDGIN: Hearing none, any cross from Ameren Missouri?

MS. MOORE: Yes, I have a few follow-up questions. Thank you, your Honor.

CROSS-EXAMINATION

BY MS. MOORE:

Q. Good afternoon, Dr. Marke. How are you. Good.

A. Doing well, thanks.

Q. Previously you were talking about the TRM manual. Is it your understanding that Ameren's TRM manual that was filed in this case is based on the 2017 statewide TRM?

A. I don't -- I don't think I was talking about the TRM. I can if you like. Yes.

Q. And were you involved in that?

A. I was.

Q. And who was the third party who drafted that TRM?

A. Vermont something I believe. Yeah.

Q. Yeah. So they would have been the ones that developed all the deemed tables and the links?

A. That's correct.

Q. All right. Thank you. Now, you said you have the market potential study up there?

A. I do.

Q. Could you please turn to page 20.

A. I see it.

Q. Yeah. So up there in measure costs, there are some bullet points.

A. Oh, I'm sorry. Hold on a second. My page numbers are different than the ones over at -- hold on. Sorry. My pagination is on here and it's covering it. I believe I've got it. Page 20?

Q. Correct.

A. Okay.

Q. All right. Do you see that paragraph after the three bullets on the top of the page, the

Illinois TRM and secondary sources program evaluation?

A. Yes.

Q. And then there's a discussion about the cost and savings for measures.

A. I do.

Q. That discussion. Okay. On page -- or there there's that footnote 30. Could you please read that for me?

A. EO-2023-009 expressed tax credits as part of the Inflation Reduction Act were considered in the energy efficiency measure characterization.

Q. So the MPS did take some consideration of the IRS? I -- IRA?

A. I would say the operative word is some.

Q. Yes. But I believe you -- didn't you just say that the MPS did not consider any of the IRA measured impacts? I'm not sure impacts was your word, but.

A. If I did, then -- then I misspoke.

Q. All right. Thank you. I don't have an extra copy. Did you review the Company's Appendix A, the revised Appendix A?

A. I am familiar with it. It was not the central focus of my testimony.

Q. All right. So for that TRC -- the TRC test, did you -- did I hear you right that you said the earnings opportunity wasn't included in that calculation?

A. Yes.

Q. All right. So then it's safe to assume you didn't read footnote one to that TRC?

A. So I am aware that Mr. Wills factored in a T -- the earnings opportunity example with that as well.

Q. Yes.

A. Right.

Q. Because footnote one indicates on page 12 I believe of the TRC that the earnings opportunity was included. Would you agree that -- would you agree to that subject to check?

A. I would need to check that. I would need -- and not just that there's a footnotes that exists in it, but whether or not that earnings opportunity includes the full --

Q. It includes the targets.

A. Does it include the bonus? It does not includes the bonus. Okay. So it includes some of the earnings opportunity potential.

Q. Correct.

A. Okay.

Q. But the Company might not earn the bonus. Correct?

A. I would say based off of my professional experience with these programs, that's unlikely.

MS. MOORE: All right. Thank you. I have no further questions.

JUDGE PRIDGIN: All right, Ms. Moore. Let me see if we have any bench questions. Chair Hahn.

QUESTIONS

BY CHAIR HAHN:

Q. Good afternoon, Dr. Marke.

A. Good afternoon.

Q. My only question is really -- I think you might have covered it, but in Ms. VanGerpen's opening statements she spoke about how Ameren's proposed MEEIA plan fails to avoid or defer any supply-side investments. You've spoken about this a little bit around the assumptions about how it's lots of assumption, long way down the road. Can you give a little bit more detail to your explanation.

A. So I raise a number of issues. I felt kind of like Billy Mays sitting here all day. And I kept wanting to say, But, wait, there's more, right.

Because I felt like Mr. Luebbert did a heck of a job, and quite honestly my testimony doesn't address anything that J or Sarah talk about in their analysis.

So, you know, I raised my concerns surrounding the principal-agent issue, my concerns around operational efficiencies, the rebound effect, naturally-occurring saturation. So let me just briefly talk about those -- those assumptions and why that -- that calls into question the actual deferral on things. And again, think of it terms of in no MEEIA's approved, will energy efficiency still occur. Yes, it will. I mean, like again, the IRA, the tax funds, tax rebates, the program itself, it's all moving forward with options.

The principal-agent issue is a legit challenge that we haven't raised historically. And again, you know, as Mr. Luebbert talked about, we reserve the right to get better at this. You know, that's an issue of, you know, there's a perverse incentive to -- to upcharge effectively customers on what is going in. So oversizing your HVAC than what you need for a home. All of that impacts ultimately the savings that could actually be claimed here that are taking place.

A rebound effect, just simply put, the easiest analogy is to think of it as used to call -- used to be called colloquially as like the Prius effect. Any sorts of savings that you got from driving around in a Prius were offset by the fact that you drove the Prius more, right. And there's all sorts of, like, huge, rich, empirical literature that dates back, you know, more than a hundred years quite frankly that that exists with -- as you move forward with more efficiencies, you're using more.

The operational efficiencies like right now are deemed energy that's supporting the TRM essentially assumes that these measures are going to be operating at their useful life at the same level that when they were installed. I can tell you right now most people don't change their air filters at the same level that they're supposed to. And that has an impact on your efficiency. It's got to work harder if it's filled with stuff. And that's also operating under the assumption that your ductwork works, that all of these things work.

Now, EM&V doesn't look at that stuff at any length today. We could. We could do randomized control tests. We could go down that path if we want, but it's going to come at great cost, great work, great energy, probably litigation on the EM&V side. And these are the reasons collectively why -- and I don't want to speak for Staff, but they supported it, why we got to where we got for those one-year extensions. Our one-year extensions basically were designed to have strong measures, cut the fat out, and minimize all of the litigation issues that could be associated with EM&V.

That's not on the table anymore. I mean, what's on the table in front of you is a prospective EM&V, right. They're saying that we want to do this now. We want -- we want certainty on what the savings are going to be moving forward and have that agreement. That's -- I mean, that's -- I would say that's fundamentally against regulation if you want to get down to it in the concept of used and useful, right. You know, we don't allow investment and earnings off of stuff that isn't used and useful, but we are doing it on the MEEIA side by going ahead and providing that earnings opportunity on a year-to-year basis moving forward.

We take -- I've got a lot of issues on the assumptions baked into the measures themselves. So operationally, principal-agent issues, rebound effect, and then just saturation. Again, and I can't stress this enough, a lot of the testimony was very critical of Staff and OPC, that we were -- that the DE-sponsored programs, that we were saying that the DE-sponsored programs were enough to deal with energy efficiency than the MEEIA programs. I think those are illustrative, and that's important, in part because DEs have that 20 percent cap on administrative overhead where we're close to 50 percent on Ameren.

I mean, my gosh. Government gets accused all the time of being inefficient and wasteful, okay. I mean, that's why we have an investor-owned model, right. And you're seeing more than twice the administrative overhead on the investor-owned side. That's problematic to me. And that -- those are issues we have raised in the past. So I'm -- I'm hoping I'm asked [sic] the question that was posed. But those -- those are generally the issues.

CHAIR HAHN: That's helpful. Thank you.

JUDGE PRIDGIN: Chair Hahn, thank you. Further bench questions? Commissioner Coleman? Commissioner Kolkmeyer? Commissioner Mitchell?

COMMISSIONER MITCHELL: No, Judge.

JUDGE PRIDGIN: All right. Thank you. I think I might have just a couple questions.

QUESTIONS

BY JUDGE PRIDGIN:

Q. Dr. Marke, could I direct you to page 44 of your surrebuttal please.

A. I'm there.

Q. And I do not have a line reference, I'm sorry, but I'm referring to your testimony on that page that talks about the impact of current market saturation of energy efficiency appliances and unique increases in demand such as data centers. Do you see that?

A. Page 44 of my surrebuttal?

Q. I believe so. And if you cannot find it --

A. I'm just looking for the data center. I don't see that.

Q. And that might not be in the question. That might be in the question --

A. Okay. All right. Sure. I'm sorry, Judge, could you please just repeat the question.

Q. Sure. Well, I mean, without getting to the question, I mean, on that page, I mean, you refer to the impact of market saturation of energy efficiency appliances and unique increases in demand.

A. Okay.

Q. And I guess one question would be what do you foresee could be the potential impact of data centers in Ameren's service area to its load and resource adequacy?

A. I mean, that's -- that's the billion dollar-plus question. I mean, that was -- that was the question in NARUC here this last week. It just seems like we were all kind of caught off guard with -- with the data center problem that's inundated across the United States. I was listening to -- I was watching the news the other day and Bill Gates was talking about AI and moving forward and asked on the question of energy. And he minimized it and said, Well, you know, data centers are only going to account for about 10 percent increase in energy use. And I'm sitting there, like, 10 percent. Like, that's -- that's an enormous amount of generation that you just can't come online like that.

So the statute, you know, in policy level we talk about, you know, moving towards all cost effective demand-side management. And I want to use that demand-side management as sort of a blanket term. I think it can be applied to a lot of things. We've -- we're looking at it pretty narrowly here just in rebated measures. But, I mean, the easiest

way -- and I realize -- I'm going to couch this by saying that there are operational challenges that'll be associated with this that are worth discussing, but it's pricing. I mean, you -- you know, you can price electricity. You give that price signal to a customer. That's going to change behavior. And we've seen that through empirical studies. We've seen that in other industries, that that can have an impact on curbing usage.

We've -- I've talked -- particularly in my Evergy case, I've talked to considerably -- I've spent a lot of time working on something called the Urban Heat Island, some mitigation efforts there. I think all of that is potential ways of getting that all cost effective application forward. And I think we need to consider all of them moving forward to meet the load, the expected load moving forward. Even if AI -- and AI is going to materialize, you know. We've got huge concerns about stranded assets associated with that, but it is going to materialize.

I would say another way of dealing with that is -- energy -- give me one second; I lost my train of thought here. So pricing electricity, we talked about thinking outside the box in terms of stuff like the Urban Heat Island and like holistically challenging ourselves to go ahead and mitigate those efforts. Man, there's one more thing that was on the tip of my tongue and I can't think of it at the moment.

I think we need to be cognizant of, you know, with all of this. I -- I -- the challenge that we have in front of us is not just how you value this demand-side management, but how you value it in the context of everything that's taking place. A lot of utility regulation or cases that come in front of the Commission like to do this within a vacuum. So within a vacuum, we might say, Oh, this makes sense. You have to look at it in its totality.

I go back to the RIM test as a perfect example of that. In this setting you'll hear the utility say that the RIM test is absolutely awful and you shouldn't look at it. This -- that same exact test is what's utilized when you talk -- start talking about EV charging stations. You should use the RIM test. We used to always joke that you can't have the same Company witness for the EV charging in the same room as the Company witness for the MEEIA programs because they contradict each other. Because in a vacuum, it might make sense, but if you look at it in its totality, you start to see the contradictions and you start to see the policy issues that undermine each other moving forward.

At the end of the day though from a utility perspective, it's pretty straightforward. Are we making money off of it. And in this case, oh, my gosh, yes. Like, it is -- it is handsomely rich that they're moving forward. I don't know how ratepayers deal with that moving forward. I don't know how ratepayers absorb all of the demand side, you know, talk that we're talking about along with FERC 1920 where it says we need to spend multi-billions of dollars on transmission to go ahead and move it. How do we support that with PISA that enables all this distribution investment moving forward. Something's gotta give. And when you look at states where that something's gotta give, almost entirely the first thing that gives is energy efficiency.

It's -- look no further than Iowa. I mean, Iowa passed a statute. They went ahead and said, okay, you can still keep doing energy efficiency programs, but it's got to pass the RIM test. And if it doesn't pass the RIM test, then any customer can opt out of it. Like, that's a bold move, I mean, like at the end of the day. And quite frankly, like, I understand it. Because again, it's -- it's the challenge that you have in ensuring the statutory requirement that this results in benefits to all customer regardless of whether or not they participate. Absent that, then we're just needlessly increasing rates.

Q. Could the annual MEEIA load reduction support the load for any of these data centers?

A. No. No. I mean, you've got one potential study here, you know. There -- there are other potential studies. There are other potential studies in this state. And some of those studies are completely different than what's articulated here. Evergy, for example. When you look at their market potential, you go out three years. If you're at this level of what we've historically done, their market potential comes down here for the next three years. And you know what the next three years look after that? Even smaller and even smaller.

And the reason is, like, and -- look -- go to Lowe's this weekend. Try to find an incandescent light bulb. They're not there, okay. I get it. It is expensive out there. It is expensive for everything. But the point of MEEIA is that attribution. So regardless of the cost of these

measures, if my HVAC goes down, I am getting some sort of efficient HVAC because that's what's on the market. And if it's not on the market, that will be that much more of a true statement a year from now and another year from now and another year from now.

I've had people kind of push back on me with that assertion by saying the whole recent Chevron issue that you can walk back on it, the next administration might roll this stuff back. That could very well be. It's not going to change how GE is already moving forward on things, okay. Like to revert back to a more inefficient option is just no longer on the plans for them. You're -- it's just going to be more efficient moving forward. MEEIA made sense in 2009. It is a challenge the mental gymnastics we have to go through in 2024.

JUDGE PRIDGIN: All right. Dr. Marke, thank you. I don't believe I have any further questions. Let me see if we have any recross based on bench questions. Anything from Staff?

RECROSS-EXAMINATION

BY MR. PRINGLE:

Q. Dr. Marke, is a utility better off retaining future investment opportunity by implementing programs that do not defer investments?

A. Yes. Yes. I mean, utilities, this is a cost-plus regulation. That's what we talk that about. This is cost-plus regulation of the United States. Utilities are incentivized, I would argue perversely, to build out. That's how they make money. They get a return on those investments.

Q. And would you say that the ratepayers would be harmed in that instance?

A. That is an ever present challenge. Which look no further than really like the last -- you've got -- the history of regulation in this state's fascinating. You've got a hundred-plus years where we've effectively done things a certain way. And the last, like, 15 years, you've got all of this enabling legislation to go ahead and make things quicker and quicker and quicker. The problem with that is we just don't have the time and resources to actually verify and to make sure that things are what they say they are.

When Mr. Luebbert talked about the challenges with hard-coded numbers, understand, like, that is how Staff works. You -- they get a proposal from the utility and they're asked, Does this make sense. Well, they reserve engineer it. They walk back the calculations to see if it makes sense. If

they're not able to do it -- and, you know, Ameren and rightfully so sits there and says, Well, did you make that a cross issue. The reality of it is is if we did, what time would we have had to make that a germane issue in front of you. We were going to hearing in the next couple weeks. Because there's just no time. And then we were on top of Evergy testimony and Liberty.

Like, I -- I -- I -- it concerns me in how -- I think there's a path forward and it makes sense, but it comes at a great cost and potential risk to ratepayers who again are bearing the entire risk of this endeavor. This is all upside for the utility.

MR. PRINGLE: Thank you for that, Dr. Marke. No further questions from Staff. Thank you, Judge.

JUDGE PRIDGIN: Mr. Pringle, thank you. Any cross from Consumers Council?

MR. COFFMAN: No questions.

JUDGE PRIDGIN: Renew Missouri?

MR. LINHARES: No, thank you.

JUDGE PRIDGIN: NRDC?

MS. RUBENSTEIN: No questions, thank you.

JUDGE PRIDGIN: Ameren Missouri?

MS. MOORE: Yes. I have a few follow-up on your questions, your Honor.

RECROSS-EXAMINATION

BY MS. MOORE:

Q. I believe on page 42 of your surrebuttal testimony too you mention the opt-out provision for Iowa customers. Are you aware of any customers who have opted out or the Iowa Utilities Board granting that?

A. Am I aware of Iowa customers that -- I am not aware of Iowa -- I haven't spoken to Iowa customers that have opted out.

Q. Let me -- let me refine your understanding. Is it your understanding that customers have the choice today to opt out, or is there a trigger?

A. It's the RIM test. That's what I said. If it doesn't pass the RIM test, that option is then opened up.

Q. All right. Has the Iowa Utility Board opened up that option for any utility customers that you're aware of?

A. Well, it didn't pass the RIM test, I'm assuming that they didn't. I mean, if -- listen, if the Ameren program didn't -- if Ameren's program

passed the RIM test, if it was above a 1.0, we would not be sitting here today arguing about all the intricacies. We -- what you would have is a healthy program. What you would have is an ideal setting. What you would have is us sitting there talking about why are these targets so low. There's no testimony about why the targets are so low outside of the NRDC who's not really an active participant in these settings.

Q. Does MEEIA require the Company to set new targets?

A. Yes.

Q. So --

A. We don't -- I mean, you -- Ameren has complete control over their application. We don't -- we don't have preset targets in this state.

Q. All right. Thank you. So, but moving back to your testimony, is it your testimony that the IUB, when considering an energy efficiency plan, uses only the RIM test, or they use the RIM test to allow customers to opt out?

A. I would suspect Iowa looks at all of the tests.

Q. When they're determining it. So they don't use any one test in approving a plan?

A. Iowa can approve a plan with -- however Iowa sees fit. What I know is statutorily if that plan does not pass the RIM test, then that triggers this clause that says customers can now opt out, because you can't guarantee that, you know, the benefits are going to materialize for you if you're a nonparticipant.

Q. Right. But is that same provision here in Missouri?

A. No. I mean --

Q. And what is the preferred cost test under the Commission rules?

A. The TRC.

MS. MOORE: Thank you. I have no further questions.

JUDGE PRIDGIN: Ms. Moore, thank you. Any redirect, Ms. VanGerpen?

MS. VANGERPEN: Yes, just briefly.

REDIRECT EXAMINATION

BY MS. VANGERPEN:

Q. So first, Dr. Marke, I want to go back to your suggestions about the statewide program. I know you had mentioned in response to some questions from Mr. Linhares that you thought that statewide program would likely require a legislative change and you suggested that there might be a path forward in doing a bridge program until we could work on that legislative change. Would your proposal for a bridge program include any customer protections if that legislation didn't pass?

A. And those are -- those protections are largely articulated in my surrebuttal testimony. I mean, what I would say is that this -- the suggestion for -- for a -- for a statewide program did not materialize out of thin air. Ameren Missouri, Evergy, Renew Missouri, PSC Staff, OPC, NAACP, NRDC, Sierra Club, all of these participants were involved in -- in a competitive grant that was won by the Rocky Mountain Institute, that was rewarded by the Rocky Mountain Institute called the e-Accelerator program, where we specifically looked at converting into a statewide program. We spent a good six, seven months. That was an application that was put forward by myself and Renew Missouri's director James Owen. We got -- we were one of three that were adopted in 2022. We did the work on it. We looked at other states and how they -- how they governed the systems. We mapped out a path forward.

But the reality is this. There is no incentive for the utility to move to that until

they're told to. It's so rich right now that you -- we effectively need guidance from the Commission to go ahead and say no more, to see if there's an appetite for something like that. And that there's where we stalled out and that's why -- where we are today.

Q.   Great. Thank you. So my last questions are just going to be kind of clarifying questions. So in your responses to Staff's initial cross questions, you were talking about the profit margin and you mentioned a 20 percent profit margin. Is that 20 percent the percentage of EO and program costs that Commissioner Mitchell was discussing with myself during openings this morning?

A.   Page 50 of my surrebuttal testimony breaks down, you know, the cost assumptions there. But I've got 70; I actually think it's a little bit larger than 70 based off of comments by Mr. Wills made earlier today and my own recollection of, I think it's Appendix G, you know, that includes that. It's -- but, yeah, but that's -- it's approximately 20 percent.

Q.   Okay. Great. Thank you. And next are just to define some things to make sure they're clear in the record. You mentioned NARUC. Could you

define what that -- what you mean by that?
    A.   The National Association of Regulatory Utility Commissioners.
    Q.   And you mentioned a NARUC meeting for the last week. Could you --
    A.   This was the mid-year NARUC conference that was held in West Palm Beach in Florida.
    Q.   Thank you.
    A.   Yeah.
    Q.   Thank you. You also mentioned PISA. Could you explain what you mean by PISA?
    A.   It is an acronym short for Plant In-service Accounting. It is largely a product of legislative -- legislation that was passed several years ago that has since been modified and will probably be modified in the future again, that incentivizes investment on the distribution, transmission, and certain supply-side investments on an expedited level.
    Q.   Thank you. And you also mentioned FERC. Could you explain what you mean by FERC?
    A.   Federal Energy Regulatory Commission. FERC largely regulates transmission and the RTO interplay.
    Q.   Thank you. And then lastly when you were

discussing the Evergy market potential study with I believe Judge Pridgin, you were kind of showing various levels of potential. Could you explain in words what levels you were showing with your hands?

A. I think the Commission acutely got the concept that these targets are getting lower, you know, moving forward. You're right. And they're going to be lower moving forward, you know. All things being equal if you're -- if you're an investor of a utility with this, I want the highest possible reward and the lowest possible target. That's -- that's a challenge.

And again, if we were in a healthy environment, that's where the vast majority of this testimony would focus on. We'd be talking about, well, can't your targets be bigger, can't we go ahead and defer more. I -- I mean, try to find that in my testimony. I've thrown that out the window effectively just trying to focus on the challenges inherent with all of the naturally occurring, all of the different attribution issues moving forward that just put more and more risk onto ratepayers.

So I -- yeah. Ameren's going to have to build. They're going to have to build a lot more. And ratepayers, if this is approved, I mean,

they're -- they're in -- in line for a huge rate increase. I believe we did some internal calculations I think in -- this is public knowledge. I mean, Ameren's in for a rate case right now. The request that Ameren's putting forward is largely equivalent to what they're asking for here, about 15 percent. That sounds a lot better than saying 30 percent rate increase, right. But that's really in front of the Commission here in a pretty short amount of time. It's not 15 percent; it's 30 percent if we look at both of these.

Now, in the rate case we can sit there and I can point to tangible investments. I can sit there and say, Yep, put wires in, right. We put, you know, solar plant over there.

With this stuff, it becomes -- it's a counterfactual. And that's so difficult to go ahead and -- and prove and will require, I mean, quite honestly just an enormous amount of time and energy. You can -- you know, to me this explains why Staff and OPC put so much testimony and so many witnesses on this issue. Because if approved, it will be -- it will be tough on customers.

Q. So just to follow up on that with one last question, so if you have concerns with reliability going forward which is more likely to increase reliability for customers, that money spent on a generation plant or the demand-side programs?

A. Good question. Both. Okay. And I'm going to couch that. Approve that to MEEIA inside management. That 200 megawatt shortfall, get the demand. I'm not arguing against it. Like, go ahead and approve the demand response. There's an immediate need. It meets the MISO capacity. You're able to go ahead and do that. Now, we've taken issue with that long term because long term we see a market alternative in ARCs. But that ship has sailed here for a window, a period of time anyway. So take care of that issue.

It's the other part of this, which is the huge part effectively that we're talking about. And again, you take that demand response out of these programs and all of a sudden this is not a very attractive portfolio. In that sense, build. I can -- I'll put it this way. I wouldn't want to be a commissioner when we have rolling blackouts. And if I can point to supply-side investment and, you know, Chairman Hahn was a hundred percent right two week -- or was it Chairman Hahn -- Chairwoman Hahn or Commissioner Holsman. Several weeks ago we were in

here talking about Evergy and their need to build.

You know, to me the sanity check is whether or not you actually have an application in front of SBP or MISO. It's gotta be both. And that's -- and that I guess would be consistent with the statute of valuing demand side on an equivalent basis of supply side. I think you just need to evolve the demand-side management programs, and that's going to take some time.

MS. VANGERPEN: Thank you, Dr. Marke. No further questions, your Honor.

JUDGE PRIDGIN: Ms. VanGerpen, thank you. Dr. Marke, thank you very much. You may step down.

And that is the end of today's scheduled witnesses. As a reminder because of the rulemaking hearing, we will not begin tomorrow until 1:00 p.m. Also Wednesday the Commission has agenda, I believe at 9:00, so I would look for a start time closer to 10:00 a.m. on Wednesday. We are -- we are currently on schedule. If we fall behind, we may need to work late some evenings, but so far, so good.

Is there anything further from counsel or the bench before we go off the record? All right. Hearing nothing, that concludes today's hearing. We will resume tomorrow at 1:00 p.m. Thank you. We're off the record.

(Off the record at 4:36 p.m.)

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EXAMINATIONS

EXAMINATIONS

OPC WITNESSES:

EXHIBIT INDEX

OPC

RENEW MISSOURI

(Exhibits retained by counsel. Not attached.)

CERTIFICATE OF REPORTER

STATE OF MISSOURI)
COUNTY OF CALLAWAY)

I, Shelley L. Bartels, a Certified Court Reporter, CCR No. 679, do hereby certify that I was authorized to and did stenographically report the transcript of proceedings; and that the foregoing transcript, pages 1 through 283, is a true record of my stenographic notes.

I FURTHER CERTIFY that I am not a relative, employee, or attorney, or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED this 29th day of July, 2024.

Shelley L Bartels

Shelley L. Bartels, CCR 679

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