BEFORE THE PUBLIC SERVICE COMMISSION

STATE OF MISSOURI

TRANSCRIPT OF PROCEEDINGS

Evidentiary Hearing

July 20, 2015

Jefferson City, Missouri

Volume 1

In The Matter Of Union Electric)
Company d/b/a Ameren Missouri's)
2nd Filing to Implement) File No. EO-2015-0055
Regulatory Changes in)
Furtherance of Energy)
Efficiency as Allowed by MEEIA)

RONALD D. PRIDGIN, Presiding
DEPUTY CHIEF REGULATORY LAW JUDGE

ROBERT S. KENNEY, Chairman,
STEPHEN M. STOLL,
WILLIAM P. KENNEY,
SCOTT T. RUPP,
COMMISSIONERS

REPORTED BY:
Tracy Taylor, CCR No. 939
TIGER COURT REPORTING, LLC

A P P E A R A N C E S

MATTHEW R. TOMC, Attorney at Law
WENDY TATRO, Attorney at Law
1901 Chouteau Avenue
St. Louis, Missouri 63109
314.554.4673
FOR: Ameren Missouri

JAMES B. LOWERY, Attorney at Law
Smith Lewis, LLP
111 South 9th Street
Columbia, Missouri 65201
573.443.3141
FOR: Ameren Missouri

L. RUSSELL MITTEN, Attorney at Law
Brydon Swearengen & England, PC
312 E. Capitol Avenue
Jefferson City, Missouri 65102
573.635.7166
FOR: Ameren Missouri

DAVID C. LINTON, Attorney at Law
314 Romaine Spring VW
Fenton, Missouri 63026
314.341.5769
FOR: United for Missouri, Inc.

EDWARD F. DOWNEY, Attorney at Law
Bryan Cave
221 Bolivar Street, Suite 101
Jefferson City, Missouri 65101
573.556.6622
FOR: Missouri Industrial Energy Consumers

DAVID WOODSMALL, Attorney at Law
308 E. High Street, Suite 204
Jefferson City, Missouri 65101
573.636.6006
FOR: Midwest Energy Consumers Group

ALEXANDER ANTAL, Associate General Counsel
301 West High Street
Jefferson City, Missouri 65102
573.522.3304
FOR: Missouri Division of Energy

ANDREW ZELLERS, General Counsel
Brightergy
1712 Main Street, Floor 6
Kansas City, Missouri 64108
816.897.1049
FOR: Brightergy, LLC

HENRY ROBERSTON, Attorney at Law
Great Rivers Environmental Center
391 North 4th Street, Suite 800
St. Louis, Missouri 63102
314.231.4181
FOR: National Resource Defense Council

JILL M. TAUBER, Managing Attorney
CHINYERE A. OSUALA, Associate Attorney
Earthjustice
1625 Massachusetts Ave, NW, Suite 702
Washington, DC 20036
202.667.2356
FOR: Sierra Club

MAXINE I. LIPELES, Attorney at Law
Washington University in St. Louis
One Brookings Drive
St. Louis, Missouri 63130-4899
314.935.5837
FOR: Sierra Club

ANDREW LINHARES, Attorney at Law
1216 Subella Drive
Columbia, Missouri 65201
314.471.9973
FOR: Earth Island Institute d/b/a Renew Missouri
FOR: National Housing Trust
FOR: Tower Grove Neighborhood Community Development Corporation

TIMOTHY OPITZ, Assistant Counsel
PO Box 2230
Jefferson City, Missouri 65102
573.751.5324
FOR: Office of the Public Counsel

ROBERT S. BERLIN, Deputy Counsel
WHITNEY PAYNE, Assistant Staff Counsel
MARCIE MUETH, Assistant Staff Counsel
200 Madison Street, Suite 800
PO Box 360
Jefferson City, Missouri 65102-0360
573.751.4140
FOR: Staff of the Missouri Public Service Commission

JUDGE PRIDGIN: Good morning. We are on the record. This is the hearing in File Number EO-2015-0055 in the matter of Union Electric Company, doing business as Ameren Missouri's, second filing to implement regulatory changes in furtherance of energy efficiency as allowed by MEEIA.

I am Ron Pridgin. I'm the Regulatory Law Judge assigned to preside over this case. It is being heard in the Governor Office Building in Jefferson City, Missouri. Today's July 20th, 2015 and the time is approximately 8:50 a.m. I would like to get oral entries of appearance from counsel, please, beginning with Ameren, Missouri.

MR. TOMC: Appearing on behalf of Ameren Missouri, Matthew R. Tomc and Wendy Tatro, 1901 Chouteau Avenue, St. Louis, Missouri. Also appearing on behalf of Ameren Missouri would be Mr. Jim Lowery with Smith Lewis from Columbia -- a law firm from Columbia, Missouri.

JUDGE PRIDGIN: All right. Mr. Tomc, Ms. Tatro, Mr. Lowery, thank you.

On behalf of the Division of Energy, please?

MR. TOMC: Your Honor, I apologize. we do have one more attorney that will be representing us in this proceeding. And that will be Mr. Russ Mitten and he's with the Brydon Swearengen firm, also here in Jefferson City.

JUDGE PRIDGIN: All right. Very good. Thank you. Mr. Mitten, thank you.

On behalf of Division of Energy, please.

MR. ANTAL: Alex Antal on behalf of the Missouri Division of Energy, PO Box 1157, Jefferson City, Missouri 65102.

JUDGE PRIDGIN: Mr. Antal, thank you.

On behalf of NRDC, please. Mr. Robertson.

MR. ROBERTSON: Henry Robertson, Great Rivers Environmental Law Center, 319 North Fourth Street, Suite 800, St. Louis 63102.

JUDGE PRIDGIN: Mr. Robertson, thank you.

On behalf of United for Missouri, please.

MR. LINTON: Good morning, Judge. On behalf of United for Missouri, David Linton, 314 Romaine Spring View, Fenton, Missouri 63026.

JUDGE PRIDGIN: Mr. Linton, thank you.

And Mr. Steiner has contacted me for KCPL and GMO and indicated no appearance, but just in case, is there anyone appearing for KCP&L or KCP&L GMO?

Hearing no appearance, on behalf of the

Staff of the Commission, please.

MR. BERLIN: Thank you, Judge. Appearing on behalf of the Staff of the Missouri Public Service Commission are Marcella Mueth, Robert S. Berlin and Whitney Payne at Post Office Box 360, Jefferson City, Missouri 65102.

JUDGE PRIDGIN: All right. Ms. Mueth, Ms. Payne, Mr. Berlin, thank you.

On behalf of the Office of Public Counsel, please.

MR. OPITZ: Thank you, Judge. On behalf of the Public Counsel, I'm Tim Opitz. My address is PO Box 2230, Jefferson City, Missouri 65102.

JUDGE PRIDGIN: Mr. Opitz, thank you.

On behalf of Renew Missouri, please.

MR. LINHARES: Thank you, Judge. Andrew Linhares, 910 East Broadway, Columbia, Missouri 65201.

JUDGE PRIDGIN: Mr. Linhares, thank you.

On behalf of MIEC, please.

MR. DOWNEY: Good morning, Judge. Edward Downey on behalf of the MIEC. My address is 221 Bolivar Street, Suite 11, Jefferson City, Missouri 65102.

JUDGE PRIDGIN: Mr. Downey, thank you.

On behalf of MECG, please.

MR. WOODSMALL: Thank you, Your Honor. David Woodsmall on behalf of the Midwest Energy Consumers Group, 308 East High Street, Suite 204, Jefferson City, Missouri 65101.

JUDGE PRIDGIN: Mr. Smallwood, thank you.

On behalf of Sierra Club, please.

MS. TAUBER: Good morning, Judge. Jill Tauber, along with my colleague, Chinyere Osuala, from Earthjustice, 1625 Massachusetts Avenue, Northwest, Suite 702, Washington DC, 20036. And also appearing is Maxine Lipeles from the Washington University School of Law, One Brookings Drive, Campus Box 1120, St. Louis, Missouri 63130.

JUDGE PRIDGIN: All right. Thank you.

On behalf of National Housing Trust, please.

MR. LINHARES: Thank you, Judge. Andrew Linhares appearing separately for National Housing Trust, as well as Tower Grove Community Development Corporation.

JUDGE PRIDGIN: All right. Mr. Linhares, thank you, and also appearing for Tower Grove.

On behalf of Brightergy, LLC, please.

MR. ZELLERS: Thank you, Judge. Andrew J. Zellers appearing on behalf of Brightergy, 1712

Main Street, Floor Number 6, Kansas City, Missouri 64108.

JUDGE PRIDGIN: Mr. Zellers, thank you.

Have I missed anyone?

Hearing nothing, anything before we proceed to opening statements?

MR. OPITZ: Judge, I have one matter I'd like to bring up.

JUDGE PRIDGIN: Mr. Opitz, yes, sir.

MR. OPITZ: On July 17th, a second deposition of Dr. Geoff Marke was conducted. And Missouri Court Rule 57.03(f) describes the submission to witness for charges -- changes and signing of the deposition. And that rule provides that if a deposition is not signed at the time of trial, it should be used as if signed unless there is a motion to suppress, and I would make that motion now.

The deposition has not been presented to neither Dr. Marke or myself and so we have not had an opportunity to review this or sign it. The trial has started and it is unlikely that we will be able to review this document as we are ongoing. And so I move to suppress the use of this deposition for any purpose during this trial.

JUDGE PRIDGIN: All right, Mr. Opitz,

thank you. And I'll allow responses and I will plan on taking that motion with the case. Any responses?

MR. MITTEN: Your Honor, the e-mail we received from the court reporter transmitting a copy of the deposition transcript last Friday included Mr. Opitz as one of the addressees, so I had every reason to believe that he had received a copy of the transcript directly from the court reporter.

JUDGE PRIDGIN: I'll take the motion with the case. And I may require, you know, further motions and pleadings on that as well if you can't work it out.

MR. MITTEN: We'll make sure a copy of the deposition transcript is delivered to Dr. Marke this morning.

JUDGE PRIDGIN: All right. Thank you. Anything further?

MR. WOODSMALL: Your Honor, as you know, KCP&L has a true-up hearing going on and some other matters. I'd ask to be excused as this trial develops.

JUDGE PRIDGIN: Certainly. I have no problem with that.

Anything further before we proceed to opening?

MR. TOMC: Yes, Your Honor. Matthew Tomc on behalf of the Company. I just wanted to make an oral motion. MECG, Midwest Energy Consumers Group, has filed an intervention in this proceeding. Their counsel is here this morning. I make a motion that MECG identify its members for the record. And with Mr. Woodsmall indicating he may have to depart, I'd ask that that be today, if possible.

The Commission's rules on intervention allow intervention of an unincorporated association, which MECG is, provided that those rules grant intervention on behalf of the actual legal entities making up that organization. And the -- the rule number is 4 CSR 242.075. It is subsection 4 that I'm referencing. And I believe that the Company has a right to know who MECG is and I believe the record would benefit from that information as well.

JUDGE PRIDGIN: Mr. Woodsmall?

MR. WOODSMALL: I have no objection to that. As I noted, I'm going to be in the KCP&L true-up hearing, so trying to do that today as requested may be difficult, but certainly by the end of the hearing I'll have that done.

JUDGE PRIDGIN: Okay. Thank you.

MR. TOMC: Your Honor, we would ask that

MECG be compelled to do that today, not after the hearing. This is the evidentiary hearing and not knowing who the party is who's signed a stipulation against my client's interest until after the evidentiary hearing prejudices the interest of my client. We would ask that filing be made today.

MR. WOODSMALL: I didn't say after the hearing. I'd say I'd certainly have it done before the end of the hearing. So I'm going to be in another Commission hearing. Doing it today will be very difficult, if not impossible.

JUDGE PRIDGIN: All right. I understand. I'll let you two, if you're able to talk at a break, see if you can arrive at a mutually agreeable time to get that information. I don't hear an objection as to giving the information, just the timing. And so, you know, we're -- we're going to need to press forward and get opening statements. We've got a lot of ground to plow here today. Anything further before we go to openings?

All right. We will begin with Ameren Missouri, please. Ms. Tatro, good morning.

MS. TATRO: Good morning. Good morning, Chair Kenney.

CHAIR R. KENNEY: Good morning.

MS. TATRO: On August 28th, 2009 the Missouri Energy Efficiency Investment Act, or MEEIA as I'm sure we'll all be referring to it today, became law. It was designed to encourage Missouri electric utilities to pursue all cost effective demand-side savings; that includes energy efficiency and demand response.

MEEIA recognizes that the typical business of a utility is to sell electricity. A utility earns by investing in its system, placing that investment in rate-base, earning a return upon that investment and ultimately selling electricity. To ask a utility to spend money not to sell electricity runs counter to that traditional process.

MEEIA was designed to address the reality that for demand-side resources, we cannot simply apply traditional rate-making principles without specific modifications to address the consequences of selling less.

Ameren Missouri has embraced MEEIA and is currently running the largest energy efficiency program in the state of Missouri. And our customers like it. As Mr. Laurent can tell you, our customer satisfaction scores are higher when our customers are aware of our energy efficiency programs and even higher if they participate in them. We currently operate six residential energy efficiency programs with numerous measures available under them, and four commercial. We've exceeded our savings goals and are currently on track to save over 800,000 kilowatt hours by the end of this year. That's enough energy to power 96,000 average Missouri homes.

And no one in this room disputes that Ameren Missouri has had a successful program. We've had two rounds of EM&V by a third-party evaluator reviewed by the Commission's auditor. We've undergone a prudence reviews on these programs. And all of those have been resolved without any finding that Ameren Missouri has operated these programs imprudently. Ameren Missouri has been able to pursue energy efficiency because of the mechanism approved under its first MEEIA cycle. Currently MEEIA's working.

Now, MEEIA established that the policy of the state is to value demand-side investments equal to traditional investments in supply and delivery infrastructure. So what does that mean? It means that when utility decision makers have, for example, $100 million to invest, they should be financially indifferent as to whether they invest in demand-side programs or construct a new plant.

And in order to support that policy, Commissioners, MEEIA directs you to do three things: First, ensure timely cost recovery; second, ensure that utility financial incentives are aligned with helping customers use energy more efficiently; and third, to provide a timely earnings opportunity.

So let's talk about each one of those. MEEIA requires timely cost recovery. What costs are involved? Well, obviously there's program costs. And you'll be glad to know that's one area where there isn't any dispute in this case. Everyone agrees using the E-- the EEIC rider is the way to recover those costs, just as we're doing for MEEIA 1.

However, there's a second cost and that's the throughput disincentive. The Court of Appeals has recognized this is a cost for which timely cost recovery is required. The throughput disincentive is the sales lost because a customer installed a measure before the utility's rates were reset to reflect the lower sales, such as what occurs in a rate case.

Now, everyone in this case agrees that these are real costs and everyone agrees that they operate as disincentives for utilities to pursue demand-side programs. The real disagreement centers around how the throughput disincentive should be calculated and how and when the costs should be recorded or can be recorded as revenue.

The second statutory requirement is to align utility financial interests with helping customers use energy more efficiently. Commissioners, this section is key. This is what makes the MEEIA statute work. The easy part is helping customers use energy more efficiently -- and Ms. Dolly would tell you it's not that easy.

But the tougher part, for you at least, is to ensure that utility financial interests are aligned with helping customers use energy more efficiently. And frankly, that's the part that some parties in this case have difficulty with. If we pursue demand-side programs for our customers without addressing the impact on utility financials, our shareholders are harmed. We erode the trust with our shareholders. MEEIA recognizes that demand-side programs are inherently detrimental to the utility's business unless those interests are aligned.

With demand-side programs, we're paying people not to purchase our product. And MEEIA recognizes that barrier and through this requirement requires it to be overcome so that demand-side programs become a win for the utility as well as for the customer.

Finally, MEEIA requires a timely earnings opportunity. When the company invests in a demand-side program, then it is delaying the day when it will need new generation resources. While this delay is a win for the customer, it is yet another disincentive for the utility because we earn a return on our capital investments like new plant. Utilities do not earn a return on demand-side program costs because they're expenses. MEEIA recognizes this as a disincentive and requires it to be overcome by providing the utility with an earnings opportunity.

All three of these statutory requirements are designed and are necessary to promote the goal to incentivize utilities to invest in demand-side programs. MEEIA's not a stick, it's not a mandate and it's not a requirement that the utility pursue demand-side programs. To the contrary, Your Honor, it is permissive and provides a means to enable utilities to pursue demand-side programs when they would otherwise be foolish to do so.

And it provides you the road map; indeed, the requirements that you must follow when we seek to operate programs under MEEIA. Commissioners, when you provide us with the regulatory structure that fulfills the requirement of MEEIA, we respond. Just as we did in our first MEEIA filing.

As I said earlier, MEEIA's working. Knowing that, when we made our filing for our second MEEIA plan for years 2016 through '18, we based the megawatt hours target on the potential study results that are contained in our last IRP, just as we did in our first MEEIA cycle. And we proposed a cost recovery mechanism that was very similar to that used for our first MEEIA cycle, believing the parties to this case would be familiar with and comfortable with that mechanism.

Well, I submit to you we were wrong. Many parties thought that the megawatt hour targets were too low and many parties had concerns about the cost recovery mechanism. So after seeing the concerns raised by others, Ameren Missouri went to work to try to find a way to understand those concerns and determine if and how we might address each one of them.

Our efforts were guided by the principles set forth in MEEIA; that is, we work to compromise on issues as long as it did not violate MEEIA's guiding principles. As long as the comprise resulted in programs that were cost effective and as long as the comprise did not result in a misalignment of utility financial interests with helping customers use energy more efficiently.

Now, obviously we've reached a resolution with some parties, but not with all. But even if we couldn't reach a resolution with a party, if we could, we made an effort to address the concerns expressed by all parties in this case even if they're a non-signatory to our stipulation. Our goal was to find a way to continue demand-side programs in Missouri because we believe structured properly, demand-side programs benefit our customers as well as the Company.

So as you're aware, there have been two stipulations filed in this case and objections have been filed to both. The first stipulation was filed on June 30th and was signed by a group of pretty diverse parties. You have Ameren Missouri, the utility; you have the Division of Energy, the state agency charged with developing energy policy; you have Natural Resources Defense Council, a group focused on environmental issues and whose interests do not always align with Ameren Missouri; United for Missouri; KCPL, KCP&L GMO. I'm going to refer to that stipulation as the June 30th stipulation, although I recognize with the objections, it's now nothing more than the joint position of the parties.

Then in July, a group of intervenors filed their own stipulation, and I'll refer to that as the second stipulation.

So what does the June 30th stipulation change from Ameren Missouri's initial filing? It increases the megawatt hours target by 37 percent. Now, Ameren Missouri continues to believe that our initial megawatt hour target was based on a solid foundation. And we will have Ingrid Rohmund available for your questions. She leads the energy analysis and planning area for a consulting company called The Applied Energy Group. She's a nationally recognized expert in her field. She is the consultant primarily responsible for our potential study and she can explain why the demand-side potential is lower at this time than it has been previously.

Please talk with her. Unlike most of us in this room, she does this work for a living. She doesn't just critique other studies. She doesn't just write white papers or publish scholarly articles on how to undertake a potential study. She actually performs such studies.

She describes the study as best in class. It's based on Missouri primary market data. She stands behind its results. That potential study provides a solid basis for the initial targets filed in this case.

But as I said, in agreeing to the terms of the June 30th stipulation, we've endeavored, as a compromise, to address concerns that others in this case have about the level of the targets. We recognize that others strongly believe that more megawatt hours can be obtained. So we went beyond our initial filing and expanded our targets.

Now, this compromise was not an easy decision for Ameren Missouri. Talk with our witnesses. The 37 percent increase is a stretch goal for us. Mr. Voytas will tell you that he believes in the potential study and that it captures the realistic savings targets that can be achieved and that adding 37 percent to those targets will be difficult to achieve.

Mr. Laurent will tell you that he and his department -- and Mr. Laurent is the one who will be responsible for running this program -- views the increase as a substantial challenge, but one they've decided to accept in an effort to address the concerns of others and to resolve this case so the success of Ameren Missouri's MEEIA's programs may continue after December of this year.

You will find that the June 30th stipulation also contains much of what is requested by the National Housing Trust and Tower Grove, even though they aren't signatories. As I said, we were working to find a solution that addresses all of the issues raised, not just those of the signatories.

Now, 37 percent wasn't enough for some parties, but Ameren Missouri didn't feel we could realistically agree to even higher target and still provide cost effective demand-side programs; something that MEEIA requires. So the 37 percent increase represents Ameren Missouri's efforts to step beyond its beliefs about demand-side potential and take a bit of a leap of faith based on the belief of others that there's more potential out there to be achieved.

Then there's the cost recovery aspect of the plan. As I stated before, there's no dispute about the recovery of program costs. There is, however, much dispute over the throughput disincentive. As part of the June 30th stipulation, Ameren Missouri agreed to a modification that is different from what it had done in its first MEEIA cycle. Other parties had expressed a concern with the impact that rate case timing and other rate case parameters can have on the throughput disincentive calculation.

Of course, a rate case updates usage to a more recent date, which would capture any decrease in usage due to demand-side measures, at least through whatever the update point is. So a rate case naturally works towards reducing the throughput disincentive moving forward.

Now, Ameren Missouri doesn't know exactly when it will file rate cases in the future, so when the throughput disincentive is calculated, we make some assumptions. Parties were concerned that the difference between when we really filed and when we assumed we were going to file would allow Ameren Missouri to collect more revenue than is necessary to remove the throughput disincentive.

So to deal with that concern, the June 30th stipulation establishes a two-tiered approach to recovering throughput disincentive.

JUDGE PRIDGIN: Ms. Tatro, I'm sorry to interrupt, but you can continue. I just need to open a port for a Commissioner to listen, so it's just going to take me a moment. You can either wait or continue on as you wish.

MS. TATRO: I'll take a second.

JUDGE PRIDGIN: When you heard the beeping, I didn't want anyone to be concerned.

MS. TATRO: That's okay. Go ahead.

JUDGE PRIDGIN: I apologize.

MS. TATRO: I'm sure he's dying to hear every word.

JUDGE PRIDGIN: I'm so sorry to interrupt. Please continue when you're ready.

MS. TATRO: No problem. No problem.

So to deal with the rate case timing impact issue, the June 30th stipulation established a two-tiered approach to recovering the throughput disincentive. The amount of the throughput disincentive that's included in the first tier is limited to the amount of the throughput disincentive that Ameren Missouri would experience if it filed rate cases every 15 months, which we feel is likely the shortest time between the filing dates of rate cases. This tier is a floor.

The amount of throughput disincentive collected in the second tier is based upon actual rate case timing and is only calculated at the end of 2019, when significantly more information is known about what rate cases have been filed over the MEEIA cycle. If a rate case has been filed, then the update in sales is included in the throughput disincentive calculation.

This methodology still aligns the utility's financial interest because the first tier has been set conservatively; that is, its assumptions are such that there's only a small chance from either the Company's point of view or a customer's point of view that future rate case timing and outcomes would cause any material variance between the sharing percentage produced by the upfront assumptions and the sharing percentage that would be produced if the actual rate case parameters were known.

The first tier is also fixed. That means it is not to be changed based on after-the-fact EM&V, which allows it to satisfy the accounting standards described by Ameren Missouri witness Cliff Hoffman who spent 38 years with Deloitte, and Lynn Barnes with whom all of you are familiar. Talk with them about this accounting standard. I submit to you, Commissioners, that you cannot align utility financial incentives without understanding this standard.

The June 30th stipulation means that revenues produced by the first tier can be recognized, meaning recorded as earnings on the Company's books and records, which neutralize the otherwise detrimental impact on the Company's income that occurs simply because the Company is offering demand-side programs.

Consequently, it is the alignment of utility financial interests with helping customers use energy more efficiently, which is exactly the customer/shareholder balance that MEEIA requires.

Mr. Davis describes this two-tiered approach in detail in his Supplemental Testimony and is happy to discuss how this works and how it protects customers from uncertainty in the throughput disincentive recovery due to rate case and other rate case issues.

Now, the second stipulation also uses a two-tiered approach, although they don't use the same language. But they pick an arbitrary two-thirds/one-third split as the breakpoint between the first and second tier. And there doesn't appear to be any rationale or basis for this split; there's no link to customer protection.

And despite Staff's claims to the contrary, the evidence in this case will overwhelming show that the two-thirds/one-third split after -- is an after-the-fact revision which prevents the Company from recognizing all of the unrealized revenues and, thus, reducing its income as the programs are operating the throughput disincentive.

Unlike the tiers for the June 30th stipulation, Mr. Davis's modeling -- and he'll be happy to talk to you about that -- shows that the second stipulation's arbitrary split does not produce sufficient revenue to offset the throughput disincentive as it is incurred each year. In fact, in his Rebuttal to that stipulation, demonstrates that this lag in recovery continues until 2020.

So it doesn't overcome the barrier imposed by the throughput disincentive, which is one of your charges in this case. It does not incent Ameren Missouri or any utility to undertake demand-side programs. It fails to align utility interests with that of helping customers using energy more efficiently.

Now, Mr. Davis's testimony also points out two other major flaws with the second stipulation; one of which alone would prevent full recovery of the throughput disincentive, and that's the rebasing to zero argument that's in his testimony. He quantifies that impact as a $9 million hit to Ameren Missouri's earnings. I encourage you to discuss those issues with him. I won't go into further detail here.

Now, the last aspect of the June 30th stipulation is the performance incentive; the earnings opportunity. The June 30th stipulation uses the net benefits model for determining the performance incentive. That is, it uses a combination of energy savings and the associated net benefits to calculate the performance incentive. Net benefits are determined, in part, by what it costs to achieve the savings. It's not just savings, it's what we spend to get there.

As Mr. Voytas will explain, if Ameren Missouri achieves the megawatt hour target but spends twice as much as it planned to do so, the performance incentive award that we would receive will decrease. The net benefit mechanism balances the achievement of megawatt hours with the cost in a way that incents us to achieve savings at as low of a cost as possible.

What better way is there to align utility financial interests with helping customers to use energy more efficiently and to enable the utility to place an equal value on investing demand-side programs as opposed to infrastructure. I submit that there is not one.

Now, Ameren Missouri did not believe that the statute requires the performance incentive to be based on backward-looking EM&V. But again, trying to be responsive to concerns of other parties even when we didn't share that concern, the June 30th stipulation moves to a performance incentive mechanism which uses the retrospective EM&V results -- evaluation, measurement and valuation -- of each year to determine the level of performance incentive earned.

This is a major give on the part of Ameren Missouri. Mr. Voytas has provided significant amount of testimony about the pitfalls of EM&V and the inability to accurately measure the amount of energy not consumed by customers. But we're taking this risk by agreeing to retrospective EM&V because we recognized it was important to certain parties in this case and so agreed to incorporate it into the performance incentive as part of the settlement deal.

Now, the level of performance incentive found in the June 30th stipulation is also reasonable. It is $30 million if we achieve 100 percent of our increased megawatt hours targets over three years, but only -- remember, because it's the net benefit model -- if we achieve it at the cost that we presumed we were going to achieve it at. This is key. We're not just trying to reach a megawatt hour number. We're trying to do it within the budget we use -- set forth.

So how was the performance and level set? Presume a utility's required to retire coal plant, let's say, to meet stricter environmental regulations. Without demand-side programs, the utility would likely have to replace that generation with a new resource. With demand-side programs, the utility might not have to do so or it might not have to do so until a later date.

In that scenario, the utility's investment in demand-side programs results in a lost or deferred earnings opportunity for the utility. So as part of Ameren Missouri's IRP -- and we will have Ameren Missouri witness Hande Berk available to discuss this with you -- the Company constructs resource plans about how we're going to meet its needs over the next 20 years.

And as required by your rules, there is a resource plan that includes demand-side resources at the RAP level -- realistic achievable potential -- and also a resource plan with no demand-side programs. The RAP DSM resource plan significantly defers future investments in supply-side resources. So Ameren Missouri simply calculated and compared the deferred earning opportunities between the two scenarios amortized over 28 years. That difference represents the upper bounds of what would be an appropriate earnings opportunity to allow Ameren Missouri decision makers to view demand side equal to supply side.

Now, the $30 million that we requested is actually only a fraction of that calculated amount. And Mr. Davis can talk to you about the appropriateness of the request and can explain to you how this request is consistent with performance incentives in other states.

Now, the second stipulation takes a completely different tact. Those parties abandon the net benefits model altogether, despite the fact that it's the mechanism written in your rules. And under the second stipulation, the cost at which Ameren Missouri delivers its energy efficiency results don't have an impact on that initial performance incentive that it can earn.

I found that surprising because sharing net benefits inherently requires there be benefits to share, as we talked about earlier. The parties have abandoned this sensible approach in favor of one that creates, in my mind, the wrong incentive; spending more regardless of the benefits in an effort to earn a higher performance incentive. Mr. Voytas can talk to you in depth about that issue.

Now, the second stipulation fails to meet the statute in another way. It is not designed to incent all cost effective demand-side resources, which as I told you earlier, includes demand-side programs, energy efficiency, as well as demand-response programs. Instead, Ameren Missouri would only earn a performance incentive for measures that reduce peak demand. So for demand-response programs but not so much for energy efficiency programs.

Now, the stipulation goes on to say that the Commission, after they go through a panel, might be able to do something on energy savings, but it isn't clear and it isn't anything the utility can base a decision upon. So whether a measure is cost effective or how cost effective a measure is has no impact on the amount of the award for -- under their proposal.

Mr. Voytas has provided testimony that the second stipulation would require Ameren to completely revise its portfolio to one that is designed only to maximize demand savings. Talk about sending a wrong signal. No more lighting programs. Commissioners, I encourage you to talk with Mr. Voytas about this, how it could impact availability and cost effectiveness of programs.

The fact is the proposal of this performance mechanism is at odds with the purpose of the panel that the second stipulation establishes, which is supposed to find more energy savings. If the performance incentive rewards peak shaving, why would we implement any energy efficiency program that that panel desires if it doesn't result in an increased performance incentive?

And finally, but just as importantly, the performance incentive is set 100 percent achievement for the three-year targets. The Company would only have the opportunity to earn around $6 million. That amount is far, far lower than the earnings the utility could receive if it did not delay construction of a new generation facility. In fact, it's so low that utility decision makers do not see it as a legitimate performance incentive that would allow it to value demand-side equal to supply-side investments.

There's a lot more detail that could be discussed about these two positions in front of you, Commissioners, and you're probably already tired of hearing me talking so I won't go into all that. The one thing I ask you to consider as you hear this case is the requirements of the MEEIA statute. Which proposal best achieves all cost effective demand savings? Which proposal best removes the throughput disincentive and other barriers that the utilities face when implementing demand-side programs? Which proposal values demand-side equal traditional investments and supply-side investments?

I submit to you it is not the second stipulation; that the second stipulation fails each one of those requirements. I believe that you will conclude the answer to those questions is the June 30th stipulation, and we ask you to approve the company's MEEIA plan as modified by that position. Thank you very much.

JUDGE PRIDGIN: Ms. Tatro, thank you. Questions from the Bench?

CHAIR R. KENNEY: Just a couple of questions. Ms. Tatro, thank you. I just have a couple of questions regarding the second component of the MEEIA requirement where we are to align the utility's financial interests with helping customers use energy more efficiently.

The second component of that says we're

all supposed do that in a manner that sustains and enhances the utility customer's incentives to use energy more efficiently. So address the second half of that second requirement.

MS. TATRO: That's exactly what the net benefits model does for you, because it encourages us to deliver those programs at the lowest cost possible. And we have -- and we don't -- and also, of course, we don't receive the benefit unless we hit the target or a certain percentage of the target. So we're incented to get those hours, we're incented to get them at a low cost. So that is encouraging customers to use energy more efficiently in a manner that aligns all of our interests.

CHAIR R. KENNEY: So I see -- and I see how it removes the disincentive to the utility. Where is the component that sustains and enhances the utility customer's incentives to use energy more efficiently?

MS. TATRO: Well, if we don't have the pr-- keeping the program alive is what that does that.

CHAIR R. KENNEY: Okay. So that's my point. So because MEEIA is permissive --

MS. TATRO: Yes.

CHAIR R. KENNEY: -- and essentially you

don't have to do this --

MS. TATRO: Correct.

CHAIR R. KENNEY: -- if you decide not to do it, then the utility customer is no longer -- his or her's incentive is not sustained in that situation. So --

MS. TATRO: Right.

CHAIR R. KENNEY: -- it's just the generosity of Ameren continuing the program that sustains the utility customer's --

MS. TATRO: It's not just generosity. I mean, we're expecting to be made whole for the losses that we incur and we're expecting the opportunity to earn. That's the alignment of incentives.

CHAIR R. KENNEY: Which is the first half of the sentence, but I'm still addressing the second half. So that one seems a little --

MS. TATRO: My point is they have to go together. You have to have both. So in my mind, I can't talk about one without the other. So I apologize if I'm not really answering -- if I'm not limiting to what you're talking about, I apologize.

CHAIR R. KENNEY: Well, I think what I'm getting at is that in your opening statement, you addressed the first component, you didn't address the second component at all. I mean, when you were reciting the second component of 393.1075, you said the focus is on aligning the utility's financial incentives or interests with helping consumers use energy more efficiently.

But we don't talk about the second half, which is also doing all of that in a way that sustains and enhances, which to my mind means doing more than -- if you're sustaining and enhancing, then you're sustaining what you already have and you're doing something extra to enhance the utility customer's incentive to use energy more efficiently.

So what's that extra component that's enhancing the utility consumer's incentive to use energy more efficiently?

MS. TATRO: Well, I think it's continuation of the program and the growth of the program and the robustness of the program and coming up with different programs being available to customers. That aspect I don't think is really -- wasn't put at issue by any of the other parties and perhaps that's why I didn't focus on it.

CHAIR R. KENNEY: So the 37 percent increase in the megawatt hour target and perhaps maybe the --

MS. TATRO: That's part of it, certainly.

CHAIR R. KENNEY: -- increase in spending would be the enhancement?

MS. TATRO: Yeah. I talked over you. I apologize.

CHAIR R. KENNEY: That's okay. Let's talk about the performance incentive. How does the performance incentive that's proposed in the June 30th stipulation differ from what we've already seen in the last three year -- the first cycle?

MS. TATRO: It's very similar to the first cycle.

CHAIR R. KENNEY: So why is anybody objecting to it? Because I mean the first cycle was the result of a stipulation that seemed to have been relatively successful.

MS. TATRO: I agree.

CHAIR R. KENNEY: And this is similar to that. So why are the other -- why is there the competing stipulation, the July stipulation?

MS. TATRO: I can answer part of that; part of that I can't answer. I think the first part is some parties thought that the level was too high, the dollar -- the total dollar amount that could be earned was too high. I have absolutely no idea why the second stipulation uses the performance incentive that it did. That was never discussed with Ameren Missouri, so I can't explain any of that to you.

CHAIR R. KENNEY: Okay. And then this is just a general proposition or general policy question. We've talked a lot about looking at decoupling for electric utilities. If we adopted some form of decoupling for electric utilities, does that obviate all these other concerns?

MS. TATRO: If decoupling is done properly, it should remove the throughput disincentive, yeah. So it -- it would go -- it would take great steps to resolving issues. The devil is always in the details, so it depends on what the decoupling looks like. But theoretically, yes, I agree with you.

CHAIR R. KENNEY: Okay. Thank you.

JUDGE PRIDGIN: Thank you. Anything further from the Bench?

COMMISSIONER STOLL: No questions. Thank you.

MS. TATRO: Thank you.

JUDGE PRIDGIN: Ms. Tatro, thank you. I'm sorry?

MR. TOMC: I'm sorry, Your Honor. If I

may interrupt. I have heard from my clients that the webcast is not working. I just didn't know if you were aware of that.

JUDGE PRIDGIN: I will see what the problem is. Thank you.

MS. TATRO: They missed my opening.

CHAIR R. KENNEY: It will be archived, I'm sure.

JUDGE PRIDGIN: Any opening on behalf of Division of Energy?

MR. ANTAL: Yes, Your Honor.

JUDGE PRIDGIN: When you're ready.

MR. ANTAL: May it please the Commission. The Commission has a unique and very important case before it today in which it may choose one of two options. The first option is to approve the Ameren Missouri's MEEIA Cycle 2 plan with the modifications that the Company itself has agreed to as stated in the Non-unanimous Stipulation and Agreement filed by Ameren Missouri, the Division of Energy, National Resource Defense Council, United for Missouri, Kansas City Power & Light and KCPL GMO, which I will refer to as the Company Agreement.

Approval of the Company Agreement will ensure that utility-sponsored energy efficiency programs will be available to Ameren Missouri's customers through 2018 consistent with the voluntary nature of the MEEIA statute and rules.

The second option is to outright reject Ameren Missouri's MEEIA plan as modified by the Company Agreements. Rejection of the MEEIA plan, however, will jeopardize the continuation of utility-sponsored energy efficiency programs in Ameren Missouri's service territory and may also impact the continuation of utility-sponsored energy efficiency programs in Missouri as a whole.

As you well know, there is a competing proposal which has been signed by Staff, OPC and various other parties. I will refer to this agreement as the Non-company Agreement. The parties who have signed on to the Non-company Agreement would have you believe that this agreement represents a viable third option for the Commission.

But this is not the case. Commission approval of the Non-company Agreement will have the same effect as an outright rejection of Ameren Missouri's MEEIA plan. This choice will have the same effect as an outright rejection because Ameren Missouri objects to the modifications of this MEEIA plan contained in the Non-company Agreement.

The MEEIA statute states that the Commission shall permit electric corporations to implement Commission-approved demand-side programs proposed pursuant to this section with a goal of achieving all cost effective demand savings.

The plain meaning of this language is that MEEIA programs are voluntary. This interpretation is made even clearer by the Commission's MEEIA rules, which state that the Commission shall approve, approve with modification acceptable to the electric utility, or reject such applications for the -- for approval of demand-side program plans.

The modifications in the Non-company Agreement, whether the signatories to the Non-company Agreement like it or not, are not acceptable to Ameren Missouri. Approving any agreement other than the one Ameren Missouri has accepted amounts to an outright rejection of the plan and at the very least will jeopardize the continuation of utility-sponsored energy efficiency programs in Ameren Missouri service territory.

DE signed the Company Agreement because this agreement goes further toward the goal of achieving all cost effective demand-side savings, as stated in the MEEIA statute, by increasing the energy savings target 37 percent above the initially filed target. The Company also meets -- the Company Agreement also meets the MEEIA statute requirements of being beneficial to all customers in the customer class, regardless of whether the programs are utilized by all customers, because the programs will also result in non-energy benefits to all customers and will offset long-run capacity increases.

The Company Agreement also provides for a collaborative process which will work to identify potential new programs, increase participation rates and determine other alternatives to achieving deeper savings, improving the cost effectiveness of both the existing programs and the entire portfolio over the course of the second cycle.

Additionally, the structure of the throughput disincentive net shared benefits mechanism and the performance incentive mechanism is consistent and predictable and allows Ameren Missouri certainty and the ability to earn as its achieved energy savings targets are met, which will encourage the Company to achieve additional savings through additional cost effectiveness programs and increase participation rates in a manner that aligns the incentives of the

Company and its customers.

DE recommends that the Commission approve Ameren Missouri's MEEIA Cycle 2 plan as modified by the Company Agreements. While the agreement is a compromise, it represents substantial greater movement towards the goal of achieving all cost effective demand-side savings as compared to the original filing, the Non-company Agreements and the alternative of no MEEIA portfolio.

As an outright rejection of the plan -- an outright rejection of the plan modified by the Company Agreement would lead to discontinuation of the Company's energy efficiency portfolio, poor public policy outcomes and would be detrimental to the public interest. Even a temporary lapse in program availability would at the very least create a significant uncertainty for customers, program partners and the Company while -- while drastically reducing the potential markets for energy efficiency in Missouri in the short term.

Now, Division of Energy's witness, Mr. Martin Hyman, will be testifying during this hearing. Encourage you to ask him any questions you have about the particulars of these two competing agreements as well as the public policy concerns of

Division of Energy in rejecting Ameren's plan. But if there are any initial questions, I'll be happy to try to answer those.

CHAIR R. KENNEY: I should have asked -- thank you. I should have asked Ms. Tatro this question so I'm going to do it now and ask both of you. Is it essentially your understanding that if we don't approve the Company's stipulation, that Ameren's going to discontinue its energy efficiency offerings? You can answer first and then I'll ask Ms. Tatro. I should have asked her.

MR. ANTAL: It is certainly a concern of Division of Energy. There's -- Cycle 1 is due to expire at the end of this year. Without a Commission-approved MEEIA plan certain by that date or realistically before that -- well before that date, they would, you know, discontinue their Cycle 1 programs. That is DE's concern.

CHAIR R. KENNEY: So the Cycle 1 programs end. But let's say we approve the Non-company Stipulation, the July stipulation, so we've approved something but it's not one that's agreeable to the utility. Are they free then to disregard that and say we're just abandoning all offerings? Is that your understanding.

MR. ANTAL: It's Division of Energy's understanding that MEEIA is voluntary and unless the Company accepts the modifications after the fact, there's no obligation on their parts to implement a plan that they don't agree with.

CHAIR R. KENNEY: Ms. Tatro, I apologize for not asking that earlier.

MS. TATRO: That's fine. Ms. Barnes' Rebuttal to Supplemental states very clearly that if the Commission adopts the non-- the second stipulation, the July stipulation, the utility does not consider that to align our financial incentives with helping customers use energy more efficiently and we won't be able to proceed under that. So we'd have to go back to the drawing board, figure out what we are going to do. But certainly we would not have programs on January 1st.

CHAIR R. KENNEY: Another question for the Division of Energy. Does the Division of Energy, as a matter of policy, have any opinion about whether pursuing some type of decoupling mechanism would be a more efficient and better way to deal with the throughput disincentive?

MR. ANTAL: Division of Energy believes that decoupling should be reviewed, explored by the

Commission. As Ms. Tatro said, the devil is in the details and the Commission should take care, if it chooses to develop a decoupling mechanism, that it's a fair and balanced decoupling mechanism.

CHAIR R. KENNEY: And as a matter of just public policy, does the Division of Energy view as a failing of MEEIA that it's not mandatory?

MR. ANTAL: The law is what the law is. We're working within the constraints of the law as it is today. And in part, one of the reasons why we signed onto the stipulation that we did is that the energy efficiency programs offered by the utility are far too important to let them, you know, end at this critical juncture.

CHAIR R. KENNEY: You know, some states make it mandatory and they have clearly delineated targets. And does Division of Energy, as a matter of policy -- forget about the law, because you're right, the law is what it is. Does the Division of Energy opine as to whether a mandatory energy efficiency statute is more efficacious than a non-mandatory energy efficiency statute?

MR. ANTAL: I don't believe that Division of Energy has taken a firm position at this time on whether or not MEEIA should be volun-- should be mandatory; however, there are certain benefits to a mandatory statute.

CHAIR R. KENNEY: Okay. Thanks. Thank you.

COMMISSIONER STOLL: No questions.

JUDGE PRIDGIN: Nothing further from the Bench? All right. Very good. Thank you.

MR. ANTAL: Thank you very much.

JUDGE PRIDGIN: Any opening on behalf of National Resources Defense Council? Mr. Robertson, when you're ready.

MR. ROBERTSON: May it please the Commission. Natural Resources Defense Council signed onto the June 30th Non-unanimous Stipulation with the Company because it offers us more cost effective energy savings and, therefore, more ratepayer benefits than either the Company's original plan or the competing Non-unanimous Stipulation of Staff, OPC and their co-signors. It also offers us the opportunity to identify additional cost effective energy savings and we believe that those could easily be added to the portfolio.

And it also incorporates some of the recommendations we made in our testimony; a strengthened multi-family low-income program, adopting a one-stop shop whole building approach, a small business direct install program to target a hard-to-reach segment of the market, and it also targets public buildings for energy saving measures to the extent that they are not free riders.

I agree with Mr. Antal that the MEEIA rules do not give you the option to reject the Company's plan and substitute another in its place, which is essentially what the OPC/Staff stipulation is asking you to do. Ameren cannot be compelled to adopt that plan and indeed has already objected to it. So it is, at best, in vain and, at worst, illegal. Your choice is clear to approve the modified Company plan embodied in the June 30th Non-unanimous Stipulation and Agreement. Thank you.

JUDGE PRIDGIN: Mr. Robertson, thank you.

Mr. Chairman.

CHAIR R. KENNEY: Just really quickly. So NRDC is in favor of this. And forgive me. Maybe I missed something. Don't you usually represent Sierra Club and Earth--

MR. ROBERSTON: I do. But we are now taking -- we've signed different stipulations so I can't represent both parties.

CHAIR R. KENNEY: So who's representing

N-- I mean Renew Missouri and Earth Island? Okay. Where is National Housing Trust? They're part of the June 30th -- they agree with the June 30th or are they taking --

MR. ROBERTSON: No. They have not signed either stipulation.

CHAIR R. KENNEY: Either stipulation. But they don't oppose the June 30th one?

MR. ROBERTSON: Ask Mr. Linhares. I don't believe that they do.

MR. LINHARES: No, Judge. The National Housing Trust and Tower Grove have both not opposed either or signed either of those stipulations.

CHAIR R. KENNEY: All right. All the parties are shifting and I'm a little confused. I apologize. Thanks, Mr. Robertson.

MR. ROBERTSON: Hopefully that's temporary.

CHAIR R. KENNEY: Thank you.

JUDGE PRIDGIN: If there's nothing further, Mr. Robertson, thank you.

MS. TATRO: I'd like to think we could start working together more.

CHAIR R. KENNEY: Here, here.

JUDGE PRIDGIN: Opening for United for

Missouri.

MR. LINTON: Thank you, Judge. I have no opening.

JUDGE PRIDGIN: Mr. Linton, thank you.

And I believe KCPL and GMO have waived opening, but let me verify. Any opening for Kansas City Power & Light or KCP&L GMO?

All right. Hearing nothing, opening for Staff.

MR. BERLIN: Judge, my opening's going to probably take a few minutes to explain the details of these plans. I was just wondering if, you know, right now might be time for a very short break?

CHAIR R. KENNEY: I'd be amenable to that.

MR. BERLIN: Five minutes?

JUDGE PRIDGIN: Let's make it ten. We'll go off the record and we will resume at 9:50. Thank you. We're off the record.

(A recess was taken.)

JUDGE PRIDGIN: All right. Thank you. We are back on the record. I believe we were about to have Staff's opening statement. Anything further before Staff makes its opening?

All right. Mr. Berlin, when you're

ready, sir.

MR. BERLIN: Thank you, Judge. I'm Bob Berlin appearing on behalf of the Staff. And before I begin with the Staff opening statement, I would like to address one legal issue head-on. And that is Staff vehemently disagrees with the proposition that the Commission cannot modify the terms and conditions of a MEEIA Cycle 2 program. The Commission certainly has that within its jurisdiction and within its capability and can modify a Cycle 2 program plan.

I'm going to take a slightly different approach to the opening statement in that I have a series of PowerPoint slides to move through to talk to various key points of the Cycle 2 programs that the Commission will be considering today.

As mentioned, there are two Stipulation and Agreements, both of which are objected to. I will refer to the Utility Stipulation and Agreement signed June 30th and filed as the Utility Stipulation. And I will refer to the Staff Public Counsel, Renew Missouri, Missouri Industrial Energy Consumers, Missouri Energy Consumers Group and now recently the Sierra Club as the joint signatories to the Non-utility Stipulation and Agreement.

And again, for Commissioners who are just joining us, Staff disagrees with the proposition that the law prevents the Commission from modifying the MEEIA Cycle 2 programs. But Staff does agree that it is within the prerogative of Ameren to have the final say whether the company implements any Commission-ordered MEEIA program.

Now, I'm going to take an approach that I will call my SportsCenter approach. I'm going to try to give you the 10,000-foot view of the game. And I'm going to show you PowerPoint slides that contain a great deal of detail and a great deal of analysis of which is supported in the pre-filed testimony of Staff witnesses and also to be supported today, tomorrow and the day after at hearing by Staff and Public Counsel witnesses.

But like a SportsCenter commentator, my goal is to give you enough information to guide you if -- to give you a program or a road map through this very detailed complex and dense testimony. So I will also guide you as to which Staff witnesses you should address questions to regarding any particular matter, because I will address all the aspects that were addressed by Ms. Tatro.

First of all, I'd like to say that the Staff witnesses that you will hear from during the course of this hearing are John Rogers, who will talk to the matter of costs, savings and plan comparisons and the relationship of the plan to the IRPs.

Sarah Kliethermes will address the demand-side investment mechanism, or DSIM, the throughput disincentive, or throughput disincentive net shared benefits as proposed by the utility and the performance incentive.

David Murray, in his pre-filed testimony, addressed business risk. I don't think that there will be much at issue during the course of this hearing on that matter.

And OPC witness Geoff Marke will be the primary witness to address specifics regarding the plan programs.

I've highlighted for you in the next slide the applicable provisions of the Missouri Energy Investment Act Statue, 393.1075. We have talked about the need to provide a timely cost recovery for the utility and we've talked about the need to align utility financial incentives in a manner that sustains or enhances utility customer incentives to use energy more efficiently, again, the timely earnings opportunities associated with cost effective measurable and verifiable efficiency savings with a goal toward achieving all cost effective demand-side savings.

And Staff firmly believes that the Non-utility Stipulation provides the path forward to achieving the goal of all cost effective demand-side savings, and that's supported by all Staff witnesses.

Now, what we need to understand here is the MEEIA programs Cycle 2 will involve a MEEIA charge, and it's a significant charge. This is effectively a rate case that you're looking at. The order of magnitude value of this MEEIA charge rate case is approximately $240 million nominal or about $208 million for the discounted revenue requirement.

Over three years, approximately $80 million annual revenue requirement will be collected from Ameren ratepayers. It will be collected whether they participate in these programs or not. And all will pay except for the low-income customers who are exempted and for the opt-out customers. And I remind the Commission that 393.130.1 requires that all charges shall be just and reasonable.

Now, there is one key difference in this MEEIA Cycle 2 case with a rate case. And unlike a rate case where all litigation expense is paid for in a sharing arrangement by ratepayers and shareholders, the litigation expense associated with this particular type of charge or rate case, there is no sharing. The expense of litigating this case will fall solely on the ratepayers.

Slide 4 is an example of an Ameren bill. And what you see in this presentation is a winter bill from March of 2015. And you'll note that there's an Energy Efficiency Investment Charge. This bill shows this customer has a MEEIA charge of $17.86, that and taxes we're looking at around 18 or more dollars.

So this goes back, I think, to Chairman Kenney's question is what's in it for the customer? And particularly Staff looks at it, what's in it for the customers that aren't participating in these programs? This bill begs some questions. What if the customer doesn't participate in a MEEIA program in any kind of meaningful way? What if the customer lacks discretionary income to participate? It's simply too costly to go out and replace appliances with energy efficient appliances or to do major HVAC replacement. What if the customer has done everything that customer can do to achieve energy efficiency? Well, the answer is the customer will still pay the MEEIA charge.

Now, slide 5 is a side-by-side comparison of the Utility Stipulation and the Non-utility Stipulation. And the point I'd like to make here is this side-by-side comparison comes from the Utility Stipulation Tables 1 and 2 on page 4 and the Non-utility Stipulation programs listed in Appendix A. I will talk generally to some differences.

First of all, the Non-utility Stipulation contains the same multi-family low-income and small business direct investment programs. The Utility Stipulation has some additional add-ins for combined heat and power, CFL lighting, public facilities, HOME certification.

And what you'll see here too is that there's a big difference in the cost of the Utility Stipulation programs and the Non-utility Stipulation programs. That amounts to a $49 million difference, which is to say if you select the Utility Stipulation plan, customers will pay an additional $49 million in program costs.

Now, there is a net incremental energy savings of about 124.2 gigawatts the Utility's Stipulation has, but it's at a significant cost. There's also a net incremental demand savings delta -- well, actually it's not much of a delta because the Utility Stipulation does not address anything related to reducing demand. Staff believes it's very important to address reduction of demand in kilowatts.

So the Staff/OPC stipulation contains a target related to the performance incentive, which I will talk to later, of 121.1 megawatts. Again, that's in the Non-utility Stipulation. And that number was worked on and came about as a result of the collaborative effort between Staff witness John Rogers and Ameren.

Slide 6 is a summary analysis of Ameren Missouri's MEEIA Cycle 1 with MEEIA Cycle 2 as stated in the application and the June 30th Utility Stipulation and Agreement. This chart is from John Rogers' testimony, the top part of Schedule JAR-1 from his Rebuttal to Supplemental Testimony. It includes the Cycle 1 column, which contains data from the approved Stipulation and Agreement in Cycle 1 case, as I mentioned, the Cycle 2 application and the Utility Stipulation modified Cycle 2. All data on this slide comes from Ameren Missouri's filed documents and work papers and represents analysis of John Rogers to quantify the costs and benefits of these programs.

Slide 7 is a continuation of slide 6 from John Rogers' testimony. And this breaks down the cost and benefits a lot further. It's an example done by

Mr. Rogers that demonstrates the expectation that the Utility Stipulation, Cycle 2, will result in little, if any, net benefits for the majority of customers. I would encourage you to ask Mr. Rogers questions about this.

Slide number 8 shows why the dollar benefits are lower for Cycle 2 in avoided cost of energy and dollars per megawatt hour. It compares the avoided cost of energy for the 2011 IRP with that of the 2014 IRP and it illustrates the primary reason for the decline in expected benefits during Cycle 2 as a result of the reduction in the avoided cost of energy in the marketplace for which Ameren has no control over.

This chart reflects what is happening in the market. And it is an annualized amount of avoided energy as a result of the integrated resource analysis performed as a part of the triennial compliance filings.

Slide 9 shows the impact of costs paid by customers and expected benefits and cumulative revenue requirements from year 2016 through year 2035. This is from John Rogers' Rebuttal to Supplemental Testimony, page 8. And all costs, benefits and cumulative revenue requirements in this chart are in millions of nominal dollars. This is the same information on John Rogers' bar charts for customers as a whole for Cycle 2, which you will see a little bit later in this presentation.

The point I'd like to make with this is to show that the costs for the programs are collected up front in hard dollars along with throughput disincentive. And the difference -- one of the key differences between the Utility's Stipulation and the Non-utility Stipulation is that the Utility Stipulation relies entirely on deemed energy and demand savings for installed measures and also deemed avoided cost -- demand costs and deemed avoided energy costs, and these are uncertain to occur over the long term.

And this is a big concern the Staff has with a MEEIA Cycle 2 program. Each Staff witness can address that matter based on their area of analyses. But again, the money is collected up front in return for an expectation of future benefits that are uncertain.

I'm going to talk a little bit about Cycle 2 components. I'm going to try to unpack this a little bit. I have a series of slides that I hope will do that for you. A demand-side investment mechanism, or DSIM, basically has three components. One is the program cost recovery. Ms. Tatro mentioned earlier there's no issue with regard to that and Staff has no issue with regard to program cost recovery. Our issue with regard to program cost, of course, is the budget, but the program costs are recovered through Ameren's rider EEIC.

And then there's the matter of a net throughput disincentive or a throughput disincentive net shared benefits or you might call it the lost revenue recovery as provided for under the Commission's MEEIA rules. These differences will be addressed by Staff witness Sarah Kliethermes in great detail. And then finally, there is a performance incentive award, which Ms. Kliethermes will also address.

And I will talk to the difference between Staff's recommendation for a net throughput disincentive and how that differs from the throughput disincentive net shared benefits proposed by the Utility Stipulation as I go through these slides.

Again, this is about program costs. It's the same for Cycle 2 plan in the application -- the modified Cycle 2 in the Utility Stipulation and the Non-utility Stipulation. There's no issue here. The only difference is the program budget. The Utility Stipulation will require Ameren ratepayers to pay an additional $49 million in program costs.

The demand-side investment mechanism, or DSIM, as a throughput disincentive mechanism. Chapter 20 of the Commission's rules provide for the recovery of lost revenue. That was Staff's original position. Staff has moved from that position and has accepted and proposed in its Non-utility Stipulation a net throughput disincentive recognizing certain merits of Ameren's argument regarding its proposed throughput disincentive net shared benefits.

And then regarding performance incentive mechanism, I think it's important to understand these differences. Under both stipulations there can be an energy-based performance incentive mechanism. The Utility Stipulation relies solely on recovery for energy-based performance incentive. The Non-utility Stipulation includes two other performance incentive components; one being the demand-based component, and the other one, the participation-based component. And I will talk to those components as I move through this.

The throughput disincentive net shared benefit mechanism that Ameren would like to have in the Utility Stipulation assures recovery of an assumed level of revenue shortfall and it does so in an accelerated manner. But to do that it requires a number of assumptions be made. And those assumptions have to do with a marginal rate, marginal avoided cost, marginal off-system sales margin increase, rate case timing, rate case impact. And all these assumptions are deemed in advance to predict the future impact of each installed efficiency measure.

A big problem from our viewpoint, the viewpoint of Staff, is that the net shared benefits throughput disincentive mechanism has no EM&V. No evaluation, measurement and verification associated with it. It all relies on deemed values.

The Cycle 1 TDNSB percentage actually relies on a sharing percentage of net shared benefits from energy savings. And they have proposed a two-tier sharing mechanism, if you will, but basically all that does is address rate case timing issues principally.

But I want to get back to our concern. And I think Public Counsel, in their revised position statement, said it best and I'm quoting from it, The use of a TDNSB, throughput disincentive net shared benefit, in Cycle 1 that's what -- where it started --

has been a failed experiment and should not be repeated. Staff concurs wholeheartedly with that sentiment. I will continue to explain these differences as I move along.

I think though on this slide it's important to understand what we're talking about when we use the word "deem." To deem is to establish a legal fiction either positively by deeming something to be something it is not or negatively by deeming something not to be something which it is. Deem is useful, but it's dangerous. It creates an artificiality and artificiality should not be resorted to if it can be avoided. Now, that is from legislative drafting, second edition.

Black's Law Dictionary defines "deem" as to treat something as if it were really something else or it has qualities that it doesn't have. And Black's also cites to legislative drafting, second edition.

I just want to point out that when we deem energy values and do not follow up with EM&V, I think we're in a dangerous area for customers overpaying for these programs.

Now, with regard to the DSIM and the net throughput disincentive mechanism under the Non-utility Stipulation, the recovery is not accelerated. The Utility Stip wants and has provisions for accelerated recovery. The Non-utility Stipulation provides for a recovery as those energy efficiency savings are realized or as they occur. The recovery of assumed revenue shortfall is as again I said it, as it occurs and not accelerated.

There are still similar assumptions required in marginal rate, marginal avoided cost, marginal off-system sales margin increase, but Non-utility Stipulation does away with any assumption regarding rate case timing or rate case impact. And ever so important, from Staff's viewpoint, is that it -- the measurement of individual efficiency measure effectiveness is subject to after-the-fact auditing through EM&V; evaluation, measurement and verification.

Slide 16 is a chart that shows throughput disincentive recovery as a percentage of net shared benefit at the program level. Now, there's -- there's analysis here that I'm not going to get into it, but I will -- I will say that this analysis shows what I call as proof of law of unintended consequences.

And what this does is it shows that the Company has the ability to play the vendors in a way that bumps up or increases the dollars it recovers through the TDNSB. Now, Staff certainly supports efforts to manage vendors and to have a reasonable effort toward containing vendor costs. That's a good thing. But the unintended consequence of this -- of controlling those program costs moving -- increasing the net shared benefits of which the Company takes a portion of is simply not a proper result. Sarah Kliethermes can address that in greater detail for any questions you might have.

Slide 17 is a chart very similar that shows throughput disincentive recovery as a percentage of net shared benefit at the portfolio level for the Utility Stipulation. And to summarize this chart, it also shows an unintended consequence in that the utility has an incentive to gain the mix of programs in its portfolio because it can increase its throughput disincentive net shared benefit recovery.

That is to say, it can gain the mix of programs regardless of how eff-- even if they are similarly effective, it can gain the mix of programs and do that in a way that increases the pot of net shared benefits of which the Company takes a portion of under its TDNSB. Again, this is Sarah Kliethermes's analysis.

The DSIM throughput disincentive

accounting measure that Ms. Tatro referred to is an interesting one. The utility argues that accounting standards prohibit Ameren Missouri from booking throughput disincentive revenues when received if a true-up mechanism is applied. That true-up mechanism is an audit of EM&V after the fact.

The non-utility response is that Staff disagrees with this interpretation. There is no evidence that any other utility or commission has even considered or accepted this argument. The accounting standard at issue that we're talking about here is ASC 980-605-25.

Mark Oligschlaeger contends that the ASC standard at issue does not deal with booking revenues related to throughput disincentive recovery, but instead this accounting standard relates to the ability of utilities to book regulatory assets that are associated with throughput disincentive recovery. That's a very big difference.

Staff recommends that if the Commission gives any further consideration to the Company's argument in this matter, that it order the Company to provide additional evidence supporting its position and contention.

Staff and the non-utility parties in our stipulation have made a reasonable accommodation to Ameren's accounting concern by agreeing that the Company should recover and be able to book 66.67 percent of the deemed energy saving values of the efficiency measures. In effect, that creates a floor under which Ameren's recovery of throughput disincentive will not fall below.

The interesting aspect of the Non-utility Stipulation, in my view, and I think in the view of the parties signed on, is that it provides an opportunity for the Company to be able to recover up to 133.3 percent of the deemed energy savings if those savings are supported by EM&V after the fact. This means that the Company is not disincented to drive increased energy efficiency savings. I'll address that a little bit more.

Slide 19 is a chart on the net throughput disincentive recovery for measures installed January 1 in a 15-month interval between rate cases. Now, this chart is in Sarah Kliethermes's Rebuttal to Supplemental Testimony. It is an example of a residential measure that saves 100 watts of energy each hour installed January 1, 2016. This assumes that Ameren Missouri will have new rates going into effect 15 months after the last set of rates went into effect. So the net throughput disincentive is the dollar value of the money the utility does not make when it does not sell energy. This shows the dollar value of the money Ameren Missouri would not make by selling energy under this -- by not selling energy under this particular example of the 100 watts saved.

Ms. Kliethermes also has a chart, slide 20, which is the net throughput disincentive recovery for measures installed January 1 at a 15-month interval between rate cases. This particular chart shows what I have referred to earlier in my presentation in that you can see this very, very steep curve. Under Ameren Missouri's TDNSB mechanism, you can see the accelerated recovery of the throughput disincentive. The other curves represent the Non-utility Stipulation and Agreement in which there's actually two different alternatives that the Company could undergo. And I'll explain those.

The non-utility alternative number one recognizes Ameren Missouri's accounting concerns and Ameren Missouri can recover 66.67 percent of the NTD, or net throughput disincentive amount, each month as it's experienced and the rest will be recovered later; that is, the other 33.3 percent. That's alternative one. That means they can book two-thirds of the deemed value of these measures.

If EM&V proves out that the Company exceeded results -- exceeded energy efficiency savings above and beyond the level of deemed savings, the company will be rewarded up to 133.3 percent, subject again to EM&V.

Alternative two in the Non-utility Stipulation provides a way that will address any concerns regarding lag in that 100 percent of that -- of the deemed energy savings values will be collected up front, which is to say as it occurs, with one-third of that total amount subject to true-up within that 66.67 to 133.3 percent range. Again, that particular alternative number two should eliminate any concern the Company would have with regard to lag.

Ameren Missouri's mechanism, what Ameren Missouri would like, gives them 100 percent recovery on day one based entirely on a series of assumptions that the Company requests be deemed to be true in advance whether or not new rates go into effect sooner than was assumed, which is 15 months, and whether or not an individual measure performs at whether it's 75 percent of projected effectiveness or 120 percent of effectiveness.

Now, let me just make a real important

distinction here. Anyone that follows the news or media accounts with regard to -- and it's a controversial issue, as to what is the true savings achieved by these energy efficiency measures, there's articles out there that say, well, it's way less than what has been assumed or projected.

What Staff and -- and the Non-utility Stipulation does is that it provides that floor of 66.67 percent that the utility will recovery that level of deemed energy efficiency savings as it occurs. If EM&V came back -- those results became came back and the Company actually, through EM&V, says it only achieved 50 percent, the Company would still retain the 66.67 percent value.

Slide 21 shows three different bar charts that compares the portfolio benefit cost ratios, the residential benefit cost ratios, the business benefit cost ratios. Now, these bar charts are from John Rogers' Schedule JAR-2 of his Rebuttal to Supplemental Testimony. These are important because they are the benefit cost ratios when you include the cost to customers of the throughput disincentive and the performance incentive.

This analyses demonstrates that residential customers that do not participate in the programs will receive very little, if any, net benefits from the Utility Stipulation. And it's important to note that most customers do not participate in these programs.

Demand-side investment mechanism, again the performance incentive mechanism under the Utility Stipulation, as I mentioned, is energy related only. It has no regard for hour of use, no regard for the impact on future capacity needs. And by that, I'll explain.

Because the utility performance incentive is based on a fixed payout amount regardless of the actual capacity needs as the result of this 3-year cycle, the Company wants to be paid or -- as if this is a 20-year plan, but it isn't. It's a 3-year plan. And this is a matter that John Rogers and Sarah Kliethermes can address.

And also with regard to the energy related performance incentive mechanism, there's no lasting benefits for ratepayers and the environment required. And this is a concern that Staff has. The energy savings might appear to be short lived over a short period of time, but we have no confidence that it will stay along the long term.

The Utility Stipulation, as I mentioned, has no demand component and no participation component. I'll talk about that with regard to the Non-utility Stipulation. Under the Non-utility Stipulation, the Commission may order an energy-related component. And we have a provision for that in our stipulation in paragraph 7C. Again, there's certain weaknesses inherent in that energy related component.

I won't go back into those, but what we view as the value to the Non-utility Stipulation is that there's a demand-related component. In fact, it's set up in two different tiers. And by having a demand-related component to the performance incentive, we can take into consideration the regard for hour of use, the regard for impact on future capacity needs and lasting benefits for ratepayers and the environment from avoided investments or delayed investments in capacity improvements or supply-side investments.

Tier one is set up at 121,100 kilowatts. That number, as I mentioned earlier, was developed by John Rogers from Staff and Mr. Bob Willen from Ameren Missouri. It is in Appendix A of the Non-utility Stipulation. Tier one of the demand performance incentive provides that between the 121,100 kilowatts and up to a level of 834,000 kilowatts, the Company can receive $48 per kilowatt within that range. If the Company were to exceed 834,000 kilowatts, tier two kicks in and the Company would enjoy a demand-related performance incentive of $250 per kilowatt not to exceed 166,000 kilowatts.

I didn't mention it, but there is a participation-related component. That's going to be covered by Mister -- or Dr. Geoff Marke from OPC.

In closing, I'd like to make a couple comments. If the Commission approves a MEEIA Cycle 2 program, it should approve the program as modified by the terms and conditions contained in the Non-utility Stipulation. The Non-utility Stipulation provides a clear path forward for program years 2017 and 2018 to identify and implement improved strategies to boost energy efficiency and demand savings and to increase customer participation in these programs. And this is critical toward achieving the goal of all cost effective savings as required under the MEEIA statute.

Ever so important is the need to fix the throughput disincentive. The Non-utility Stipulation, by setting a floor of two-thirds or 66.7 percent and a ceiling of 133 percent, provides customers with protection from Ameren over-earning from the assumptions of deemed energy and deemed demand savings and if those deemed savings are higher than what are actually realized through EM&V. It protects customers by requiring after-the-fact audit of energy savings through EM&V.

The Non-utility Stip also provides an incentive to Ameren to drive these efficiency programs to produce verifiable energy savings that are greater than the assumed deemed savings. If the Company achieves greater savings than what are deemed, then the ceiling of 133 percent of deemed savings rewards the Company for exceeding demand savings targets.

The performance incentive component of the DSIM mechanism also provides a real opportunity for the Company to drive demand savings that reduce peak needs and reduce need for expensive investments in plant or supply-side capacity.

The performance incentive also incents the Company to work to improve customer participation in these programs. That is so very important. Because customers are paying the bill for these programs and right now most customers do not participate in these programs.

And lastly, the Non-utility Stipulation joined in and supported by the Staff, Public Counsel, Renew Missouri, MIEC MECG, and the Si-- excuse me, the Sierra Club provides the best path forward to have energy efficiency programs that safeguard Ameren Missouri customers and provides a reasonable balance of risk between the utility and its customers.

And I neglected to say something at the outset where Ms. Tatro had talked to a rebasing and annualization -- annualizing issue for rate case test period. That's not an issue as far as Staff is concerned. Staff agrees with the Company on that.

But having said that, that concludes my remarks. I'll answer any questions if you have them. Thank you.

JUDGE PRIDGIN: Mr. Chairman.

CHAIR R. KENNEY: Thank you. I was a couple minutes late walking back into the room when you began your opening, so maybe you addressed this already. But let's assume for the sake of argument that we agree with everything you just said and we approve the Non-company Stipulation. How do we compel Ameren to implement it when the statute requires that we approve something that's acceptable to them? And if it's unacceptable to them, what stops them from just discontinuing these programs altogether?

MR. BERLIN: The Company has the

prerogative to not proceed, that is correct. It is the view of Staff that what the terms and the conditions contained in the Non-utility Stipulation and Agreement provide to the Company a strong consideration of an earnings opportunity associated with a modified MEEIA Cycle 2 program that we believe protects the consumer, safeguards consumer interest and hopefully drives increased participation and balances risk between the Company and the consumer and removes the asymmetrical relationship that exists now.

So I think you may have not been in the room. I'll back up a minute and restate that the Commission does have the ability to approve a modified Cycle 2 program, but I do agree Ameren -- the Ameren executives would have to look at it and determine whether or not they want a MEEIA Cycle 2 program in their business portfolio. But we believe that this will provide a more than reasonable earnings opportunity for the Company. I hope I answered that.

CHAIR R. KENNEY: Not really. I mean kind of, but I mean the answer really is that they don't have to do it.

MR. BERLIN: That's correct

CHAIR R. KENNEY: So I mean, we can approve this and we can say all day long that we think it's better than the stipulation that they're trying to implement, that it provides them with adequate earnings opportunities, but they don't have to provide us a reason for disagreeing with it, do they?

MR. BERLIN: I don't -- I don't believe they have to. It's their prerogative.

CHAIR R. KENNEY: Totally discretionary. So we can agree all day long that the Non-company Stipulation is the better of the two. If Ameren ultimately decides that it isn't, that ends the inquiry. Right?

MR. BERLIN: If Ameren elects to do that, yes.

CHAIR R. KENNEY: All right. Let me just ask a broader policy question that I've asked each of the other parties. Does Staff have an opinion about whether some sort of decoupling mechanism is a better way to address the throughput disincentive?

MR. BERLIN: I think Staff believes that decoupling needs to be explored. And again, as the other attorneys have said, the devil is in the details with regard to how that decoupling would be implemented. But Staff is certainly willing to pursue that avenue.

CHAIR R. KENNEY: And just back to my

initial question, I mean, am I correct in my understanding that Staff has already examined the Non-company Stipulation and has -- I mean that Ameren has already examined the July stipulation and has determined that it doesn't approve of it or doesn't agree with it?

MR. BERLIN: Well, I listened to Mrs. Tatro's answer to your question and she referred you to Ms. Barnes' testimony, if I recollect correctly. I don't know if Ms. Barnes is in the position to make an executive level decision as to whether or not Ameren would forego the earnings opportunities associated with a modified MEEIA Cycle 2 program. I suspect that decision would be made at the highest levels of Ameren management.

CHAIR R. KENNEY: You guys depose Ms. Ta-- I mean Ms. Barnes?

MR. BERLIN: We did not.

CHAIR R. KENNEY: All right. That's all I have. Thank you.

JUDGE PRIDGIN: Mr. Chairman, thank you.

Commissioner Stoll?

COMMISSIONER STOLL: Kind of a basic question. You talked about participation in the Cycle 1 program by customer participation. Do you --

is there a number out there -- I don't know that I -- if you'd refresh my memory. Is there a percentage of participation that's been determined?

MR. BERLIN: I don't have the answer to that. I would have to probably go back to Staff to see what we do know about that, but I'm not aware of any.

COMMISSIONER STOLL: It could be one of the witnesses also. Yeah, I was just -- I was curious as to what the percentage of participation was and how that is determined. But thank you.

JUDGE PRIDGIN: Anything further from the Bench?

All right. Mr. Berlin, thank you.

Opening on behalf of OPC.

MR. OPITZ: May it please the Commission. Ratepayer impact and energy efficiency. Those are the two most important components of this case. And Ameren's proposal fails miserably at attaining either one of those. It also fails to follow the law. However, the Company's initial application is no longer its position. Several parties have signed onto a Utility Stipulation and now share a joint position that is even worse for ratepayers.

How did Ameren get anyone to sign on to

this bad deal? Well, prior to a MEEIA application, a company must have a market potential study. And what is that? Well, a market potential study establishes the parameters that make up the universe of actions a utility can take to further energy efficiency in a 3-year MEEIA cycle. Knowing this information, the company can then develop its plan of programs aimed at achieving the available energy efficiency.

Here, Ameren's potential study underestimated the available efficiency savings. Various parties have raised questions about the accuracy and the results of the market potential study. The environmental groups I think would all agree that the potential study was artificially low.

Then when Ameren submitted its initial application in December, it lowered the estimate of available efficiency savings even more. A skeptical mind might think the Company did this strategically, knowing that it would have to negotiate back up. If it artificially set the ceiling established by the potential study too low and then filed an application -- an even lower application, it wouldn't later find itself in a situation where it's throughput or performance incentive mechanisms are threatened because it couldn't perform.

Sure, the Utility Stipulation increases savings levels slightly to 583,000 megawatt hours. But with that increase, program costs bloat to $197 million. Over a 3-year cycle, that means program costs alone would be $65 million a year. To put that amount into perspective, the Ameren stipulation asks for a rate increase for program costs alone that is approximately one-half of the Company's increase in the most recent rate case.

Now, the MEEIA statute says that demand-side investments should be valued equal to traditional investments. And to do that, the Company should be able to recover money for three things: Program costs; the energy that it does not sell because of its energy efficiency program, called the throughput disincentive; and an earnings opportunity, which is called the performance incentive.

In exchange for the Company's slight increase in savings target, the Utility Stipulation signatories agree that Ameren should get a larger share of dollars for both the throughput disincentive and the performance incentive. The signatories also agree that the measure should have deemed values never to be trued up, measured or verified. And this slide indicates a -- a sentence that's in the Utility

Stipulation filed on June 30th.

Ameren insists on using deemed values for efficiency measure. A deemed value is the value listed in the technical resource manual for each energy efficiency measure, for example, a light bulb. That value represents what level of energy savings is possible for that light bulb. And associated with that energy savings is a dollar value for the measure. That dollar value is certainly dependent, in part, on the energy savings that the light bulb causes, because it is essentially the money that Ameren will not collect because the light bulb causes the customer to buy less energy.

Now, the MEEIA statute provides that the utility should be paid for cost effective, measurable and verifiable efficiency savings. The Commission's rules lay out a process for evaluation, measurement and verification of those energy savings. That process is called EM&V. And what EM&V does is try to figure out how much energy savings that light bulb I talked about actually caused. The value for a measure after EM&V is called the realized value.

And experience from Cycle 1, which is ongoing now, particularly with Ameren's light bulb program, tells us that using deemed values overstates the energy savings for each measure. If the energy savings are overstated, then the dollar value is overstated too. And even though we all know that the deemed value will change for both energy savings and the dollar benefit value, Ameren claims that accounting rules prevent any true-up after EM&V shows that the realized value is different. Staff witness Mark Oligschlaeger has offered testimony that Ameren's interpretation and application of the accounting rules is incorrect.

The Ameren stipulation is a bad deal for the environmental signatories and here's why: The energy savings target did not actually increase by as much as the signatories think it did. First, the Ameren stipulation includes CFL light bulbs in the portfolio. Public Counsel witness Dr. Marke has provided testimony, as did Ameren Missouri in this case, explaining why a CFL program is inappropriate.

One reason is that Ameren claims to have transformed the CFL market in its service territory during Cycle 1, and ratepayers have already generously compensated the Company for that transformation. Nonetheless, the Ameren stipulation includes $1.6 million in program costs for these bulbs. And the costs borne by ratepayers grows when one considers the throughput share and performance incentive share associated with the 27,000 megawatt hours of ephemeral energy savings from the CFLs.

Second, the Ameren stipulation attempts to transfer some of the savings associated with program expenditures in Cycle 1 into Cycle 2. This means that the Company is not starting Cycle 2 with a zero energy savings. The increase in energy savings targets includes potential savings that were already baked into the Cycle 1 scenario.

However, Ameren proposes to leave costs identified with that transfer in Cycle 1. And leaving behind those costs would mean that Ameren's increased throughput share would not be offset by those costs. This transfer, as proposed by the Company, does not incent them to achieve any more energy savings. Rather, it merely creates a cost mismatch to the benefit of the shareholders.

Third, the Ameren stipulation allows for public facilities to count towards the kilowatt hours savings goal. Those public buildings and associated energy savings are, by definition, free riders and, thus, should not be included by Ameren Missouri.

A free rider in terms of energy efficiency is someone who would have taken steps to be energy efficient absent the utility's program. In effect, the Ameren signatories are gifting Ameren $7.3 million in program costs and the dollars associated with 25,000 megawatt hour of energy savings for the public buildings.

Ameren Missouri customers should not be required to pay to improve public buildings through their utility bill. They already do so with their tax dollars. In other words, in exchange for a few more kilowatt hours of savings, those signatories are very generous with other people's money.

So why would these parties sign on to the Ameren stipulation? Perhaps because Ameren has threatened that it might not offer a MEEIA program if it does not get its way. Ameren will take its ball and go home.

On this slide is a portion of the testimony of Lynn Barnes where she says, Absent approval of a MEEIA plan that fulfills MEEIA's requirements, the Company will be left with no reasonable choice but to set aside its current plan to spend 135 million on energy efficiency over the next three years. She continues, I cannot predict what course of action the Company will take should the Commission not approve our plan as filed.

The fact is Ameren got a great deal in Cycle 1 because nobody knew any better. It was the first time. And having tasted such a sweet deal, the Company was never going to give it up without a hearing. And unfortunately, some parties capitulated to the Company's threats.

Perhaps they did not realize that deemed savings are not same as realized or actual savings, or worse, perhaps the signatories to the Ameren stipulation do not care that the savings will not be accurate. Experience from Cycle 1 tells us that deemed savings values benefits only the Company. Ratepayers are now and would be, under the Ameren stipulation, forced to pay Ameren for nonexistent energy savings. Recording and tracking phantom energy savings may further the goals of the signatories to the Ameren stipulation, but it is unjust to require ratepayers to fund that endeavor.

The use of deemed values is problematic for at least two reasons. First, from an energy efficiency standpoint. Ameren is not actually achieving its energy savings target. To the extent that the deemed value is greater than the measured and verified energy savings value, the Company is tracking phantom savings.

I would expect that the environmental groups would want to see results, not just track meaningless numbers. If they want to track these savings for some possible Clean Power Plan compliance, then they should want the values to be measured and verified. If not, eventually the chickens are going to come home to roost and people will say, well, wait a minute. We're in no better shape than we were before, except now we've given Ameren all of our money.

Second, from a ratepayer standpoint, using the deemed value means ratepayers will pay Ameren more money. And the problem isn't only that it's more money. It's that it's money for nothing. I explained earlier that there are three different cost components to fulfill the MEEIA statute and those are program costs, the throughput disincentive and the performance incentive.

Now I'm going to address all three, but since I'm talking about how deemed values means the ratepayers pay Ameren more money, I'll address the throughput disincentive first. Ameren's application and the Company's stipulation would use deemed measured values for the throughput disincentive just like they did in Cycle 1.

Now, this slide is taken from John Rogers's Surrebuttal Testimony and compares the value of deemed benefits for 2014 with the measured and verified benefits from that same period. As you can see, the deemed values -- deemed value benefit for the throughput disincentive in 2014 was approximately 184 million. But after EM&V, the realized value was only 90 million. This shows that the deemed values were way off. And remember that Ameren never wants to true-up this number.

This slide is also from John Rogers's Surrebuttal Testimony and shows how much money the company over-collected for the throughput disincentive piece in 2014.

So we take the deemed values and for the throughput disincentive piece in its first cycle, and again in its second cycle, the Company wants to use deemed values. And so for this, the Company is getting 26.3 percent of that first slide, which equates to about $48 million.

Now, after evaluation and measurement, it's been determined that 26-- the same percentage of the actual realized benefits is only $23 million. Thereby, the Company is actually over-collecting about $25 million never to be returned to customers. So that's almost $25 million over-collected from ratepayers in one year for only one piece of this cost recovery mechanism.

Let me point out a few other things in this slide for you. The 26.3 percent is what the Company's share of the dollar benefits is under Cycle 1. Even though it is now clear that the Company has over-recovered in its December application and now in the Ameren stipulation, incredibly Ameren has the audacity to request an even larger percentage of that number. Even though they've over-collected already.

So why does Ameren want to use deemed values? Well, it's pretty clear. Because it overstates the benefits and all but guarantees that Ameren over-collects millions of dollars from ratepayers.

It's not just a throughput cost recovery component that Ameren seeks to take more money from ratepayers; it's the performance incentive too. This earnings opportunity should be based on measured and verified energy savings. However, the Ameren stipulation includes Appendix B, which castrates the EM&V process and would likely result in Ameren getting credit for all efficiency measures at deemed energy savings and dollar values instead of measured and verified values.

As requested, the Company gets a performance incentive reward for achieving 70 percent of its already artificially low energy savings target. 70 percent is a C minus and that, in my mind, is underachieving. And when you reward someone for underachieving, they can be become entitled and petulant. You all know. The type of kid who threatens to take their ball and go home.

In Cycle 1 we have seen the performance incentive is full of controversy. The Staff has a pending complaint against Ameren alleging the Company is not properly calculating the dollar benefits attributable to its MEEIA programs. This winter Public Counsel disputed the Company's realized energy savings for the performance incentive. We also raised concerns about the proper dollar value benefits attributable to Ameren's programs. The Company requests to continue the same performance incentive mechanism, but here too requests a larger share of the dollar benefits.

The problems with the performance incentive are compounded when you consider that the energy savings target was likely underestimated. By setting low energy targets, Ameren sets itself up to collect a performance incentive of approximately $30 million without ever trying. When it achieves these low-hanging goals, assuredly the Company will welcome kudos and congratulations from whatever environmental parties are naive enough to believe the Company performed exceptionally.

The third cost recovery program is component costs and this too should be non-controversial. However, it appears that Ameren has found a way to game this component as well. Ameren overstates the program costs necessary to achieve energy savings target.

So why would Ameren overstate program costs? Because under this mechanism, for the two -- for the other two cost recovery components, the throughput disincentive and the performance incentive, Ameren gets a percentage of the net benefits amount. Ameren's percentage of the share of that amount is set at the time the program budgets are established. And so when calculating the net benefits amount, program costs are included as an offset. That's why it's called net benefits.

This means that if Ameren spends less of budgeted program costs, the Company gets to keep the same percentage of a larger pot of money. And the interplay between cost and benefits in the calculation is a reason why Ameren might over-project program costs. And by over-projecting in the application, Ameren sets itself up to collect a larger share of the net benefits from customers.

If we examine Cycle 1, we can see that Ameren's projected program costs have been vastly overstated. In Cycle 1, ongoing now, Ameren had an energy savings target of approximately 800,000 megawatt hour and a budget of $145 million. We know that Ameren has achieved savings of 692,000 megawatt hour by spending $76 million to date. In other words, Ameren has almost reached its target -- energy savings target by spending about half of what it projected.

Ameren's Cycle 2 application proposed spending $135 million to achieve 426,000 megawatt hours of energy savings. A budget of roughly the same program cost for half of the energy savings goal of Cycle 1. Worse, rather than improve the costs to energy savings ratio, the Ameren stipulation makes things worse. Program costs bloat to $197 million to achieve 580,000 megawatt hour of energy savings. Ameren has successfully figured out to game its current cost recovery mechanism to allow it to over-recover millions of dollars from ratepayers.

I'm putting up the MEEIA statute -- or relevant portions of it on the projector to talk about the ways Ameren's proposal is unlawful. Through its proposal, Ameren seeks to rewrite the statute omitting any ratepayer protection. Section 3 -- Section 3 generally describes the policy of the -- of the state to value demand-side investments equal to traditional investments in supply and delivery infrastructure.

At Section 3.2, the Company focuses only on the first half of the sentence, the utility's financial incentive. However, Ameren does not offer here a proposal that sustains or enhances utility customer's incentives to use energy more efficiently. The proposal is likely to cost ratepayers more than no program at all.

At Section 3.3, the impact of the Company's proposal would read the crossed-out section out of the statute. Ameren wants to recover deemed savings and only measure the realized savings on a prospective basis. Here too, the Company's proposal ignores the impact on customers.

Using deemed savings perversely incents the Company to pursue programs with high deemed values and low realized values. After all, the Company is still in the business of selling power. This does not enhance customers' incentives to use energy more efficiently.

At Section 4, the Company's proposal would require the words "all cost effective" be read out of the statute. Several parties have filed testimony that the Company is not identifying or proposing to identify all demand-side savings.

Remaining at Section 4, the Company's proposal ignores and would delete the words "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 is particularly true for low-income customers and residential customers.

John Rogers' Supplemental Rebuttal Testimony explains that there is a significant possibility, if not a probability, that little to no -- that little to no net benefits will be realized by the majority of residential customers who pay for programs.

For every one of these deletions, which one must do if willing to accept the Company's proposal, the consideration for ratepayers is dropped out entirely. The Ameren stipulation remains focused only on enhancing the utility's financial incentives to the detriment of ratepayers.

And the Commission, being charged with protecting ratepayers, should not follow the Company's disfiguring interpretation of this statute. Instead, the Commission should modify Ameren's unlawful proposal consistent with the terms of the amended Non-utility Stipulation.

Adopting the terms of the Non-utility Stipulation would authorize the Company to recover program costs, the net throughput disincentive and the performance incentive mechanisms that would form an alternative demand-side recovery mechanism. This alternative mechanism removes disincentives to Ameren's promotion of demand-side programs and would properly incent the Company to promote demand-side programs.

The first component is program costs. The Company should receive program costs roughly contemporaneous with the occurrence of those costs.

The second component is the throughput disincentive mechanism. The net throughput disincentive mechanism should make the utility indifferent as to any reduction in sales of energy because of program measures implemented under MEEIA. As such, through the throughput disincentive mechanism, Ameren Missouri should recover only the value of unrealized revenue caused by its MEEIA programs.

In order to accomplish this outcome, the terms of the amended Non-utility Stipulation and Agreement would allow Ameren Missouri to recover 66.67 percent of the product of the accumulated measure savings and the applicable unbilled per kilowatt hour amounts.

Then upon the conclusion of each program year, the realized kilowatt hour savings will be determined through evaluation, measurement and verification. After the determination realized kilowatt hour savings attributable to Ameren Missouri, the Company will potentially recover additional revenues up to 133.33 percent of the projected savings.

The third component of the alternative cost recovery mechanism is the performance incentive. Rather than adopting the Company's proposal for a single performance incentive that rewards the Company for achieving only 70 percent of an already low target, the Commission should adopt the alternative performance incentives that give Ameren an opportunity to earn significant rewards for achieving meaningful targets as outlined in the amended Non-utility Stipulation and Agreement.

The first component of the performance incentive is the demand-related incentive, which would be based on kilowatt savings associated with the installation of measures that impact future capacity requirements. The kilowatt savings target level to achieve a performance incentive is based on information provided by the Company.

This demand incentive -- kilowatt incentive contains two tiers. If the Company achieves 121,100 kilowatt savings, Ameren will receive an incentive equal to coincident peak kilowatt savings multiplied by $48 a kilowatt. For achievement of kilowatt savings that exceed 834,000 kilowatt, Ameren will receive a second tier demand incentive of $250 a kilowatt, not to exceed an additional 166,000 kilowatt.

The demand incentives described would give Ameren Missouri the opportunity to earn approximately $81.5 million. And although this amount is far greater than the performance incentive provided in the Ameren stipulation, the Company must actually achieve meaningful targets to earn this incentive.

Second, the amended Non-utility

Stipulation provides for a customer participation performance incentive. To encourage the Company to pursue programs that have broad customer impact and to ensure that low-income customers can also benefit from MEEIA, the customer performance -- customer participation performance incentive will be made available to the Company to include 5 percent of program costs associated with Ameren Missouri's custom standard or residential programs for multi-family low-income units and Ameren Missouri's multi-family low-income direct install program. Under this incentive, Ameren Missouri may earn an additional $537,500.

Third, a kilowatt hour incentive may be available. The stipulation of the non-utility parties provides a blueprint for stakeholders to work collaboratively and in conjunction with a panel of experts convened by a third-party mediator to identify and pursue additional energy savings. This is a benefit to the Company.

If, after determining that the additional energy savings are available and can be achieved, the Commission deter-- orders a change in the Company's kilowatt hour savings target for 2017 and for 2018, it may provide the Company a third performance incentive described here based on kilowatt hour savings achievement at the following amounts: $2 million at 105 percent achievement, $3 million at 130 percent achievement, and $5 million at 150 percent achievement.

In addition to establishing an alternative cost recovery mechanism that is fair to ratepayers and fair to the utility, the Non-utility Stipulation modifies Ameren's application in order to make progress towards achieving all cost effective savings as the statute requires.

The Company can achieve additional savings by adding multi-family low-income programs and a small business direct program to its proposal as filed in December 2014. Beyond the information that the Company has available to it now, however, additional cost effective savings and strategies may be available.

As I indicated earlier, the Non-utility Stipulation provides a blueprint for the Company to work collaboratively with stakeholders and a panel of experts convened by a third-party mediator to identify and recommend additional programs and possible increases in projected kilowatt hour savings for 2017 and 2018.

Importantly, I'll point out that the additional kilowatt hour savings that are identified would not increase the Company's performance target for its demand-related performance incentive. To reward the Company for its meaningful participation in identifying and implementing programs that increase the kilowatt hour savings, the amended Non-utility Stipulation provides that the Commission may approve an additional performance incentive based on change program kilowatt hour targets -- savings targets as explained earlier.

Of the two stipulations presented to the Commissioners today, only the amended Non-utility Stipulation removes disincentives to Ameren's promotion of demand-side programs, properly incents Ameren in the promotion of demand-side programs and balances the financial interests of ratepayers and Company while achieving verifiable energy savings and creating a pathway for more savings.

With the amended Non-utility Stipulation available, why would Division of Energy and NRDC continue to support the Utility Stipulation? Well, those parties made a deal that they cannot honestly say is better. They made a bad deal and they made it worse by including a promise to support that agreement in the stipulation.

Your decision is simple. If the Commission doesn't care about energy efficiency and if the Commission doesn't care about ratepayer impact, than the Ameren stipulation is fine. The Ameren stipulation, we will never know the energy savings impact; only some meaningless deemed number. With the Ameren stipulation, we keep the same flawed cost recovery mechanism that caused ratepayers to overpay millions of dollars.

But I don't think you want that. If you do care about achieving verified and meaningful energy efficiency savings and if you do care about ratepayer impact and if you do care about following the law, then Ameren's proposal should never be considered. However, if you care about the verified and meaningful energy efficiency savings and you care about ratepayer impact and you care about following the law, and I believe that you do, then you should issue an order adopting the terms of the amended Non-utility Stipulation and Agreement. Thank you.

JUDGE PRIDGIN: Mr. Chairman, anything?

CHAIR R. KENNEY: Mr. Opitz, thanks. I think I was with you up until the very end on some of your points and I appreciate your passion. But isn't -- at the end of the day, doesn't your opening statement really just point out the flaws in the statute? And what I really mean is that, I mean, if we approve the July stipulation -- I'll call it the July stipulation, the Non-company Stipulation, use those interchangeably -- and Ameren disagrees with it, then there's no MEEIA offering at all. Correct?

MR. OPITZ: If Ameren chooses not to offer one, then there is no MEEIA offering, yes.

CHAIR R. KENNEY: So then let me ask you this question: Is it then OPC's position that is something better than nothing or is nothing better than the June stipulation?

MR. OPITZ: Our position is that to accomplish balancing the interests of the Company and the ratepayers and promote energy efficiency, the amended Non-utility Stipulation accomplishes all of those. Now --

CHAIR R. KENNEY: I get that.

MR. OPITZ: -- I understand the Company --

CHAIR R. KENNEY: I get that. But let's take the Company at face value that it's not going to offer anything if we approve your stipulation. Is it your position then that something -- or that nothing at all is better than the June stipulation?

MR. OPITZ: There may be something besides the amended Non-utility Stipulation that's out there. But the June stipulation offered by the Company is unacceptable to Public Counsel and if that were the only option, we would rather there be no program.

CHAIR R. KENNEY: All right. Well, that's fair enough. So let me ask a few more questions. I mean, so the -- OPC's problem with the use of deemed values, the deemed values comes from Technical Resource Manual?

MR. OPITZ: As I understand, yes.

CHAIR R. KENNEY: And it's Ameren's Technical Resource Manual. Right?

MR. OPITZ: Yes.

CHAIR R. KENNEY: So is your concern then -- let me ask if -- I'm going to restate your concern. Would it be better than to have a Statewide Technical Resource Manual that specifies certain deemed values for certain things?

MR. OPITZ: Well --

CHAIR R. KENNEY: This is a policy question.

MR. OPITZ: I think that the Commission's rules do provide that there should be a Statewide Technical Resource Manual and so we should pursue that. However --

CHAIR R. KENNEY: Would that alleviate your concerns about having deemed values come from the utility-specific TRM?

MR. OPITZ: Not entirely. We -- our office would still believe that those values should be measured through the EM&V process and subject to a determination of what the realized energy savings and dollar benefit were.

CHAIR R. KENNEY: So the deemed values, even from a statewide TRM, would still just be a starting point subject to some type of true-up or EM&V process?

MR. OPITZ: Yes.

CHAIR R. KENNEY: Okay. And then the market potential study that OPC says overstates or has overstated some of the values that Ameren relies upon, would that also be obviated or alleviated by having some type of market study done by the Energy Division or by the Commission?

MR. OPITZ: I would think a statewide or otherwise Missouri-specific potential study that everyone -- every Missouri utility could use would probably alleviate some of the concerns. And I think that's part of what we were hoping to address with the panel of experts convened by a third-party mediator is that they would be able to look at that potential study and say well, you did this in the potential study, maybe you shouldn't have made that adjustment.

And since it's a panel of experts rather than, you know, one party or the other saying something, then we think that that would have more weight and be a great resource for -- for this company and for its ratepayers.

CHAIR R. KENNEY: So if we approve the Non-company Stipulation, the July stipulation, and then Ameren says well, we can't agree to these -- to this stipulation, we're going to take our ball and go home, we're back at the beginning, we're back at the drawing board. Right?

MR. OPITZ: I think ultimately, yes. But -- but the benefit would be an order telling Ameren that something along the lines of what they're proposing now is unacceptable. And they can take that back and if they need to -- and they're unwilling to accept the Non-utility Stipulation, they can re-design something consistent with the statute and with whatever the Commission may order.

CHAIR R. KENNEY: Is there any possibility of the parties getting together and trying to hammer out these details any more? Is that -- have we exhausted all those possibilities? And the thing I'm thinking about specifically is the EM&V and the difference between deemed values and actual realized savings, on that -- just that component.

MR. OPITZ: Mr. Chairman, I -- you know, I can't speak for everyone, but I think our office is always willing to talk with other parties and see if we can reach an agreement.

CHAIR R. KENNEY: Okay. Thank you.

COMMISSIONER STOLL: No questions.

JUDGE PRIDGIN: If there's nothing further from the Bench --

COMMISSIONER RUPP: I want to know how he really feels.

JUDGE PRIDGIN: Mr. Opitz, thank you.

Renew Missouri, Mr. Linhares.

All right. I'm going to -- I think we're going to have to break just so the Commission can get to the true-up hearing KCPL -- we're trying to accommodate two hearings at once. And so Mr. Linhares, I apologize. I think we're going to break for lunch before we get to your opening. And I believe we will be at lunch until 12:45.

Is there anything further from counsel before we go off the record? All right. Hearing nothing, we will resume with opening statements beginning with Renew Missouri and we will stand in recess until 12:45. Thank you. We're off the record.

(DE Exhibit Numbers 200, 201, and 202 were marked for identification.)

JUDGE PRIDGIN: All right. Good afternoon. We are back on the record. We are set to continue opening statements I believe beginning with Renew Missouri. That's my recollection. Somebody correct me if I'm wrong. Okay. And do we have anything else from counsel before we go on to more opening statements?

All right. Mr. Linhares, I believe the floor is yours when you're ready, sir.

MR. LINHARES: May it please the Commission. My name is Andrew Linhares and I will be giving the opening statement for Renew Missouri. I'm here today to articulate Renew Missouri's position on Ameren Missouri's proposed energy efficiency plan and to clarify what it is we're requesting from the Commission.

Under the MEEIA rules, as we've heard

today, the Commission has -- the Commission has three options when it has received an application for approval of demand-side programs. The Commission may approve, the Commission may approve with modification acceptable to the utility, or the Commission may reject.

Today we are asking that the Commission pursue this second option, approve with modifications. We're asking that the Commission pursue this second option rather than outright approval or denial. We think the Commission should select from the menu of options presented to it through these two stipulations that have been filed thus far.

Later in this case I'll touch upon some of those options, but first I'd like to provide some context for where our state is in energy efficiency and the implementation of the MEEIA statute. The MEEIA statute sets up a dual framework with two primary aims. The first one is to value demand-side investments on par with traditional supply side and infrastructure investments. The second one, of course, is to achieve all cost effective demand-side savings.

So taken together, these twin aims mean that we should allow utilities to recover full costs and lost revenues and to turn a profit, but only where the utility has set a goal of achieving all cost effective savings. And it's important for the Commission to keep these two statutory aims in mind when deciding which pieces and which menu items from the two competing stipulations to approve.

It's important also to remember the character of the resource we're dealing with here. Energy efficiency is repeatedly shown to be both the lowest risk and the lowest cost resource available to utilities. In other words, it's arguable that utilities should already be heavily invested in energy efficiency even absent incentive, since it is literally true that an investment in anything else is a riskier and more costly investment. This is taken from a report by Ceres and the Regulatory Assistance Project in November 2014.

Furthermore, energy efficiency will be an essential non-negotiable resource in the near future for our state and for the country as a whole. With or without MEEIA, utilities will be pressured to pursue energy savings and demand reduction. This pressure will come from federal regulations on carbon and other air pollutants as well as from the public and consumer groups who will oppose further fossil fuel-based rate increases.

The MEEIA statute grants utilities one of the nation's most lucrative incentives for pursing energy efficiency. Renew Missouri is strongly in favor of this framework because it can remove inherent disincentives and make the utility a partner in reducing fossil fuel use.

However, if we're going to allow utilities such a good deal simply for making the lowest risk and lowest cost investments that they arguably should already be making, then it is entirely appropriate that the Commission establish some reasonable ground rules for implementing demand-side programs under MEEIA, particularly when those ground rules are supported by the MEEIA statute itself. Now, this case offers the Commission a perfect opportunity to establish those ground rules. And we -- Renew Missouri believes we shouldn't waste that opportunity.

If utilities decide not to pursue energy efficiency under MEEIA as a result of the Commission sticking to its guns on some of these principles, then that is their prerogative. Chairman Kenney has asked a lot of questions about this -- this conundrum. It's absolutely the utility's prerogative.

Utilities can either make money on energy efficiency through MEEIA today or they can be forced by circumstance to invest in energy efficiency tomorrow without the ability to earn tremendous profit for their shareholders. So we would encourage the Commission to establish these ground rules now and put it in the Company's court to later decide whether they want to make money on energy efficiency or not.

So long as the Commission is holding fast to reasonable principles authorized under the statute and is offering the utility a chance to turn a profit on energy efficiency, I can't see a reason why the utility would then withdraw any plan and not pursue energy efficiency under the MEEIA statute. I think so long as the Commission meets that -- that criteria, the Company is going to want to be at the table and make some money from energy efficiency from this essential resource going forward.

So Renew Missouri believes that the Non-utility Stipulation and Agreement to which we're a signatory presents three options for modifying and drastically improving Ameren Missouri's application. First, the stipulation provides Ameren Missouri with a demand-side investment mechanism intended to hold the utility harmless for its lost revenues. This is accomplished through verification of actual kilowatt hour -- kilowatt hours of energy saved.

Now, obviously this distinction here is whether or not to verify those savings through EM&V. And we're going to hear a lot about that from witnesses from Staff and from the Public Counsel on that topic.

I should note here also that Renew Missouri strongly prefers decoupling to the two DSIM mechanisms or the two DSIM frameworks proposed in this case. On that we share the opinion of NRDC and Sierra Club, as well as possibly Ameren Missouri, possibly Staff and Division of Energy who appear to be open to this as well, so that's worth noting.

The second option that the Non-utility Stipulation offers to the Commission to adopt is that it provides the Company with a well-rounded performance incentive meant to encourage real, long lasting energy and demand savings. You heard Staff counsel Bob Berlin discuss the multiple performance incentive components that incentivize different aspects of energy efficiency programs, not simply a pure kilowatt hour incentive.

Finally, the stipulation presents the only workable path forward for identifying additional cost effective savings, a mechanism by which the

Commission can approve new targets and a financial incentive for the Company to go out and capture those additional savings. So we will hear in this case from witnesses from Staff and Public Counsel on these first two -- these first two key elements. So I won't go into further detail there.

But the third option represents the main reason that Renew Missouri is a signatory to the Non-utility Stipulation and it reflects our primary interest in this case: This workable path forward for identifying additional cost effective savings and providing a way to incent the utility to get these additional savings.

You might be asking yourself -- some people in this room might be asking themselves why Renew Missouri, a energy efficiency advocate, is supporting a stipulation with a lower savings target than the alternative. I'll do my best to explain that. I believe Tim Opitz gave some background -- background for why that might be a motivation.

But Renew Missouri and a majority of the other parties in this case have continually taken issue with the extremely low savings target in Ameren Missouri's plan ever since the publication of the Company's 2013 market potential study.

If approved, Ameren Missouri would be able to reap a sizable reward for capturing only about .4 percent or .5 percent savings over three years, which is far below what similar utilities across the country have accomplished easily even with minimal incentive.

As identified in the Rebuttal Testimonies of NRDC witness Phil Mosenthal, Sierra Club witness Tim Woolf, and Public Counsel's witness Dr. Geoff Marke, a key driver for this low savings target is the potential study's assumptions about customer participation rates or adoption rates. And I expect we'll hear a lot of testimony on this issue.

Assuming higher participation rates would have the effect of drastically increasing Ameren Missouri's realistic achievable potential scenario and could also reduce -- crucially, could also reduce the cost per kilowatt hour of savings to a large extent.

Now, Ameren Missouri has shown little flexibility in revisiting these participation rate assumptions, despite repeated concerns from numerous stakeholders. It is this central issue that the Non-utility Stipulation attempts to solve with the so-called expert panel proposal. And that's what Renew Missouri's chief focus is here in becoming a signatory to the Non-utility Stipulation.

So here's the language from the expert panel proposal language from the Non-utility Stipulation. Paragraph 2D of the stipulation lays out the basics of the proposal which is supported by the Supplemental Direct Testimony of Public Counsel witness Dr. Geoff Marke. Essentially the idea here is a third-party mediator selected by RFP through cooperation between the Company and Staff would be tasked with putting together a small panel of representative experts, experts in this area, particularly the area of participation rate assumptions in potential studies.

This panel's main focus would be to develop an estimate of achievable potential, after examining the participation rates issue and other relevant data. That estimate would then inform the third-party mediator's recommendation to the Commission for a new kilowatt hour savings goal for years 2017 and '18. The Commission would then have the choice of approving new savings targets as well as an additional kilowatt hour based performance incentive to encourage the utility to meet the higher goals.

Now, it's important to note here that

this expert panel process would in no way force Ameren Missouri to accept or agree to the conclusions of the expert panel. It merely provides a way to reach a stronger consensus on this extremely contentious issue on the level of potential that exists. And it also offers the utility an opportunity to earn additional profits.

The parties basically all -- all agree in engaging on the -- on pursuing the process that is shared in both stipulations of the parties convening, coming together and working on strategies to increase savings with the existing programs. That's found in both stipulations. So at a minimum, we think the Commission should take that piece and look at it and approve it.

However, crucially while Ameren Missouri's stipulation includes this similar language, Renew Missouri believes that the additional expert panel concept is necessary in order to provide a workable mechanism for legitimizing and approving a new savings target.

Now, given the very low savings target in both stipulations and the high level incentive being requested here, Renew Missouri sees the expert panel proposal as the only way forward really to reach a reasonable compromise for identifying additional savings in the future and incenting that additional savings. Without some way to identify and capture significantly more savings, Ameren Missouri's plan will fall short of the MEEIA statute's goal of capturing all cost effective savings.

Now, a few of the Commissioners were not present. I started off by saying that -- by recapping the twin aims of the MEEIA statute, which is both to value demand-side investments on par with traditional supply-side resources, but also to capture all cost effective demand-side savings. So unless those two goals are met, we're not really pursuing what the MEEIA statute is intended for.

We see the expert panel as a decent compromise. It is not a compulsory mechanism for the utility. It's a way to shed further light on a very contentious issue surrounding participation rates and would give the Commission wide discretion on how to proceed after that panel delivered its recommendation.

Again -- and Chairman Kenney, I know you've had a lot of questions around this issue. The MEEIA law is not compulsory. It is up to the -- it is dependent on the agreement of Ameren Missouri.

We really believe that this case is a --

it's an opportunity for the Commission going forward to establish some basic ground rules for how the state of Missouri is going to pursue energy efficiency. So that means standing up for things like doing EM&V to figure out exactly how much energy is being saved so we're not allowing the Company very obvious over-recovery, which we've seen in previous cases. That's a principle that the Commission can stand for today.

We would ask that the Commission stand for those principles and then give it to the Company to decide whether they approve of what the Commission decides. I would ask the Commission to refrain from treating Ameren Missouri's representations of non-agreement as final positions, because we believe the utility does want to turn a profit from energy efficiency and a few reasonable tweaks to how we're doing energy efficiency shouldn't change their -- their eventual desire to turn a profit.

So we encourage the Commission to view the expert panel as a separate menu item that can be approved to modify Ameren Missouri's plan, apart from the DSIM, apart from the performance incentive. We believe a lot of these pieces separately and together would drastically improve Ameren Missouri's plan, but we certainly want to encourage the Commission not to view this as a binary decision, but as a menu of items that it can look at for approval.

So those are my prepared remarks at this point and I'd be happy to answer any questions. Thank you.

CHAIR R. KENNEY: Mr. Linhares, just a couple. Thank you. So at the beginning of your opening statement you said that we had three choices, second of which was to approve a modified MEEIA filing. But you -- prior to that, you acknowledged the fact that the second option really requires Ameren's acquiescence of approval.

MR. LINHARES: Yes.

CHAIR R. KENNEY: So is the second option really a legitimate option if Ameren has indicated that it doesn't approve of the modified stipulation?

MR. LINHARES: Yes. This is what I was trying to indicate there at the end of my statement. I think this is an excellent opportunity for the Commission to -- I don't want to say stand up or -- or oppose the Company, because the Company's the one doing the energy efficiency programs and they should be commended for the success they've had in Cycle 1.

But there is a better way to do energy

efficiency. And there is a more cost effective way to do energy efficiency. There is a -- especially in regards to how much incentive we're giving the utility. And the Commission, I don't believe, should feel -- they should not feel shy for standing up for these basic principles.

Now, in terms of the logistics of how it works, Ameren Missouri is saying that all of the provisions just across the board are not acceptable to them. I would ask the Commission to wait until it's decided on the best approach on all of these issues to give it to the Company, to put it in the Company's court to see if they still have an interest in pursuing energy efficiency and still pursuing a profit in the energy efficiency sector.

I be-- I suspect that the Company would like to make money from energy efficiency, regardless of whether the Commission stands up to them on a few DSIM and performance incentive and expert panel issues here and there. I believe the Commission has the authority to decide what is allowed under the law, what is prudent under the law. So that's a bit of a difficult problem I see that you're presenting, but --

CHAIR R. KENNEY: So -- yeah. You're essentially saying we should go ahead and approve modifications and assume that Ameren's going to want to go through with this anyway because they're making money off of it even if it's not exactly what they've proposed.

MR. LINHARES: I would think it would be -- I would think it would be possibly -- I think the right word is spiteful if the utility doesn't want to pursue energy efficiency because it's not getting its way on a few things. As we know, the utility is earning tremendous profit from energy efficiency already. They surely expected that that couldn't have lasted. We had to come here to hearing in order to get these issues aired.

I think it's up to the Commission now to decide whether to continue giving the Company that very lucrative package or to start establishing some basic standards of implementation here for this law.

CHAIR R. KENNEY: Okay. And that's fair enough. Let me ask you some of the same policy-related questions I've asked the other parties. As a general proposition, does Renew Missouri have -- I mean do you see that some of the things that you're identifying are flaws in the statute itself that would perhaps necessitate statutory revisions, particularly the fact that the statute's voluntary?

MR. LINHARES: I don't think they're lethal flaws. I think there are several things Renew Missouri would prefer. I -- Renew Missouri -- it's probably no secret. We would strongly prefer a mandatory energy efficiency resource standard. We think -- we think that because it's the lowest risk and lowest cost resource, the utilities should be required to do it. This is the best decision for their shareholders, for their customers.

It is identified in Ameren's own IRP methodology as the best scenario to pursue; in fact, a much higher level of energy efficiency is identified as a superior scenario. So we believe energy efficiency should be mandatory, but obviously is not in the MEEIA statute.

But that being said, we think there's plenty of justification for the modifications we're asking for here in the -- in the current statute.

CHAIR R. KENNEY: And then how about Renew Missouri's position on decoupling? Do you -- does Renew Missouri have a position about whether that's a better mechanism for removing the throughput disincentive?

MR. LINHARES: Absolutely. I think you may have missed when I touched on that, but Renew

Missouri strongly prefers decoupling to the two DSIM proposals that have been offered. We think it would cut down on a lot of the controversy here.

The principle that we all sort of agree on, that we give lip service to, is the utility should be held harmless for the kilowatt hours it doesn't sell due to energy efficiency. And the way to do that -- the cleanest way to do that is decoupling, we believe. We think that would be a major step forward for our state.

CHAIR R. KENNEY: That's all the questions I have. Thank you.

JUDGE PRIDGIN: Mr. Chairman, thank you. Anything further from the Bench?

COMMISSIONER STOLL: No questions. Thank you for your testimony.

JUDGE PRIDGIN: All right. Very good.

Next would be MEIC. Mr. Downey, when you're ready, sir.

MR. DOWNEY: Good afternoon. Ed Downey for the MEIC. The MEIC has a very limited role in this case and it was my intention to have no opening statement. However, there have been so many questions about decoupling, I feel compelled to point the Commission to Mr. Brubaker's testimony, Surrebuttal, pages 7 through 9 where he explains why decoupling is bad.

One of the things he mentions is even assuming it were lawful, he has policy concerns. And the policy concerns were that decoupling shifts the risk from shareholders to ratepayers, it provides -- I won't say a disincentive, but less incentive for the utility to bring plant back online when it's down and it makes the customers' bills volatile.

And I would say that on the legal side, which Mr. Brubaker does not get into, the law says the Commission is supposed to set the rate to be charged. And I don't believe you're doing that when you decouple.

Now, Mr. Brubaker also addresses a number of other things. RAP should be used rather than MAP; Realistically Achievable Potential rather than Maximum Achievable Potential. You should use the total resource cost test rather than the utility cost test. And then as I indicated, you should oppose decoupling. That's really all I have. Be happy to answer any questions.

JUDGE PRIDGIN: Mr. Chairman?

CHAIR R. KENNEY: I don't have any questions. Thank you.

JUDGE PRIDGIN: Nothing from the Bench.

MR. DOWNEY: Thank you.

JUDGE PRIDGIN: Thank you.

MECG? Mr. Woodsmall said he might be gone.

Sierra Club. When you're ready, ma'am.

MS. TAUBER: Good afternoon, Your Honor and Commissioners. My name is Jill Tauber for Sierra Club. And as this is my first time appearing before the Commission, I'd like to thank you very much for having me.

Sierra Club intervened in this case to promote and advance the pursuit of all cost effective efficiency. And the goal here is to secure a savings level from Ameren that moves in this direction. Sierra Club takes this position because energy efficiency is the cheapest, the least risky, cleanest energy resource.

And when viewed as a resource, such as in integrated resource planning processes that the Company has done, the results reflect that portfolios with more energy efficiency lower the revenue requirement for the Company, proving that energy efficiency is a good deal.

Now, by using less energy and reducing

our demand, we can lower our electric bills, we can reduce the need to build and retrofit power plants, which ultimately reduces rates in the long term as well and that benefits participants and non-participants alike. For this reason, energy efficiency is a key part of meeting future energy needs.

Now, all cost effective energy efficiency reflects the underlying goal of MEEIA, which Sierra Club strongly supports. We also strongly support the familiar three-legged stool of cost recovery that MEEIA outlines. And that's program cost recovery, the removal of a disincentive to pursue energy efficiency, as well as performance-based incentives.

Now, while these components may not be particularly divisive at a general level, this and other recent cases before the Commission make clear that designing at least two of the three legs of this stool can be quite controversial. And on that piece, I would like to pause and just maybe anticipate and answer a question with respect to one of those legs on the issue of decoupling.

Sierra Club does believe that if done properly, full revenue decoupling with consumer protections would eliminate the need for a throughput disincentive and all the controversy that those proposals have brought with it. Sierra Club witness Tim Woolf has spoken to this issue in another case recently at the Commission and NRDC witness Mr. Gupta has spoke to it in this case as well.

So where are we now? The Commission has two non-binding multi-party joint positions before it. Sierra Club supports the non-utility proposal. But let me say this up front: Sierra Club does not believe that either of the joint positions includes savings targets that are even close to what Ameren could and should achieve over the next three years.

Now, this gets a little complicated so I'm going to kind of walk through it slowly, but understanding that a lot of this has been covered by counsel before me. Ameren's proposal does include more gigawatt savings than the non-utility plan, and by some counts, is 30 percent higher than its initial filing. However, to call this 30 percent increase growth, as Company counsel did, is -- is incorrect.

This -- the level of savings that Ameren now proposes in their stipulation amounts to more than a 25 percent cut from Cycle 1 targets and more than a 40 percent cut from what Cycle 1 is projected to save.

These overall reductions, despite

Ameren's recent increases are due to the incredibly low starting point that Ameren came to the Commission with in this filing. The Company's proposal, with its incredibly low starting point, is the result of several efficiency analyses; the potential study, the IRP and then program planning.

And as Sierra Club witness Tim Woolf, a former Commissioner, will tell you and as others will explain, at each step of these analyses, at the potential study, at the IRP and at the program planning, Ameren chipped away at its savings potential we would argue based on flawed analyses and flawed assumptions.

Now, Mr. Woolf further provides his recommendations in testimony as to the level of savings that the Company should be pursuing, which is more than double what's on the table right now and how it can modify its plan to achieve them. Now, Mr. Woolf's recommendation and similar recommendations of NRDC witness Phil Mosenthal, that's where we want to get to.

So the question is how do we get there. And as a result of the low level of savings that are on the table right now, Sierra Club's view, very similar to that of Renew Missouri, is that it is critical to determine how to increase savings going forward during the life of this three-year plan. And only the Non-utility Stip creates a path forward to do so. It does this in part by proposing the expert panel that Mr. Linhares just talked about, a process to address savings generally, and also to particularly focus on a key element of the savings estimate which is participation rates. Through this process, savings in 2017 and 2018, two-thirds of the plan, could increase along with a energy performance-based incentive.

On the DSIM, Public Counsel and Staff will speak to -- testify to that at great length. I'll just briefly note that only the Non-utility Stipulation calls for savings that are fully measured and verified to compensate Ameren while also ensuring that consumers are getting the full value of energy efficiency.

Now, I also want to be clear, we understand as well that MEEIA is permissive. Sierra Club wants Ameren to offer energy efficiency programs for the benefit of customers, for the benefit of the utility system and for the benefit of the environment. And our goal remains for Ameren to offer a plan that demonstrates a commitment to achieve all cost effective efficiency. And in our view, the Non-utility Stip provides a path forward to do that.

So I will stop there and just happy to take any questions and would also encourage the Commission to ask questions of Sierra Club witness Tim Woolf who will be testifying tomorrow.

JUDGE PRIDGIN: Ms. Tauber, thank you. Mr. Chairman?

CHAIR R. KENNEY: Just very briefly. Thank you. You already anticipated my question. You mentioned your witness will be able to testify -- or was it Mr. Gupta that testifies about decoupling?

MS. TAUBER: Yes. Mr. Gupta testifies in this case. And I just referenced that Sierra Club witness Tim Woolf I believe recently presented testimony in another case about the same issue.

CHAIR R. KENNEY: So here's my question for you -- and if I should direct it to them, let me know. But just generally speaking, you referenced that decoupling, if done properly, is the most effective way to deal with throughput disincentive and then you mentioned with proper consumer protections. Just what are those consumer protections?

MS. TAUBER: Yes. And if I might, I think that would be the perfect question for Mr. Woolf as well as Mr. Gupta to put those in place to ensure that full revenue decoupling achieves its goals. But if done properly, we strongly believe that that type of mechanism is far preferable to the TDNSB, which is I would guess -- I would say the most controversial element in these MEEIA plans.

CHAIR R. KENNEY: Is that one of the reasons why decoupling is preferable, because the measurement of the TDNSB results in more litigation and controversy?

MS. TAUBER: I think the complexity of the TDNSB is a part of why looking for a simpler way to sever the tie -- or in this case to make the utility whole and to make them indifferent to pursuing energy efficiency, I think that is definitely an attribute that favors decoupling, but there are also other pieces of it that favor revenue decoupling apart from efficiency.

But certainly with respect to efficiency, you know, the TDNSB, they're very complicated mechanisms, as I know the Commission is well aware from the two proposals before it. And our contention is if you are going to do a TDNSB, to do it right you absolutely need rigorous evaluation, measurement and verification. And that is completely absent in the

Utility Stipulation.

CHAIR R. KENNEY: Thank you.

COMMISSIONER STOLL: No questions. Thank you.

COMMISSIONER KENNEY: No questions. Thank you.

JUDGE PRIDGIN: Ms. Tauber, thank you very much.

I believe next would be National Housing Trust. And Mr. Linhares, will you let me know -- are you combining openings with Tower Grove or are you going to have separate openings?

MR. LINHARES: Yes. I plan to do so.

JUDGE PRIDGIN: All right. Very good. When you're ready, sir.

MR. LINHARES: May it please the Commission. My name's Andrew Linhares. I'm separately representing the National Housing Trust and Tower Grove Community Development in this case. I'm going to keep my opening statement very brief, as I know you've all already heard from me today.

The National Housing Trust is a national non-profit engaged in the preservation of affordable and low-income housing whose work includes -- whose work also includes expanding access to energy efficiency programs and measures for multi-family and low-income residents across the country.

Along with the Natural Resources Defense Council, NHT has facilitated meetings of stakeholders from Missouri and Illinois aimed at identifying best practices program designs to help low-income and multi-family customers gain better access to utility-sponsored energy efficiency programs.

Tower Grove Neighborhood CDC is a non-profit neighborhood development organization which promotes responsible development and affordable housing and serves as a resource to neighborhood residents, buyers, renters, developers and business owners in the neighborhoods surrounding Tower Grove Park in south St. Louis City.

Now, NHT and Tower Grove are not signatories to either the Ameren stipulation or the Non-utility -- the July stipulation. The parties' concern in this case are preliminarily limited to programs and measures affecting multi-family and low-income customers.

The populations that this program seeks to serve are groups who have been traditionally overlooked or neglected due to an issue known as the split incentive that has been well documented in this case and elsewhere. NHT and Tower Grove have been in close collaboration with Ameren Missouri in the development of the multi-family low-income program proposal laid out in the Ameren stipulation. In addition, NHT and Tower Grove have worked closely with the signatories to the Non-utility Stipulation to ensure it include -- it included adequate provisions for the multi-family low-income program.

NHT and Tower Grove have purposefully refrained from signing on to either stipulation in order -- in order to maintain neutrality and stay focused on the points of consensus that have emerged between the two sides on this issue.

Now, this area of the case presents the Commission with a rare instance where there is almost complete agreement between the parties. Both stipulations that have been filed include significant program offerings for multi-family and low-income customers. Both include a three-year program budget of roughly $10.7 million. They include an establishment of a one-stop shop coordinator position with the utility, which will be a single point of contact for all low-income customers and measures. They -- both stipulations expand program eligibility significantly and both include a 25 percent bonus incentive for low-income customers, among other program details.

NHT and Tower Grove request that the Commission at a minimum approve a program for multi-family and low-income customers that includes the program details on which all parties to this case have agreed to already.

Now, the preceding being said, there are certain differences between the two stipulations with respect to the multi-family and low-income program. The Non-utility Stipulation clarifies certain eligibility requirements for the 25 percent bonus incentive and requires the inclusion of estimated measure cost information in audit reports as per standard industry practice.

The Commission will have the opportunity to hear from NHT witnesses and Annika Brink and Tower Grove witness Dana Gray on Wednesday regarding their opinion on these two stipulations, as well as the other issues in this case. And I encourage the Commission to ask those witnesses questions about their opinions on how both stipulations deal with this program.

So that concludes my remarks on behalf of National Housing Trust and Tower Grove Neighborhood

CDC, and I yield for questions.

CHAIR R. KENNEY: No questions. Thank you.

COMMISSIONER STOLL: No questions. Thank you.

JUDGE PRIDGIN: Mr. Linhares, thank you.

Brightergy, Mr. Zellers. When you're ready, sir.

MR. ZELLERS: Thank you, Your Honor. Good afternoon, Commissioners. You've heard a lot this morning and this afternoon and you will continue to hear a lot from two sides in this docket regarding the various competing provisions of the stipulations.

Brightergy in this case, after careful consideration, has determined not to side with other one and we have not signed on to either stip nor have we objected to either stip. That's because what you haven't heard yet is a solution to the persistent issue that every state faces in energy efficiency programs with free ridership; that being you want to make sure that the money you spend is actually moving the needle forward in terms of getting savings and energy efficiency measures.

That's much different than any other type of investment that a utility makes. Generally if you're investing in a coal plant, you get a coal plant at the end of the investment. You've got something to look at, something to kick and something to measure. In energy efficiency, you're trying to measure something that is not there anymore and something that may have happened anyway.

So whether you go with what Ms. Tatro has asked you to do, which is take the plan as filed and amend it with the Utility Stipulation, or if you do what Mr. Opitz and Mr. Berlin want you to do and take the plan as filed and amend it with the Non-utility Stipulation, or whether you do what Mr. Linhares has asked you to do and treat all of the stipulations and proposals as sort of a menu for you to pick and choose from, we ask you to implement what Mr. Snider has laid out in his Rebuttal Testimony as a fix for this free ridership issue.

Before getting into the details of that plan, I want to emphasize Brightergy's position that the MEEIA program absolutely should continue. As a Missouri-based business, working in the Kansas City market, Kansas City Power & Light and GMO territory, we can tell you that the program is working. We can tell you that it's working really well.

And the way that we know that is we go

perform energy audits. We work with businesses. And we convince them that energy efficiency is in their best interests, businesses that otherwise may not have invested in energy efficiency measures. This is our expertise.

It's also important to pay attention to meeting the state's stated public policy investment goals and valuing efficiency as equal to that of generation. Some parties are concerned with meeting the target goals. Ameren is concerned -- certainly concerned with being made whole for the investments that they're making. We value both of those as well. However, get the most bang for your buck and target those dollars in a way that's going to make sense and move the needle forward.

Now, Brightergy's proposal, under the current MEEIA statute money is spent and savings are realized. No one is disputing that. However, there are undoubtedly investors out there who would have made the investment without the MEEIA statute and the MEEIA rebates. These are what we refer to as free riders. And that term has taken on a pejorative in lots of senses, and I don't mean it as a pejorative here.

If you're a business or a household and

you're out there and you're investing despite the fact that you're going to get rebates or you would have invested without the rebates, you should be applauded. That's great for you. But it's likely that your reward is going to be in the form of lower energy costs; money that you could spend on something else.

What we want to do instead is target those businesses and those households that wouldn't otherwise make the investment. And then that's money that they can take and they can spend on something else; employment, infrastructure, something else that would benefit the economy.

So why should you pay attention to Brightergy? Brightergy's business is becoming our client's energy partner. Our experience marketing to businesses and public entities tells us that what works, what moves the needle is a lower payback period. That being, if I'm about to make an investment in something, how soon before I actually get the benefit of it? How soon before that investment is paid off? Generally the longer that takes, the less likely you are to invest. The shorter amount of time that takes, the more likely you are to invest.

Our business is to help companies reduce a major operating expense freeing that money for other investments. You should listen to Brightergy because our expertise is in finding energy solutions just like the ones we're talking about here today.

You should also listen to us because we have a perfect laboratory on the west side of the state in KCP&L and GMO's operating territory. Their tariff does precisely what we're asking you to do in Ameren's territory. And we've been over there, we've been operating within it and we've seen it work.

And as an example -- Mr. Snider can go into more detail in this, but generally, if you're a company, you've got about $10,000 to invest. That invest is going to yield you about 20,000 kilowatt hours of potential efficiency savings and let's estimate that you're going to get a 10 cent per kilowatt hour rebate.

We're not exactly sure what Ameren is going to offer. They've given themselves some flexibility within their tariff, but just for the sake of making the math easier, under the current plan -- and this is a per kilowatt hour rebate basis, that company is going to get a $2,000 up front rebate and that's going to result in about a 4.5 year payback. In our experience, that's just too long for companies to invest in it. It's not moving the needle.

If, however, we switch that to a more effective 50 percent of the total project cost up front payment, you're going to get a rebate up front of $5,000. That's going to do a couple of things. It's going to reduce the amount that you have to pay at the beginning and it's also going to reduce your overall payback time to less than three years. And in our experience, that's about the magic number.

Now, this isn't an exact science. Sales, business, this is an art. And we're here today to tell you that this is generally what works in the marketplace.

So what we're asking you to do is to take Ameren's MEEIA 2 filing, amend it in the way that you see fit based on Company's -- based on the various parties' arguments and however you amend it, include the tariff language that we've included as an attachment to Mr. Schneider testimony. We know it's worked in the west side of the state and we know it will work here. I'm happy to answer my questions.

CHAIR R. KENNEY: I don't have any questions. Thank you, Mr. Zellers.

JUDGE PRIDGIN: Hearing no questions, Mr. Zellers, thank you.

MR. ZELLERS: Thank you.

JUDGE PRIDGIN: Have I overlooked anyone for an opening statement?

Anything else before we proceed to our first witness? All right. Hearing nothing, I believe Ms. Rohmund is the first witness.

MR. TOMC: That's correct, Your Honor. And she would be the first of the Company witnesses. I just want to comment that we've heard a lot of -- a lot about the facts in this case. There's been a lot of questions about the issues involved. And I'll do -- I'll try with Ms. Rohmund to do the best that I can, and other witnesses, to identify who the appropriate person is for questions.

And so we begin with Ms. Ingrid Rohmund. And she prepared the potential study that served for the basis by which we developed the plan. And her testimony addresses that potential study, which includes the assumptions concerning participation rates that we have heard this morning. So with that, I would introduce Ms. Rohmund.

JUDGE PRIDGIN: Ms. Rohmund, thank you. If you'll raise your right hand to be sworn, please.

(Witness sworn.)

JUDGE PRIDGIN: Thank you very much.

And Mr. Tomc, when you're ready.
MR. TOMC: Thank you, Your Honor.
INGRID ROHMUND testified as follows:
DIRECT EXAMINATION BY MR. TOMC:
Q. Good afternoon, Ms. Rohmund. Can you please state your name and business address for the record?
A. Ingrid Rohmund, 1259 Blue Sky Drive, Cardiff, California 92007.
Q. And are you the same Ms. Rohmund that caused to be filed testimony in this proceeding?
A. Yes.
Q. Do you have that testimony before you?
A. I do.
Q. Do you have any additions or corrections to your testimony?
A. I do have one. I found a typo on page 32 in Table 5 and it's about halfway down the page. There are two blocks that say, Average savings in the first 10 years for RAP and MAP. And the second block should say 15 years instead of 10. So that the average savings in the first 15 years for RAP are .78 percent for Ameren Missouri and the average savings in the first 15 years for MAP are 1.06 percent.

Q. Thank you. And with that correction, if I asked you the same questions that are contained in your testimony, would your answers remain the same?

A. Yes.

Q. And is your testimony true and accurate to the best of your information, knowledge and belief?

A. Yes

MR. TOMC: Your Honor, for the record I would identify Ms. Rohmund's testimony -- her Surrebuttal Testimony as Exhibit Number 111 and I'll hand that to the court reporter at this time.

(Ameren Exhibit 111 was marked for identification.)

MR. TOMC: And I would move for the admission of Ms. Rohmund's testimony, Exhibit Number 111, and I would tender the witness for cross-examination.

JUDGE PRIDGIN: Exhibit 111 has been offered. Any objections?

Hearing none, Exhibit 111 is admitted into evidence.

(Ameren Exhibit 111 was received into evidence.)

JUDGE PRIDGIN: Proceed to cross-examination. I don't believe KCP&L or GMO has counsel present today. United for Missouri, any cross?

MR. LINTON: No questions, Your Honor.

JUDGE PRIDGIN: Very good. NRDC?

MR. ROBERTSON: No questions, Your Honor.

JUDGE PRIDGIN: Division of Energy?

MR. ANTAL: No questions.

JUDGE PRIDGIN: Renew Missouri?

MR. LINHARES: No questions, Your Honor.

JUDGE PRIDGIN: Same with Tower Grove, National Housing Trust?

MR. LINHARES: Yes, sir.

JUDGE PRIDGIN: Okay. Thank you. Sierra Club?

MS. TAUBER: Yes, Your Honor.

JUDGE PRIDGIN: When you're ready.

MS. TAUBER: And, Your Honor, is it your preference for me to approach or --

JUDGE PRIDGIN: However you're comfortable. You may -- either way.

MS. TAUBER: I may approach.

CROSS-EXAMINATION BY MS. TAUBER:

Q. Good afternoon, Ms. Rohmund. My name is Jill Tauber, here for Sierra Club.

Ms. Rohmund, your testimony concerns the

potential study that's at issue in this case; is that correct?

A. Yes.

Q. And your company prepared that potential study?

A. Yes.

Q. And at the time of the study -- at the time of the study, the team -- your team was affiliated with Global Energy Partners EnerNOC; is that correct?

A. We were with EnerNOC.

Q. EnerNOC.

A. Not Global Energy Partners any longer.

Q. Okay. And now you're with AEG?

A. Correct.

Q. Now, you testified that the potential study team that put together this report for Ameren performed more than 50 studies over the past five years. Do you recall that?

A. Yes.

Q. And that work is often referenced by policy makers?

A. Yes.

Q. Now, you also mentioned that the EPA considered several AEG studies in developing recent

technical guidance for the Clean Power Plan; is that correct?

A. Correct.

Q. And the studies you -- the studies that your team performed to that end, they were used to develop the energy efficiency building block; is that correct?

A. They were used by the EPA in a table that they looked across to represent -- to develop representative studies from the US.

Q. And that was a meta analysis of --

A. Yes.

Q. -- potential studies; is that correct?

And I believe you said in your testimony that 4 of the 12 studies in that meta analysis were conducted by your company --

A. Yes.

Q. -- either AEG or EnerNOC?

A. Yeah. By my team.

Q. Okay. And I would imagine that your position is that these four studies were done correctly?

A. Yes.

Q. Okay. Now, based on that analysis, are you aware that EPA concluded that an annual reduction

of 1.5 percent per year is achievable?

A. I don't know the details of 111-D, so I'm not going to speak to that.

Q. Okay. Are you aware that the 1.5 percent conclusion was the result of the meta analysis, not the rule itself --

A. Yes.

Q. -- but the meta analysis?

A. Yes.

Q. Now, the potential study work that you did -- that your company and your team did for Ameren in this case, that occurred between 2012 and 2013; is that correct?

A. Correct.

Q. Okay. And the base year of that study was 2011; is that correct?

A. Correct.

Q. Okay. So that was roughly four years ago?

A. Yes.

Q. Okay. Now, the savings estimates are impacted by the time frame that the studies used. Is that a fair assessment?

A. Yes. Uh-huh.

Q. Now, in your study your team accounted

for the effects of upcoming codes and standards in the baseline; is that correct?

A. That is correct.

Q. Okay. So in other words, to account for codes and standards requiring more energy efficient behavior, you would -- that would be reflected in an increase in the baseline. The more energy efficient code and standards, you would increase the baseline; is that right?

A. It decreases the baseline.

Q. Decreases the baseline?

A. Yes. It reduces sales.

Q. That's what I meant, yes.

A. Increases the savings, reduces sales.

Q. Yes. Sorry. I was thinking about savings.

A. Yeah.

Q. And you set the baseline in the beginning of the potential study process; is that correct?

A. Yes.

Q. Okay. So when you account for codes and standards, you do so in the beginning of the study process when you're setting the baseline?

A. We have a set of standards that are in place at the beginning of the study and they unfold over the course of the study. And those are factored into the -- into the baseline projection.

Q. Okay. Now, the study estimated three levels of potential; is that correct?

A. Four actually.

Q. So you've got the technical --

A. Technical --

Q. -- economic --

A. -- economic.

Q. -- and then I -- and I was using the umbrella achievable.

A. Yes. Two levels of achievable.

Q. Great. Now, is it fair to say that just from those three levels, we are going from larger potential to smaller as you go from technical to achievable?

A. Correct.

Q. Okay. And so technical, we're capturing all measures that are technically feasible setting aside cost issues?

A. Correct.

Q. And when we do economic, we're taking that technical pool and we're screening it for cost effectiveness?

A. Correct.

Q. And then achievable is the smaller subset of that based on customer adoption assumptions?

A. Correct.

Q. So now to derive the economic potential, your team screened all measures from the technical potential using the -- what I'll use as shorthand TRC, but total resource cost test; is that correct?

A. Correct.

Q. Okay. And now the TRC score essentially is a ratio of a certain set of benefits to a certain set of costs; is that correct?

A. Uh-huh.

Q. And so when we refer to something as passing a TRC, the ratio would be one or higher; is that correct?

A. Yes.

Q. Okay. And so for the economic potential in the study, if a measure doesn't get above a 1 on the TRC, it is not considered part of the economic potential and it failed?

A. That's correct. Yes.

Q. Even if it passed a different cost effectiveness test?

A. Yes. That's correct.

Q. Now, you used the TRC as the economic

potential screen -- and I'll refer you specifically to your testimony on page 11, beginning at the last line of the page so it goes onto the next page. And I won't repeat the line, but what I want to ask you is am I correct that your team used the TRC to screen the economic potential because your understanding is Missouri law establishes the TRC as the preferred cost effectiveness test?

A. Yes.

Q. And the Missouri law that you were speaking of is MEEIA?

A. Yes.

Q. Okay. And so it's your understanding that because the TRC is required, and I believe you said for cost recovery, that efficiency programs generally have to pass that test to get cost recovery?

A. Yes.

Q. Okay. And are you familiar with the standard cost effectiveness test --

A. Yes.

Q. -- in addition to the TRC?

A. Yes.

Q. Okay. And would you agree with me generally that the TRC, what that is doing is comparing the benefits of avoided supply cost to the

costs of both running a program from the utility perspective as well as buying and installing measures from the participant's perspective? It's capturing both of those?

A. Yes.

Q. Are you familiar with the term "utility cost test"?

A. Yes.

Q. Okay. And the utility cost test compares that same benefits to just the cost of the utility?

A. Yeah. Yes.

Q. So what's the difference --

A. The difference is the incentives. Where the incentives are counted, those are costs that's included in --

Q. And those get netted out?

A. -- the utility cost test.

Yes. In the TRC they're netted out, yes.

Q. Right. And so the difference then between the TRC and the UCT would be the participant's costs are not included?

A. It's the incentive payment.

Q. Okay. Well, I just want to make clear I understand. So are you saying that the -- my understanding is that the difference between the TRC

and the utility cost test is that the utility cost test does not include the cost that the participants incur, whereas, the TRC does.

A. It's the incremental cost of the equipment is what -- is the -- is the cost --

Q. That's the cost?

A. -- the physical cost.

Q. Great.

A. Yes.

Q. Okay. Thank you. I'd like to refer you, if I could -- and I'm going to hand you a copy of the MEEIA law. I'm not going to seek to offer it because it's the law, but I'm going to give a copy to counsel as well. And I'm not going to mark it, but I just want you to read a sentence, if that's okay.

MS. TAUBER: May I approach?

JUDGE PRIDGIN: You may.

BY MS. TAUBER:

Q. Ms. Rohmund, I've handed you a printout of the MEEIA law. And just to confirm that, could you just read Roman numeral one -- or number one rather?

A. This section shall be known as the Missouri Energy Efficiency Investment Act.

Q. Okay. Great. So would you agree with me that this is the Missouri Energy Efficiency Act, a

copy of it?

A. Yes.

Q. Okay. Now, I just would like to refer you on the second page to number 4, if I could. And I would just like for you to read the last sentence of this paragraph starting with the words, Nothing herein.

A. Nothing herein shall preclude the approval of demand-side programs that do not meet the test if the costs of the program, above the level determined to be cost effective, are funded by the customers participating in the program or through tax or other governmental credits or incentives specifically designed for that purpose.

Q. Okay. And I'll just jump two sentences up and I apologize. I should have led with this. Do you see the sentence -- it says, The Commission shall consider the total resource cost test a preferred cost effectiveness test?

A. Yes.

Q. Okay. So this last sentence that you just read states that nothing prevents the Commission from approving a demand-side program that doesn't meet the TRC if the costs that are determined not to be cost effective are funded by consumers. Do you -- do

you understand that last sentence?

MR. TOMC: Objection, Your Honor. I don't believe that's what that sentence says. And moreover, the question calls for legal interpretation and analysis. And Ms. Rohmund has not been offered as a legal expert in this case.

MS. TAUBER: And, Your Honor, I'll just say I will not ask Ms. Rohmund for a legal conclusion. I would note that -- I would argue the witness has put it in contention by discussing the MEEIA statute in her testimony and what her understanding of MEEIA law is, which is that the TRC is the preferred cost effectiveness test. But I'm actually going to move on with --

JUDGE PRIDGIN: All right. Thank you.

BY MS. TAUBER:

Q. Let me just ask you this then: If you -- if it had been your understanding that the MEEIA law allowed for programs that passed the UCT to be eligible for cost recovery, you could have included programs in the economic potential that passed the UCT; is that correct?

A. At the outset of the study, one of the parameters for the study was the cost effectiveness screening. And all the parties that were involved, the stakeholders, the Company and the consultant team, all discussed the fact that we were going to use the TRC for the study and agreed to that. So that's why we did it.

Q. And if I can just clarify my question then. And I understand how you got to the TRC, but just to be clear, you could have used the UCT as an economic screen just as you used the TRC. Your team would have been able to run the analysis and derive an economic potential study that way; is that right?

A. We are able to do that, yes.

Q. And if you had, do you have a sense of whether the economic potential would be higher? Would more measures make it in if the screening test was the UCT versus the TRC?

A. I believe the potential would have been lower, if we'd used the UCT test, but I would have -- I'd have to go back and look at that.

Q. You'd have to go back?

A. Yeah. Uh-huh.

Q. What would you refer to if you --

A. I would go back to our model and run the numbers.

Q. Now, Sierra Club witness Woolf has critiqued the avoided cost use in this study. Are you

aware of that general critique?
A. I've heard that there is critique of the avoided cost.
Q. Okay. Now, the avoided costs you used in the study, they didn't come from your company; is that correct?
A. We were given those.
Q. They came from Ameren?
A. Yes.
Q. Okay. Now, you stated in your testimony that the avoided costs are among the lowest you have used in a potential study; is that correct?
A. That's correct. Yes.
Q. Okay. Now, AEG has worked on a lot of studies; is that correct?
A. Yes. Uh-huh.
Q. Now, the avoided costs did not include water savings; is that correct?
A. That's correct.
Q. And other savings that I'll just categorize --
A. Actually, I'd like to take that back.
Q. Sure.
A. The -- we received the avoided costs from Ameren. What was included in the avoided cost it --

only Ameren can answer.

Q. Okay. Are you aware that -- what is your understanding as to whether the avoided cost included non-energy benefits?

A. I don't really know. As I said, they were given to us.

Q. Okay. Now, when you went from the economic to achievable potential, the process of doing that involved the application of market adoption rates; is that correct?

A. Correct.

Q. And there were two levels of achievable -- what we've been talking about as RAP and MAP; is that correct?

A. Yes. Correct.

Q. And the difference between the two is the adoption rates?

A. Correct.

Q. Okay. Now, the market adoption rates were developed using customer surveys; is that correct?

A. Correct.

Q. And to derive the different adoption rates, you assume different payback periods; is that correct?

A. Yes.

Q. And you adjusted the market adoption rates later based on YouGov data; is that correct?

A. They were adjust-- the responses to the survey, which was the customer's likelihood to participate in a program if the -- at two different payback levels or three different payback levels in the survey. Those responses were adjusted to more accurately represent what customers will actually do when facing a purchase decision as opposed to what they think they would do in advance of actually having to make one.

Q. And when you say "adjusted," they were adjusted downward; is that correct?

A. Correct.

Q. Okay. Now, on page 19 of your testimony -- actually excuse me, page 18, the bottom of the page you're asked if there were any alternative methods to developing market adoption rates. Do you see that?

A. Yes.

Q. And in your answer you discuss ways to utilize market adoption rates other than using the market research that you have. Do you recall that?

A. Yes.

Q. And one of the approaches that you discuss is the Delphi approach; is that correct?

A. Yes.

Q. And you're aware of studies that use the Delphi approach?

A. Yes.

MS. TAUBER: Your Honor, that's all the questions I have.

JUDGE PRIDGIN: Ms. Tauber, thank you.

Brightergy, any cross?

MR. ZELLERS: No cross, Your Honor.

JUDGE PRIDGIN: Thank you.

MIEC?

MR. DOWNEY: No cross.

JUDGE PRIDGIN: MECG? Mr. Woodsmall isn't here.

Public Counsel? Mr. Opitz, when you're ready.

MR. OPITZ: Thank you, Judge.

CROSS-EXAMINATION BY MR. OPITZ:

Q. Good afternoon, Ms. Rohmund.

A. Hello.

Q. Would a utility with a longer history of energy efficiency programs have less available potential than one just starting out?

A. In general that's true, yes.

Q. And would you agree that some states have had energy efficiency longer than others. Correct?

A. Yes.

Q. And in those states, generally, there would be less available energy potential savings. Correct?

A. We have to be very careful about how we define the potential because it's measured in different ways in different states. So to say -- to compare one against another and say it's higher or lower based on years of experience could lead to misleading conclusions.

Q. Okay. When you conducted this study for Ameren Missouri, how long had Ameren's MEEIA program been in place? Let me step back.

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

Q. Let me step back. When was the study conducted?

A. The study was conducted in 2012 and 2013, finished at the end of 2013.

Q. And what year was the baseline that you used for data?

A. 2011. It's the last year for which we had complete -- a complete calendar year's worth of data because the study started in 2012.

Q. And so would you agree with me that -- if I told you that MEEIA for Ameren, their program was approved in 2012 and implemented in 2013?

A. I would believe you.

Q. And would you agree that with a newer program like that, shouldn't there be more potential energy savings then a state that maybe -- then a state that has had energy efficiency for a while?

A. Again, I can't -- you can't just make that statement. There's a lot of variables that come into play to say -- generally there's more opportunity when it's new, but that's relative to that utility, not to California or any other place.

Q. Do you say that because your potential study showed lower available energy than maybe some studies in other states?

A. No. I do not say it for that reason.

Q. What are the variables that would change Missouri's available -- Ameren Missouri's service territory, their available energy potential that you described?

A. Things like weather, the efficiency of the building stock, of homes and buildings to begin with, the presence of building codes and how those are enforced, the avoided costs that are at play, weather data, climate. There's more opportunity for savings for -- savings from air conditioners where it's very hot for longer periods of time. I could go on. Income levels.

Q. Thank you. So do you -- you mentioned building codes. And I think in your testimony -- Surrebuttal Testimony on page 8 you discuss that your projection included energy codes and standards.

A. Uh-huh.

Q. What -- I guess were -- was there any particular Missouri code or building code that you applied in your study?

A. So I'd have to go back and look at the study to tell you. It's documented. So I can't recall off the top of my head.

Q. Do you know if Missouri has any appliance standards?

A. So there are federal appliance standard -- federal appliance standards that are in effect in Missouri.

Q. But if they're federal, they would apply --

A. Everywhere.

Q. -- whatever service territory. Correct?

A. Uh-huh. Yes.

Q. And so what adjustments did you make based on the building codes that you mentioned?

A. So the building code adjust-- the adjustments we make reflecting building codes have to do with new construction activity. New homes are generally more efficient than existing homes. They're built better and they have newer appliances so new homes generally use less energy than existing homes.

Q. But is that the result of building codes or is that --

A. That is -- it is an effect of building codes and building practices.

Q. So you made an adjustment because of building codes that you knew were particular to Ameren Missouri's service territory?

A. We made adjustment to -- to reflect building practices -- new construction building practices in the Ameren Missouri territory. I can't respond about the building codes specifically without going back and looking at the study.

Q. And so I guess what particular building practices did you evaluate that were particular for Ameren Missouri?

A. We looked -- we -- we looked at the energy consumption in new homes and new buildings compared to the overall stock of homes and buildings and used that difference in energy use to reflect the different building practices.

It's mostly captured -- it's very little in the way of building codes. It's more in the fact that the newer homes and buildings have newer equipment and that's the real difference.

Q. But don't newer homes and buildings in other service territories have newer equipment?

A. Yes. Yes. We do that everywhere.

Q. Okay. So why does the building codes require that you make a different adjustment for the Ameren Missouri potential study?

A. Because every state is different and every utility is different in how -- what building codes are in place, what the construction practices are and what the consumer response is to those codes in terms of the equipment that's in place and how it's used.

Q. So can you tell me what -- and I think maybe you've already answered this, but you're unable to tell me what particular practices or codes you looked at. Correct?

A. It's -- correct. The specifics -- it's wrapped up in the energy use of those buildings and homes.

Q. And would I be able to find that documentation anywhere?

A. It's in the report and in the model.

Q. And does it specifically list out the differences for --

A. It doesn't.

Q. -- the Ameren Missouri service territory?

A. It shows the difference between the new buildings and the existing buildings in terms of energy use. It was not -- it was not a study of building codes.

Q. Thank you.

A. It was a study of energy efficiency potential through programs.

Q. Would you agree that new buildings will be different than old buildings in every service territory?

A. Yes.

Q. Thank you. Have you performed potential studies in other states, Ms. Rohmund?

A. Yes.

Q. What other states have you performed

potential studies for?

A. On page 3 of my testimony there's a map. And the dark shaded states are those in which we have performed potential studies either for individual utilities or for some state entity. In addition, we have performed national and regional studies that cover, in one way or another, every state in the union.

Q. In your studies were there any other states where you found energy efficiency potential greater than Ameren Missouri's?

A. In terms of absolute kilowatt hours saved, yes. In terms of baseline energy use, yes.

Q. And had some of those states with greater -- any -- had -- excuse me.

Had any of those states with the greater available energy efficiency had energy efficiency programs that had been in place longer than Ameren Missouri?

A. So that's -- I can't answer that off the top of my head. I'd have to have a list of the programs and the potential and the years of -- of programs in order to answer that accurately.

Q. That's fair. Thank you. When you conduct a potential study and include -- you include

federal efficiency standards. Correct?
A. Correct.
Q. Do you phase in those standards or do you just use a hard deadline?
A. So we phase them in as they are taking place. So the -- they are -- I don't know have a -- in our report is a table that shows the timing of the standards for each end-use. So for refrigerators, there's a timing of when the standards come in. And typically we phase them in -- in the year that that takes effect.
Q. Would phasing those standards in result in a different energy potential than a hard implementation would?
A. It would affect the timing more than the amount -- the timing of the savings rather than the amount of the savings.
Q. But isn't the potential study itself subject to a certain time frame?
A. Yes.
Q. And so it might affect the available potential within that potential study time frame?
A. Depending on the time frame, yes. It's very complicated.
Q. And just so I'm clear, the phasing in of

these standards would reduce the available potential. Correct?

A. Yes. Well, the presence of the standard reduces the potential. How the timing works depe-- the devil's in the details.

Q. Thank you. If you'll -- do you have your Surrebuttal with you?

A. Yes.

Q. If you turn to page 18, there is a question there on line 10 wherein you reference psychographic segmentation. And you state that you've not adjusted your data based on psychographic segmentation. Correct?

A. I'm sorry. I don't see what you're referring to.

Q. Page 18, line 10, the question that begins, Besides the sadue (phonetic) adjustment -- the rest of that question on line 11, it mentions psychographic segmentation questions.

A. On my printout that is not page 18, line 10 so let me see if I can find it.

COMMISSIONER KENNEY: Ma'am.

THE WITNESS: Yes. Thank you. Sorry about that. Okay. Ah. Okay.

BY MR. OPITZ:

Q. And so --
A. We didn't -- yeah. Okay.
Q. You would agree that your testimony is that you did not adjust your data based on --
A. Correct.
Q. -- psychographic segmentation?
A. Yes.
Q. Can you explain to me what is psychographic segmentation?
A. Psychographic segmentation looks at a variety of characteristics of the customer. And -- and it's often how they respond to certain questions about things like importance of climate change or how important is it that -- that the utility is a good -- good citizen and things like that. And you -- you use that -- those responses to questions to develop segments that are more attitudinal in nature. They reflect more their attitudes and behavior.
Q. So psychographic segmentation is used to develop attitudinal segmentation?
A. Yes. Yeah.
MR. OPITZ: Your Honor, may I approach the witness.
MR. TOMC: One moment, Mr. Opitz. I apologize. I have a copy so that hopefully the

pagination is correct on that version.

MR. OPITZ: Thank you, Matt.

Would you mark this as 804?

(OPC Exhibit 804 was marked for identification.)

BY MR. OPITZ:

Q. Ms. Rohmund, you recognize this document that I've had the court reporter mark as Exhibit 804, I believe?

A. Yes.

Q. And can you tell me what it is?

A. It is the Executive Summary for the demand-side market potential study that was completed in December of 2013 by EnerNOC.

Q. And this was a study that you participated in creating. Correct?

A. Yes.

Q. If you could please turn to page 9. And there's two charts there and then there's a paragraph below that.

A. Uh-huh. Right.

Q. Would you please follow along as I read so that you can let me know if I've read it correctly?

A. Uh-huh.

Q. It says, In addition to estimating take

rates, the study also developed an attitudinal segmentation model that disaggregated residential and business customers into groups that differ in terms of whether and why they might be interested in pursuing energy efficiency options. Correct?

A. Yes.

Q. And this paragraph goes on to say that based on that, they developed three different segments and then used the practical idealist segment to adjust your savings potential. Correct?

A. So the take rates for -- the one-year take rates for the practical idealist were used to estimate maximum achievable potential. That's not an adjustment. That's a subset of the survey results for this segment were used to -- to estimate maximum achievable potential.

Q. Well, based on that segment, did you make any adjustments to determine what would be your recommendation on the achievable potential for Ameren Missouri?

A. So we estimated take rates or participation rates for these segments. And for the maximum achievable potential case, we used the practical idealist, which was the group most likely to participate in programs to mes-- to estimate the upper bound of achievable potential.

Q. Did you use it to make any adjustment to the Realistic Achievable Potential?

A. We used the response -- the responses from all Ameren customers, the average for the RAP at a three-year payback level.

Q. And that is based on some attitudinal segmentation?

A. No. We just used all the responses. We didn't do -- there was no -- it was not one particular segment. It was all the responses we received. So it represents all Ameren customers.

Q. And isn't -- but wouldn't that be doing some type of psychographic segmentation?

A. The question asked did you make any other adjustments to the take rates based on psychographic segmentation questions. We estimated take rates for different segments. We didn't make adjustments. Maybe it's a semantics issue.

Q. So why did you go ahead and estimate take rates for different segments if you didn't apply them?

A. We did apply the -- we applied the practical idealist results to get the most -- to get the highest potential for RAP -- I mean, excuse me, for MAP. And then we used all Ameren customers to reflect RAP.

Q. But in order to get that practical idealist subset, you had to do psychographic segmentation. Correct?

A. Yes.

Q. Thank you.

MR. OPITZ: Judge, I would offer Exhibit 804 into evidence at this time.

JUDGE PRIDGIN: 804 has been offered. Any objection?

MR. TOMC: No objection from the Company, Your Honor.

JUDGE PRIDGIN: Hearing no objection, 804 is admitted.

(OPC Exhibit 804 was received into evidence.)

BY MR. OPITZ:

Q. Ms. Rohmund, you did adjust your primary data based on a YouGov study. Correct?

A. Correct.

Q. Were you involved in the YouGov study that was conducted in 2010?

A. I was not.

Q. Was adjusting the data with this study your idea?

A. I believe that we talked it over, as we did a lot of things in this study, and then decided whether to proceed with it.

Q. Can you tell me who you -- when you say "we talked it over," who do you mean by "we"?

A. It would have been the project team and we also shared it with the stakeholders in advance.

Q. How did you ultimately decide to adjust your data with this YouGov study?

A. So in -- in market research -- and I can -- I can explain this up to a point because I'm not the market research lead; that's David Lineweber. But there is a -- well-known problem that people tend to overstate their good intentions with respect to an activity.

So when you ask people if they will participate in an Ameren program or take some other action, they -- we tend to say yes more often than we do when we're actually faced with a purchase decision at the time and are making the decision then.

Q. So you adjusted the primary data that you or your team collected by applying this YouGov study. Correct?

A. Correct.

Q. Can you describe what that study -- the

YouGov study was?

A. My understanding is that the study -- it -- it was for utility programs. So it was -- it's relevant to the -- to our study for Ameren. And it asked consumers what their intentions were with respect to replacing their appliances and equipment. And then it tracked those same respondents through some time period, I believe it was about a year, to observe what they actually did.

And the adjustment that we used was based on the findings from that empirical research that said that fewer people actually took the actions than said they would take the actions in advance.

Q. So you know all this because you've read the study. Correct?

A. Right.

Q. Can you tell me what products were screened in that study?

A. I don't recall the details of that.

Q. Can you tell me what the demographics of the customers that were surveyed?

A. I cannot do that.

Q. Do you know the manner in which the surveys were conducted for that study?

A. I don't know the details.

Q. Do you know if they were asked about energy efficiency products?

A. My understanding is that they were asked about utility products, yes.

Q. Do you know if there were -- they were asked about products that are not energy efficiency products?

A. I do not.

Q. Do you know if the survey included commercial and industrial customers?

A. No, I don't.

Q. Do you know if the results of the study varied depending on the product that the customers were asked about?

A. I don't know definitively.

Q. Did you apply the -- the study results across -- for products across the board for all products in your potential study or did you segment it out like the YouGov study may have?

A. So the -- the adjustment was applied by Dr. Lineweber and I don't recall the details. I believe we have it in the report.

Q. Do you know if the study has been published, the YouGov study?

A. The YouGov study was a proprietary study and it was made available to the Ameren project team and stakeholders.

Q. Do you know if this YouGov study has been substantiated by any researchers?

A. I do not.

Q. Has the study been substantiated by any other sort of institution?

A. Not that -- I do not -- I don't know.

Q. Has this adjustment, based on the YouGov study, been used in conjunction with any other potential study besides Ameren Missouri or Ameren Illinois?

A. Yes.

Q. And what were those?

A. Omaha Public Power District and the EmPOWER Potential Study.

Q. Has this YouGov adjustment been approved by a State Commission as the basis for setting a savings target?

A. Not to my knowledge.

Q. You state in your Surrebuttal Testimony on page 19, lines 9 through 10, you state that, The market potential study was designed to adhere to the approaches and conventions outlined in the NAPEE guidelines.

A. Uh-huh.

Q. Did I read that correctly?

A. Yes.

Q. What is the NAPEE?

A. The National Action Plan for Energy Efficiency.

Q. And do NAPEE guidelines prefer the use of primary data?

A. I believe they do.

Q. But for your study, you altered the primary data with this YouGov study. Correct?

A. We adjusted the take rates with the YouGov study, yes, correct.

Q. That to your knowledge -- and you adjusted it with this study that to your knowledge hasn't been published and has never been substantiated by any other institution or researcher?

A. Yes.

Q. Would you agree that -- that that seems to be a pretty big deviation from the NAPEE guidelines?

A. The NAPEE guidelines do not talk about participation rates -- estimating participation rates from customer surveys or adjusting them or not adjusting them. That's not covered.

Q. So how does this market potential study then constitute as being designed to adhere to the NAPEE guidelines?

A. There are guidelines in the NAPEE report and we adhere to those guidelines, but it doesn't get into the specifics of -- at the level that we're talking about here.

Q. So it's more just a general statement that it applies to the NAPEE guidelines? And by "it" I mean the potential study. Correct?

A. Yes.

Q. Thank you.

MR. OPITZ: That's all I have, Judge.

JUDGE PRIDGIN: Mr. Opitz, thank you. Any cross from Staff?

MS. PAYNE: Yes, thank you Your Honor.

CROSS-EXAMINATION BY MS. PAYNE:

Q. Good afternoon, Ms. Rohmund. Mr. Opitz asked you about some of the energy efficiency potential studies that you've conducted outside of the Ameren one. Can you tell me, did any of those studies that you performed have less potential relative to the baseline energy sales forecasts than Ameren Missouri's?

A. I can't answer that because I -- in order to answer it, I'd have to have the numbers in front of me and I don't have them in front of me.

Q. Could I have just kind of a general idea of what you might think it is? It doesn't have to be exact without the numbers.

A. I believe we have done studies that have lower potential than Ameren Missouri's.

Q. And you would say roughly -- I mean would it be 5, 10? I know you said there's about 50 total.

A. The potential in those studies is defined differently. Each study is defined differently. They take place in different parts of the country, different avoided costs, different timing. Some of those studies go back to 2010. So it -- it really depends on where we are and when we are and who we're talking about.

I will refer you to page 26 of my testimony, Figure 7. And there is one study that I can point out there that we did as EnerNOC that has lower potential in terms of the savings weighted participation rates.

Q. Okay. Thank you. And then in another vein, could you approximate, of the studies you performed, how many of those had lower RAP portfolio savings relative to the baseline energy sales

forecasted than Ameren Missouri's 2013 study?

A. I can't give you a number on those -- on that.

Q. Not -- okay.

A. No.

Q. And then -- let's see here. Ms. Tauber was asking you -- on page 19 you make a reference to the Delphi approach. Can you elaborate on that? Is that something AEG uses commonly?

A. No. We don't use it commonly. We have used it twice in all the studies that I have performed and most recently in the state of New Mexico -- for the state of New Mexico.

Q. Okay. And it's -- is it commonly used in the rest of the energy field?

A. Not commonly.

Q. Okay. Okay. And then finally on page 15 of your Surrebuttal, Table 2, one of the things that that figure depicts is the baseline, naturally occurring energy efficiency. Would you just clarify? So that is energy efficiency that occurs without any utility involvement?

A. That's correct. That's the -- what happens as a result of codes and standards and naturally occurring conservation outside of programs.

Q. Okay. Thank you very much. That's all I have.

JUDGE PRIDGIN: Ms. Payne, thank you. Let me see if I have any questions from the Bench. Mr. Chairman?

CHAIR R. KENNEY: No questions. Thank you very much.

JUDGE PRIDGIN: Commissioner Stoll?

COMMISSIONER STOLL: No questions. Thank you.

COMMISSIONER KENNEY: No questions. Thank you.

JUDGE PRIDGIN: All right. Thank you.

Any redirect?

MR. TOMC: Yes, Your Honor. I do have a few questions.

REDIRECT EXAMINATION BY MR. TOMC:

Q. You were asked some questions from both Sierra Club as well as Staff concerning a Delphi panel. And I'd just like to ask -- do you recall those questions? Let me ask you that.

A. Yes.

Q. And you mentioned most recently in your response that you were involved in a Delphi panel in the state of New Mexico; is that right?

A. Correct.

Q. Can you explain to the Commission, you know, what is a Delphi panel, first of all? I'll ask you that.

A. So a Delphi panel is generally a group of experts, defined by someone, who are asked to give their informed opinion on certain topics. And the individuals provide their responses and then in some manner a unified answer is created.

Q. With respect to how that unified answer is created, are there ever disputes among the experts or among the participants in that panel as to what the correct answer is?

A. I -- I suppose they can be. That wasn't our experience, because the panelists never talked to each other, but I imagine there could be quite heated debate.

Q. And with respect to your experience on Delphi panels, do the results that come out of the Delphi panel reflect -- always reflect primary market data or are they based on some other combination of approaches?

A. I believe each person bases their opinion on whatever information they have available.

Q. And with respect -- there was some

questions with respect to a survey that was conducted that was referenced as the YouGov survey that was used to adjust primary market data. Is it common to see, in your experience in potential studies, the use of adjustments or other data to primary market data in order to produce results?

A. So most of the potential studies out there don't use customer data at all to estimate participation rates. Ameren is one of the few utilities that asks its customers. And so I can't really speak to the adjustments that others make in that regard.

Q. But would you -- in your opinion, is the use of primary data that Ameren employed in its study appropriate with respect to the -- to this particular study?

A. Absolutely. It was a requirement that Ameren customers be surveyed and that they -- that the potential study reflect local conditions. And the best way to get that information is to talk to Ameren customers.

Q. There was some questions that were -- you were asked by Sierra Club -- actually strike that.

I believe you were asked by the Office of Public Counsel concerning codes and standards in

developing the -- a potential study. And with -- I think the questions were specifically about building codes. Do you recall those questions?

A. Yes.

Q. Just as the basic point, why do you look at codes and standards and why is that important in preparing a potential study?

A. So the codes -- the codes and standards affect energy use in the baseline. And if there are building codes coming in the future, that will reduce the amount of savings that can be achieved through utility programs and other interventions.

Q. And would an example of codes and standards that may affect -- could you offer an example, I mean such as lighting or some other that would illustrate how those codes and standards affect the potential study?

A. Sure. So the lighting standard, the Energy Independence and Security Act lighting standard went into effect in 2014 and basically requires manufacturers to produce lamps that are more efficient than the general service incandescent lamp we've had for years. And so essentially that lamp is no longer available and has been replaced by a more efficient option.

So when we look at energy efficiency in residential lighting, we're now comparing to a base that has this much higher lighting standard compared to what was there three or four years ago or even two years ago for lighting. So the savings -- the savings are being achieved. We are all saving energy because of that standard.

Where it's being counted is in a different place. It's now part of the baseline instead of being available for savings through utility programs.

Q. Thank you. I have one more question. I want to circle back concerning the discussion on the Delphi panel approach. In your experience with Delphi panels -- and I understand you had two -- two examples of that came to mind. Was that panel convened before the program -- the energy efficiency program or the -- to achieve the goals was set in motion or did it occur some time after?

A. It was before.

Q. Okay.

MR. TOMC: Thank you. I have no further questions.

JUDGE PRIDGIN: All right. Thank you very much. Thank you, ma'am. You may step down.

This looks to be a fairly convenient time to take a break. And if I could ask counsel -- and I'll give you probably a little more time. If I could ask counsel to kind of consult the schedule contemplating getting through eight Ameren witnesses today, that would be all of them. So far we've just made it through one.

So if I could ask counsel if you have a preference or a plan on working into the evening versus, you know, continuing the hearing beyond Wednesday or I'd certainly welcome your input on that before -- and, you know, obviously everyone has different schedules and I want to give you a little time to talk and try to figure out, you know, how to try to speed things up or how we need to proceed from here because we seem to be quite a ways behind schedule. So if we could back on the record at, say, 2:45 and I'll ask counsel about any plans on how we want to proceed.

Anything further before we go off the record? All right. Hearing nothing, we will stand in recess until 2:45. Thank you. We're off the record.

(Ameren Exhibit 109 was marked for identification.)

(A recess was taken.)

JUDGE PRIDGIN: All right. Good afternoon. We are back on the record. I believe the next witness is Mr. Hoffman, whom I assume is in the witness chair. I appreciate your promptness, sir.

I had asked counsel before the break if you would discuss your plans on proceeding since we're quite a ways behind schedule. And did any counsel have any announcement for me before we go on to Mr. Hoffman?

MS. MUETH: Yes, Your Honor.

JUDGE PRIDGIN: Ms. Mueth.

MS. MUETH: I believe all the parties are in agreement that we'd like to just press forward today until five o'clock or the closest cut-off time around there, and then have the witnesses that -- if any, who have not yet been heard, overflow to tomorrow, Tuesday. We would then continue the schedule for Tuesday until we finish all the witnesses scheduled for Tuesday so that Wednesday we could maintain just the witnesses that are currently scheduled for Wednesday.

JUDGE PRIDGIN: So what I'm hearing is we're going to -- by the end of tomorrow we're going to get through those seven remaining Ameren witnesses and what I'm counting to be five other witnesses on top of that as well, is that correct, however late that takes?

MS. MUETH: Yes, Your Honor. That's the goal.

MR. LOWERY: Your Honor, if I could just maybe give a little bit of color around that. It was never the Company's expectation that we would get through all eight of our witnesses today. And in terms of, you know, do we literally stay with the listed witnesses through tomorrow night, I think that's a call that, I mean, ultimately you would make obviously, but I think that's a call I think we would make late tomorrow. It may or may not be that we literally have to be through all of them tomorrow, but if we need to go late to get -- to have some assurance we'll get done Wednesday, I think we're all in agreement tomorrow night's the night we'd prefer to do it.

JUDGE PRIDGIN: I just didn't want to just randomly say, well, we're stopping at 5:00 versus we're working until 8:0, because I don't know everyone's schedules. So I wanted to at least give you a heads-up, hey, this is what I'm thinking; how do you want to proceed from here? And so I appreciate your input. And obviously, you know, if we need to change things tomorrow, that's fine. I think the room is free. But you may or may not be free, you know, after Thursday and so I just wanted to let you know kind of, you know, my thoughts on proceeding.

MR. DOWNEY: Judge, we appreciate you asking us.

JUDGE PRIDGIN: My pleasure. It's the Public Service Commission, remember? Okay. Enough of my stand-up act.

Anything further before we go on to Mr. Hoffman?

All right. Mr. Hoffman, if you'll raise your right hand to be sworn, please.

(Witness sworn.)

JUDGE PRIDGIN: Thank you very much, sir. Counsel, when you're ready to proceed.

CLIFFORD HOFFMAN testified as follows:

DIRECT EXAMINATION BY MR. LOWERY:

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

A. Clifford Hoffman.

Q. Mr. Hoffman, am I correct that you caused to be prepared for filing in this docket Surrebuttal Testimony, which has been marked for identification as Exhibit 109?

A. I did.

Q. Do you have any corrections to that testimony?

A. Yes, I do. I have a general correction. When I wrote the testimony I was under the mistaken impression that at the time, Staff witness Mr. Oligschlaeger had indicated that EMV results should apply -- be applied after the fact through -- to the throughput disincentive. I'd gotten that impression from reading Mr. Rogers' and Mr. Marke's testimony. But now I understand that Mr. Oligschlaeger had only addressed an after-the-fact true-up for certain other rate case parameters.

Now, that correction doesn't affect any of the conclusions that I have in my testimony. And I also understand that Mr. Oligschlaeger now has, in fact, brought back EMV on an after-the-fact basis and would make it retroactive to prior periods. So I do not -- that does not change the substance of my testimony. I think we're right back in the circle where we started.

Q. Do you have any other corrections?

A. No, I do not.

Q. With that correction -- or with that, I guess, clarified understanding given that the Staff's

position has now essentially changed to what you thought it was in the first place, if you were asked the same questions today, would your answers be the same as they were in that testimony?

A. Yes, they would.

Q. Okay.

MR. LOWERY: With that, Your Honor, I would offer Exhibit 109 into the record and tender Mr. Hoffman for cross-examination.

JUDGE PRIDGIN: Mr. Lowery, thank you. 109 has been offered. Any objections?

Hearing none, Exhibit 109 is admitted.

(Ameren Exhibit 109 was received into evidence.)

JUDGE PRIDGIN: And cross-examination. United for Missouri, any questions?

MR. LINTON: I have no questions, Your Honor.

JUDGE PRIDGIN: NRDC?

MR. ROBERTSON: No questions.

JUDGE PRIDGIN: Division of Energy?

MR. ANTAL: No questions.

JUDGE PRIDGIN: Renew Missouri?

MR. LINHARES: No questions, Judge.

JUDGE PRIDGIN: And Tower Grove, National

Housing Trust?
MR. LINHARES: No questions.
JUDGE PRIDGIN: Sierra Club?
MS. TAUBER: No questions, Your Honor.
JUDGE PRIDGIN: Thank you. Brightergy?
MR. ZELLERS: No questions, Your Honor.
JUDGE PRIDGIN: MIEC?
MR. DOWNEY: No questions.
JUDGE PRIDGIN: MECG I believe -- Mr. Woodsmall is not here.
Public Counsel?
MR. OPITZ: No questions, Your Honor.
JUDGE PRIDGIN: Staff?
MS. MUETH: Just a few, Your Honor.
JUDGE PRIDGIN: Almost had a no-hitter.
MS. MUETH: Sorry to destroy your game.
JUDGE PRIDGIN: Not a problem.
CROSS-EXAMINATION BY MS. MUETH:
Q. Mr. Hoffman, in your testimony, you express concerns regarding Ameren's ability to book revenues in the context of throughput disincentive recovery in the event of a retrospective true-up if lost revenue recovery is ordered by the Commission; isn't that correct?
A. I did.

Q. Okay. Are you aware of any proceedings in other jurisdictions in which a utility raised identical or very similar accounting concerns pertaining to recovery of lost revenue amounts as you express in your testimony?

A. I -- I am not. In my 38 of exper-- years of -- 38 years of experience in the utility industry, when I get to the foundation of what's described by auditors -- not lawyers talking to lawyers, but auditors, they always go back to 986-05-25 as the only standard that can be used in revenue recognition.

And understand this is -- this is very critical for Ameren because they've identified revenue recognition of this specific revenue as a critical accounting estimate. The Securities and Exchange Commission and the PCOB, their focus when they come and look at auditors' work -- and the FCC writes comments at every Public Register and is required to be looked at every three years.

Also, the PCOB comes in and looks at the audit firm's working papers on a three-year cycle for every partner. Missing this particular standard and making a mistake would have very egregious consequences to everybody.

Q. Okay. Thank you.

MS. MUETH: I have nothing further.

JUDGE PRIDGIN: All right. Thank you. I have no questions.

Any redirect?

MR. LOWERY: Maybe just one question.

REDIRECT EXAMINATION BY MR. LOWERY:

Q. Can you tell -- just for the record, can you explain to the Commission what the PCOB is?

A. It's the Public Oversight Board. And -- and with this, understand that the focus of both of the -- the Public Oversight Board and the SEC, it's all about revenue recognition is what they go after companies for. Overstating --

Q. And when you say oversight board, it's over public utility accounting -- or over I should say public accounting?

A. Over public accounting for everybody, that's right.

MR. LOWERY: I have nothing further, Your Honor.

JUDGE PRIDGIN: Mr. Lowery, thank you. And Commissioner Kenney, any questions for this witness?

COMMISSIONER KENNEY: Is this Mr. Hoffman?

JUDGE PRIDGIN: This is Mr. Hoffman.

COMMISSIONER KENNEY: No. Thank you, Mr. Hoffman

JUDGE PRIDGIN: Thank you very much. You may be excused, sir.

I believe next would be Mr. Berk.

MS. TATRO: Ms. Berk.

JUDGE PRIDGIN: Ms. Berk. 50/50. I apologize.

MR. LOWERY: See, we're back on schedule, Judge.

MR. DOWNEY: Good job, Judge.

JUDGE PRIDGIN: Any time.

All right. If you'd raise your right hand to be sworn, please.

(Witness sworn.)

(Ameren Exhibit 104 was marked for identification.)

JUDGE PRIDGIN: Thank you very much, ma'am.

MS. TATRO: Thank you.

JUDGE PRIDGIN: Ms. Tatro, when you're ready.

S. HANDE BERK testified as follows:

DIRECT EXAMINATION BY MS. TATRO:

Q. Can you state your name and business address for the Commission, please.

A. My name is Hande Berk and my business address is 1901 Chouteau Avenue, St. Louis, Missouri.

Q. And you may have to lean into the mic a little bit. You're very soft.

A. Okay.

Q. And are you the same Hande Berk that filed pre-filed testimony in this case?

A. Yes, I am.

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

A. Yes, I do. On page 18 I would like to replace the chart. And line 6 should read, Shown in Figure 3 below, period. And I would like to strike the rest of the sentence. Page 19, line 3 should read, Until 2036 after. So I'm striking 2034, the last year off. And then on line 6, I would like to strike 2034. That should be 2036.

Q. Do you have any other corrections or additions?

A. No.

Q. If I were to ask you the same questions that are in your testimony as your amended answers, would your answers be the same?

A. Yes.

Q. And are your answers correct and true to the best of your belief?

A. Yes.

MS. TATRO: I move for the admission of 104 and tender the witness for cross-examination.

JUDGE PRIDGIN: Ms. Tatro, thank you. 104 has been offered. Any objections?

Hearing none, Exhibit 104 is admitted.

(Ameren Exhibit 104 was received into evidence.)

MS. TATRO: Do we need to mark the separate page as another exhibit or is it fine just separately? I'll do it either way.

JUDGE PRIDGIN: I mean, I understood it was just supposed to be a replacement.

MS. TATRO: It is.

JUDGE PRIDGIN: I think it's fine as part of 104.

MS. TATRO: Thank you.

JUDGE PRIDGIN: You're welcome.

Cross-examination. United for Missouri, any questions?

MR. LINTON: Yes, Your Honor. I have a few.

JUDGE PRIDGIN: Yes, sir.

CROSS-EXAMINATION BY MR. LINTON:

Q. Good afternoon, Ms. Berk.

A. Good afternoon.

Q. I'm David Linton. I represent United for Missouri. Good to meet you.

A. You too.

Q. Are you aware that United for Missouri has signed onto what has been called either the Company Stipulation or the Utility Stipulation?

A. Yes.

Q. Are you also aware that we've -- we've only signed on to the extent that the portfolio being proposed in the settlement agreement in the stipulation is more cost effective than the next unit of generation?

A. Yes.

Q. Okay. With that understanding, would you take a look at your Surrebuttal Testimony, page 8, starting at line 7 -- Q and A starting at line 7. I believe there you say that you prefer a levelized rate to calculate instead of the average rate to evaluate a customer's rate impact; is that correct?

A. That is correct.

Q. Okay.

A. Yes.

Q. If you turn then to page 9, the table there is your calculation of the various levelized rates for the different plans with the incentives. Correct?

A. Yes.

Q. Okay. And I guess as -- well, let me ask this question: This -- this chart was prepared before the Stipulation and Agreement. Correct?

A. It is correct. And I have down the analysis for the -- for the June 30th stipulation plan as well.

Q. Okay. And I guess you anticipated my next question. If I take a look at the row and column that is probably most relevant to my analysis, it would be the second row, RAP plan 1 -- or RAP --

A. I.

Q. -- plan I?

A. Yes.

Q. And then the third column, With utility performance incentives requested in this case 2015 through 2044.

Now, performance incentives, does that include both the performance incentive and the throughput disincentive in-- throughput disincentive

correction?

A. Well, the RAP analysis does not -- does not have a throughput disincentive for two reasons. We are -- by the rules, we are required to adjust rates annually. And we assume that the load pays for all the costs in the year that those costs are incurred. So there are no throughput disincentives.

Q. In this number?

A. Yes. So it's very straightforward.

Q. Just the performance incentive?

A. Yes. And it does include a performance incentive of the original plan, which was 25 million.

Q. Okay.

A. This table does.

Q. Now, since the stipulation agreement, I would assume that the no DSM plan K number in that third column does not change as a result of the Stipulation and Agreement?

A. No, it doesn't.

Q. The second -- the RAP plan I plan number would increase, I would assume; is that correct?

A. It could go both ways, but yes, it -- by a very, very small percentage. And it still is much better than the no DSM plan.

Q. Okay. Well, since you say you have done

the calculation, what is that number?

A. So the rate under the June 30th stipulation plan is 12.038.

Q. 038.

A. That includes $30 million performance incentive. And if you -- and if you included 30 million performance incentive for the same RAP plan I, that would be 12.031.

Q. Thank you very much. No further questions.

JUDGE PRIDGIN: Mr. Linton, thank you. Excuse me, Mr. Linton. Thank you.

NRDC, Mr. Robertson?

MR. ROBERTSON: No questions.

JUDGE PRIDGIN: Division of Energy

MR. ANTAL: No questions. Thank you.

JUDGE PRIDGIN: Renew Missouri?

MR. LINHARES: No questions.

JUDGE PRIDGIN: Tower Grove, National Housing Trust?

MR. LINHARES: No questions.

JUDGE PRIDGIN: Thank you. Sierra Club?

MS. TAUBER: Just a few, Your Honor.

JUDGE PRIDGIN: Ms. Tauber, when you're ready.

MS. TAUBER: Thank you. Just so I'm not hidden back there.

JUDGE PRIDGIN: Certainly.

CROSS-EXAMINATION BY MS. TAUBER:

Q. Good afternoon, Ms. Berk.

A. Good afternoon.

Q. Ms. Berk, I want to ask you a few questions about your Surrebuttal regarding Mr. Woolf's testimony.

A. Uh-huh.

Q. So the Company assumed for the IRP a 15 percent probability of any carbon price during the IRP planning period; is that correct?

A. Any direct cost of carbon, yes. And we had 85 percent of indirect cost of carbon regulations.

Q. But in terms of putting a price on it, a price per ton, that was the case in 15 percent of the time; is that correct?

A. Yes.

Q. And in those -- those scenarios that fell within this 15 percent, that price started in the year 2025; is that correct?

A. That is correct.

Q. So it was zero before 2025?

A. Yes.

Q. And you just mentioned the 85 percent probability refers to indirect?

A. Indirect costs, yes.

Q. Indirect costs. Okay. Now, is this 85 percent probability assumption based on the Company's judgment?

A. That is based on the Company's executives' judgment and based on subjected probabilities, which is what is required by the rules, which is what we can do for future regulations. There is no state of analysis that I know of that would not include subjected probabilities.

Q. Now, if I can direct your attention just briefly to page 5 of your Surrebuttal --

A. I'm sorry. Page?

Q. I'm sorry. Page 5, lines 3 to 4. And in this particular section of your Surrebuttal -- and let me know when you get there so I don't rush ahead.

A. Yes.

Q. Okay. So in this answer you observed or noted that the CO2 prices that were assumed by the Company you say, quote, Are exactly equal to those produced by Synapse in their last study.

Do you recall that discussion?

A. Yes.

Q. You understand that the Synapse price forecast that you're referring to, and I believe you include the appendices -- or excuse me, you include the report in your testimony. You understand that to reflect a full range of CO2 prices; is that correct?

A. That is correct.

Q. And the Synapse range doesn't include a zero price; is that correct?

A. Well, I guess what -- well, what it reads is the CO2 price is what we -- what we used from the Synapse price forecast or what we -- what we -- what we put into the IRP was the Synapse energy price forecast that we use in the IRP. I -- and we did have scenarios where we didn't include a direct price on carbon. Maybe it's a semantics issue. I'm not sure, but --

Q. But you would agree that the Synapse range doesn't include zero?

A. I guess, yes.

Q. Now, I want to direct you to -- I apologize for bouncing around, but to the schedule -- your first schedule, if I could take you there, which is the -- is what we've been talking about, the 2013 price forecast. And specifically, Ms. Berk, I just wanted to draw your attention to page 6 and you can

just let me know when you're there.

A. Page 6, yes.

Q. Okay. And I'm looking under the header Effective Price of Carbon. Do you see that?

A. Yes.

Q. And then below that there's a subheader in this report. And I'm wondering if I can just ask you to please read what follows in this report under the Effective Price of Carbon header?

A. In this report, utility carbon price forecast are effective prices used for state required IRPs and internal planning purposes. The US Environmental --

THE COURT REPORTER: I'm sorry?

THE WITNESS: I am sorry. Utility carbon price forecasts are effective prices used for state required IRPs and internal planning purposes. The US Environmental Protection Agency's proposed carbon pollution standard for new resources of electric generation is a non-market based policy that would represent an effective price.

BY MS. TAUBER:

Q. Thank you, Ms. Berk. So the -- and just to recap, so the EPA proposed carbon pollution standard, what this is saying is in this report that

is -- that represents an effective price. Do you see that?

A.   Yes, I do see that.

Q.   Now, in the Company's IRP they put a price on this carbon only 15 percent of the time. Correct?

A.   Yes.

Q.   And the Synapse price forecast it did -- it started before 2025; is that correct?

A.   Yes. It started in '20.

Q.   Now, I just have a few more questions. And I'm going to ask -- direct your attention to page 31 of your Surrebuttal Testimony. And towards the bottom of the page, Ms. Berk, in this -- in this part of your testimony you're --

A.   I'm sorry. I'm not there yet.

Q.   Oh, I'm sorry. Please tell me when you're there.

A.   Yes.

Q.   So in this section -- and mainly kind of referring to the area around Figure 6, if you see that, you're responding to a critique from Sierra Club witness Woolf that Ameren didn't adequately consider efficiency as an option for complying with the Clean Power Plan.

Do you see that part of your testimony?
A. Yes.
Q. Do you recall that discussion generally?
A. Yes.
Q. Now, you provide an IRP. There's an illustrative compliance plan. Do you recall that?
A. Uh-huh. Yes, I do.
Q. And what that does is it tells the reader how the preferred resource plan that was selected might change to respond to the CPP. Do you see that?
A. Yes.
Q. And you note here in your testimony in response to Mr. Woolf's testimony that efficiency is a part of this illustrative compliance plan; is that right?
A. Yes, it is.
Q. And it's a part of it because the preferred plan has a RAP level of efficiency savings; is that correct?
A. Yes. They are included in the preferred plan.
Q. So there's no added efficiency as distinct from the preferred resource plan for this --
A. Yes.
Q. -- clean power compliant plan?

A. Yes.
Q. So efficiency -- extra efficiency, additive efficiency is not part of this illustrative plan?
A. Yes. Extra energy efficiency is not, but that wasn't my understanding from what I read from the testimony.
Q. That's all the questions I have. Thank you.
JUDGE PRIDGIN: All right. Ms. Tauber, thank you.
Brightergy?
MR. ZELLERS: No questions, Your Honor.
JUDGE PRIDGIN: MIEC?
MR. DOWNEY: No questions.
JUDGE PRIDGIN: MECG is not here. Public Counsel?
MR. OPITZ: A few, Your Honor.
JUDGE PRIDGIN: Yes, sir. When you're ready.
CROSS-EXAMINATION BY MR. OPITZ:
Q. Good afternoon, Ms. Berk.
A. Afternoon.
Q. Just -- there were some corrections made to your testimony.

A. Uh-huh.

Q. So if you would look at page 9 of your Surrebuttal and there's a Table 1 there.

A. Oops. Sorry. Yes.

Q. And I'm looking at the line and it's -- it's on the very left. It says RAP-plan I.

A. Uh-huh.

Q. And if I follow that all the way across to, With utility performance incentives requested in this case 2015 through 2044, did you make a correction to that number?

A. No. That doesn't require any corrections. The difference -- the difference was normal dollars versus present value dollars. It doesn't affect anything in this table or anywhere else in my testimony.

Q. Thank you. When you use these -- when you make this projection that gives you the result of .035, is that using the Synapse CO2 projection that you were discussing with the Sierra Club attorney?

A. Yes.

Q. And is the Synapse CO2 projection higher than the Ameren triennial IRP CO2 price projection?

A. It's not higher, but it starts earlier, in 2020 and we start at 2025.

Q. So if you use the Ameren triennial IRP CO2 price projection --

A. Uh-huh.

Q. -- would that change that number, that .035?

A. That would potentially be small -- smaller in the sense that it would maybe be .036, 37. I don't know. So the rate impact to customers would be more beneficial.

Q. Have you performed that calculation?

A. No. But I could tell -- I could infer from how the analysis is that would be -- I don't know the specific number that we would get to, but it would help -- it would help lower levelized average rates even further.

Q. Just a moment. So still on Table 1 on page 9, can you clarify for me why that .035 number does not change?

A. I'm sorry?

Q. So it appears when I'm looking at the chart that the top half of the table -- let's take, for example, the no DSM-plan K.

A. Uh-huh.

Q. It says 12.062. And then there is the RAP-plan I --

A. Yes.

Q. -- that's 12.064. And so that number -- does that number correspond with any number in the lower box?

A. Yes. That is the difference between those two, 12.062 and 12.027.

Q. Okay. So --

A. So --

Q. -- if you change the RAP-plan I in the top box that was 12.027 and I believe you changed it to 12.038, how does that not change the number in the lower box?

A. Oh, the reason that change -- I believe you're talking about the June 30th stipulation results where I said the -- that 12.027 would be 12.031.

Q. 031.

A. That is due to the 25 million versus 30 million dollars performance incentives. And since no DSM doesn't have any energy efficiency programs, then we would not be asking for any performance incentive. That's why it doesn't change.

Q. Okay.

A. However, if -- if you were to -- well, I'll -- I'm sorry.

Q. So when you calculated that performance

incentive in that box, did you calculate it at 70 percent -- the reward at 70 percent, the reward at 100 percent or the reward at 130 percent?

A. No. I did not make any changes according to what we hit, what targets we hit. So it's always 30 million. And we actually included a much more downside potential for the new June 30th stipulation plan. So, therefore, the benefits might be even higher.

Q. Can you tell me if you included the performance incentive number of $48 million, which I believe is the upper limit of the Utility Stipulation performance incentive, how would that change this .035 number?

A. Well, I did not do that calculation so I would not be able to answer that.

Q. Would it increase that number or would it decrease that number?

A. It could, but the distinction is -- I gave -- when we did the risk analysis, we gave --

Q. Excuse me. You said it could. It could reduce or it could increase. Which?

A. I don't know the answer.

Q. You don't know?

A. The reason is when we did the risk

analysis, we gave a much bigger down-- downside potential and we would not -- I mean the assumption was we wouldn't hit that target.

Q. So I've noticed that your time frame that you use in your charts is 2015 up to 2044. Correct?

A. Yes.

Q. And I understand that you're familiar with the Company's triennial IRP. Correct?

A. Yes. I was heavily involved in that.

Q. But the years of the triennial IRP are 2016 to 2034. Correct?

A. When we filed IRP, the 20-year plan horizon was 2015 through 2034. And we have been including 10 years for the end effect and we have been doing this since at least 2008 IRP to capture the cost and benefits in an appropriate way.

Q. How did Ameren Missouri develop appropriate assumptions to project out that additional 10 years without an IRP?

A. I'm sorry. I don't think I understood you.

Q. How did -- so how did Ameren Missouri develop the appropriate assumptions all the way out until 2044 without a potential study?

A. Oh, what we do is for the end year

effects, we do not change the load. So load doesn't grow. Load keeps constant. And as far as energy efficiency goes, we -- again, we hold it constant so that we can look at the impacts of our decisions within the 20-year planning horizon on a higher per-- on a longer time period.

Q. So those are two -- two different assumption that you make?

A. It's not really different assumption. It is keeping the load constant so that we don't have to include additional resource additions or additional retirements. Again, so that we can evaluate what the decisions we make within that 20-year planning horizon will be without introducing any more changes.

Q. Are there any other assumptions that you make or any assumptions that you make in that 10-year period?

A. Sure. If -- if we don't have cost streams that don't go that farther -- that much longer, than we do -- we do increase those costs at the inflation rate.

Q. Do you know -- do you have any specific assumptions that you made in coming up with your projected value here in your table?

A. I mean, I cannot remember off the top of my head, but one example could be the carbon dioxide prices. If -- if those prices stop in 2040, let's say, we would be -- we would be adding 2041, '42, '43, '44 at 2 percent growth. We -- let me think. I cannot specifically remember.

Q. So let me take the carbon pricing example. So if you had a plan that enabled you to reduce your carbon output, would that change your number there?

A. I'm sorry. Would you repeat that?

Q. So you mentioned that carbon prices were one assumption that you use in coming up with this -- this number. So if you had a likely plan that allowed you to reduce your carbon output, would that change the value of this number?

A. It could, but the -- the assumptions are -- we have the assumptions and we don't have an explicit price on carbon dioxide emissions. We don't know if that's ever going to happen so --

Q. Are you familiar with Ameren Missouri's coal generating units?

A. Yes, I am.

Q. And even if Ameren achieved all of its kilowatt hour savings in this MEEIA plan under its proposal, would Ameren shut down any of those coal

fire units?

A. What we -- whether or not we achieve energy efficiency savings does not have much impact on whether or not we shut down a power plant. What we -- what we look at is what are the costs of keeping a power plant online; that includes fuel costs, environmental costs. And -- and we look at what the market prices are.

And then if -- if -- if it makes more sense to shut down the plants, then we could make that decision, which is what we did with the Meramec decision. We are -- we are going to retire Meramec at the end of 2022, regardless of we achieve energy efficiency savings or not.

Q. So even if you achieve 130 percent of Ameren Missouri's target energy efficiency savings, it's still probably going to run its coal fire units the same amount?

A. If the coal plant is providing benefits for the customers, we would keep it online because that would mean reduced costs to customers. That would mean it would be reducing revenue requirements to customers and --

Q. So whether or not the energy savings from Ameren were 10 kilowatt hours or a million kilowatt

hours, it wouldn't make a difference about how you operate your coal units?

A. Again, it would depend on the cost of operating that coal unit.

Q. Are you familiar with the units that Ameren Missouri uses to meet its peak load?

A. Yes. Typi-- yes.

Q. And what type of generating units does it use to meet peak load?

A. Typically they are natural gas fired.

Q. And would you agree that a kilowatt hour savings target for a MEEIA plan is unlikely to reduce peak load?

A. No, I'm not really thinking that way.

Q. And why would you disagree with that?

A. I believe it would -- it would be -- there would be reductions to peak load. That is what -- what -- that is what the DSM potential study -- or not the DSM potential study, but the DSM programs that we have in our -- in our calculations have. And you would probably ask these questions to Mr. Voytas, he could -- he could give you more details.

Q. So are you saying that you believe the Ameren DSM programs right now are designed to reduce

peak load?

A. Oh, they're not designed to reduce peak load, but as a result of reduction in overall energy efficiency, there will be some reductions in coincidence peak. But they're not designed -- that's not what I'm saying. I'm sorry if that's what it sounded like.

Q. So I think you agreed with me that -- or you answered that natural gas or combined cycle units are used to meet peak load. Correct?

A. Typically they are online to -- yes.

Q. And would you agree that those units are run whenever there is an increase in demand requirements?

A. Yes.

Q. So a MEEIA savings target that uses a demand goal -- demand target would be more likely to cause those units to not have to start running. Correct?

A. I thought MEEIA is about energy efficiency and not demand, but again, I -- I'm not really the expert on this.

Q. So if you -- if you were able to -- if a MEEIA program did -- you said that some MEEIA programs do cause a demand reduction. Correct?

A. I would believe they would, yes.

Q. And so for those programs that cause -- so if the demand is reduced enough by MEEIA, I guess to the value of one of those peaking units, that peaking unit would not have to run. Correct?

A. Again, it depends on the -- on which day you are looking at and the -- what are the market conditions at that time is and which -- which units are online, which units are not on line.

Q. So you disagree --

A. But it -- it -- it -- no -- no. It would -- it would reduce peak demand and that is what we have peak demand savings from the energy efficiency programs in our -- in our IRP plans.

Q. But that's not the goal of your energy efficiency savings right now?

A. Again, as far as I know, MEEIA is about energy efficiency savings and not demand savings.

Q. On page 9 in your table you compare the levelized rates with and without performance incentives. Why do you estimate these rates with and without a performance incentive?

A. That's a requirement by the resource planning rules.

Q. Would you agree that the utility

performance incentive can be a substantial cost?

A. No, I don't. I mean what we have --

Q. Are you aware that one of the possible performance incentives in this case is $48 million?

A. If we meet -- I'm not really sure about the percentage, but if we achieve some percentage of the target, yes. But in the IRP, we estimated what the foregone earnings from combined cycle supply side resources should -- would be.

And if we don't do energy efficiency, we would be -- well, if we do energy efficiency, the Company would be foregoing $280 million. That's the net present value of foregone energy -- foregone earnings. And we are not asking for $280 million. I mean --

Q. So are you aware that -- so even though you include the performance incentive in your calculation for the IRP, are you aware that Ameren Missouri doesn't include the performance incentive as a cost in its TDNSB share calculation?

A. TDNSB calculation is different from performance ince-- well, I'm not really sure. You should ask this question to Mr. Bill Davis. He's really the expert on that.

Q. Do you think that the performance

incentive should be included, the TDNSB, as a cost?
A. I -- I don't know the details of those calculations.
Q. That's all I have. Thank you.
JUDGE PRIDGIN: Mr. Opitz, thank you.
Staff, any questions?
MR. BERLIN: Yes, Judge.
JUDGE PRIDGIN: Mr. Berlin, when you're ready.
CROSS-EXAMINATION BY MR. BERLIN:
Q. Good afternoon, Ms. Berk.
A. Good afternoon.
Q. I'm Bob Berlin for Staff. I just have a few questions for you today.
Does the Synapse price of carbon projection represent the expected value of carbon prices given all the information available to Synapse at the time of the forecast?
A. Expected value of carbon prices to Synapse? I cannot talk for Synapse, but maybe, yes, I guess. I don't know.
Q. Would that be I don't know?
A. I don't know.
Q. Okay. Does the term "expected value" mean that there is a 50 percent probability of the

actual carbon prices being higher or lower?

A. Oh, I see. Expected value -- well, it depends. It would be the probabilities times whatever the values are.

Q. Okay. Then -- well, let me go back to the first question then. I thought you might know but then you said you didn't know. And so I'd like to re-ask that.

A. Okay.

Q. Does the Synapse price of carbon projection represent the expected value of carbon prices given all the information available to Synapse at the time of the forecast?

A. Again, maybe I'm getting stuck in some technicality. When you say "expected value," I'm thinking about there are -- let's say there are three levels of carbon dioxide prices in Synapse report and they would be assigning some probabilities to those and they would be multiplying those levels by those probabilities and coming up with an expected value. That's what I'm thinking. But I don't see any probabilities around those prices, so that's why I don't know what the answer would be.

Q. Okay. Would you agree with me that MEEIA's goal is to achieve all cost effective

demand-side savings?

A. Yes.

Q. And then would you agree that demand-side savings include both energy efficiency and demand response programs in both energy savings and demand savings?

A. All cost effective energy efficiency savings. I would think it is -- it is the megawatt hours and not megawatts, but I am -- I'm not exactly -- I'm not very well versed in the MEEIA statute so --

Q. Let me maybe rephrase the question --

A. Uh-huh.

Q. -- for you. Would you agree that demand-side savings includes both energy efficiency and demand response programs?

A. Sure. The DSM programs could include both. And we have -- we have -- in the IRP we have separate assumptions for demand-response programs.

MR. BERLIN: Okay. That concludes my questions. Thank you.

JUDGE PRIDGIN: Mr. Berlin, thank you.

Any Bench questions?

CHAIR R. KENNEY: No questions. Thank you.

JUDGE PRIDGIN: Commissioner Kenney?

COMMISSIONER KENNEY: No questions.

JUDGE PRIDGIN: Commissioner Stoll?

Any redirect?

MS. TATRO: Yes, thank you.

JUDGE PRIDGIN: Ms. Tatro, when you're ready.

REDIRECT EXAMINATION BY MS. TATRO:

Q. I'm trying to move so I can see you.

A. Yes. I'll do the same.

Q. At the beginning -- at the very beginning of the questioning, Mr. Linton with United for Missouri asked you some questions about the Table 1 on page 9 and whether you had redone that analysis. Do you remember -- do you recall those questions?

A. Yes.

Q. And you indicated that you had redone that analysis using the settlement figures; is that correct?

A. Yes, that is correct.

Q. I'd like to mark Exhibit 114.

(Ameren Exhibit 114 was marked for identification.)

BY MS. TATRO:

Q. Can you identify this for the Commission?

A. DSM Customer Cost Impact. Did you want me to go through?

Q. Yeah. Can you explain what it is while I'm finishing handing this out?

A. Yeah. Sure. So the first table shows the levelized rate, cents per kilowatt hour with what we had previously and then what is the June 30th Stipulation and Agreement plan. And the last one is no DSM plan, which doesn't include any energy efficiency after MEEIA Cycle 1.

So what that shows is the June 30th stipulation plan compared to no DSM plan does reduce levelized average rates, which means all customers, whether or not they participate in programs, would benefit from programs -- from energy efficiency.

And the second table is showing the PVRR. Again, this is compared to June 30th stipu-- compared to no DSM plan, June 30th stipulation plan would reduce present value of revenue requirements by $2 billion.

And the third one is maximum single-year rate increase, which is -- I mean rate impacts to customers. Again this one shows the June 30th stipulation plan would result in a smaller maximum single-year rate increase compared to a no DSM plan.

Q. So in your opinion, what does this analysis tell the Commission about whether the June 30th stipulation is beneficial to all customers?

A. This shows that June 30th stipulation plan does benefit all customers.

MS. TATRO: Move for the admission of 114.

JUDGE PRIDGIN: Ms. Tatro, thank you. Exhibit 114 has been offered. Any objection?

Hearing none, Exhibit 114 is admitted.

(Ameren Exhibit 114 was received into evidence.)

BY MS. TATRO:

Q. Okay. Then you were asked some questions by the Sierra Club. And the first set of questions dealt with the 15 percent probability of carbon, whether -- 15 percent being direct and 85 percent, assuming there's an indirect cost of carbon. Do you remember that line of questioning?

A. Yes.

Q. Do you know if the Commission has ever addressed this issue in a previous case?

A. Yes. Actually in our latest rate case this issue was brought up by Sierra Club in Labadie discussions. And the Commission order stated on page 99 and 100 that the Commission finds Ameren's environmental regulations assumption -- I mean GHG regulations reasonable. And it also says, if I can read from the order itself, Ameren Missouri's analysis took into account its reasonable evaluation of what such regulations would likely require. But no such greenhouse gas regulations are currently in effect and no one can know with any certainty what form such regulations might take in the future. So -- so this Commission found our analysis appropriate.

Q. And just to be clear, you're reading from the Report and Order issued in File Number ER-2014-0258 --

A. Yes.

Q. -- pages 9 and 10?

A. Yes.

Q. I'd ask the Commission to take --

A. Pages 99 and 100. Is that what you said?

Q. Oh, I'm sorry. No, it is not. 99 and 100?

A. Yes.

MS. TATRO: I would ask the Commission to take judicial notice of those pages.

JUDGE PRIDGIN: Any objection?

So noted.

MR. OPITZ: Judge --
JUDGE PRIDGIN: I'm sorry.
MR. OPITZ: -- I would just add if we're going to take notice of some pages, I would like to take notice of the entire Report and Order.
JUDGE PRIDGIN: Any objection to that?
MS. TATRO: I do not.
JUDGE PRIDGIN: So noted. We'll take notice of that Report and Order.
BY MS. TATRO:
Q. Ms. Berk, can you tell me does the IRP rules -- do the IRP rules require the use of a specific CO2 price?
A. No, they don't. No, they don't. They -- they call for utility executives' judgment and they call for subject of probabilities. And that is what -- what we did exactly.
Q. All right. Can you tell me under what kind of regulation there might be no price -- specific price given to a CO2 emission?
A. I'm sorry. I'm sorry. I didn't get the question.
Q. What type of greenhouse re-- greenhouse gas regulation might not have a specific price for CO2 emissions?

A. Right. Indirect costs, indirect mechanisms do not require an explicit price on carbon dioxide emissions. And we have included explanations on this in our IRP.

So there are three mechanisms that -- that can be used to reduce greenhouse gas regulations. One of them would be promoting or mandating low or no carbon emitting resources. The second one would be limitations on emissions. This could be emission rates or mass emissions and these are the indirect mechanisms. And these impose indirect costs by -- by resulting in coal plant generation retirements and replacement generation.

And these are actually the same -- the same mechanisms and the same cost that -- that is mentioned in the Synapse Energy Economics Report and I believe I had also included it in my testimony. So the -- the cost of those regulations would be retirement and repl-- retirement of coal plants and replacement with new -- other types of generation resources. So those would be the costs and that would not require additional carbon dioxide costs. That would be a double counting of costs.

Q. And do you know, does the Clean Power Plan as proposed include a direct price or an indirect

price on CO2 emissions?

A. It includes indirect costs. It does not include any -- any explicit carbon dioxide prices.

Q. And are the retirement assumptions in the IRP scenarios consistent with the levels found in other third-party studies of the Clean Power Plan?

A. Yes, they are. As I had just -- as I just stated, the cost of these indirect -- or these indirect costs are retirement of coal plants and replacement generation.

So what we did is our subject matter experts came up with the timing and the magnitude of these retirements and we had 80 gigawatts of retirements in the least changing scenario by 2030. And in our most likely scenario, we had 100 gigawatts of coal plant retirements and 120 gigawatts of retirements in the most changing scenario that -- and when we look at other resources, we see they are all around 100 gigawatts of coal plant retirement.

So we are seeing that -- that our assumptions are totally consistent with -- with third party -- or other parties.

Q. And in those other studies to which you're referring, do any of those studies include assumptions for a specific price on CO2 or do they

have an indirect cost?

A. No, they don't. They look at what the impacts of CPP would be.

Q. Okay. All right. Then you were asked some questions by the Office of Public Counsel. And he was discussing the IRP analysis and how long you're evaluating the long-term impacts of various decisions. Do you remember those questions?

A. Yes.

Q. Can you explain to me the purpose of the additional 10 years in your IRP analysis? When you're evaluating for the 20-year plan, why you're -- what's the purpose of evaluating impacts 10 years beyond?

A. Yeah. Because if we don't do that, we would be -- we would be potentially biasing the analysis. We could be -- if you give an example. If we include supply-side resources at the last year of the planning horizon, then we would not be including the costs of depreciation and property taxes and et cetera. It -- you'd only have one year of those costs. So we would be underestimating the costs related to that supply-side resource.

On the other hand, for energy efficiency programs, for example, we keep -- our assumption is that we implement programs throughout 2034, but the benefits of those programs do -- do continue way after -- after you have implemented the programs. So you would be underestimating the benefits of energy efficiency programs if you did not include additional land effects. And land effects are -- they are recommended by several different resource -- several different parties and there are other utilities that include these.

Q. All right. And then later in the conversation there was a discussion about whether or not energy efficiency drives coal plants retirements. Do you remember that conversation?

A. Yes.

Q. And I believe it -- to make sure I have this correct, I believe you said that energy efficiency doesn't drive coal plant retirements. Right?

A. Correct.

Q. Can you explain to me what the impact of energy efficiency might be on the timing of replacement once a coal plant is retired?

A. Right. Energy efficiency would impact when we -- when we replace and how much of that retire-- coal plant retirement capacity we replace. But it doesn't -- it doesn't impact whether or not we make the decision to retire.

So if he would do -- if we implement energy efficiency programs and we may be able to defer an additional supply-side resource due to retirement, but again, it -- the decision is, first, is the coal plant -- should the coal plant keep operating? And it doesn't have anything to do with -- with energy efficiency investments.

And Mr. Davis also talks about this in his -- in his testimony. You could also ask those questions to him. I should have said that earlier, I guess.

Q. I have no further questions. Thank you.

JUDGE PRIDGIN: Ms. Tatro, thank you.

Ms. Berk, thank you very much. You may step down. I believe Ms. Dolly is our next witness.

Ms. Dolly, if you'll raise your right hand to be sworn, please.

(Witness sworn.)

(Ameren Exhibit 108 was marked for identification.)

JUDGE PRIDGIN: Thank you very much.

CARA DOLLY testified as follows:

DIRECT EXAMINATION BY MR. MITTEN:

Q. Would you please state your name and

business address for the record.

A. My name is Cara Dolly. And I work at the Ameren General Office Building, 1901 Chouteau Avenue, St. Louis, Missouri.

Q. Ms. Dolly, did you prepare and cause to be filed in this case Surrebuttal Testimony, which has been marked for identification as Exhibit 108?

A. Yes, I did.

Q. Did you prepare that testimony yourself?

A. Yes, I did.

Q. Do you have any changes or corrections you need to make to that pre-filed testimony today?

A. Yes, I have three I'd like to do.

Q. Could you please tell me where those are?

A. Page 2, line 14, I'd like to strike the word "convention" and replace it with the word "convening." Page 4, line 12, I'd like to strike "windows" and replace it with the word "window." Page 23, line 10, I'd like to strike the word "demand" and replace it with the word "supply."

Q. Any other changes or corrections?

A. No. That is all.

Q. With those changes and corrections, if I ask you the questions that are contained in your pre-filed Surrebuttal Testimony, would your answers be

the same as are shown?

A. Yes.

Q. And are those answers true and accurate to the best of your knowledge?

A. Yes.

MR. MITTEN: Your Honor, I have no further questions for Ms. Dolly. I would offer Exhibit 108 into evidence.

JUDGE PRIDGIN: Mr. Mitten, thank you. Exhibit 108 has been offered. Any objections?

Hearing none, Exhibit Number 108 is admitted.

(Ameren Exhibit 108 was received into evidence.)

MR. MITTEN: And Ms. Dolly is available for cross-examination.

JUDGE PRIDGIN: Thank you.

Any cross-examination United for Missouri, Mr. Linton?

MR. LINTON: I have no questions.

JUDGE PRIDGIN: Mr. Robertson, NRDC?

MR. ROBERTSON: No questions.

JUDGE PRIDGIN: Division of Energy?

MR. ANTAL: No questions.

JUDGE PRIDGIN: Thank you. Mr. Linhares,

Renew Missouri --

MR. LINHARES: No questions.

JUDGE PRIDGIN: -- Tower Grove, National Housing Trust? Thank you.

Sierra Club?

MS. TAUBER: No questions.

JUDGE PRIDGIN: Thank you.

Brightergy?

MR. ZELLERS: No questions, Your Honor.

JUDGE PRIDGIN: MIEC?

MR. DOWNEY: No questions.

JUDGE PRIDGIN: MECG? Public Counsel?

MR. OPITZ: A few, Your Honor.

JUDGE PRIDGIN: When you're ready, Mr. Opitz.

CROSS-EXAMINATION BY MR. OPITZ:

Q. Good afternoon, Ms. Dolly.

A. Hello.

Q. Has Ameren had trouble getting multi-family low-income unit owners to participate in energy efficiency programs?

A. We did initially when we first launched the program, but we haven't since we made some pretty good changes; one of which was offering all of the upgrades at no charge. Initially we would do the upgrades and then reim-- or they would do the upgrades and then we would reimburse them. So when Honeywell took over the program, they said what if we just do at no cost and offer it that way. So we went with that approach and it's been very successful.

Q. Thank you.

A. Uh-huh.

Q. In Cycle 1 Ameren Missouri partnered with Laclede Gas to deliver its low-income program. Correct?

A. Yes.

Q. Am I correct in understanding that there's no mention of Laclede Gas in the Utility Stipulation or in Ameren's Cycle 2 application?

A. We talk about being able to offer combined or co-delivered programs wherever possible.

Q. Has Ameren Missouri approached Laclede Gas to partner with any programs for its MEEIA Cycle 2?

A. Actually we had a discussion probably -- I want to say it was before last Christmas -- I'd have to actually look at the timing -- where we talked about what would we do going forward and were there forward-looking opportunities. And we had not filed at that time so we were saying, well, we were getting ready to file and that. I have called them just recently to talk to them about what we would do going forward.

And also just on a side note, we have issued our RFPs for program participation going forward in '16 through '18 because we have to do some of this concurrent and have asked for co-delivery opportunities in that RFP from those contractors as far as where would be opportunities for them to do that.

Q. Has Ameren Missouri approached any other gas utility, such as Liberty Gas, to partner programs in Cycle 2?

A. No, we haven't. But we hope to.

Q. Thank you. That's all I have.

JUDGE PRIDGIN: Mr. Opitz, thank you.

Questions from Staff?

MS. MUETH: No, Your Honor.

JUDGE PRIDGIN: All right. Thank you.

Any Bench questions?

CHAIR R. KENNEY: No questions. Thank you, Judge.

JUDGE PRIDGIN: Commissioner Kenney? Commissioner, Stoll, questions?

COMMISSIONER STOLL: No questions. Thank

you.

JUDGE PRIDGIN: Any redirect?

MR. MITTEN: No redirect, Your Honor.

JUDGE PRIDGIN: All right. Thank you.

Ms. Dolly, thank you very much. You're excused.

MS. TATRO: We're making progress, Your Honor.

JUDGE PRIDGIN: The next witness is Mr. Voytas.

JUDGE PRIDGIN: If you'll raise your right hand to be sworn.

(Witness sworn.)

JUDGE PRIDGIN: Thank you very much, sir.

Counsel, when you're ready.

MR. TOMC: Thank you, Your Honor. One moment, Your Honor.

JUDGE PRIDGIN: Certainly.

MR. TOMC: Your Honor, I'd like the record to reflect I'm going to put a couple of exhibits here before the court reporter. The first would be Exhibit Number 100, which is the original Energy Efficiency Plan filed by the Company that initiated this proceeding. Mr. Voytas assisted with preparing portions of those report. His name is identified in that document with respect to the sections that he assisted with and authored.

I'm also going to leave with the court reporter Exhibits 112, I have an HC version and an NP version. Those are Mr. Voytas's Surrebuttal Testimony versions. And I also have Exhibit Number 113, which is Mr. Voytas's Rebuttal to the Non-utility Stipulation.

JUDGE PRIDGIN: So noted. Thank you.

(Ameren Exhibits 100, 112-NP, 112-HC and 113 were marked for identification.)

MR. TOMC: At this time, Your Honor, I would call Mr. Richard A. Voytas to the witness stand. Mr. Voytas filed pre-filed testimony in this proceeding. I know there's lots of versions. Just to clarify, he addressed issues concerning national trends in energy efficiency, the comparison of potential studies with other jurisdictions and also responded to the Non-utility Stipulation on behalf of the Company, among other topics addressed in his testimony.

JUDGE PRIDGIN: He's been sworn. You can proceed when you're ready.

RICHARD A. VOYTAS testified as follows:

DIRECT EXAMINATION BY MR. TOMC:

Q. Good afternoon, Mr. Voytas. If you could please state your name and business address for the record?

A. My name is Richard A. Voytas. My business address is 1901 Chouteau Avenue, St. Louis, Missouri.

Q. Now, Mr. Voytas, are you the same person that caused to be filed Exhibits 112-HC and NP versions, as well as Exhibits 113, those being your testimony submitted in this proceeding?

A. I am.

Q. And you also authored portions of the original report which is marked as Exhibit 100; is that right?

A. I did.

Q. And, Mr. Voytas, do you have any additions or corrections to any of your testimony or portions of that report this afternoon?

A. I do not.

Q. And if I asked you the questions contained in your testimony, would your answers remain the same?

A. Yes.

Q. And is the information contained in that report true and accurate to the best of your

information, knowledge and belief?

A. Yes.

Q. And the information contained in your testimony is also true and accurate to the best of your information, knowledge and belief?

A. Yes.

MR. TOMC: With that, Your Honor, I would move for the admission of the aforementioned Exhibits 112-HC and NP, as well as Exhibit 113. I would note for the record that Mr. Wills' name is indicated on those -- on that report in portions as well. Those portions of the report have been adopted by Mr. Davis and he will be testifying later today.

JUDGE PRIDGIN: Very good. So I have Exhibit 112-HC, Exhibit 112-NP and Exhibit 113 being offered. Any objections?

Hearing none, Exhibits 112-HC is admitted, Exhibit 112-NP is admitted and Exhibit 113 is admitted.

(Ameren Exhibits 112-HC, 112-NP and 113 were received into evidence.)

JUDGE PRIDGIN: Any further direct?

MR. TOMC: No further direct, Your Honor. The witness is available for cross-examination.

JUDGE PRIDGIN: Thank you very much. Any

cross for United for Missouri?

MR. LINTON: I have no questions, Judge.

JUDGE PRIDGIN: Thank you. NRDC?

MR. ROBERTSON: No questions.

JUDGE PRIDGIN: Division of Energy?

MR. ANTAL: A few questions.

JUDGE PRIDGIN: Mr. Antal, when you're ready.

CROSS-EXAMINATION BY MR. ANTAL:

Q. Hello, Mr. Voytas.

A. Good afternoon.

Q. Were you involved in the development of the Company's 2015 Integrated Resource Plan?

A. My involvement inc-- was sponsoring the DSM portion of that filing, yes.

Q. Okay. And as part of that sponsorship, are you aware of any CHP or combined heat and power case studies that the -- that Ameren did?

A. Yes.

Q. And were any of those case studies found to be cost effective?

A. Yes.

Q. Okay. And under the terms of what has been referred to as the Ameren agreement or Utility agreement today, CHP would be one measure among the

Company's business custom program; is that correct?
A. That's my understanding.
Q. Okay. And is it also your understanding that combined heat and power would be reviewed for cost effectiveness on a case-by-case basis under that program?
A. That's my understanding.
Q. Okay. My next line of questioning is about the Company's lighting program. Are you aware of a study done by Cadmus entitled Ameren Missouri Lighting Impact and Process Evaluation for Program year 2014?
A. I am.
Q. Okay. And one of the results of that evaluation was that in 2014 the percentage of CFL light bulbs was significantly lower in drug and grocery stores as well as discount stores. Would you agree with that statement?
A. I -- I don't recall that specific.
Q. Okay. Under the terms of the Ameren or Company agreements, CFLs are going to be incentivized for an additional year; is that correct?
A. That's my understanding.
Q. And under the terms of that agreement, those rebates would only be provided for in grocery

stores, drug stores and discount stores as well as online purchases; is that correct?

A. That's my understanding.

Q. Okay. Do you know why that decision was made to only provide those incentive in those particular stores?

A. I was not involved in that part of the settled agreement. I do not know.

Q. Okay. Ask you a few questions about the terms of the Non-utility Stipulation and Agreement. Are you generally aware of the terms of that agreement?

A. Yes, I've read it.

Q. Okay. Section 2-D2 states that the third-party mediator shall issue a report on these findings to the Commission by April 15th, 2016.

Given your experience with developing Ameren's Cycle 1 and Cycle 2 plans, do you believe it's feasible for a third-party mediator to issue a report by that date?

A. Can you tell me what the proposed start date is?

Q. I believe -- well, under the terms it states that the Company shall issue a request for proposal by August 31st, 2015.

A. Well, you know, it could be -- it could take up to six weeks to get responses evaluated, interview a long list, interview a short list. And so that would put -- that could put the start of this endeavor in November.

And it -- you know, the devil's in the details. It depends on the scope of work. If the scope of work is to tear into the potential study and every assumption and every modeling input into that study, that's a pretty long process. So if that's what the scope of this work is intended to be, that could be quite lengthy. I don't know the length of time, but I would say a span of time of four or five months is pretty quick.

Q. Okay. No further questions.

MR. ANTAL: Thank you.

JUDGE PRIDGIN: Mr. Antal, thank you.

Renew Missouri?

MR. LINHARES: No questions.

JUDGE PRIDGIN: Tower Grove, National Housing Trust?

MR. LINHARES: No questions.

JUDGE PRIDGIN: Sierra Club?

MS. TAUBER: Just a few, Your Honor.

CROSS-EXAMINATION BY MS. TAUBER:

Q. Good afternoon, Mr. Voytas.

A. Good afternoon.

Q. Mr. Voytas, I want to refer you to your Surrebuttal Testimony, page 25. And if you could just let me know when you're there.

A. I'm there.

Q. Great. And specifically, sir, lines -- beginning on line 10, you discuss some of the common -- or the most common, rather, key drivers of potential studies that impact the outcome. Do you see that question?

A. Yes, I do.

Q. And so the first such driver that you discuss is net versus gross. Do you see that?

A. I do.

Q. And so this refers to how annual energy savings are reported, the reported estimates; is that right?

A. That's correct.

Q. And you indicate that net is preferable; is that correct?

A. That's correct.

Q. And the preference for net, is that a result of -- would you say that the gross potential would be less accurate than net potential?

A. Well, it's not a question of accuracy. It's a question of attribution. The net potential includes naturally occurring energy efficiency in your base load forecast. Gross potential does not. So it's really not a question of accuracy. Both gross and net can be accurate in their own context. But in terms of what a utility can achieve, net has got the correct attribution associated with it.

Q. So net would be more reflective of the energy savings that a utility could deliver?

A. That's correct.

Q. Okay. Now, you also discuss -- moving down, just item Number 4, EM&V true-up. And EM&V, that stands for evaluation, measurement and verification; is that correct?

A. That's correct.

Q. Would you agree -- and here you discuss that potential estimates should account for EM&V?

A. That's correct.

Q. You would agree it's important to account for EM&V?

A. Well, it -- you've got to put that in context. In this particular case, it is. Not all cases it may not be. But in this particular case, our potential study started in 2012 and the basis for measured savings was done for the TRM developed from MEEIA Cycle 1. That TRM was the first of its kind in the state of Missouri.

And in that, we had some secondary information, some primary data and then we had stakeholders review and approve it and the Department of Natural Resources at the time hired a contractor to review it. And then we went with that and that's what we proceeded to use for MEEIA Cycle 1. And that was used for our DSM potential study that was substantially completed in 2013.

But then what happened is in 2013, approximately in February of 2014, we got our actual EM&V results based on 100 percent primary data collected from Ameren Missouri customers. And what we found is that we had substantial differences, mainly from the secondary sources that we had since this was a first of a kind type TRM.

So in this particular case there's a substantial difference between the EM&V results and what we had in the TRM used for the potential study. And that's why the potential study needed to be adjusted to reflect that.

However, now that we've got all primary data, what we've found -- and this answers your question -- that in 2014, when you compare the measured savings from 2013 EM&V to 2014 EM&V, they're substantially similar. There is nowhere near the differences that there are. So the reason I answered the question that way is it depends where you are in the cycle. If this is the first of a kind, it makes some difference. If this is ongoing and all prior TRMs were based on primary data, it's not such a big deal.

Q. Thank you, Mr. Voytas. And my last question, you provided updated numbers or I guess the most recent numbers in your Surrebuttal Testimony with respect to what Ameren has achieved thus far in Cycle 1 and I just wanted to confirm. Is it correct that Ameren has achieved nearly 700 gigawatt hours in energy savings over the past two years, 2013 and 2014?

A. Can you point to me where I provided that in my Surrebuttal Testimony, please?

Q. 135 -- page 135, line 16. And I've seen a couple of different numbers around this ball park and I just wanted to confirm that this number, to your knowledge, is the most accurate?

A. It is, to the best of my knowledge. My particular team does not do the bookkeeping to keep these numbers and we work with our implementation team to get these numbers. To the best of my knowledge, these numbers are accurate.

Q. Great.

MS. TAUBER: No more questions. Thank you.

JUDGE PRIDGIN: Brightergy, any cross?

MR. ZELLERS: No cross, Your Honor.

JUDGE PRIDGIN: Thank you. MIEC?

MR. DOWNEY: No cross.

JUDGE PRIDGIN: MECG? OPC?

MR. OPITZ: I've got a few, Your Honor.

JUDGE PRIDGIN: When you're ready, sir.

CROSS-EXAMINATION BY MR. OPITZ:

Q. Good afternoon, Mr. Voytas.

A. Good afternoon.

Q. You mentioned the -- that Ameren has a Ameren-specific Technical Resource Manual. Correct?

A. That's correct.

Q. Does Ameren's Technical Resource Manual include adjustments for Ameren Missouri service territory-specific weather?

A. Well, the --

Q. Is that a yes or no?

A. The -- the weather factors, specifically the heating degree days, cooling degree days, normal temperatures those aren't part of the TRM. But if you're talking about in terms of HVAC savings as one example, those savings include the weather that is specific to Ameren Missouri service territory. In other words --

Q. So -- so the TRM, to the extent that weather is built into the program, includes weather, but it's not applied specifically for every other measure?

A. Well, I think I could state it more clearly. The TRM is a direct result from the 2014 EM&V results. For whatever program, whatever was analyzed, those numbers are extracted from that primary market research done for EM&V and those numbers are directly put into the TRM.

Q. You were in the room when Ms. Rohmund was testifying. Correct?

A. Yes.

Q. And she, near the end of her testimony, stated that there were certain requirements to be complied with in conducting the market potential study. Do you recall that?

A. I do.

Q. And is it your understanding she was referring to requirements by Ameren Missouri?

A. I did not speak to her before or after so I don't know what she meant by her comments.

Q. Do you know that if Ameren Missouri required -- let me -- excuse me. Let me go back.

How did Ameren Missouri hire Ms. Rohmund's firm to conduct this market potential study?

A. Well, I've got in my Surrebuttal Testimony the complete history from working with stakeholders to telling an RFP to working with stakeholders to ultimately select EnerNOC. As a part of that whole process, we had a statement of work and that was, again, conducted jointly with the stakeholders.

But part of that statement of work was to comply with all the MEEIA rule provisions that there were that pertained to DSM potential studies. So there was quite a few things that changed from the prior study that we did in 2009, there were some more process evaluation requirements, things of that nature. So we specifically went to the rules and used that as the basis for the developing the scope of work.

Q. And did that scope of work include a requirement that EnerNOC adjust the primary data using

YouGov data, the YouGov study?

A. Well, that particular statement of work just defined the various levels of potential and it defined, you know, what achievable potential was, but it didn't say -- none of that work told EnerNOC what to do or how to do it.

Q. Well, I believe Ms. Rohmund testified that Ameren Missouri had indicated that EnerNOC was supposed to use Missouri service territory-specific data Missouri, service territory-specific information and Missouri service territory-specific requirements. Correct?

A. To the extent that it's available, that's correct.

Q. And so did Ameren require EnerNOC to adjust the primary data with the YouGov study?

A. No.

Q. When did you become aware of the YouGov study, what year?

A. Well, we've been working with YouGov for -- for a few studies now. And I guess I was aware of their type of work in our -- 2009 in our first Ameren Missouri DSM potential study that we did with EnerNOC. So I guess I've been aware of it since 2009.

Q. And my understanding was that the

particular YouGov study applied to the market potential study in this case came out in 2010. Correct?

A. The study that was done in 2009, was updated with further analysis in 2010, that's correct. This is the second version of the study.

Q. Ms. Rohmund seemed to indicate that it was not her decision to adjust the primary data using the YouGov study. Do you know whose decision it was to adjust the primary data using the YouGov survey?

A. Well, nobody on my team or the Ameren Missouri implementation team claims to be expert market researchers. That's what we relied on the EnerNOC team and that's why they hired subcontractors, specifically Dr. David Lineweber, to inform us and guide us on how to best estimate take rates.

So this was something that they described as national best practice, but they thought was so powerful and what -- I think what all stakeholders agreed was so powerful, this was the only take rate methodology that actually relied, at least in part, on primary market research data.

Q. But was that market research data Ameren Missouri service-territory specific?

A. Yes.

Q. For the YouGov survey?
A. No. For the customers inte--
Q. Thank you. Thank you. Thank you. Were you in the room when Ms. Berk was testifying?
A. I was.
Q. And do you recall her testimony that the Ameren MEEIA energy efficiency programs can also cause demand savings?
A. Yes.
Q. Do you have a copy of your Rebuttal Testimony to the Non-utility Stipulation with you?
A. I do.
Q. Could you please turn to page 6?
A. Yes.
Q. On line 16 it's the title of a section and the first sentence of that title is Energy Efficiency is Energy Savings. Did I read that correctly?
A. You did.
Q. But that's not entirely true. Correct? Because energy efficiency also uses -- also includes demand savings. Right?
A. No, that is correct. When we design an energy efficiency program, we design it to achieve energy efficiency savings and the demand savings just

happen to happen. Those are not overtly designed to happen. They just happen.

Q. But there are demand savings associated with energy --

A. There are.

Q. -- efficiency?

A. There are.

Q. And you could design energy efficiency programs to try and achieve demand savings. Correct?

A. That's incorrect.

Q. Okay. Do you happen to have a copy of your Surrebuttal Testimony with you?

A. I do.

Q. And beginning on page 137 -- just a moment. I believe it's 139. You discuss CFL. Correct?

A. Yes.

Q. And in the program years 2013 and 2014, CFL light bulbs accounted for 83 percent of all residential energy savings. Correct?

A. I'm looking for that -- that reference to 83 percent.

Q. I believe if you look at 137, there is a pie chart.

A. Okay.

Q. And there's also a textual reference at 137, line 3.

A. So all of these graphs have different meanings and different contexts. This is residential measures. Of the residential measures offered, CFLs accounted for 83 percent per EM&V results for 2013 and 2014.

Q. Okay. Thank you. Do you agree that Ameren believes the efficient lighting market in its service territory has been transformed as a result of its MEEIA Cycle 1 efforts?

A. By "transformed" you mean that it's in its final end state?

Q. How do you define "transformed"?

A. I define the Ameren Missouri lighting market as evolving. Ameren Missouri has made great strides in increasing the saturation of efficient light bulbs, but it by no way, shape or form has saturated the entire market. It has not transformed the entire market. Ameren Missouri is not in a position to walk away from the efficient lighting market because the market's transformed at this time.

Q. But the CFL program, was that included in Ameren's Cycle 2 application?

A. No, it was not.

Q. And whose decision was it to not include the CFL program in Cycle 2's application?

A. Well, I don't know if it was any one person's decision. It was the result of our program cost effectiveness screening. It was not cost effective due to the change in baseline standards beginning the year 2020. And hopefully I describe that in my Surrebuttal Testimony.

Q. Going back to your Supplemental Rebuttal on page 4.

A. I'm sorry. Is -- is Supplemental Rebuttal my Rebuttal?

Q. Excuse me. Your Rebuttal to the Utility Stipulation --

A. Okay.

Q. -- or to the Non-utility Stipulation. On page 4, lines 6 through 9 you say, The residential lighting program would be minimized, if not eliminated, from the portfolio. Correct?

A. In response to the question, Please provide an example of a significant portfolio design change brought about by making the primary objective maximization of peak demand reductions; that is correct.

Q. But in the Company's previous application

it minimized, if not eliminated, large portions of its lighting program anyway. Correct?

A. No. It just eliminated CFLs and replaced CFLs with LEDs.

Q. Can you tell me what percentage of the lighting program in Cycle 1 CFLs were?

A. What percentage of savings? I mean we went through that 80 plus percent of the residential portfolio for 2013 and '14. Is that the number you're looking for?

Q. What percentage of the residential lighting program in Cycle 1 used CFL bulbs?

A. Well, a very high percentage. Some LEDs were moved, but I -- you know, I think I would be safe to say that 95 percent of the savings achieved in MEEIA Cycle 1 came from CFLs and perhaps 5 percent came from LEDs.

Q. So at least for CFLs, the Cycle 2 application was a significant reduction of that residential lighting program aspect. Correct?

A. No. Again, the LEDs replaced the CFLs. Now, the volume of LEDs decreased because one of the things that we could do with CFLs was sell them in six-pack units. With LEDs, they're pricier and you can't do that so the volume decreased.

Q. So I think you mentioned that in Cycle 1 residential lighting was approximately 83 percent of the residential portfolio savings?
A. For 2013 and '14, per the EM&V results.
Q. But residential lighting is only expected to contribute 13 percent of the energy savings in its Cycle 2 plan. Correct?
A. Is that in the plan or the Utility's Stipulation and Agreement?
Q. I believe it's in the plan.
A. I -- I -- you know, I don't have those numbers in my head. I don't know at this point.
Q. But from 80-some percent down to 13 percent is a pretty big reduction anyway; isn't that correct?
A. That's correct.
Q. Would you agree that the Non-utility Stipulation would place more emphasis on measures that are similar to HVAC more than residential lighting?
A. If the primary objective is maximum -- maximization of peak demand reductions, yes.
Q. If the Cycle 2 application and plan under the stipulation is a significant reduction from the lighting portion of the Cycle 1 application, why is it a bad thing to not focus on lighting?

MR. TOMC: Objection, Your Honor. I believe that the question needs to state which stipulation he's talking about. I can already tell from the last response that the witness may not be tracking the same thing the examiner is trying to elicit. So I would ask that the question clarify that for him.

MR. OPITZ: I can rephrase, Your Honor.

JUDGE PRIDGIN: Thank you.

BY MR. OPITZ:

Q. Mr. Voytas, if the residential lighting in the Ameren's Cycle 2 position as it stands now is still much lower than the residential lighting in its Cycle 1 application, why is it bad to not focus on lighting going forward?

A. Why is it bad to not focus on lighting going forward? Well, I get a little bit confused when I hear talk at this hearing about achieving all cost effective energy efficiency and then I hear something as significant as lighting, something that's ubiquitous in all of our homes that we -- because it's not as great as it was in a year prior, that we should eliminate that and only go after things that might have a bigger impact on peak demand. I don't see how that complies with the statute of achieving all cost effective energy efficiency.

Q. So to your knowledge, does the Non-utility Stip say anything about removing LED lighting?

A. Well, the Non-utility Stip changes the ball game. I mean --

Q. But does it say anything about removing LED lighting?

A. Explicitly or implicitly? Implicitly it says a ton about removing lighting.

Q. But it does not explicitly say anything about that?

A. That's correct.

Q. And you're not a signatory to the Non-utility Stipulation, so you really don't know what it means?

A. That's correct.

Q. In your Supplemental Testimony -- and I don't have a page reference, but you state that -- I believe it's your Rebuttal Testimony to the Non-utility Stipulation. Excuse me. You testified that the net share benefits business model is a win-win model for both customers and the Company. Correct?

A. That's correct.

Q. Are you aware that Ameren -- that Ameren Missouri has overcollected from ratepayers through the TDNSB --

A. No, I'm not.

Q. -- in Cycle 1?

A. I am not aware of that.

Q. Have you read the testimony of Staff's witness John Rogers?

A. Yes, I have.

Q. And have you seen the table in his chart describing the deemed values compared to the realized values after EM&V?

A. Yeah. Unfortunately, you know, we got Mr. Rogers' testimony late last week and I took a day of vacation on Thursday and Friday so I didn't have a lot of time. But I know Ameren witness Bill Davis has looked at that and gotten into the numbers. And I think Mr. Davis can give you more insight as to what Mr. Rogers did versus what the Company may have done.

Q. So you disagree that the Company has overcollected through the throughput disincentive mechanism in Cycle 1?

A. I don't know, but I dis-- I do not agree that they did overcollect.

Q. So in other words, you are saying that

the Company did not overcollect through the throughput disincentive mechanism?

A. I'm saying I don't know. I've not had time to examine the data.

Q. But you just said that they did not overcollect?

A. Well, to the best of my knowledge, they did not, but I don't know that they did.

MR. OPITZ: That's all I have, Your Honor.

JUDGE PRIDGIN: Mr. Opitz. Thank you.

Any questions from Staff?

MS. PAYNE: Yes, Your Honor. Thank you. May I approach?

JUDGE PRIDGIN: Yes, you may.

CROSS-EXAMINATION BY MS. PAYNE:

Q. Mr. Voytas, if you can clarify that what I just handed you is portions of the Energy Efficiency Plan filed for 2016, 2018 in this proceeding?

A. It looks like it.

Q. I'll take that. And on the one I gave you, there is a highlighted section on page 21 there under Avoided Cost Heading?

A. Yes.

Q. If you could read that for me?

JUDGE PRIDGIN: Is this HC?

MS. PAYNE: No.

JUDGE PRIDGIN: Okay. Very good. Thank you.

MS. PAYNE: Sorry. The HC portions on there will not be referenced so there's no reason to go in-camera.

MR. TOMC: Your Honor, just for the Company's benefit, we'll follow along. Just to make sure I'm on the same page as counsel for Staff. it's these values that are starred that we would object to those being discussed. Is that okay?

MS. PAYNE: Absolutely. And nothing about those numbers will be discussed.

MR. TOMC: Thank you.

THE WITNESS: Thank you. Shall I start reading? Shall I start reading?

BY MS. PAYNE:

Q. That would be great. I'm sorry.

A. As discussed above, one of the primary inputs to the cost effectiveness testing is the avoided cost assumptions used to value saved energy and capacity. The development of the avoided cost curves that were used in the 2013 Energy Efficiency Potential Study were grounded in the analysis of the

IRP and are discussed in detail in Chapter 2 of the IRP filing made on October 1, 2014 in File Number EO-2015-0084.

Forward energy market prices were developed using modeling software provided by Ventyx and commonly referred to as MIDAS. The results of this production cost model provided 15 unique forward price power price forecasts that would include probable environmental costs by adjusting the following input variables: Natural gas, load growth, co-plant retirements, cost of carbon.

Q. Thank you.

MS. PAYNE: I would like to go ahead and offer this -- or I'm sorry. This is already offered as Exhibit 100. I want to add on.

BY MS. PAYNE:

Q. Mr. Voytas, an energy efficiency potential study was used in the IRP process to forecast a utility's potential for savings from energy efficiency measures. Would you agree with that?

A. Yes.

Q. Thank you. Could you describe for the record how the development of the avoided cost curves used in the 2013 energy efficiency potential study were grounded in the analysis of the 2014 IRP study,

Integrated Resource Plan?

A. No, I can't. What my team does is we're receivers of that information and we work with our IRP staff who work with our market experts to develop those forward price curves. And we use the inputs they give us, so I cannot speak to the components that are in there.

Q. Just to clarify, you drafted this portion of the filing, did you not?

A. This section my team sponsored. This particular excerpt, we went to the IRP team to get the forward price expert to help us write it.

Q. Thank you. Now, a potential study was also conducted in 2010; is that correct?

A. That's correct.

Q. And you were responsible for that study as well as the 2013 one. Correct?

A. That's correct.

Q. All right. What avoided energy and capacity cost curves were used to value the benefits for energy efficiency measures in the 2016 to 2018 plan?

A. The avoided cost curves that are in this filing.

Q. And is that the same as what's contained

in the 2014 IRP?

A. You know, I didn't go back and double check. I believe it is, but I didn't do that check so I can't say with a 100 percent certainty.

MS. PAYNE: May I approach again?

JUDGE PRIDGIN: You may.

BY MS. PAYNE:

Q. Thank you, Mr. Voytas. Can you verify that what I just handed you is pages from the 2014 IRP, the planning environment section?

A. Yes, they are.

Q. Okay. And could you do me a favor and read the highlighted portion on that page 1 under the Highlight section?

A. All right. It says Highlights: General economic conditions suggest sustained growth that is modest by historical standards, resulting in lower than historical load growth when combined with increasing energy efficiency. Natural gas prices will continue to be driven by large domestic supplies of shale gas and approximate a range of $4 to $6 per million BTU in today's dollars.

Environmental regulations coupled with relatively low gas prices and slow load growth will continue to drive additional retirements of coal-fired generation. Ameren Missouri has developed and modeled 15 scenarios comprising ranges of values for key variables that drive wholesale power prices for use in evaluating its alternative resource plans.

Q. Thank you. Now, between load growth and natural gas prices, which has the greatest influence, in your opinion, on avoided energy and capacity cost curves in the 2016 to 2018 plan?

A. I don't know. I don't do that work.

Q. Okay.

A. I don't have an opinion.

Q. You do agree though that natural gas prices seem to have a significant influence on wholesale prices, as referenced in what you just read?

A. Yes. That's what our planning team said.

Q. Okay. If you could refer to pages 7 and 8 in that same exhibit -- or that same document that I just handed you starting with Energy Markets.

A. Okay.

Q. And if you could read that highlighted portion just to the end of that?

A. All right. Energy markets -- market conditions that may affect utility resource planning decisions include prices for natural gas, coal, nuclear fuel and electric energy and capacity.

Natural gas prices in particular have a strong influence on energy prices as on peak wholesale prices are often set by gas-fired generators.

Ameren Missouri has updated its assessment of these key energy market components to serve as a basis for analysis of resource options and plans.

Q. And then also on page 8 there's a section Natural Gas Market, if you could read that for me?

A. All right. Natural gas market. Our assumptions for natural gas prices have been update d to reflect Ameren's 2014 point of view update. This update is a coordinated corporate-wide view developed by internal experts on natural gas markets.

The Company's general expectations for the fundamentals affecting natural gas supply, demand and markets are largely unchanged from our most recent IRP annual update. Although there are significant changes occurring in supply, demand and infrastructure in the near term, natural gas is expected to be a reliable and economic fuel for the long term.

Q. Thank you. Now, an IRP is updated annually to recognize the changing conditions and special contemporary issues. Would you agree?

A. That's my understanding.

Q. Okay. And the most recent IRP annual update was filed in April 2013?

A. I don't really recall, but -- I don't know.

Q. Okay. The -- my understanding was the analysis of the fundamentals that affect natural gas supply and demand in markets were performed for the 2013 update in the winter of 2012 and 2013. Would you be able to comment on that?

A. No.

Q. Okay. Do you know if there was an update of the energy and demand avoided cost curves for the 2013 IRP update?

A. I know our avoided cost curves change frequently and I assume that's a high probability, but I don't know for a fact that it occurred.

Q. If I were to tell you that they weren't updated, would that surprise you?

A. No.

Q. Okay. Can you tell me why that would not surprise you?

A. Maybe conditions were such that they didn't need to be updated.

Q. Okay. If you can refer back to the portion of Exhibit 100 that I gave you first.

A. I'm sorry. I have an Exhibit 1 and an Exhibit 2.

Q. The one marked Exhibit 1, I apologize. That's how I've been referencing them, but it's actually a portion of Ameren's Exhibit 100.

A. Okay.

Q. At the bottom of page 26 there's a highlighted portion that continues onto page 27. And it's just -- it's till the end of that paragraph.

A. Okay. I'm sorry. Did you ask me to read that?

Q. Yes, if you would.

A. Okay. Secondly, and even more significantly, a marked decrease in the market price of natural gas which is frequently the fuel that fires marginal generators that establish wholesale electricity market clearing prices, has significantly depressed peak power prices.

The natural gas prices used in the 2010 study were based on 2009, 2010 data, which was prior to the boom in production of gas from shale formations that has caused precipitous declines in observed market prices and expectations of future gas prices. The confluence of these two factors caused the marked decrease in the avoided cost illustrated above.

Q. Thank you. That's enough for those.
Now, on that -- back on page 26, there's the chart labeled Figure 2.3. I'll give you a chance to flip back to that. Can you tell me what the 2010 avoided energy and the 2013 avoided energy lines depicted in that figure represent?

A. Figure 2.3 are the avoided energy cost compares in 2013 through '15 versus 2016 through '18. So these are the avoided energy costs for the two plans.

Q. Okay. And they were developed in the respective years 2010, 2013 and used for potential studies; is that correct?

A. I don't know if these were the exact years for the potential study or used for the filing itself. I don't know. There could be slight differences, but generally they have the same shape and magnitudes.

Q. Okay. Now, the cost curve that's depicted in the -- for 2013 on this figure, was that used to value the benefits for energy savings due to the measures installed in the 2016, 2018 plan?

A. Was the cost curve -- this is just the energy portion of the avoided cost curve. There's also a demand component and an avoided transmission and distribution component. So is your question specifically on the energy piece?

Q. Yes.

A. Was this exact cost curve used for the development of the plan?

Q. Correct.

A. So did Exhibit 1 come from our MEEIA filing or from our IRP filing?

Q. Exhibit 1 is from the MEEIA filing in this matter.

A. Okay. Then this is what was used for the MEEIA filing.

MS. PAYNE: Okay. Your Honor, if I can approach one more time.

JUDGE PRIDGIN: You may.

BY MS. PAYNE:

Q. And if you'll refer on page 5 of the document that I just handed you -- well, first of all, would you agree that this is also pages out of the 2014 Integrated Resource Plan Ameren filed?

A. That's what it says on the page.

Q. Okay. Thank you. If you'll refer to Figure 8.3 on page 5 of this document.

A. I have it.

Q. It's on the backside. And if you could

tell me how that compares to Figure 2.3 in what I have labeled for you as Exhibit 2 on page 26.

MR. TOMC: Counsel, I just would note that there are HC numbers in this document. The comparison -- there's no problem, but just be aware of that.

MS. PAYNE: Agreed. And I will -- do not intend to ask anything related to the HC information. I was about to clarify that.

MR. TOMC: Thank you.

THE WITNESS: Yes.

BY MS. PAYNE:

Q. Yes. If you could compare those two for me. If you could tell me how those two compare, not referencing the HC information.

A. Well, the Exhibit 3 that you gave me, in addition to avoided energy, has avoided capacity costs on it.

Q. Okay. And what's labeled as the 2013 to 2015 MEEIA avoided energy in Figure 8.3, how does that relate to the curve that's depicted in Figure 2.3 as the 2010 avoided energy study?

A. Refresh my mind. Figure 2.3, Exhibit 1, is that from the Company's MEEIA filing?

A. Yes.

Q. Okay. What's filed in this proceeding.

A. And then the Figure 8.3 on page 5 from Exhibit 3, that's the Company's IRP filing?

Q. 2014 IRP filing, yes. Filed in 0084.

A. Okay. So it looks like the load shapes may be -- the start point for the two MEEIA plans might be -- be different. I think we've got an apples and oranges comparison here. As I look at Exhibit 1, Figure 2.3, that looks like this is the avoided energy costs that were used for the 2010 DSM potential study versus the same costs that were used for the 2013 DSM potential study.

Q. Thank you.

A. What it looks like I'm looking at on Exhibit 3 is from the IRP plan, which is at a later point in time, which has subsequently updated those costs to new values or slightly different values. I think that's what I'm seeing.

Q. Thank you. That's -- that's what I was hoping that you would see for me.

A. Okay.

Q. And then just one more thing. Or I take that back, two more things. Referring to Exhibit 1 on page 27, there is a second paragraph that I stopped you from reading earlier. If you could go ahead and

read that for me now.

A. The impact of lower avoided costs on energy efficiency is that the benefits of energy efficient measures have become smaller. Lower avoided costs can reduce marginally cost effective measures to become no longer cost effective, reducing potential, or can cause cost effective measures to simply be less cost effective. Either result reduces the total benefits realized by customers.

Q. Okay. Now, Ameren Missouri analyzes changing energy market conditions at least annually, sometimes more frequently; is that correct?

A. That is not my area of expertise and I don't know the frequency with which those studies are done so I can't answer that question. I don't know.

Q. Okay. You are familiar with the cost curves though, its avoided energy and capacity cost curves and the updates to those?

A. I am familiar with the cost curves that are used in this study.

Q. Okay.

A. The update process, I -- if they don't pertain to our DSM plans, I don't get involved in those.

Q. Would it surprise you to hear that Ameren

has changed its avoided energy and capacity cost curves at least four times since 2010?

A. No.

Q. Okay. Is it true that the cost curves for each of the potential studies and the IRP filings were lower each successive year starting from the 2010 and continuing up to the most current?

A. Is it true that they were lower for -- like lower in 2011 than they were in '10 and '12 then --

Q. Then each successive curve was.

A. I don't know the answer to that question.

Q. Okay. Referring back to what's labeled as Exhibit 3, the last document that I handled -- handed you.

A. Okay.

Q. Would you verify that those were the cost curves that were used in MEEIA Cycle 1 and Cycle 2?

A. That's what Figure 8.3 says.

Q. Let me clarify, the proposed MEEIA Cycle 2. Okay. Thank you.

And finally, the throughput disincentive that's currently approved for Cycle 1 and that's proposed for Cycle 2 would deem the avoided energy and capacity cost curves for the entire three-year period

of each of the cycles; is that correct?

A. That's correct.

Q. And deeming for those three years means that the cost curves would be fixed at the same level instead of updating them when new avoided cost curves were adopted for either a market potential study or Chapter 22 compliance filings; is that correct?

A. Yes. Following industry best practice, that is correct.

MS. PAYNE: Okay. Your Honor, I have no further questions.

JUDGE PRIDGIN: Ms. Payne, thank you.

Any Bench questions, Mr. Chairman?

QUESTIONS BY CHAIR R. KENNEY:

Q. Mr. Voytas, thanks for being here. Just to that last point you just said, why is that an industry best practice as opposed to updating it?

A. Sure. Sure. We've got, you know, a pretty good network. And when we work with other jurisdictions, other utilities -- I can point to Pennsylvania, California, Wisconsin, all the Duke energy states. It becomes unimaginable. If avoided costs change every year, that's something this Company cannot manage, has no control over. It becomes impossible to compare a plan year to year. There's other factors that no longer -- you have any influence over that could make the plan either worthy or not worthy.

So the best practice is to take your avoided cost assumptions at the beginning of your three-year plan and keep them constant. And I -- subject to check, I'm not aware of another jurisdiction in this nation that doesn't do it that way.

Q. Okay. Let me -- I want to ask you a question, and I can't remember who asked you. It may have been Office of Public Counsel. Asked you whether energy efficiency programs could be designed to realize demand savings. I think that was the question.

A. Uh-huh.

Q. And you said no, that they couldn't be designed for -- that his question was incorrect or the assumption of his question was incorrect.

A. Uh-huh.

Q. Why is it incorrect that energy efficiency programs can't be designed to achieve for realized demand savings?

A. A couple facts. The energy efficiency -- there are demand savings from energy efficiency. And because of the sheer magnitude of those dollars, for this particular cycle when you're spending 100 to 200 million dollars on energy efficiency, there's so many widgets, light bulbs, air conditioners that you're installing, some of those will be on at the time of system peak and they will reduce demand. I mean, it just happens that way. But it's not a market attempt to do so. It just happens that way.

There are also many measures, like lights that may not have any peak demand savings at all. Some air conditioners -- the super efficient air conditioners have something called a two-stage compressor. And the second compressor kicks on at those hot temperatures. They may not have demand savings.

So we'd have to reconfigure the portfolio to find those measures that specifically had the highest peak demands and see if there's a way that we could make the objective of the portfolio design peak demand reduction.

And the trouble with that is, is that energy efficiency is about energy efficiency. If you want to get demand savings, that's what demand response is for. Because that you can call at the time of system peak, it's callable and it's measurable.

If we got those demand savings from energy efficiency, we don't know how to measure them. If you look at all of our energy EM&V reports for 2013 and 2014, they measure energy savings and demand savings are kind of backed into. They'll use an average demand across all hours or they might even put them in our cost effectiveness model, which has an algorithm to try to forecast when this peak demand may occur, but it doesn't know. So there's just no way to even record those savings. But they do, in fact, happen. There's no question about that.

Q. And then let me just ask a couple of questions about just general policy. Do you have an opinion about whether having a Statewide Technical Resource Manual is valuable as opposed to utility-specific TRMs?

A. Well, I thought I did prior to this hearing. You know, it depends on how you use the TRM. If you're going to use the TRM -- a TRM involves 12 to 18 months of resources from all stakeholders, utilities, contractors, consultants a couple million dollars of work. And so if you're going to put that type of customer money into an instrument like that, it needs to be used and useful.

If that's going to be used to deem the EM&V and stop this bickering, if that's going to be used for program design and stop this bickering, it is the best investment this state could make in the TRM. If it's just going to be another tool in the toolbox that has no meaning, then it's basically of little use to -- to anybody in this hearing.

Q. But presumably the former, what you just described, would be the purpose of having a statewide TRM. Right?

A. That's what we think the best use of the TRM would be.

Q. Okay. Thank you.

JUDGE PRIDGIN: Commissioner Kenney, any questions? Commission Stoll?

COMMISSIONER STOLL: No questions. Thank you for your testimony.

JUDGE PRIDGIN: Let's see if we have any recross based on Bench questions. United for Missouri?

MR. LINTON: No.

JUDGE PRIDGIN: NRDC?

MR. ROBERTSON: No.

JUDGE PRIDGIN: Division of Energy?

MR. ANTAL: No questions.

JUDGE PRIDGIN: Renew Missouri?
MR. LINHARES: No questions.
JUDGE PRIDGIN: Tower Grove, National Housing Trust?
MR. LINHARES: No questions.
JUDGE PRIDGIN: Sierra Club?
MS. TAUBER: No questions.
JUDGE PRIDGIN: Brightergy?
MR. ZELLERS: No questions.
JUDGE PRIDGIN: MIEC?
MR. DOWNEY: No questions.
JUDGE PRIDGIN: Public Counsel?
MR. OPITZ: No questions.
JUDGE PRIDGIN: Staff?
MS. PAYNE: Just one, Your Honor.

RECROSS-EXAMINATION BY MS. PAYNE:

Q. If Ameren is going to use the net benefit approach according to its non-- or its Utility Stipulation, isn't it reasonable to update the avoided costs in order to more accurately quantify the benefits of that?

A. No, it's not. To the extent that net benefits change and marginal programs become not cost effective and other discrepancies happen to the market, it doesn't make any sense. Who's to say in the next year or the next year after that or the next year after that they increase to higher levels? Perhaps the Clean Power Plan, perhaps conditions in -- at least in Ameren Missouri's case, the MISO regional transmission market. It could be any unforeseen changes. So no, that doesn't make sense at all.

Q. So in a sense you would say it doesn't make sense to fix something because it might change?

A. No. What I said is it makes sense to keep avoided costs the same for all three years of the MEEIA plan for evaluation purposes.

Q. Okay. Thank you.

MS. PAYNE: No further questions.

Your Honor, I do want to add at this point that I wanted to offer the two documents that I handed out portions of, the 2014 Integrated Resource Plan as Staff's Exhibit 713 and 714.

JUDGE PRIDGIN: Let me make sure we get straight which is which.

MS. PAYNE: 713 would be pages 1, 7 and 8.

JUDGE PRIDGIN: I'm sorry. These are pages 1, 7 and 8 of what?

MS. PAYNE: Of the 2014 Integrated Resource Plan.

JUDGE PRIDGIN: Okay. That's been offered. Any objection?

Hearing none, Exhibit 713 is admitted.

(Staff Exhibit 713-HC was received into evidence.)

JUDGE PRIDGIN: And then 714?

MS. PAYNE: Would be pages 4 and 5.

JUDGE PRIDGIN: 714 has been offered. Any objection?

MR. OPITZ: Judge, I think that should be 714-HC.

MS. PAYNE: Yes. And they should both be HC actually. Thank you for pointing that out. Let's go back and relable 713 as 731-HC.

714-HC has been offered. Any objection?

714-HC is admitted.

(Staff Exhibit 714-HC was received into evidence.)

JUDGE PRIDGIN: All right. Any redirect?

MR. TOMC: Yes, Your Honor. I just have a few quick questions.

JUDGE PRIDGIN: When you're ready.

REDIRECT EXAMINATION BY MR. TOMC:

Q. Mr. Voytas, you were asked a number of questions about avoided cost and I just wanted to

follow up with a couple quick questions.

In developing the Company's plan, did the Company look to other practices in other states with respect to the net shared benefits model and the performance incentive?

A. Yes, it did.

Q. Is the purpose of a performance incentive to incentivize utility management performance in delivering energy efficiency programs? Is that what it's for?

A. Yes.

Q. It's not to incentivize or reward the Company for consistently predicting what avoided costs are going to be; is that fair?

A. That's fair.

Q. Now, I know you testified in response to several questions that with respect to this case and the presently pending IRP proceeding, your expertise is not directly related to calculating avoided costs. Is that a fair characterization of your responses?

A. That's accurate.

Q. You do have some familiarity with the IRP process though; is that right?

A. That's right.

Q. The IRP process is a resource planning

process; is that right?

A. That's correct.

Q. And in making resource decisions, the Company looks at avoided costs in planning its system resources. Is that a fair characterization?

A. That's fair.

Q. And in doing so, it must look at forward price energy commodity information and other avoided cost inputs. Do you agree or disagree with that?

A. I agree.

Q. So for example, if we were to take a look at a supply-side resource, the Company would have to take some -- into account some analysis of forward energy prices; is that right?

A. Definitely.

Q. Once the decision to put that plant in rate-base is made, even though the avoided cost changes, that plant will stay in rate-base. Is that your experience?

A. That's my understanding.

Q. So if the avoided costs were to go down, the Company would not take that plant out of rate-base and turn it off, would they?

A. They would not.

Q. Can you talk just -- and I know this is a

broad subject, but can you talk about how net shared benefits are calculated and what your group does to assist with that calculation?

A.   Sure. The net shared benefits -- again, there's two components. And the net shared benefits model encourages the Company, first, to achieve a certain threshold kilowatt hour piece and that's Step A. You don't get anywhere until you achieve that piece. But then Step B is to generate sufficient shared net benefits such that customers win. And when customers win, the Company wins. Only the Company wins to a much lower degree than customers.

In the first MEEIA cycle, I believe the Company's sharing percentage of those net benefits was in that 6 percent range of total benefits. That means customers got 94 percent of the benefits. In this particular MEEIA cycle, those share of net benefits that the Company has the opportunity to earn are about 13 percent. So the customers still earn the lion's share of those net benefits.

So it's all about generating net benefits, regardless of the level of avoided costs, but generating those net benefits and doing so in the most cost effective manner. We are -- you know, our budget is what it is, it's our best estimate, but to the extent that we can manage that, I mean, we manage that.

Q. And can you talk a little bit about the role of the -- and I know we throw lots of acronyms out there, but about the DSMore system and what that does in the planning process for energy efficiency?

A. Well, DSMore is just a cost effectiveness model that is used by 20 to 30 utilities across the nation for doing DSM cost effectiveness testing. And in it, it takes avoided costs as inputs, it's got hourly price shapes, it's got hourly weather patterns. And when you plug it in and run it, out come your net benefits, your costs, your present value of your net benefits and things of that nature.

There's also -- when we were talking about energy efficiency has a demand component and the DSMore model will produce a KW demand component. That is based on a model statistical exercise. In fact, it's so rare to find load shapes -- not everybody has load shapes for LED lighting how they're used every hour of the day or for smart power strips or for, you know, consumer electronics.

But we've got a set of load shapes that were a little bit generic from 1990 that we used and that's what essentially sets the KW demand. It has nothing to do with EM&V and you can't put any precision or accuracy to those. That's why it would be so difficult to try to pick that one peak hour and estimate KW out of the DSMore model.

Q. Now, there were some questions with respect to the EM&V process. Can you define -- we throw all these acronyms around. What do you understand -- people say in the industry parlance, EM&V. What do you understand that to mean?

A. Well, EM&V stands for evaluation, measurement and verification. And usually the connotation associated with EM&V is that an independent third-party contractor determines that. And they determine that by going in the field and actually measuring, where they can, energy savings. They may put meters on air conditioners, they may put loggers on lights to see how many lights they're in use. They may go count the number of lights in a home. But that's what we mean by EM&V.

Q. Thank you. And with respect to an EM&V, can you come up with an absolute correct value to determine the precise amount of energy that were saved over the period that you're looking at?

A. No. And that -- that's the frustrating part of EM&V. We have a saying that you put five EM&V

contractors in a room and they'll give you five different answers. But I know that in our jurisdiction, we -- I'll just use the residential HVAC program for an example.

The EM&V contractors that are contracted to by Ameren Missouri put meters on air compressors to estimate the savings from the more efficient air conditioning units compared to the inefficient baseline.

In Kansas City Power & Light, my understanding is that the EM&V contractors uses a building simulation model. They've got a model of a typical home and they put an air conditioner in and they put different levels of more efficient air conditioners in. And the results are markedly different. So there are just a multitude of approaches that give a multitude of different answers.

But that's on the equipment side. The most -- most disparaging part of EM&V is -- and I think Brightergy has discussed this, is the analysis of a net-to-gross ratio. That's that attribution of the 100 widgets -- efficient widgets that you sold, how many were you really responsible for and how many would have sold without you.

And the flip side of that is if you're

truly running a market transformation program and the rest of the market takes notice of the good work you do and they start selling more efficient light bulbs, what is that? Well, that is a -- you know, people like to think of EM&V as something that you can quantify with great accuracy; that this is an objective exercise and you can put precision and accuracy to those estimates. Nothing could be farther from the truth.

This is totally subjective. It's asking questions the hypothetical what would you have done if you didn't do what you did. And it's -- it's just really, really difficult. So the -- the range of values from EM&V especially on a net-to-growth side can be an ocean wide.

Q. Thank you, Mr. Voytas. Just one last question about the EM&V. How do -- how does Ameren -- as part of its proposal pending here in this proceeding, how does Ameren use its recent EM&V information in developing its TRM that is then used to set the deemed values that are so hotly debated at least in this proceeding?

A. Sure. Well, as I mentioned, for the TRM that was used for this particular filing, what we did was we took our 2013 EM&V results, the first year where we had virtually 100 percent of primary market research and we extracted those values that said how much energy each widget that we sold to customers sold, we took those and we put those into our EM&V. And what we have is an online TRM. And we've got all the work papers, the documents, the equations, the algorithms, the inputs that go into that. And so what we do every year, we get our EM&V results, we update that.

And so with this online tracking tool, we'll be able to look at Version A through Version Z and see all the changes that occurred and why they occurred and have all the source documentation electronically available for all to see.

Q. Thank you.

MR. TOMC: I have no further redirect, Your Honor.

JUDGE PRIDGIN: All right. Thank you very much. Mr. Voytas, thank you very much. You may step down.

It's a little bit after 5:00. It looks like a good time to call it a day. It looks like the next witness that we could call in the morning at or near 8:30 would be Mr. Laurent. Is there anything further from counsel or anything else we need to address before we adjourn for the day?

All right. Hearing nothing, we will stand adjourned until 8:30 in the morning. Thank you very much. We are off the record.

(Staff Exhibits 713-HC and 714-HC were marked for identification.)

(Whereupon, the hearing was adjourned until July 21, 2015 at 8:30 a.m.)

INDEX

EXHIBIT INDEX

	MARKED	REC'D
AMEREN:		
Ameren Exhibit 100 Energy Efficiency Plan		244246
Ameren Exhibit 104 Surrebuttal Testimony of S. Hande Berk		199201
Ameren Exhibit 108 Surrebuttal Testimony of Cara Dolly		237239
Ameren Exhibit 109 Surrebuttal Testimony of Clifford Hoffman		190195
Ameren Exhibit 111 Surrebuttal Testimony of Ingrid Rohmund		145145
Ameren Exhibit 112-NP Surrebuttal Testimony of Richard A. Voytas, Non-Proprietary		244246
Ameren Exhibit 112-HC Surrebuttal Testimony of Richard A. Voytas, Highly Confidential		244 246
Ameren Exhibit 113 Rebuttal Testimony of Richard A. Voytas to Non-utility Stipulation		244246
Ameren Exhibit 114 DSM Customer Cost Impact		228230
DE:		
DE Exhibit 200 Rebuttal Testimony of Alex Schroeder		108
DE Exhibit 201 Surrebuttal Testimony of Martin Hyman		108
DE Exhibit 202 Supplemental Rebuttal Testimony of Martin Hyman		108

EXHIBITS INDEX (CONT'D)

	MARKED	REC'D
STAFF:		
Staff Exhibit 713-HC Pages 1, 7 and 8 of the 2014 Integrated Resource Plan, Highly Confidential	300291	
Staff Exhibit 714-HC Pages 4 and 5 of the 2014 Integrated Resource Plan, Highly Confidential	300291	
OPC:		
OPC Exhibit 804 Executive Summary for the demand-side market potential study	173173	

CERTIFICATE OF REPORTER

I, Tracy Thorpe Taylor, CCR No. 939, within the State of Missouri, do hereby certify that the testimony appearing in the foregoing matter was duly sworn by me; that the testimony of said witnesses was taken by me to the best of my ability and thereafter reduced to typewriting under my direction; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this matter was taken, and further, that I am not a relative or employee of any attorney or counsel employed by the parties thereto, nor financially or otherwise interested in the outcome of the action.

Tracy Thorpe Taylor, CCR

D

E

J

K

M

N

P