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BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

)	
In the Matter of the)	
Application of Union)	
Electric Company d/b/a)	File No.
Ameren Missouri for)	EA-2022-0245
Approval of a)	
Subscription-Based)	
Renewable Energy Program)	

Monday, February 6, 2023
9:00 a.m. - 4:41 p.m.

Office of the Missouri Public Service Commission

Judge Kenneth J. Seyer
Chairman Scott Rupp
Commissioner Jason Holsman, via WebEx
Commissioner Maida Coleman, via WebEx

Stenographically Reported by:
Jill Bleskey, CSR, CCR, RPR

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1 * * * * *

2 (Hearing commenced at 9:00 a.m.)

3 * * * * *

4 JUDGE SEYER: Good morning. Today is
5 February 6, 2023 the time is nine o'clock a.m. The
6 Commission has set this time for an evidentiary
7 hearing in the case captioned as In the Matter of the
8 Application of Union Electric Company d/b/a Ameren
9 Missouri for Approval of Subscription-Based Renewable
10 Energy Program. It is the Public Service Commission
11 File Number EA-2022-0245.

12 My name is Ken Seyer, I am the regulatory
13 law judge presiding over this hearing. This hearing
14 is taking place in the Public Service Commission
15 Hearing Room, Room 310 of the Governor Office
16 Building in Jefferson City, Missouri. However, there
17 may be counsel, and I know there will be witnesses,
18 who will be participating over the internet via Cisco
19 WebEx.

20 So at this time, let's have counsel for
21 the parties make their entries of appearance
22 beginning with Ameren Missouri.

23 MR. LOWERY: Thank you, your Honor. Jim
24 Lowery appearing on behalf of Ameren Missouri this
25 morning. The court reporter has my contact

1 information. And also on behalf of Ameren Missouri,
2 Jermaine Grubbs, corporate counsel with Ameren
3 Missouri. And I believe the court reporter also has
4 her contact information.

5 JUDGE SEYER: All right. Thank you. For
6 the Missouri Industrial Energy Consumers.

7 MS. PLESCIA: Diana Plescia of the law
8 firm Curtis, Heinz, Garrett, and O'Keefe, 130 South
9 Bemiston, Clayton, Missouri, 63105.

10 JUDGE SEYER: And then counsel for
11 Wal-Mart?

12 MR. OPITZ: Good morning, your Honor. Tim
13 Opitz appearing on behalf of Wal-Mart. My address is
14 308 East High Street, Suite B101, Jefferson City,
15 Missouri, 65101.

16 JUDGE SEYER: All right. Thank you. On
17 behalf of the Sierra Club?

18 MR. THOMPSON: Ethan Thompson appearing on
19 behalf of Sierra Club. I'm an attorney at Great
20 Rivers Environmental Law Center in St. Louis, 400
21 North 4th Street.

22 JUDGE SEYER: And --

23 MR. MORRISON: Judge, co-counsel for
24 Sierra Club on the line. Bruce Morrison also at
25 Great Rivers Environmental Law Center.

1 JUDGE SEYER: All right. And Mr.
2 Thompson, T-H-O-M-P-S-O-N?

3 MR. THOMPSON: Yes.

4 JUDGE SEYER: Okay. For Renew Missouri?

5 MS. GREENWALD: Good morning. Alissa
6 Greenwald for Renew Missouri. My address is P.O.
7 Box 413075, Kansas City, Missouri, 64141.

8 JUDGE SEYER: All right. Thank you. For
9 the Office of Public Counsel?

10 MR. WILLIAMS: Nathan Williams, Chief
11 Deputy Public Counsel appearing on behalf of the
12 Office of Public Counsel and the public. I provided
13 my information to the court reporter as well.

14 JUDGE SEYER: All right. Thank you. And
15 for the Staff of the Commission?

16 MR. GRAHAM: Paul Graham entering his
17 appearance for the --

18 JUDGE SEYER: Mr. Graham, could you --
19 yeah.

20 MR. GRAHAM: Paul Graham entering his
21 appearance for the Staff of the Missouri Public
22 Service Commission. The Commission has my address
23 which is in this same building. Thank you very much.

24 JUDGE SEYER: All right. Are there any
25 other attorneys here representing parties that I've

1 left out? All right. Thank you.

2 For those in the hearing room, I do ask
3 everyone to silence all cell phones and mobile
4 devices. For those connected via WebEx, I ask that
5 you mute your microphone when not speaking. For
6 those in the hearing room, please be cognizant of
7 when your microphones are on, indicated by the green
8 light, and when they are off. Also notice speaking
9 within just a few inches of the microphones will make
10 it much easier for the court reporter and those on
11 WebEx to hear what each of us says.

12 As far as planning -- I'm sorry.

13 COMMISSIONER HOLSMAN: Judge, this is
14 Commissioner Holsman. Just wanted to note my
15 presence on the record.

16 JUDGE SEYER: All right. So noted. As
17 far as how this day will proceed. We will be taking
18 a lunch break today at 12:30. Dependent upon where
19 we're at that time with opening statements and what
20 have you, we may break a bit sooner than that but we
21 will definitely be in recess from 12:30 until 1:30 as
22 the commissioners have a meeting scheduled at that
23 time.

24 Another preliminary matter, Mark Schuerman
25 is on the witness list and he is scheduled to testify

1 on behalf of the Missouri Industrial Energy
2 Consumers. Ms. Plescia, am I saying that correctly?

3 MS. PLESCIA: Yes. Thank you.

4 JUDGE SEYER: Okay. She would like to
5 know if there are any other parties -- if any of the
6 other parties intend to cross-examine Mr. Schuerman
7 or whether he could be excused from the hearing. So
8 do any of the other parties wish for Mr. Schuerman to
9 be available for cross-examination later when he's
10 scheduled to testify? If not, I'll excuse him from
11 the hearing. Mr. Graham?

12 MR. GRAHAM: Staff has no problem with
13 that.

14 JUDGE SEYER: Mr. Williams?

15 MR. WILLIAMS: As long as he's not going
16 to appear and his testimony is just -- pre-filed
17 testimony is admitted into the record then Public
18 Counsel's okay with not crossing him.

19 JUDGE SEYER: All right. Do any other
20 parties have any objection to that, to excusing Mr.
21 Schuerman?

22 MR. LOWERY: No objection from the
23 Company.

24 JUDGE SEYER: Thank you. And Ms. Bleskey,
25 that is -- Mr. Schuerman's name is S-C-H-U-E-R-M-A-N.

1 Then Mr. Schuerman is excused and is not required to
2 appear to testify.

3 MS. PLESCIA: Thank you, your Honor.

4 JUDGE SEYER: You're welcome. Do the
5 parties have any other preliminary matters to
6 discuss? All right. Hearing none. As far as the
7 order of witnesses on cross-examination. Give me a
8 second here. We will follow the order filed by the
9 parties in their jointly proposed list of issues,
10 order of opening statements, listed order of
11 witnesses and order of cross-examination. Besides
12 Mr. Schuerman, are there any changes to that list and
13 order of witnesses?

14 MR. GRAHAM: Your Honor, Paul Graham
15 speaking for the Staff. We have a witness, Jane
16 Dhority, and --

17 JUDGE SEYER: Mr. Graham, could I have you
18 just bring that microphone a little closer.

19 MR. WILLIAMS: Surely. We have a witness,
20 Jane Dhority, who's coming from St. Louis, I believe,
21 and she has requested, and Counsel have not objected
22 to the proposition, that she be allowed -- that we
23 fit her in at some point regardless of where we
24 otherwise might be tomorrow, for Tuesday, so that she
25 can make plans. I'm not saying that we're reordering

1 any witnesses, we'll kind of take that matter on the
2 fly. And that's the agreement, if it's okay with the
3 Commission.

4 JUDGE SEYER: Okay. I don't think that
5 will be a problem. Thank you. All right. I'll give
6 the parties the opportunity to make an opening
7 statement. Mr. Lowery, would you like to make an
8 opening statement on behalf of Ameren Missouri?

9 MR. LOWERY: Yes, I would. Thank you,
10 your Honor.

11 Your Honor, I do have a slide deck and I'd
12 just like to mark it for identification. I don't
13 intend to offer it but I've got copies for you and
14 the commissioners and the court reporter. My
15 co-counsel's handing parties to the other parties. I
16 believe it will be Exhibit 13 for identification. It
17 just consists of information that's already in
18 pre-filed information but I thought it would be more
19 convenient for the commissioners to be able to have
20 it in their hands this morning.

21 JUDGE SEYER: All right. I'm not sure --
22 I'm not sure we captured all that, but Mr. Lowery,
23 you were telling me that you had --

24 MR. LOWERY: I'll try that again. Your
25 Honor, I have a handout, a slide deck that's also on

1 the screen that I suggest we marked for
2 identification as Exhibit 13. I don't intend to
3 offer it but it just contains information that is in
4 pre-filed testimony in the case. And I'm providing
5 it just so it's a little easier for the commissioners
6 to follow along.

7 JUDGE SEYER: All right. Understood.
8 Thank you. All right. Mr. Lowery, you can proceed.

9 MR. LOWERY: Good morning, and may it
10 please the Commission. My name is Jim Lowery and I,
11 along with my co-counsel Jermaine Grubbs, are
12 representing Ameren Missouri in this important case
13 here today.

14 Why do I say this is an important case?
15 After all it involves a single 150 megawatt renewable
16 energy facility that, relative to Ameren Missouri's
17 overall generation fleet, is not very big. So why
18 then is this relatively small renewable generation
19 addition important not just to the Company but I
20 would respectfully submit to the Commission as well?

21 It is important because as the evidence in
22 this case will show Ameren Missouri, starting now,
23 has a clear present need to begin adding renewable
24 energy resources to its generation portfolio so that
25 it can begin to address a shortfall in its expected

1 energy position that even under normal, or base
2 planning assumptions, is expected to arise in less
3 than five years.

4 If I could direct your attention to, I
5 believe it's up there, to Slide Number 2 in your
6 slide deck in Exhibit 13. While under base planning
7 assumptions Ameren Missouri expects to be long energy
8 in '23 and '24 by about five to seven million
9 megawatt hours while Rush Island is still a part of
10 its fleet that length is cut dramatically in 2025 and
11 becomes a projected shortfall by 2028. If the
12 Company is unable to add new resources that's the
13 picture we have. And new resources for this purpose
14 are any resources beyond its existing resources plus
15 the Huck Finn facility which the parties have agreed
16 in a separate docket that's pending should be added
17 for renewable energy standard compliance purposes.

18 The shortfall I mentioned could arise
19 earlier -- if you take a look at Slide Number 3 of
20 your slide deck -- in a case where high carbon prices
21 are imposed on Ameren Missouri's fossil generation
22 units. In that case, the shortfall occurs in less
23 than three years from now by 2026 and by 2028 the
24 Company's energy position would swing from being
25 about five to seven million megawatt hours long this

1 year and next to being short by that amount by 2028
2 and for a couple years after, a swing of about 10 to
3 14 million megawatt hours.

4 As Company witness Arora puts it, whether
5 one assumes the base planning assumptions or
6 assumptions that other events or circumstances arise
7 that could lead to an energy shortfall sooner or
8 energy shortfall that's greater than these base
9 planning assumptions indicate the Company's
10 generation position is becoming and very soon will be
11 dramatically different than it was when Ameren
12 Missouri had historical 15 to 20 percent energy
13 buffer which it's enjoyed for probably decades. That
14 buffer existed because Ameren Missouri had those two
15 base load coal units, Rush Island and Meramec, one of
16 which is already off the system and one of which will
17 be in a couple years.

18 The Company's evidence will show that
19 resource decisions -- and when you think about it,
20 that's what this case really is it is a resource
21 decision that the Commission is being called upon to
22 make since under the law utilities cannot add
23 generation without the Commission's approval. The
24 evidence will show that resource decisions need to be
25 made in the context of the planning environment and

1 circumstances that exist now and not in the context
2 of a planning environment that the Company faced in
3 the past. That environment doesn't exist anymore.
4 And because of that it requires we, and I would
5 submit the Commission, to look at resource decisions
6 differently than they have in the past.

7 In that earlier planning context the
8 Company would agree that one would look in isolation
9 at a particular resource and a narrowly defined need
10 that that resource might meet and, you know, in a
11 business as usual environment that approach makes
12 sense. But the evidence in this case will show that
13 we are no in longer in a business as usual planning
14 environment but those that oppose the CCN in this
15 case I would submit are proceeding as if we are. To
16 the contrary, the industry, our region, the RTO's in
17 which Missouri electric utilities operate, including
18 MISO, are well into making a move to greater reliance
19 on clean renewable energy resources. This move is
20 already happening all around us.

21 As the Company's evidence will show, in
22 these times resource planning can only be rationally
23 conducted by recognizing and then accounting for the
24 fundamental changes that are happening in the
25 industry and in implementing plans that account for

1 them appropriately.

2 If we take a business as usual approach
3 when it's not business as usual Ameren Missouri, the
4 Commission, we will all fail to take the steps that
5 are needed so Ameren Missouri can reliably,
6 sustainably, affordably, and in a timely way
7 transition its fleet from the old fleet that we have
8 today to one that's going to look significantly
9 different. Put another way, by treating resource
10 planning environment -- the resource planning
11 environment as if we are in a business as usual
12 environment when we aren't I would submit that Staff
13 is focusing on a problem different from the one we
14 actually face today and therefore reaching the wrong
15 conclusion.

16 The Company's testimony demonstrates that
17 Ameren Missouri is not the only one saying this, not
18 but a long shot. It is being said by other state
19 regulatory commissions literally all around us who
20 recognize the situation and are allowing their
21 utilities to add significant renewable energy
22 resources to address it. It is being said by
23 entities like NERC, the North American Electric
24 Reliability Corporation, which I think as you know is
25 the reliability coordinator for the bulk transmission

1 system which is warning us of what is happening in
2 MISO as early as next summer and importantly is
3 telling us that we need to look at resource planning
4 decisions differently than we have in the past. That
5 is our planning needs to focus on different things
6 not just whether we have, under base planning
7 assumptions, a protected capacity shortfall on paper
8 at a particular point in time but looking at what --
9 excuse me, specifically focused on energy needs in
10 all seasons and that is what Ameren Missouri is
11 doing.

12 These voices are telling you that we need
13 to solve the problem -- a particular problem, that is
14 we need to address the fundamental supply and demand
15 changes that are happening simultaneously in our
16 industry right now. And we need to recognize, NERC
17 tells us, that while we are going to have base load
18 resources and dispatchable resources on our system,
19 and Ameren Missouri's plan calls for that, we are
20 also going to have a much greater reliance on
21 renewables. These facts demonstrate that Ameren
22 Missouri's request to add this solar facility in this
23 case and its plan to add more renewables in the
24 intermediate to longer term is most definitely not
25 unprecedented as Staff's witnesses claim.

1 So why a solar facility, why now? First,
2 the Company needs and will need energy in all seasons
3 and Boomtown will produce energy. Second, the
4 facility meets the specific needs of the subscribing
5 customers in the proposed Renewable Solutions
6 Program, which I'll talk more about in a moment, and
7 those subscribing customers make this needed facility
8 cheaper for all customers which is an obvious
9 win/win. And third, as a practical matter, and to
10 mitigate real risks that we face, the Company cannot
11 sit by and let this and other good renewable resource
12 projects pass it by if it's to meet its energy needs
13 in the near, intermediate, and ultimately in the long
14 term.

15 With respect to the first point, the
16 evidence will show that Ameren Missouri is projected
17 to have energy shortages throughout the year,
18 including in the summer, when both the Ameren
19 Missouri and MISO systems peak. Solar resources like
20 Boomtown will absolutely be valuable during the
21 summer. And I will submit to you the evidence will
22 also show that those resources, while clearly not as
23 valuable in the winter, provide more value that you
24 might assume.

25 Now Boomtown, of course, as a 150 megawatt

1 facility, cannot possibility solve Ameren Missouri's
2 energy situation by itself, it's not going to reverse
3 the shortfall that may exist in MISO as soon as next
4 summer but it will help and it is a start. And I
5 would submit it would be a no regret addition to the
6 portfolio.

7 With respect to the second point, another
8 reason this facility should be built now is that it
9 has been fully subscribed by the ten subscribers who
10 have entered into contracts subscribing to phase one
11 of the Renewable Solutions Program. I'll talk more
12 about that in a moment. But it's important to note
13 that there is no plausible scenario where the
14 existence of the program does not make the revenue
15 requirement associated with the Boomtown resource
16 lower than it otherwise would be in the absence of
17 the program given that we need the facility
18 irrespective of the program.

19 On a practicality side, given the amount
20 of energy the Company needs, again as soon as 2028 in
21 base planning conditions and sooner if a myriad of
22 risks that could arise do arise, the Company simply
23 must take advantage of good renewal projects as and
24 when they are available. Consider the evidence that
25 Mr. Arora's testimony contains. The Company did an

1 RFP for wind and solar projects a couple of years
2 ago, developers proposed 51 different projects. The
3 Company, as you might expect, diligenced those
4 projects carefully and had to eliminate 42 of them
5 for a variety of circumstances, constructibility,
6 transmission, they were not competitive in cost,
7 whatever. That left the Company with nine potential
8 projects. The Company diligenced those nine
9 projects, two become unavailable, two were not, it
10 appeared, going to qualify for tax credits which made
11 them non-competitive, they were going to be higher
12 than market projects, and one couldn't be built
13 because it had a geotechnical issue where they wanted
14 to build it. That left four projects out of 51, two
15 of which are the Huck Finn and the Boomtown projects.
16 Good renewable projects are very difficult to come by
17 and they are difficult to implement.

18 On the risk side, the evidence will show
19 that inaction also poses real risk. That is the risk
20 that when the Company needs energy it simply will not
21 have it because if it waits it will not, as a
22 practical matter, be able to implement the energy
23 resources it needs in real time when it needs them.

24 If you go back to that first figure I
25 showed you, Slide 2 in your deck, you may recall that

1 I noted it showed the energy position under normal or
2 base planning conditions. But the evidence will show
3 that conditions are often not normal. The evidence
4 will show that a litany of events that have occurred
5 in just the last few years and that certainly appear
6 to be occurring with greater frequency if they happen
7 again, whether together or apart, could pose a real
8 risk to Ameren Missouri's energy position at any time
9 starting in '24 or '25 and for several years
10 thereafter. Consider Winter Storm Uri. That could
11 happen again. And perhaps in some ways it did in the
12 four days before Christmas that we probably all
13 remember from a few weeks ago.

14 In 2021 the Callaway plant suffered an
15 eight month forced outage. That did not pose severe
16 risk to Ameren Missouri's ability to meet its load in
17 large part because we had Meramec and Rush Island on
18 the system and it did not expose the Company to huge
19 exposure to the market for the same reason. But if
20 that were to happen again once those units are gone,
21 which will happen very soon, the risk profile would
22 be much different. And there could be other major
23 generating units that also are forced out besides
24 Callaway.

25 Last summer you might recall the Company

1 was forced to reduce the dispatch of its coal plants
2 because the railroads were not performing and getting
3 the coal to the plants that we needed to make sure
4 that we would have energy on, you know, the hottest
5 of the hottest summer days. Last year, MISO's
6 planning and resource auction, just last year it
7 declared a CONE, the Cost of New Entry. What does
8 that mean? It means that the capacity offered to
9 serve load in MISO was less than the expected loads
10 in MISO.

11 And finally, environmental regulations
12 could force an earlier than expected closure of a
13 major plant, for example the Sioux plant. Or if they
14 don't force a closure of a plant they could require
15 those plants to dispatch significantly less than we
16 might expect in these base planning assumptions which
17 would have a major effect on the energy position.

18 As the Company's witnesses explain, when
19 Ameren Missouri was long, when it had that 15 to
20 20 percent buffer, the evidence shows, when MISO
21 wasn't designated as a high risk zone. If you look
22 at Slide 4, that slide is from a -- or November 2022
23 NERC report where NERC designated MISO as a high risk
24 zone. I don't think that's ever happened before.
25 When those kinds of circumstances didn't exist, when

1 Ameren Missouri had that length, and when Ameren
2 Missouri had a greater ability to lean on the market
3 than it does today that buffer of energy I talked
4 about in both the market and in Ameren Missouri it
5 mitigated those risks significantly. But we are no
6 longer in that situation and so those risks are much
7 more important and must be planned and accounted for.

8 There are other key risk pieces of
9 evidence the Commission should keep in mind in this
10 case. First, as can be seen on Slide 5, if the
11 Company proceeds to add the Boomtown facility and
12 then incrementally add additional renewable energy
13 resources in the intermediate to longer term it is
14 projected to meet its customers' energy needs
15 entirely. And if you go to Slide 6 and 7, even if we
16 get in -- I can only show one at a time obviously.
17 But even if we get in a situation, for example, where
18 we have high carbon prices or other extreme
19 circumstances the Company is still expected to meet
20 its customers' energy needs. Not by as much but
21 under that plan it is still expected to meet them.
22 But again, only if we add Boomtown and we continue to
23 add like resources steadily over the next few years.

24 It should also not be overlooked, and I
25 don't think that's gotten probably as much attention

1 in this case, but the Company's approach as compared
2 to the alternative business as usual approach is
3 expected to meet those needs at a lower net present
4 value of revenue requirement than the alternative
5 case. And as you know one of the primary criteria
6 for resource planning under the Commission's rules is
7 net present value revenue requirement.

8 The evidence will further show that
9 resource planning is not a mere, quote, planning
10 exercise as Staff claims. Consider that the IRP
11 rules require that we adopt a preferred resource
12 plan, they require to have an implementation plan and
13 then they call for an implementation period which is
14 a short term period between triennial IRPs.

15 The idea that utilities should not come to
16 the Commission and say I want to implement a resource
17 that was contemplated by my implementation plan but
18 the Commission should really not give that resource
19 planning exercise much weight I would submit just
20 doesn't make sense.

21 Now, before concluding my remarks, I want
22 to pivot away from discussing the Boomtown facility a
23 little bit and focus a little bit more on the
24 Renewable Solutions Program. As the Company's
25 evidence will show the program is an innovative way

1 for the Company to partner with its larger customers
2 that desire to support the deployment of greater
3 renewables. What we are doing is we're taking
4 resources like Boomtown that we already need and
5 we're using them to support the program. Under the
6 program the subscribers pay a fixed charge for the
7 amount of renewable capacity that they need and then
8 they receive benefits in the form of reduced energy
9 costs in direct proportion to the output of the
10 resource. This approach provides these customers
11 with greater choice and results in them contributing
12 to a part of the resources cost which lowers that
13 cost of that resource. It will be providing capacity
14 and energy for the Company, all the Company's
15 customers for the benefit of all customers. And the
16 approach transfers production risk associated with
17 the resource away from the non-subscribing customers
18 to the subscribers which also benefits all customers.
19 Indeed the Company is proposing a tracking mechanism
20 to make sure that all the revenues from the program
21 will get to all customers, not just subscribers, all
22 customers between rate reviews when without the
23 tracker that might not happen.

24 As Company witness Rob Dixon testifies,
25 meeting these customers needs, giving them choice is

1 critical to making Missouri more attractive, more
2 competitive to attract new businesses to the state or
3 to attract expansions of businesses that already
4 exist here. Either of those attractions provide
5 economic development benefits, jobs, taxes, and
6 increased electricity sales over which we can spread
7 our fixed costs more broadly and lower rates for all
8 customers.

9 As I wrap up my remarks, the last thing I
10 would like to do is remind you of this Commission's
11 own statements reflected in Mr. Wills' surrebuttal
12 testimony, and I've compiled them in the last four
13 slides of this deck. I'm not going to read them to
14 you obviously but those statements I believe clearly
15 demonstrate that the Commission recognizes and values
16 the importance of the electric utilities under its
17 jurisdiction adding renewable energy resources. And
18 I have highlighted, I think, some of the more salient
19 statements this Commission has made that are
20 particularly pertinent to this particular case and I
21 encourage you to read them.

22 In this docket the Commission has the
23 opportunity to follow through on their spot on
24 statements by approving the CCN for the Boomtown
25 facility so Ameren Missouri can begin meeting its

1 energy needs which in this particular case is to be
2 partially paid for by the subscribing customers.

3 Lastly, when our witnesses take the
4 witness stand, I would encourage you to ask them
5 questions because that's what they're here for, I
6 think to answer your questions in particular. I
7 appreciate your time and your attention this morning.
8 If anybody has any questions I can answer at this
9 time I will do my best to do so. Thank you.

10 JUDGE SEYER: All right. Thank you, Mr.
11 Lowery. Before we get to potential questions from
12 the commissioners, I just want to pause here for a
13 second and go over a few terms. And for the sake of
14 our court reporter who has kind of been thrown in the
15 deep end of the pool here. So you mentioned -- of
16 course the main topic of this hearing is the Boomtown
17 Solar Project, I just want to make sure she
18 understood B-O-O-M-T-O-W-N. Okay. You mentioned
19 Rush Island, you mentioned the Sioux plant.

20 MR. LOWERY: Spelled just like the -- just
21 like you would expect.

22 JUDGE SEYER: Well, unless you --

23 MR. LOWERY: S-I-O-U-X.

24 JUDGE SEYER: You did mention NERC. Could
25 you spell --

1 MR. LOWERY: North -- yeah. N-E-R-C.
2 North American Electric Reliability Corporation.
3 MISO I think would be one, Judge, and I didn't
4 actually define it but that's the Midcontinent
5 Independent System Operator.

6 JUDGE SEYER: And you mentioned the RIP
7 rules.

8 MR. LOWERY: The IRP rules.

9 JUDGE SEYER: Right. IRP.

10 MR. LOWERY: Integrated Resource Planning
11 rules, IRP, yes.

12 JUDGE SEYER: And CORE, Cost of New Entry?

13 MR. LOWERY: CONE, I believe, your Honor.
14 C-O-N-E, CONE.

15 JUDGE SEYER: All right. Ms. Bleskey, is
16 there anything else?

17 THE REPORTER: I think that was it so far.

18 MR. LOWERY: Certainly, if you have any
19 questions, we can off line help you with your
20 transcript.

21 JUDGE SEYER: Chairman Rupp, do you have
22 any questions for Mr. Lowery?

23 CHAIRMAN RUPP: None today, thank you.

24 JUDGE SEYER: All right. Do any of the
25 other commissioners have any questions for Mr.

1 Lowery?

2 MR. HOLSMAN: No questions, Judge. Thank
3 you.

4 JUDGE SEYER: Thanks.

5 COMMISSIONER COLEMAN: No questions,
6 Judge.

7 JUDGE SEYER: Thank you, Commissioner
8 Coleman. All right. Ms. Plescia, would you like to
9 make an opening statement on behalf of the Missouri
10 Industrial Energy Consumers?

11 MS. PLESCIA: Yes. Thank you, your Honor.
12 May it please the Commission, Ameren has more than
13 met its burden of proof in this case under the
14 Commission's standards for granting a CCN. I think
15 that the core issue, and most parties agree in large
16 part on this, is that under the Commission's test for
17 granting a CCN that the issue of necessity is where
18 the parties have their dispute and the question
19 ultimately is is the project in the public interest.

20 The Commission has never defined necessity
21 as being a current immediate need of the utility. It
22 appears that the Staff of the Commission is viewing
23 renewable resource need as not appropriate for a CCN
24 in this case because is it's too far off or Ameren
25 has currently sufficient capacity. But that isn't

1 the way that utilities plan resources, especially
2 when solar projects, as the evidence shows, take five
3 to eight years to develop. There are many risks, as
4 Ameren points out, and as MIEC witness Morris
5 Brubaker points out that any particular renewable
6 project will not be achieved. And so it's important
7 for the utility to get in front of those issues, it's
8 important for the utility to have time to make those
9 plans and there's a very fierce competition right now
10 among utilities and among private companies to -- a
11 fierce competition to grab the solar resources
12 needed, the equipment, the facilities, the land, and
13 then there are numerous approvals needed.

14 Mr. Brubaker, in his testimony, provides
15 four examples of utilities that were not able to
16 secure solar resources due to well into the project
17 approval process having one of these risks develop
18 and derailing the entire program. And so it really
19 does happen that if a utility doesn't have plenty of
20 lead time there are so many things that can go wrong
21 that you can never be absolutely sure that one of
22 these projects will actually transpire. So it's very
23 important that renewable energy sources are part of
24 the utility's long term planning and not just in
25 time. It wouldn't be in the benefit of the utility

1 or its customers for Ameren to not increase its
2 renewable portfolio nor would it be in the benefit of
3 the reliability of the system in the future.

4 The Staff notes in its testimony that the
5 IRP of Ameren is not a basis for the Commission to
6 approve a CCN. And we do agree with that insofar as
7 it goes because the Commission, when it approves the
8 CCN, is approving the utility's taking on the risk of
9 constructing a project. But that risk always remains
10 with the utility. The Commission never makes a
11 decision of how the utility should run its business
12 even though it regulates and supervises that.

13 Ultimately the utility bears the cost and
14 the risk if a project turns out to be imprudent and
15 the Commission does not decide decisional prudence in
16 an IRP process and therefore that risk remains with
17 the utility. And that's very important because the
18 Commission does have that backstop and the
19 protection, rate payers have the protection that if
20 something were to go wrong and the utilities planning
21 turned out to be a bad decision at the time it was
22 made then rate payers can be protected by the
23 Commission.

24 So while the Staff notes that decisional
25 prudence as a protection they also at the same time

1 seem to disregard that as a protection for the future
2 risk of rate payers. And I think that in that
3 respect they're misconstruing the public interest
4 because there is a protection already there.

5 I also want to note a couple of other
6 significant issues. We also present the testimony of
7 Mark Schuerman who is the Director of Global Supply
8 Resources for Bayer which is one of Missouri's most
9 important companies with the two largest facilities
10 on Ameren's system and also a facility in Kansas
11 City. Obviously it's a global company but it's
12 extremely important in Missouri. And Bayer's
13 testimony is representative of other companies who
14 are large industrial users who don't find it feasible
15 to build and construct their own renewable resources,
16 they want to use their Cap X which is limited to
17 invest in their business and it makes sense to them
18 to have a program like the Renewable Solutions
19 Program which gives them an opportunity to buy power
20 far into the future, to secure resources that helps
21 them meet their corporate goals, that also helps them
22 to meet their reliability needs in the future. It
23 gives them the opportunity to do that without
24 spending that Cap X on something that the utility can
25 more cost effectively provide.

1 It also, in their opinion, is part of
2 their corporate responsibility as well. But the
3 argument we're making isn't that this program only
4 benefits industrial consumers it's a factor for the
5 Commission to consider that having these resources in
6 the state is truly important to the state's economic
7 development. So many companies right now -- and the
8 testimony of Morris Brubaker demonstrates this -- a
9 large percentage of companies actually would not
10 locate in a state where they couldn't obtain
11 renewable resources.

12 And so it really will hurt the public
13 interest to spread costs and have fixed costs spread
14 over more customers and large industrial customers
15 benefit the system by having the fixed costs covered.
16 And so it does create a lot of risk for all rate
17 payers if we don't have something like the Renewable
18 Solutions Program that really large customers can
19 count on to meet these needs.

20 There also is another factor which is that
21 it's not possible in Missouri legally for customers
22 to just do a PPA. Ameren Missouri's monopoly and
23 Missouri customers are not allowed under current law
24 to just go out and try to get another supplier
25 through a PPA. So this is really the most feasible

1 option for them. The fact that so many industrial
2 consumers and commercial consumers have signed up for
3 the program and that it's actually oversubscribed
4 shows that there is an important service being
5 provided by the RSP. And for this reason, the public
6 interest standard for a CCN is met because a service
7 is being provided that is useful to consumers and
8 that is part of the factor that the Commission has
9 always looked at when deciding a CCN.

10 The last issue I want to address is the
11 benefit that industrial customers and other
12 subscribers of the RSP should receive when they
13 receive a renewable credit. The testimony points out
14 that the Inflation Reduction Act changed the picture
15 in this case, that the original filing that Ameren
16 made was based simply on the Build Back Better plan
17 and that provided for investment tax credits which
18 had a high cost because it requires a tax equity
19 partner.

20 When the -- a month after Ameren filed its
21 case, the Infrastructure Reduction Act -- excuse me,
22 the Inflation Reduction Act was passed and production
23 tax credits, which are much more lucrative for the
24 utility than the investment tax credit, took effect.
25 That benefit goes to all renewable resources and the

1 benefit of the Boomtown project is greatly increased
2 because of that. Right now the way the proposal
3 stands is that industrial consumers and subscribers
4 -- other subscribers do not get the benefit of the
5 production tax credits.

6 Since the idea of the RSP is to share risk
7 and cost and benefits, it would be inequitable to not
8 provide any of that benefit to subscribers who are
9 taking on risk and benefit of the system in
10 subscribing to a 15 year program.

11 So we would urge the Commission to look at
12 the testimony of Morris Brubaker and ensure that
13 those tax credits are reflected in the credits to
14 subscribers. And I'm happy to answer any questions.

15 JUDGE SEYER: All right. Chairman Rupp,
16 do you have any questions?

17 CHAIRMAN RUPP: Not at this time, thank
18 you.

19 JUDGE SEYER: Do any of the other
20 commissioners have any questions?

21 MR. HOLSMAN: Holsman. No, thank you.

22 JUDGE SEYER: All right. And was that
23 Commissioner Kolkmeyer, for the sake of the record?

24 COMMISSIONER HOLSMAN: Commissioner
25 Holsman. Commissioner Holsman.

1 JUDGE SEYER: All right. Thank you.

2 COMMISSIONER COLEMAN: And Commissioner
3 Coleman, no questions.

4 JUDGE SEYER: All right.

5 COMMISSIONER COLEMAN: And Judge, if I do,
6 I'll jump in.

7 JUDGE SEYER: Understood. Thank you.

8 COMMISSIONER COLEMAN: Thank you.

9 JUDGE SEYER: All right. Thank you, Ms.
10 Plescia. All right. Mr. Opitz for Wal-Mart.

11 MR. OPITZ: Good morning, and may it
12 please the Commission. Tim Opitz appearing on behalf
13 of Wal-Mart, Inc. As a little background, statewide
14 Wal-Mart operates 156 retail stores and four
15 distribution centers employing over 45,000 associates
16 in Missouri. In fiscal year ending 2022 Wal-Mart
17 purchased \$7.8 billion worth of goods and services
18 from Missouri based suppliers supporting over 70,000
19 supplier jobs in Missouri. Within Ameren's territory
20 Wal-mart has 52 stores and one distribution center.

21 Wal-Mart has long had aggressive and
22 significant company wide renewable energy goals and
23 beginning in September of 2020 Wal-Mart announced new
24 targets including to be supplied 100 percent by
25 renewable energy by 2035 and zero carbon emissions in

1 its operations, including fleet vehicles without the
2 use of offsets, by 2040.

3 Wal-Mart pursues various pathways to meet
4 its renewable energy goals depending on the cost,
5 risks, and operational factors for any particular
6 location. Here, Wal-Mart is among the customers that
7 have already made a commitment to capacity under the
8 Renewable Solutions Program. Wal-Mart's witness, Mr.
9 Andrew Teague, pre-filed rebuttal and surrebuttal
10 testimony outlining Wal-Mart's interest in the
11 program and an overview of the way Wal-Mart meets its
12 renewable energy goals. He will be testifying
13 virtually later on during the hearing.

14 Lastly, Wal-Mart asks that the Commission
15 approve the requested CCN and the RSP program tariffs
16 in order to allow Wal-Mart to continue its progress
17 towards meeting its renewable energy goals. And with
18 that, I'm happy to answer any questions.

19 JUDGE SEYER: All right. Chairman Rupp,
20 any questions?

21 COMMISSIONER RUPP: None at this time.
22 Thank you.

23 JUDGE SEYER: All right. Any of the other
24 commissioners? All right. Hearing none, thank you
25 for your opening.

1 MR. OPITZ: Thank you, Judge.

2 JUDGE SEYER: All right. Mr. Thompson,
3 would you like to make an opening statement on behalf
4 of the Sierra Club?

5 MR. THOMPSON: Yes, sir. Good morning,
6 and may it please the Commission. My name is Ethan
7 Thompson and I'm an attorney with Great Rivers
8 Environmental Law Center in St. Louis and
9 representing Sierra Club in this case.

10 Sierra Club respectfully asks that the
11 Commission grant the requested Certificate of
12 Convenience and Necessity for the Boomtown Solar
13 Project.

14 I offer these points in support of
15 granting the CCN. First, energy is a foundational
16 component with electrical service. Any
17 interpretation of need under the Tartan factors must
18 be founded on the fact that customers need electric
19 energy in addition to other services such as capacity
20 and electric grid stability. The Commission should
21 find that need is not defined strictly by whether a
22 resource meets the company's firm capacity needs but
23 also about whether it can economically meet the
24 company's energy needs as well as the company's need
25 for a hedge against high fuel prices.

1 Second, Boomtown generation will displace
2 generation from other generators every day that it
3 operates and will therefore benefit customers by
4 reducing exposure to fuel price risk and will benefit
5 the environment by reducing pollution. Because solar
6 is a zero marginal cost resource it displaces more
7 expensive fossil fuel generation on the MISO grid
8 which ultimately drives down the cost of market
9 energy used to meet the company's energy needs.

10 Third, Boomtown will also benefit rate
11 payers by reducing energy risk associated with market
12 exposure and fuel price volatility.

13 Fourth, the Boomtown project will have
14 significant capacity value. Standalone solar has
15 significant capacity value in spring, fall, and
16 especially summer which remains a period of
17 significant risk to the system. Standalone solar
18 also provides some capacity in the winter and when
19 battery storage is added in the future the firm
20 contribution of solar in the winter will increase.

21 Lastly, Ameren needs to get started on its
22 generation transition. Staff and OPC have identified
23 operational issues associated with solar generation.
24 Ameren and MISO need experience operating solar
25 projects to begin to work through those projects.

1 Further, Ameren has no choice but to transition its
2 generating fleet. Its Labadie Coal Plant was built
3 in the 1970's and is approaching the end of its
4 useful life. Ameren has no choice but to again
5 replace its legacy generation and it must start this
6 transition today. Thank you. And I'm happy to
7 answer any questions.

8 JUDGE SEYER: All right. I'll ask you to
9 clarify for the court reporter. You had mentioned
10 Tartan factors, T-A-R-T-A-N, correct?

11 MR. THOMPSON: Yes, your Honor.

12 JUDGE SEYER: And then the coal plant that
13 you just mentioned?

14 MR. THOMPSON: Labadie.

15 JUDGE SEYER: Could you spell that for the
16 court reporter, please?

17 MR. THOMPSON: Sure. L-A-B-A-D-I-E.

18 JUDGE SEYER: All right. Thank you.

19 Chairman.

20 CHAIRMAN RUPP: Yeah. Just to clarify.
21 Your first point was that the solar facility will be
22 displacing other generating factors but in Ameren's
23 opening and their information from MISO and NERC that
24 there's going to be a shortfall. Do you -- does your
25 organization believe that there will be a shortfall

1 in the next several years?

2 MR. THOMPSON: I believe that we are --
3 our position is consistent with Ameren's on that
4 issue.

5 CHAIRMAN RUPP: Thank you.

6 JUDGE SEYER: All right. Do the other
7 commissioners have other questions? All right.
8 Hearing none. Thank you, Mr. Thompson.

9 MR. THOMPSON: Thank you.

10 JUDGE SEYER: All right. Ms. Greenwald,
11 would you like to give an opening statement on behalf
12 of Renew Missouri?

13 MS. GREENWALD: Yes, your Honor.

14 JUDGE SEYER: All right.

15 MS. GREENWALD: Good morning, and may it
16 please the Commission. My name is Alissa Greenwald
17 and I'm appearing on behalf of Renew Missouri.

18 For many years now we have advocated for
19 the deployment of renewable energy in the State of
20 Missouri because we believe that renewable energy is
21 a strong driver of economic development. We have
22 advocated before legislatures, county commissioners,
23 the utilities, and this Commission that businesses
24 care where their energy comes from and that they
25 factor this decision into their ability to move

1 operations to Missouri or keep operations in
2 Missouri. And for many years now Commission
3 precedent defining the public interest has
4 acknowledged the ability of clean energy to provide
5 health, cost, and environmental benefits to the
6 general public as well as its ability to make
7 Missouri businesses more competitive. Ameren's
8 application for this Certificate of Convenience and
9 Necessity and the Renewable Solutions Program
10 demonstrates just that.

11 The large companies that have agreed to
12 participate in this program use massive amounts of
13 energy and they're concerned not only about their
14 environmental impact but they're also interested in
15 the cost savings that they can achieve by utilizing
16 solar energy. These corporate sustainability goals
17 are not simply altruism but real business decisions
18 that have determined that offsetting their usage with
19 renewable generation is in the best interest of these
20 companies. Ameren's decision to work with these
21 large customers to meet their needs makes business
22 sense in the same way that it makes sense to offer
23 renewable solutions programs to residential customers
24 that are sustainability minded.

25 Overall approval of the Renewable

1 Solutions Program and the CCN serves the public
2 interest in many ways that the Commission has
3 consistently recognized yet are ignored by Staff and
4 OPC in their testimony. These factors include
5 developing economical renewable energy sources while
6 reducing the amount of carbon dioxide emitted into
7 the air as well as helping Missouri corporations
8 perform more competitively. This is especially
9 important because the Commission has broad discretion
10 to grant the CCN when it determines that the public
11 interest is served even if there is not immediate
12 physical need for the resource.

13 Renew Missouri encourages the Commission
14 to approve Ameren's request for the CCN as well as
15 the Renewable Solutions Program. Doing so serves not
16 only Missouri businesses but the state interest as a
17 whole.

18 Thank you. And I'm available for any
19 questions.

20 JUDGE SEYER: All right. Chairman Rupp,
21 do you have any questions?

22 CHAIRMAN RUPP: No questions, thank you.

23 JUDGE SEYER: All right. Any of the other
24 commissioners have any questions? All right. Thank
25 you, Ms. Greenwald.

1 MS. GREENWALD: Thank you.

2 JUDGE SEYER: All right. Mr. Williams.

3 MR. WILLIAMS: Thank you.

4 JUDGE SEYER: On behalf of the Office of
5 Public Counsel.

6 MR. WILLIAMS: May it please the
7 Commission, my name's Nathan Williams and I'm here
8 appearing on behalf of the Office of Public Counsel
9 and the public.

10 It's our position that customers' primary
11 concerns are with getting electricity and getting it
12 at an affordable cost. Reliability is a very
13 important factor in that and that's been demonstrated
14 by the storms that we've seen February of 2021,
15 February of 2022, December of 2022, we saw extremely
16 high prices for energy in the markets. That was
17 because of a shortage basically in those markets of
18 energy which drove the price up.

19 Our concern is that with Ameren's planning
20 is not that it's with renewables but that it's not
21 providing sufficient energy during those times of
22 high need and high cost. The solar project will not
23 do that, it will provide additional energy during the
24 days in the winter but it will not at night. And if
25 you note, all the times I pointed out when energy

1 prices have spiked severely have been during the
2 wintertime.

3 Also as to entities that are -- customers
4 that are desirous of having renewable energy as their
5 primary source. Commission should follow principals
6 of cause/causation on that. And if there's a certain
7 class of customers that want to have their energy
8 prices based upon renewable energy sources only then
9 set up a separate class for that that's based on the
10 cost of generating that electricity. It may very
11 well be lower during times of normal operations but
12 they'll also be exposed to those very high prices
13 during shortfalls.

14 Dr. Geoff Marke is our witness in this
15 case and I ask you to ask him questions to flesh out
16 Public Counsel's issues with Ameren Missouri's
17 application. And I will tell you we're not opposed
18 to renewable energy. What we're looking for is the
19 -- there's firm dispatchable sources of energy that
20 replace the current sources that are going -- that
21 Ameren Missouri's planning to retire its coal
22 generation, its gas generation, as long as the fuel's
23 there is firm generation, utility can control the
24 dispatch of that readily. With intermittent
25 resources it's there whenever the source of energy's

1 there. The electricity's there when the source of
2 energy is, it's not otherwise.

3 JUDGE SEYER: All right. Chairman Rupp,
4 do you have any questions?

5 CHAIRMAN RUPP: What is your definition of
6 firm energy?

7 MR. WILLIAMS: That you can call on it at
8 any time that you need.

9 JUDGE SEYER: Mr. Williams, I'm going to
10 go ahead and have him repeat that question.

11 CHAIRMAN RUPP: Sorry, I didn't use the
12 microphone. What is your definition of firm energy?

13 MR. WILLIAMS: That it's available when
14 you need it. Nothing's 100 percent but definitely
15 big thermal units are more available than something
16 like solar which is only available during the
17 daytime.

18 CHAIRMAN RUPP: Thank you.

19 JUDGE SEYER: All right. Do any of the
20 other commissioners have any questions for Mr.
21 Williams? All right. Hearing none, Mr. Williams, I
22 appreciate your opening.

23 MR. WILLIAMS: Thank you.

24 JUDGE SEYER: All right. Mr. Graham, on
25 behalf of the Staff of the Commission.

1 MR. GRAHAM: Thank you. If it please the
2 Commission, Paul Graham representing the Staff of the
3 Missouri Public Service Commission. After listening
4 to what I've heard this morning, it strikes me that
5 the keyword is risk and risk management.

6 In this particular case, the argument is
7 that the risks are so compelling that we need to
8 alter our definition of prudence, not so. The fact
9 that we could do a prudence review in the future is
10 not a license to not do due diligence now. It
11 certainly is not a license to be reckless now.
12 Witnesses for the Staff today will be -- or in the
13 next couple of days will be Shawn Lange, Brad
14 Forston, Michael Stahlman, Cedric Cunigan, Jane
15 Dhority, Jordan Hall, Seoung Won, and J Luebbert.

16 Ameren has presented an application for a
17 CCN for a 150 megawatt solar generation facility to
18 be constructed in White County, Illinois. Ameren is
19 also asking for approval of a Renewable Solutions
20 Program. Staff opposes both. The global question
21 presented is whether the Boomtown Solar Project is
22 necessary or convenient to the public service. In
23 answering this question, the Commission looks to the
24 Tartan factors. Should the Commission find that the
25 project is needed, should the Commission find that

1 it's economically feasible, should the Commission
2 find that Ameren has the ability to finance the
3 project, should the Commission find that Ameren has
4 the ability to construct the project, should the
5 Commission find that the project is in the public
6 interest.

7 What you've heard today so far is that
8 Staff takes a narrow position and defines need in
9 terms of what exists right now. Not so. Not so.
10 Staff appeals to this Commission to look at the long
11 term picture, see where we end up here as predicted
12 on the -- as predictable on the basis of the evidence
13 and ask itself whether Ameren has sustained its
14 burden to show that this project is needed.

15 It is Staff's contention that Ameren
16 Missouri has not demonstrated that the project is
17 needed and likely an inefficient way to meet other
18 near term and long term rate payer needs. To
19 restate, Ameren has not demonstrated that the project
20 is needed and that it is likely an efficient way to
21 meet either near term and long term rate payer needs.

22 For that reason, and also because the
23 project does not justly and reasonably allocate the
24 risks that you have heard from start to finish this
25 morning, does not allocate those risks fairly and

1 reasonably to all of the stakeholders, including the
2 shareholders, the Staff contends that this project is
3 not in the public interest. If the need is so great,
4 if the risk so great why is the risk not being shared
5 fairly and equitably, that's the question presented
6 in this case.

7 It is also Staff's contention that if the
8 project is approved the Renewable Solutions Program
9 should nevertheless be rejected. As Staff will show,
10 at the end of its operational life the Boomtown
11 project's expected revenue will not have met the
12 costs and directly or indirectly its return in rate
13 base for Ameren shareholders will from start to
14 finish be subsidized by Ameren's rate payers. This
15 is a principal reason that the Commission should find
16 that the Boomtown project is not in the public
17 interest and reject the project. And it's the
18 principal reason that the Commission should find that
19 the project does not meet the fifth Tartan factor.
20 It is also the principal reason for rejecting the
21 RSP, the Renewable Solutions Program. Although
22 called a solutions program, the Renewable Solutions
23 Program actually does little to offset the capital
24 investment expenditures of the solar facility and
25 thus the problem is not a solution to the problem

1 that the Boomtown project will never pay its own way.
2 Active in this case from beginning to end
3 has been an issue of what is need. The Staff
4 contends that the project does not meet the Tartan
5 need requirement. Ameren's principal argument is
6 that because the country needs to move away from coal
7 fired energy sources and because the Boomtown project
8 is a renewable energy facility the project meets a
9 general public interest need. And then to cross the
10 Tartan need finish line Ameren contends that the
11 project addresses a capacity need and an energy need.

12 The question of need is for the Company to
13 demonstrate in each case addressing all of the
14 material facts and circumstances in that case. Thus
15 need is defined by the shortfalls, or problems, with
16 continuing to serve rate payers which the Company
17 contends its specific project, here a solar facility,
18 addresses. Whether the project specifically proposed
19 actually addresses those shortfalls and problems
20 addresses the question whether that specific project
21 is needed. Thus if a project does not actually
22 address the identified shortfalls and problems it is
23 not needed.

24 One may need a Phillips screwdriver, one
25 may need to put a Phillips screw into something. The

1 fact that the insertion of a Phillips screw is needed
2 does not justify buying a flathead screwdriver. It
3 won't work. The fact that the Phillips screw is a
4 life or death matter and that we've got to get that
5 screw in the hole right now does not alter the fact
6 that a flathead screwdriver won't work and so the
7 flathead screwdriver is not needed for this job.

8 Understanding the concept of need
9 generally speaking as I have described, is not hard.
10 In fact, the definition's legal basis is obvious. To
11 be needed a project must be able to address or
12 improve the utility's ability to provide safe and
13 adequate service at just and reasonable rates. If it
14 can't do that it's not needed. To the extent a
15 project is not adequate to address a need at just and
16 reasonable rates it does not satisfy the Tartan need
17 requirements and that's so even if some problem must
18 be solved.

19 Staff contends that the Boomtown project
20 will not, simply cannot, all things taken into
21 consideration, provide service which is both, prong
22 one, adequate to meet Ameren's identified capacity
23 and energy needs and will, prong two, do so at just
24 and reasonable rates.

25 Looking at prong two first. It is

1 undisputed that taken in isolation and without
2 resorting to speculation that market and other
3 conditions will change in the future, the Boomtown
4 solar project will not end up, at the end of the day,
5 in the money. At the end of its operational life it
6 will not have broken even. Over its life revenue
7 specific to Boomtown will not cover its costs without
8 resorting to the assumption that things change. The
9 argument here is that we have to change because of
10 all of the risks but the case does not acknowledge --
11 Ameren does not acknowledge that the solution to the
12 problem is also based on the assumption of risks that
13 things will not happen that Ameren hopes will happen.

14 So at the end of the day rate payers will
15 be subsidizing a deficit. And from first to last,
16 throughout its entire operational life span, the
17 project -- hear me out. The thing will be negative
18 at the end of the day if things don't change. But
19 from the beginning to the end it will be in rate base
20 to the benefit of the shareholders. Think risk
21 management. Is that a fair and reasonable way to
22 manage risk?

23 That's the just and reasonable prong and
24 I'll return to it in a minute. Ameren contends that
25 Boomtown is needed to help transition away from

1 fossil fuel energy sources and specifically to meet
2 its capacity and energy needs. Ameren in essence
3 contends that Boomtown is needed to provide adequate
4 service.

5 Now what is exactly involved with capacity
6 requirements? Capacity refers to the ability to
7 produce energy at a point in time. The specific
8 capacity need which Ameren has identified is subject
9 to two competing factors. Factor one, fossil fuel
10 facility require -- retirements. On the one hand
11 Ameren's capacity to produce energy will be affected
12 as fossil fuel facilities are retired during the
13 future. Everything being equal, a fossil fuel
14 retirement will reduce Ameren's capacity. That's one
15 driver.

16 The second driver, MISO. On the other
17 hand, although energy shortfalls occasioned by
18 weather, sunlight, market and so forth factors can be
19 addressed through MISO, Midcontinent Independent
20 System Operators, relying exclusively on MISO for the
21 long term to cover capacity shortfalls occasioned by
22 fossil fuel facility retirements is certainly not a
23 plan for all of the reasons that Mr. Lowery gave us
24 in his opening statements. For one thing, MISO
25 requires that a company meet certain capacity minimal

1 thresholds and will sanction, fine, the company if
2 the company does not have that capacity. To meet
3 those increasing capacities demand over time, flanked
4 on one side by fossil fuel plant retirements and
5 flanked on the other side by MISO requirements,
6 Ameren proposes over time to build the Boomtown
7 project and then phase in other such projects.

8 Now pivoting back to the prong two, just
9 and reasonable rates. The problem with Ameren's
10 project is that phasing in more and more solar plants
11 exactly like Boomtown to meet deficits created by the
12 retirement of fossil fuel facilities makes no
13 mathematical sense. If the Boomtown project will not
14 be in the black at the end of the day then nine of
15 them won't either. Why nine? Remember we are
16 talking about keeping up with capacity requirements.
17 Ameren has identified 2027 as the first year that the
18 Company will not have enough capacity to match peak
19 winter demand. The simple fact is that Boomtown, and
20 other solar facilities, will only get credit from
21 MISO for six percent of the total capacity of the
22 resource when capacity is needed for a peak hour on a
23 January day due to the retirement of one fossil fuel
24 facility. And at a cost of ***HIGHLY CONFIDENTIAL***
25 for a facility which will be in rate base making

1 money for the shareholders but up with -- ending up
2 with a deficit that's balanced in charges to rate
3 payers at the end of its operational life.

4 MR. LOWERY: Your Honor, I hesitate to
5 interrupt Mr. Graham but a highly confidential number
6 was just mentioned that shouldn't have been mentioned
7 in public session. I guess I could ask the
8 Commission to please redesignate that in the
9 transcript and remind Counsel that commercial terms,
10 costs and so on are all highly confidential in this
11 docket.

12 MR. GRAHAM: Beg your pardon. Thank you.

13 JUDGE SEYER: And I'll make sure I cover
14 that part when I review the transcript.

15 MR. LOWERY: Thank you, your Honor.

16 MR. GRAHAM: Adding solar assets to meet
17 winter capacity needs is an inefficient use of
18 resources. The winter capacity shortfall subscribed
19 by Ameren would require nine projects similar to
20 Boomtown to satisfy the relatively small capacity
21 shortfall expected in 2027. The number of projects
22 and the subsequent cost to rate payers would grow to
23 more than 56 times the amounts we are talking about
24 for this case if Ameren were to fulfill that need via
25 solar resources. For context, 55 such projects may

1 cost in excess of ***HIGHLY CONFIDENTIAL***.

2 Staff contends that a facility described
3 by these metrics is not one which provides adequate
4 service at just and reasonable rates. Boomtown is
5 described by these metrics. An asset that is
6 economically inefficient mean -- is an economically
7 inefficient means of fulfilling identified rate payer
8 needs shifts risk to rate payers while increasing
9 shareholders' profits. That dynamic is utterly
10 unbalanced and directly contradicts the public
11 interest and Ameren knows it.

12 Ameren is also projecting a need to build
13 a combined cycle fossil fuel in around 2030. I don't
14 know if the cost of that is confidential but it is
15 high. And why is that? Could it be because Ameren
16 knows that addressing both its capacity and its
17 future energy needs with a gigantic fleet of
18 Boomtowns is simply not a plan. Actually off the
19 charts impossible.

20 John Adams was a lawyer before he was
21 president and once argued to a jury that facts are
22 stubborn things, you may have all seen the movie.
23 It's a stubborn fact that the price of a gigantic
24 fleet of Boomtowns is inconceivable. It is also a
25 stubborn fact that even if Boomtown and future

1 Boomtowns are hedged by a future combined cycle
2 fossil fuel plant fleet Ameren's own projections
3 indicate that absent market and other changes its
4 modeling -- its IRP's and its modeling on the basis
5 of those it cannot be predicted, without assuming
6 that things change, that the revenues will
7 materialize that make this project positive at the
8 end of the day. So Ameren will continue to pay for
9 energy needs of its rate payers via the MISO markets
10 throughout all of this whether or not Boomtown is
11 added to the generation portfolio.

12 Now, one could stop here and simply talk
13 about these metrics louder and louder and how much it
14 will take to invest in solar renewable plants like
15 Boomtown to replace just one fossil fuel plant.
16 Obviously however not every day in the year is
17 January the 1st. Solar powered -- presumably Ameren
18 is talking about phasing in wind powered facilities
19 as well as solar facilities, presumably it's talking
20 about placing these assets in appropriate places,
21 presumably Ameren is talking about a day when the
22 solar power facilities are not operating in the red.
23 I used the word presumably a lot and that gets to the
24 nub of the case.

25 Ameren likes to claim that Staff opposes

1 all renewable projects. Not so and the Commission's
2 past case show that. The Staff does not oppose all
3 renewable projects. Furthermore, Staff does not
4 oppose Ameren's aspirations to phase renewables into
5 a balanced mix of resources, dispatchable and
6 nondispatchable so as long as Ameren's proposal
7 actually remediates the identified need at just and
8 reasonable rates.

9 So what's the problem here? Problem is
10 that Ameren's telling us that while its game plan is
11 to get us to Kansas City Ameren has charted a course
12 on a roadmap that goes to St. Louis without showing
13 us how we're going to get turned around. The problem
14 is that the roadmap shows that I-70 ends up in the
15 wrong place if we go in the wrong direction. Now,
16 Ameren is saying, well, all will be revealed, not to
17 worry. Problem is that we, the Staff, refuse to
18 accept the presumption that something will change
19 when its forecast -- when there's no basis in reason
20 to say it's going to change and focus -- we insist
21 that we focus on what we have here and on the roadmap
22 that we've been given.

23 And why would we possibly think that this
24 thing will turn around? Stubborn fact, Ameren has
25 now provided us with some updated analysis on the

1 economics of the project that show a roughly
2 20 percent increase in cost. Now that wasn't in the
3 initial application. And that is a demonstration of
4 how things change in the wrong direction.

5 So in conclusion, what do we propose here?
6 Two things should happen. One, either the Commission
7 should reject Ameren's CCN outright and send Ameren
8 back to the drawing board and put together something
9 that shows us that we will -- or at least shows us
10 what assumptions can be made or what assumptions have
11 to be made in order to make this thing work. Or as
12 one of our conditions for the granting of a CCN, the
13 Commission should order that a hold harmless
14 agreement be attached to the CCN that shifts some of
15 these risks back over to the shareholders.

16 The basic argument here that we've heard
17 from the proponents of this application is that we
18 need to do something. We cannot stand where we are,
19 we have to do something. What I've noticed is the
20 definition of we. It appears that they would like us
21 to think that this definition -- or that the problem
22 with this case focuses on the definition of need.
23 Well, it does. It also focuses on the definition of
24 we. And we should include the shareholders. If
25 these risks are compelling, if we have to do

1 something then we all should be in the game together.
2 And if the CCN is granted by this Commission the we
3 should include the shareholders and the solution
4 should reach the shareholders in the form of a hold
5 harmless agreement that shifts an equitable amount of
6 these risks over to them.

7 Again, I reiterate what I started with
8 here. I heard here that all will be well if we just
9 take care of matters down the line with a prudence
10 review. A prudence review in the future is not a
11 license to be reckless and imprudent now, it is not a
12 license not to do due diligence now. And if these
13 risks are so great that we have to jump out into
14 territory that in the basis of the past and the way
15 the Commission has operated in the past we would
16 never do. But if we are in that position now where
17 we must jump, must do something, then the risks of
18 non-performance, the risks of a problem should be
19 fairly and equitably shared by all. That would be
20 the definition of safe and adequate service at just
21 and reasonable rates. Thank you very much.

22 JUDGE SEYER: All right. Thank you, Mr.
23 Graham. Commissioner Rupp, do you have any
24 questions?

25 CHAIRMAN RUPP: Not at this time. Thank

1 you.

2 JUDGE SEYER: All right. Do any of the
3 other commissioners have questions?

4 COMMISSIONER HOLSMAN: Judge, I've got a
5 few questions. It's Commissioner Holsman.

6 JUDGE SEYER: All right. Go ahead,
7 Commissioner.

8 COMMISSIONER HOLSMAN: Thank you. What
9 would you say is the natural life of this system, how
10 long do you think it would be in operation before it
11 needs to be decommissioned?

12 MR. GRAHAM: Commissioner, I'm going to
13 look over at the person sitting beside me here and
14 ask him as I say this to raise his hand if I'm wrong.
15 But I think the answer is the projection is
16 approximately 30 years as an operational life.

17 MR. LUEBBERT: It think that's Ameren's
18 statement.

19 MR. LOWERY: That's the estimate, 30
20 years.

21 MR. GRAHAM: Thirty years.

22 COMMISSIONER HOLSMAN: And what value of
23 solar study did you use to determine peak load
24 shaving, off system sales diversion, you know, the
25 true value of solar? Can you tell me what source you

1 used to determine that value?

2 MR. GRAHAM: Commissioner, I'm sorry I
3 can't tell you a blessed thing about that. I'm going
4 to have to defer to my witnesses in the course of
5 testimony. I am sorry.

6 COMMISSIONER HOLSMAN: Okay. Thank you.
7 And has Staff taken a look at -- we know storage is
8 an ever evolving technology. As storage evolves have
9 they looked at what storage could do for capacity in
10 the future since this is a 30 year system?

11 MR. GRAHAM: J?

12 MR. LUEBBERT: What?

13 MR. GRAHAM: Did you hear the question?

14 MR. LUEBBERT: Have we looked at it?

15 MR. GRAHAM: Storage.

16 MR. LOWERY: You Honor, I mean, I
17 certainly would like Commissioner Holsman to get an
18 answer to his questions but I don't think witnesses
19 can provide those answers as part of the opening
20 statement at this point.

21 JUDGE SEYER: All right. Mr. Graham is
22 looking at --

23 COMMISSIONER HOLSMAN: Fair enough, I'll
24 hold them.

25 JUDGE SEYER: All right. Any other

1 questions?

2 COMMISSIONER HOLSMAN: Thank you, Judge.

3 No more questions.

4 MR. GRAHAM: Thank you.

5 JUDGE SEYER: All right. Thank you, Mr.
6 Graham. All right. Before we get into witness
7 testimony, there is a couple of matters that I'd like
8 to take care of. And Mr. Lowery, I touched on this
9 last week in an e-mail or two to all the parties.
10 But the testimony of Mr. Lansford, it's your position
11 that that testimony is not -- I don't want to put
12 words into your mouth -- but not relevant and
13 therefore you are not offering that testimony into
14 evidence?

15 MR. LOWERY: That's correct. We made a
16 filing actually probably a couple of months again at
17 least that indicated that we would not be offering
18 that testimony, that we're not seeking the relief
19 related to use of a tax equity partner in this case,
20 we're not seeking any waivers because, as our
21 surrebuttal testimony explains, we don't know at this
22 moment what kind of tax strategy we will ultimately
23 use for this project if it's approved. If we did
24 ultimately need to use a tax equity partner we've
25 committed in that testimony we'll come back to the

1 Commission for whatever approval we need. As we sit
2 here today, I think we believe it's more likely we
3 won't and therefore we wouldn't need any further
4 permission.

5 But Mr. Lansford testified about a
6 situation that just doesn't exist anymore and there's
7 just -- evolution has happened in this docket because
8 of the Inflation Reduction Act that was passed after
9 the docket was filed and therefore we don't -- it's
10 not relevant but we're also not asking for the relief
11 that he was essentially supporting or testifying
12 about in that testimony, we're not asking for that
13 any longer.

14 JUDGE SEYER: Okay. But when I -- when I
15 reviewed your witness, Lindsey Forsberg's testimony,
16 to me it looks like it's still up in the air as to
17 whether -- what type of financing, what type of tax
18 credit -- tax credits you plan to use. And I just
19 feel like it would be -- it would be useful to the
20 Commission to have that testimony of Mr. Lansford
21 where he does get into the -- the ITC.

22 MR. LOWERY: Yeah. I think he gets into
23 the tax equity if PTC's are used. I guess the reason
24 that we don't believe it is -- I mean, you know,
25 tribunals like the Commission are typically going to

1 decide things that they need to decide and they've
2 been asked to decide and we are not asking them to
3 decide anything about the financing or anything like
4 that.

5 And you're right, Ms. Forsberg's testimony
6 would indicate the final decision hasn't been made.
7 But if we need further relief from the Commission in
8 order to use the PTC's and tax equity we will have to
9 come back and we will file an appropriate
10 application. But we're not asking for that now which
11 is why we didn't think the Commission needs to decide
12 something, A, that we're not asking them to decide;
13 and B, that it may never need to decide.

14 JUDGE SEYER: Okay. So you would object
15 to that testimony being -- coming into evidence?

16 MR. LOWERY: I guess I don't intend to
17 offer it and we didn't intend to tender Mr. Lansford
18 as a witness. None of the parties have asked for
19 that to happen despite us indicating two or three
20 months ago we didn't intend to offer him. Obviously,
21 you know, subject to whatever Commission orders that
22 will be made we'll evaluate and, you know, deal with
23 those orders. But I -- we don't intend to offer it.
24 And again, I just don't think the Commission's being
25 asked to decide anything that that testimony pertains

1 to.

2 JUDGE SEYER: But I'm not sure if you're
3 answering the question that I'm posing. And that is
4 if the Commission, on its own motion, would admit
5 that as an exhibit, would you have an objection to
6 that?

7 MR. LOWERY: Does that imply that Mr.
8 Lansford would have to appear and testify?

9 JUDGE SEYER: Well, that would be question
10 number two.

11 MR. LOWERY: Would it be possible for me
12 to consult with my client about this rather than
13 answer the question on the fly at this moment?

14 JUDGE SEYER: Sure. We don't have to make
15 a decision right now.

16 MR. LOWERY: Okay. We will do that.

17 JUDGE SEYER: All right. Now, let me ask
18 you this though. Which of your witnesses would be
19 the best witness to answer questions about the
20 investment tax credit versus the production tax
21 credit?

22 MR. LOWERY: I think that either Ms.
23 Forsberg or Mr. Wills are pretty well-conversed in
24 both of those and could answer questions.

25 JUDGE SEYER: Okay. And which witness

1 would be best to ask questions about the renewable
2 energy credits?

3 MR. LOWERY: I would say probably Mr.
4 Wills.

5 JUDGE SEYER: Okay. Mr. Graham?

6 MR. GRAHAM: Yes, sir.

7 JUDGE SEYER: Similar question. Which of
8 your witnesses would be in the best position to
9 answer questions about the Public Counsel's
10 suggestion that there be a 50/50 cost and risk
11 sharing mechanism between shareholders and rate
12 payers?

13 MR. GRAHAM: Cedric Cunigan, your Honor.
14 Cedric Cunigan, your Honor.

15 JUDGE SEYER: All right. Thank you. And
16 then which witness as far as to answer questions
17 about the renewable energy credits?

18 MR. GRAHAM: The same, your Honor, Cedric
19 Cunigan.

20 JUDGE SEYER: All right. Thank you. Now,
21 before we get to Ameren's first witness I would
22 suggest we take a break and reconvene at roughly
23 10:30. Let's go off the record.

24 (At this point in the proceedings, a short
25 recess was taken.)

1 JUDGE SEYER: Let's go back on the record.
2 Mr. Lowery, call your first witness.

3 MR. LOWERY: Yes, your Honor. We call
4 Ajay Arora to the stand.

5 JUDGE SEYER: All right. Mr. Arora, good
6 morning.

7 THE WITNESS: Morning.

8 JUDGE SEYER: Would you raise your right
9 hand to be sworn in, please.

10 * * * * *

11 AJAY ARORA,

12 The witness, having been first duly sworn
13 upon his oath, testified as follows:

14 * * * * *

15 JUDGE SEYER: All right. Thank you. Go
16 ahead, Mr. Lowery.

17 EXAMINATION CONDUCTED

18 BY: MR. LOWERY

19 **Q. Could you please state your name for**
20 **the record?**

21 A. My name is Ajay Arora.

22 JUDGE SEYER: Could you spell that name,
23 please?

24 THE WITNESS: It is A-J-A-Y. Last name
25 A-R-O-R-A.

1 BY: MR. LOWERY

2 Q. Mr. Arora, did you cause to be
3 prepared for filing in this docket direct testimony
4 and surrebuttal testimony that has been marked as
5 Exhibit 1HC, 1P, and 2HC, 2P respectively?

6 A. I did.

7 Q. Do you have any corrections to that
8 testimony?

9 A. I do. And it relates to my
10 surrebuttal testimony, Page 34. I had provided some
11 alternate language regarding as-built drawings that
12 all the parties had worked through and had been
13 proposed in the Huck Finn case. And the
14 commissioners had found that some of that language
15 was inconsistent and so we corrected it in the Huck
16 Finn case and we need to do so in the Boomtown case
17 in my surrebuttal testimony.

18 Q. Did you prepare an exhibit that
19 reflects the corrected language that you would like
20 to replace in your surrebuttal testimony based on
21 that inconsistency the Commission had identified?

22 A. I did.

23 MR. LOWERY: Your Honor, could I get an
24 exhibit marked, I think it's 14.

25 (WHEREIN, Ameren Missouri Exhibit 14 was

1 marked for identification.)

2 BY: MR. LOWERY

3 Q. Mr. Arora, I'm handing to you what's
4 been marked as Exhibit 14. Would ask you if that's
5 the document you prepared reflecting the correction?

6 A. It is. Thank you.

7 Q. What lines and page numbers should
8 the text on Exhibit 14 replace in your surrebuttal
9 testimony?

10 A. It's Page 34, Lines 5 through 12.

11 MR. LOWERY: With that, your Honor, I'll
12 offer Exhibit 14 rather than Mr. Arora having to read
13 a few sentences into the record to reflect the
14 replacement of Lines 5 through 12 of his surrebuttal
15 testimony.

16 JUDGE SEYER: All right. Is there any
17 objection to the admission of Exhibit 14?

18 MR. WILLIAMS: I haven't seen it.

19 MR. LOWERY: Oh, I apologize. I thought
20 we handed it out. My apologies.

21 MR. WILLIAMS: Thank you. No objection.

22 BY: MR. LOWERY

23 Q. Just for the record, Mr. Arora, is
24 the language that you propose to substitute identical
25 to the language that was recently submitted in the

1 0244 docket with the exception of the acronym EDF has
2 been changed to Invenergy to reflect that Invenergy's
3 the developer on the Boomtown project?

4 A. It is.

5 JUDGE SEYER: All right. So, if there are
6 no objections. Hearing none, Exhibit 14 is admitted.

7 BY: MR. LOWERY

8 Q. Mr. Arora, if I were to pose the
9 questions in both your direct and surrebuttal
10 testimonies that are asked there, would you give the
11 same answers today with the exception obviously of
12 the correction you just made in your surrebuttal
13 testimony?

14 A. I would, yes.

15 Q. Are those testimonies, to the best of
16 your knowledge and belief, true and accurate?

17 A. They are.

18 Q. Thank you, Mr. Arora.

19 MR. LOWERY: I have no further questions,
20 your Honor, and I tender Mr. Arora for
21 cross-examination.

22 JUDGE SEYER: All right. If I have this
23 correct -- if I have the order correct then it would
24 be Ms. Plescia first.

25 MS. PLESCIA: No questions.

1 JUDGE SEYER: All right. No questions.

2 And then Mr. Opitz, on behalf of Wal-Mart?

3 MR. OPITZ: No thank you, your Honor.

4 JUDGE SEYER: Mr. Thompson?

5 MR. THOMPSON: No questions, your Honor.

6 JUDGE SEYER: All right. And Ms.

7 Greenwald?

8 MS. GREENWALD: No questions, your Honor.

9 JUDGE SEYER: Mr. Williams?

10 MR. WILLIAMS: Thank you.

11 EXAMINATION CONDUCTED

12 BY: MR. WILLIAMS

13 **Q. Good morning, Mr. Arora.**

14 **A. Good morning.**

15 **Q. Are you familiar with ancillary**
16 **services and then MISO?**

17 **A. I am.**

18 **Q. Will Boomtown provide the same**
19 **ancillary services that Ameren Missouri's thermal**
20 **units such as Callaway or Rush Island or Labadie or**
21 **Sioux provide?**

22 **A. No. But we have a need for energy as**
23 **well.**

24 **Q. What ancillary services will they not**
25 **be able to -- will Boomtown not be able to provide**

1 **that those other units will?**

2 A. Ramping, for example. Potentially
3 voltage support.

4 **Q. What about frequency support?**

5 A. Combined with batteries they could
6 provide frequency support but standalone not as much.

7 **Q. Is it physically inherent in the**
8 **Boomtown solar array that it cannot provide these**
9 **services or is there some other reason why it won't?**

10 A. That's a technical question.

11 **Q. If you don't know, that's fine.**

12 A. Yeah, I don't know.

13 **Q. Do you know who does who will be a**
14 **witness?**

15 A. Certainly one of our engineering
16 witnesses could probably answer that question.

17 **Q. Rush Island's still dispatchable**
18 **currently, isn't it?**

19 A. It's dispatchable as a system
20 resource. So it's really there for emergency
21 purposes.

22 **Q. What kind of emergency purposes is it**
23 **there for?**

24 A. It's when MISO may be, you know,
25 short during certain times of the year, which it

1 looks like they'll be more and more in the future.
2 Rush Island can then provide system support services.

3 **Q. Is Ameren Missouri under some**
4 **obligation to in the near future cease operating Rush**
5 **Island all together?**

6 A. Yes. We plan to retire Rush Island
7 before 2025 as a result of a court order.

8 **Q. Is that true of any of your other**
9 **thermal generating units, Sioux, Labadie, Callaway?**

10 A. We expect to retire Sioux, which is
11 really reaching the end of its useful life, by 2030.

12 **Q. Is it because of some court**
13 **obligation or --**

14 A. No.

15 **Q. Its operational is the basis for that**
16 **retire -- planned retirement, correct?**

17 A. You mean Sioux?

18 **Q. Yes.**

19 A. Yes. It's reaching end of life,
20 that's the reason for the retirement.

21 **Q. And when you say reaching end of**
22 **life, is that Ameren Missouri's determination that**
23 **it's not worth the -- whatever cost it might take to**
24 **rehabilitate or continue operating that unit?**

25 A. It's a combination. Every unit plant

1 has an expected life. After a while there are safety
2 concerns and then there are operational concerns and
3 economic concerns. You know, things like high energy
4 piping can get to a level where it's not safe to
5 operate anymore. So all those factors are taken into
6 determination of when we might retire a generation
7 unit.

8 **Q. Well, you've had -- in the past**
9 **you've done things like add scrubbers to the unit to**
10 **continue operating it, have you not?**

11 A. That's right. And that was based on
12 the expectation of its useful life. The scrubbers
13 were added I believe in 2009 when there's plenty of
14 useful life left at Sioux.

15 **Q. Is there any particular factor that's**
16 **determinative of your planned retirement date for**
17 **Sioux?**

18 A. It's essentially, like I said, safety
19 related as well operational concerns as well as the
20 fact that the equipment is aging and spending that
21 much money on a plant that is essentially getting
22 old, reaching end of life, and potentially have
23 safety related issues is not really in the best
24 interest of our customers.

25 **Q. Are you familiar with what kind of**

1 atypical, I guess I would call it, fuel and purchase
2 power costs Ameren Missouri incurred in MISO during
3 February of 2021?

4 A. Just slightly.

5 Q. Do you have a number for that?

6 A. I do not.

7 Q. Do you know if it was hundreds of
8 millions or tens of millions?

9 A. Don't recall.

10 Q. Ameren Missouri's -- the Boomtown
11 solar project, initially it will create direct
12 current, correct?

13 A. Correct.

14 Q. And then that's, what, inverted to
15 create alternating current, correct?

16 A. That's correct.

17 Q. And then that alternating current
18 needs to be synchronized in terms of the frequency
19 with the grid, correct?

20 A. Correct.

21 Q. Does the cost that Ameren Missouri's
22 put in its application for its estimate of the
23 Boomtown costs include that synchronization?

24 A. It does, yes.

25 Q. Is that a part of the interconnection

1 **agreement requirement?**

2 A. It's part of the interconnection
3 agreement, it's also part of the build transfer
4 agreement. So the whole idea the plant would be
5 fully tested, commissioned, and then synchronized to
6 the grid, mainly to provide energy that we need by
7 2028.

8 **Q. No further questions. Thank you.**

9 A. Thank you.

10 JUDGE SEYER: All right. Mr. Graham, do
11 you have questions on behalf of the Staff?

12 MR. GRAHAM: Just a couple clarification
13 here.

14 EXAMINATION CONDUCTED

15 BY: MR. GRAHAM

16 **Q. Is the location of the Boomtown**
17 **facility, does that -- do you anticipate or does**
18 **Ameren anticipate that that location will be**
19 **considered a, quote, energy community, closed quote,**
20 **with respect to the Inflation Reduction Act?**

21 A. We do, yes. And the other benefit is
22 the energy prices are really high there so it should
23 benefit our customers also in the future from that
24 perspective.

25 **Q. You anticipate that the Boomtown then**

1 will be in an energy community?

2 A. We do, yes.

3 Q. And its being in the energy community
4 is one of the suppositions or assumptions that you
5 rely on for recommending this project?

6 A. The real reason for recommending it
7 is that we have a defined energy need.

8 Q. I understand that that's another
9 reason. Does the fact or the supposition, since you
10 brought it up, since Ameren brought it up, does the
11 supposition that Boomtown will be considered within
12 an energy community, as that expression is used in
13 the Inflation Reduction Act, is that one of the
14 reasons that you are advancing this project to the
15 Commission for approval?

16 A. That just helps the affordability.
17 The project is required for meeting our energy needs.

18 Q. I understand that. But the Company
19 has come before the Commission. The Staff did not
20 come before the Commission, the Company has come
21 before the Commission with a number of arguments.
22 And one of those arguments is that this project
23 should be approved because of its location and the
24 advantage of that location, the financial advantage
25 of that location with respect to the Inflation

1 Reduction Act, is that not true?

2 A. That is certainly beneficial for
3 customers, absolutely.

4 Q. Can you state within any reasonable
5 degree of certainty that in the future, at a future
6 time, the Boomtown facility will be within what is
7 considered an energy community, can you state that
8 that will happen within reasonable certainty?

9 A. That's certainly our expectation,
10 yes.

11 Q. That is your expectation. Can you
12 state it within reasonable certainty that that will
13 happen?

14 A. Yes, I can.

15 Q. All right. What will have to happen,
16 what will have to change, is that answer based on any
17 other assumptions?

18 A. No.

19 Q. Nothing will have to change?

20 A. No. We have essentially looked at
21 the communities nearby and we expect it'll qualify.

22 Q. All right. Thank you. Now, if
23 that's the case then my next question is, do you know
24 whether or not Boomtown will be eligible for the full
25 amount of added tax benefit of the relevant

1 provisions in the IRA? Of the Inflation Reduction
2 Act. I better define that one for our court
3 reporter.

4 A. Yes, I expect it will qualify for up
5 to 40 percent tax credits which really reduces the
6 cost to customers for a resource we need for energy
7 purposes.

8 Q. Can you tell me, sir, which witness I
9 should, if not you, ask about -- well, this question.
10 Assuming Ameren enters into a tax equity partnership
11 for Boomtown, what risks the tax equity partner will
12 carry that will not recover their investment plus a
13 return, can you tell me who I should ask that? Maybe
14 it's you.

15 A. Yeah. Maybe it is me. Could you
16 please restate the question?

17 Q. Yeah. Assuming Ameren enters into a
18 -- enters a tax equity partnership for Boomtown, what
19 risks will the tax equity partner carry that they
20 will not recover their investment plus a return?

21 A. The tax equity agreement is
22 structured such that it's a financing agreement
23 essentially so they do recover their return.

24 Q. All right. Thank you. That's all
25 the questions I have of this witness.

1 A. Thank you.

2 JUDGE SEYER: Chairman Rupp, any
3 questions?

4 CHAIRMAN RUPP: Yeah, just briefly.

5 EXAMINATION CONDUCTED

6 BY: CHAIRMAN RUPP

7 **Q. Good morning.**

8 A. Good morning.

9 **Q. You had stated that, you know, Ameren**
10 **has an energy buffer but you're going to need energy**
11 **resources in the future. But following up on OPC's**
12 **questioning, there's no ancillary benefits that you**
13 **mentioned ramping, voltage support streaming. Why**
14 **did you choose to go with the solar instead of a new**
15 **natural gas or some other option?**

16 A. So essentially, Chairman, we need
17 both. We need energy as well as capacity as well as
18 ancillary services. The paradigm of planning has
19 shifted and the reason for that is renewables are the
20 least cost resources for energy. And so as opposed
21 to historical paradigm where we would plan for
22 capacity we now need to separate energy capacity and
23 ancillary services. Our energy needs are essentially
24 best met with renewable energy.

25 First of all, they're cost effective,

1 secondly they mitigate a lot of risk, there's no fuel
2 risk with renewables. There's the ability to hedge
3 against any carbon emission pricing that may come out
4 in the future, there's the possibility to hedge
5 against investor expectations, there's the
6 possibility to hedge against customer expectations.
7 And at the end of the day, you know, solar resources,
8 as well as wind, need energy throughout the year. So
9 that's meeting the energy requirements.

10 Then for reliability purposes we would
11 install a combined cycle generator which will not
12 only provide capacity but provide the ancillary
13 benefits as well. And if it so happens that there's
14 a buffer of energy that's actually beneficial to
15 customers because that money flows back to customers
16 and reduces the cost for the transition. So
17 pinpointing planning towards energy and capacity in
18 the future to make use of the least cost renewables
19 is what we need to shift to. And that's what this
20 case is about, it's the start of that transition.

21 **Q. So the crux of going with this solar,**
22 **other than another option, is anticipated concerns of**
23 **the future as far as potential carbon tax, investor**
24 **pressures for certain types of investment,**
25 **shareholder viewpoints on green financing, kind of**

1 anticipating those pressures in the future, and is
2 that a driving force for this?

3 A. The main driving force is we have a
4 shortage of energy and the implication --

5 Q. You said that was the main driving
6 force. So let's table that for a second. But the
7 main driver of energy you can get energy from other
8 places 'cause you said, you know, you're separating
9 energy capacity and ancillary services. But a lot of
10 the reasons you gave was anticipated pressures from
11 potential carbon taxes, potential pressures that have
12 not yet been realized. So separating the energy
13 piece, is that the driving force for this particular
14 project?

15 A. Main driving force is renewables are
16 the least cost way to meet energy needs. All of the
17 other aspects are a hedge against potential risks
18 that may manifest themselves in the future. To meet
19 energy needs renewables are the least cost resource.

20 Q. Okay. So this is the first proposal,
21 I guess, before us since Ameren's filed its preferred
22 resource plan. Do you believe that if the Commission
23 were to grant this CCN that it is implicitly
24 approving Ameren's preferred resource plan?

25 A. That depends on how the Commission

1 issues the order. But I think we would like the
2 Commission to consider our need to transition away
3 from coal fire generation that is reaching end of
4 life. And what we have proposed is a reliable and
5 affordable plan and that's what the IRP does. So
6 yes, I do think it's valuable for us to know what the
7 Commission feels about the transition.

8 **Q. Okay. Thank you.**

9 CHAIRMAN RUPP: That's all I have, Judge.

10 JUDGE SEYER: All right. Thank you,
11 Chairman. Any questions from the other
12 commissioners?

13 COMMISSIONER HOLSMAN: Judge, this is
14 Commissioner Holsman. I have a couple of questions.

15 JUDGE SEYER: Go ahead.

16 COMMISSIONER HOLSMAN: Thank you.

17 EXAMINATION CONDUCTED

18 BY: COMMISSIONER HOLSMAN

19 **Q. Thank you for your testimony here**
20 **today. Back to the discussion of the value of solar**
21 **study. Has the Company -- can you cite the study the**
22 **Company is using to take a look at peak load shaving**
23 **and off system sales diversion and other value of**
24 **solar that is imbedded in the technology itself? You**
25 **said that solar was least -- or renewables are least**

1 **cost option. Can you talk a little bit about how you**
2 **arrived at that conclusion?**

3 A. Certainly. You know, in the direct
4 testimony of Matt Michels we included a chart that
5 looks like the levelized cost of energy, that's a
6 calculation we do in every Integrated Resource Plan
7 and it looks at the overall cost, capital as well as
8 operational cost for a resource over its life divided
9 by the production of energy. As we have looked at
10 those charts historically renewables have always been
11 least cost as compared to other resources for energy
12 purposes.

13 Q. **How about the storage aspect when it**
14 **comes to capacity? Is there a -- can you give us an**
15 **idea of what you're seeing in terms of if this**
16 **facility would ever be paired with storage to firm up**
17 **its production?**

18 A. It could certainly be paired up with
19 storage. But the benefit of storage now with the
20 Inflation Reduction Act is even standalone storage
21 gets up to 40 percent tax credit. So it could be
22 paired at the location of Boomtown or we could put
23 storage anywhere else on the grid to provide
24 reliability. So there's certainly a myriad of ways
25 to firm up energy from renewables. Especially with

1 the IRA, the Inflation Reduction Act, providing up to
2 40 percent tax credit for storage, standalone.

3 **Q. Now, this project's being built in**
4 **Illinois. Do you have plans for Missouri assets as**
5 **well for renewables?**

6 A. We do. And the Huck Finn project
7 that was -- you know, that we have a stipulation and
8 agreement on with other parties, that's being built
9 in Missouri. It's 200 megawatts, it's the largest
10 solar plant that the company would own in Missouri.
11 And Boomtown is in Illinois. And the idea is, you
12 know, as we think about renewables replacing coal
13 fire generation it's beneficial to have a
14 geographically dispersed portfolio of assets that we
15 can operate and show a reliability.

16 **Q. Okay. Thank you.**

17 COMMISSIONER HOLSMAN: Thank you, Judge.
18 No more questions.

19 JUDGE SEYER: All right. Yes, Chairman
20 Rupp, you have another question?

21 CHAIRMAN RUPP: Yeah, thank you. Sorry.

22 EXAMINATION CONDUCTED

23 BY: COMMISSIONER RUPP

24 **Q. Commissioner Holsman had mentioned**
25 **something that jogged my memory. Is there any -- I**

1 know you mentioned the IRA tax credits. Since this
2 is being built in Illinois and I know Illinois's
3 legislature has passed some investment subsidies for
4 renewable energy in the past. Is Ameren attempting
5 to gain or get any type of subsidies from the State
6 of Illinois, you know, for this project since it is
7 located in Illinois?

8 A. Yes. So, you know, the main benefits
9 in Illinois are we get up to 40 percent tax credits
10 on the federal level as well. The energy prices in
11 Illinois are meaningfully higher than Missouri so
12 that does benefit Missouri customers. In terms of
13 the local taxes, that's still being negotiated with
14 the local county. So we'll certainly do what's best
15 for our customers there. But the fact that we get up
16 to 40 percent federal tax credits and then the
17 locational marginal prices are meaningfully higher
18 that certainly bodes well for this project. Along
19 with the aspect of providing a hedge because it's
20 geographically dispersed.

21 Q. But to your knowledge, is there any
22 state subsidies offered through the State of Illinois
23 that you're applying for or will be benefitting from
24 this project?

25 A. Not that I'm aware of, no.

1 **Q. Thank you.**

2 CHAIRMAN RUPP: Thank you, Judge.

3 JUDGE SEYER: Thank you, Chairman. Any
4 other questions from the commissioners? All right.
5 Hearing none. Mr. Arora, I do have some questions
6 myself.

7 EXAMINATION CONDUCTED

8 BY: JUDGE SEYER

9 **Q. You're familiar, I would assume, with**
10 **the term force majeure?**

11 A. I am.

12 **Q. Okay. If -- during construction of**
13 **this project, will Ameren carry insurance to cover**
14 **force majeure events?**

15 A. I don't know if we'll carry insurance
16 to cover force majeure, that's certainly something we
17 can look into, you know, because it's an act of God.
18 It will have to be something we consider. We haven't
19 decided on that yet.

20 **Q. And then once operational, would**
21 **there be insurance for such events?**

22 A. Yes. Once operational we would
23 absolutely have operational insurance.

24 **Q. Would that insurance -- if you can**
25 **answer this, would that insurance, besides covering**

1 the complete loss of generation, would it cover
2 reduction of generation and reduced revenues?

3 A. If it's because of an outage that's
4 extended potentially, if it's due to weather related
5 aspects I don't think insurance would cover that.

6 Q. Once the Boomtown solar project is up
7 and operational, who will be responsible for the
8 operation and maintenance costs, will that be the
9 subscribers, will that be the rate payers, some
10 combination?

11 A. So Ameren Missouri will operate and
12 maintain the plant. In terms of how that cost is
13 allocated, if we have the Renewable Solutions Program
14 subscribers will certainly pay a portion of it,
15 otherwise it will be all our customers.

16 Q. So are you saying during the first --
17 the subscription program is a 15 year program,
18 correct?

19 A. Correct.

20 Q. And so are you saying during the
21 first 15 years the subscribers would --

22 A. Pay a portion of all the cost of the
23 project, including operations and maintenance.

24 Q. But the rate payers would be
25 responsible for some of those costs --

1 A. That's right.

2 Q. -- or a portion of those costs?

3 A. That's right.

4 Q. And then are you saying from years 15
5 through 30 it would be completely covered by the rate
6 payers?

7 A. That's right. If we don't extend the
8 sale of the asset for the renewable solutions it will
9 completely be covered by all our customers.

10 Q. Are you saying -- are you saying if
11 you don't have another 15 year subscription program?

12 A. Correct. I mean, it's certainly
13 possible we might renew.

14 Q. Okay. And I don't know if you need
15 to refer to this. But in your surrebuttal testimony,
16 on Page 35, --

17 A. Okay.

18 Q. -- you list an updated estimated cost
19 for the project, correct?

20 A. I do.

21 Q. What level of design is this updated
22 estimate cost based on?

23 A. It's based on slightly more than
24 30 percent, which essentially has identified all the
25 major equipment as well as, for a majority of the

1 other categories, the units for each equipment.

2 **Q. What factors can further impact those**
3 **estimated costs?**

4 A. You know, at this point, since we
5 expect to give clearance for construction if the
6 project is approved by the Commission in a few
7 months, it would really be maybe some market changes
8 around commodities.

9 **Q. And then what timeframe does Ameren**
10 **expect to finalize the project costs?**

11 A. In a few months. So certainly by the
12 end of May the project costs would be finalized. And
13 then it would just be subject to, based on the
14 agreement, to force majeure and then those kind of
15 risks.

16 **Q. Can you explain for the commissioners**
17 **the difference between nameplate capacity and**
18 **accredited capacity?**

19 A. Certainly. So nameplate is
20 essentially the size of the project, you know, the
21 capacity that it's rated for.

22 **Q. Is that like the maximum power it**
23 **could generate if everything's going perfectly?**

24 A. Correct, it is.

25 **Q. Okay.**

1 A. Accredited capacity as far as the
2 Midcontinent Independent System Operator is
3 concerned, they calculate the capacity value at times
4 of peak during different seasons and they assign a
5 capacity value to it. That doesn't mean that the
6 plant cannot generate more than that in that season,
7 it just means that during those peak hours it's
8 expected to generate a certain amount and that's the
9 accredited value they provide.

10 **Q. In the Company's preferred resource**
11 **-- or preferred plan resource timeline, are the**
12 **addition and retirement capacities nameplate capacity**
13 **or accredited capacity?**

14 A. The retirements are -- well, they're
15 both. It's mostly accredited though in the planning
16 process because that's what we have to account for
17 with MISO.

18 **Q. Okay. In that timeline it shows**
19 **700 megawatts of wind came online in 2021, I forget**
20 **the name of that project?**

21 A. It's High Prairie and Atchison.

22 **Q. High --**

23 A. Those are nameplate.

24 **Q. High Prairie. And then in 2022**
25 **827 megawatts for the Meramec Energy Center was**

1 **retired, correct?**

2 A. Correct.

3 **Q. Okay. Does that mean that Ameren**
4 **Missouri is currently short of capacity of**
5 **127 megawatts until an additional 800 megawatts of**
6 **solar is installed in 2025?**

7 A. So now I understand the timeline
8 you're talking about. Sorry. The Meramec number is
9 nameplate as well as accredited. The 700 megawatts
10 of wind is nameplate but not accredited. So MISO
11 will give a smaller value for that. So the amount of
12 capacity we may need once Meramec retires for MISO
13 purposes would be more.

14 **Q. Okay. I'll -- well, in that vein,**
15 **nameplate versus accredited. Are you familiar with**
16 **Public Counsel's witness Dr. Marke's Figure 3 and his**
17 **testimony that's labeled assumed MISO resource**
18 **accreditation and seasonal impact?**

19 A. Yeah. I'll have to look at it to
20 refresh my memory.

21 **Q. It is in his rebuttal testimony. But**
22 **I think I can ask my question without you having to**
23 **actually refer to it. But it -- in that testimony he**
24 **lists the assumed accreditation for each generating**
25 **resource and it lists -- for example, it lists**

1 nuclear as 95 percent accredited, coal 90 percent,
2 gas 90 percent, battery 87.5 percent, and then solar
3 35 percent and wind 16.6 percent. Would you agree --
4 assuming you find those figures reasonable, would you
5 agree that MISO's accredited capacity for coal and
6 gas, which is 90 percent, is higher than the
7 accredited capacity for wind and solar resources?

8 A. I would for capacity purposes, yes.

9 Q. And again, we're talking about
10 accredited capacity takes into account varying
11 weather conditions, reasons why solar and wind might
12 not be producing at their nameplate capacity,
13 correct?

14 A. Correct. And I think that's a
15 distinction I was drawing. When we use renewables,
16 which are least cost for energy, we have to plan not
17 only for capacity but also for energy separately.

18 Q. And the Company's preferred plan
19 replaces coal capacity with wind and solar capacity
20 through 2023, correct? Did I say 2023? 2030.

21 A. That is correct.

22 Q. Okay. So using those MISO assumed
23 accreditation percentages, would you agree that
24 replacing resources with a lower accredited capacity
25 with a retired resource with a higher accredited

1 **capacity could create a significant capacity**
2 **shortfall of approximately 2,200 megawatts?**

3 A. Yeah. Just from the math it would.
4 But we are long capacity right now and so that's why,
5 you know, in the IRP we plan not only for capacity
6 needs but also for energy needs. So the capacity
7 need is eventually met by the combined cycle by 2031.
8 Before that we have energy needs and needs for an
9 energy buffer which is being provided by renewables.

10 **Q. So from your perspective is the**
11 **replacement of that capacity a need for Ameren?**

12 A. The replacement of enough capacity to
13 meet MISO needs and planning resources is a need.
14 The replacement of energy to meet our customers'
15 needs is also a need. So we have to meet both in
16 order to have a reliable system and an affordable
17 transition. Just because we have capacity doesn't
18 mean we'll have energy in all hours of the year. We
19 have seen several times historically where that's
20 proven to not be a case for a myriad of reasons,
21 operational, permitting, fuel access. So that's why
22 as we think about the transition and the least cost
23 transition we have to not only plan for energy but
24 also for capacity separately.

25 **Q. So would approval of this CCN**

1 mitigate the capacity shortfall that Public Counsel
2 and Staff claim will exist if the Company retires its
3 coal generated facilities?

4 A. So in the summer when MISO is short,
5 potentially as early as next year, I believe MISO
6 provides a 45 percent accreditation for solar. So
7 yes, it would absolutely meaningfully help there.
8 Solar does generate throughout the year, including in
9 the winter, and so it helps with the energy needs as
10 well. But in the summer it's 45 percent is my
11 understanding.

12 Q. Okay. To shift gears a little bit.
13 Chairman Rupp mentioned that these solar -- this
14 solar project will actually be located in Illinois,
15 collect?

16 A. Correct.

17 Q. And MISO's service area has ten
18 zones, correct?

19 A. I believe that is correct, yes.

20 Q. Okay. This project, the Boomtown
21 solar project, will be in Zone 4?

22 A. In Zone 4, yes.

23 Q. But Ameren's service territory's
24 largely in Zone 5, correct?

25 A. Correct.

1 **Q. So if that -- if actual solar panels**
2 **are located in Zone 4 and there's a need and it's in**
3 **the public interest for customers in Zone 5, why**
4 **didn't the Company propose to build the project in**
5 **Zone 5?**

6 A. So it's not any different than how we
7 manage our needs today. We have about 1,800
8 megawatts of peaking capacity in Illinois that is
9 jointly dispatched through MISO to meet overall
10 needs. With renewables it's also important that we
11 have geographical diversity. So while we'll likely
12 have a majority of solar projects in Missouri I do
13 think for reliability purposes, because renewable
14 generation is weather dependent, it's helpful to have
15 projects elsewhere as well. And so that's why we
16 want to have this sort of geographically diverse
17 portfolio.

18 **Q. And I believe you discussed that in**
19 **your pre-filed testimony. But could you touch on it**
20 **for just a bit. Geographical diversity, where you**
21 **have sources -- renewable sources in different**
22 **geographical locations, what's the benefit of that?**

23 A. So, you know -- so let's maybe think
24 about solar and wind as well. Solar generates when
25 wind typically doesn't so they're complimentary for

1 the most part. It could also be the case that, you
2 know, if there is a wind resource in one location
3 there may not be a wind resource in another
4 geographic location. So by having a diverse resource
5 you essentially have generation at any given point of
6 time. And the same thing could happen with solar.
7 There could be cloud cover in Missouri, where we have
8 the majority of our solar plants, but they may not be
9 in Illinois or anywhere else where we site solar. As
10 long as all that energy can freely flow, which it can
11 in MISO, you know, it does ensure greater reliability
12 than having it localized all in one place.

13 **Q. Because the actual location of the**
14 **panels is in Illinois, does Ameren have to -- or has**
15 **it gone through the Illinois Commerce Commission to**
16 **get approval for the project?**

17 A. Ameren does not need to go through
18 the Illinois Commerce Commission for approval of this
19 project and we haven't.

20 **Q. In the Company's preferred plan**
21 **resource timeline, in 2042 the Company plans to**
22 **install 1,200 megawatts of clean dispatchable**
23 **resource. What resources consist of clean**
24 **dispatchable resources?**

25 A. So potentially -- based on the

1 technologies today, potentially three or four of
2 them. It could be small modular nuclear, which, you
3 know, there's a couple of projects in the United
4 States that are proposed to be constructed. It could
5 be combined cycle generation with hydrogen and/or
6 carbon capture. It could be long duration battery
7 storage. And it could be any other means of storage
8 as well.

9 **Q. Does MISO state any accredited**
10 **capacity for those types of resources?**

11 A. For nuclear, as you know, as you
12 pointed out, it's about 95 percent. For combined
13 cycle I would expect it would be about the same. You
14 know, for battery storage, I think it depends on, you
15 know, as they test more and the duration.

16 **Q. The clean dispatchable resources, are**
17 **they expected to be online by 2031?**

18 A. By 2031 we have the combined cycle
19 generation that would expect to be online. And it's
20 certainly possible that, you know, we might be able
21 to blend hydrogen with that. It is cleaner than coal
22 because of carbon emissions being lower.

23 **Q. In your surrebuttal testimony, if you**
24 **want to refer to that, Page 25.**

25 A. Okay.

1 **Q. You state that the Boomtown Solar**
2 **Project was one of four viable projects as candidates**
3 **considered by the Company. What were the other three**
4 **viable projects and were they considered in the**
5 **Company's preferred resource plan? And if any of**
6 **that information is confidential, we'll address that.**

7 **A. Okay. So one of them is Huck Finn,**
8 **which we already talked about. There's two more,**
9 **that is confidential. There's one in Missouri and**
10 **one in Illinois.**

11 **Q. Okay. And were those projects**
12 **considered in the preferred resource plan?**

13 **A. Essentially the preferred resource**
14 **plan figures out how much we need and then we go out**
15 **for a request for proposals to see what's available**
16 **and then there's a loop. So actually in this case**
17 **the request for proposal was pretty close to when we**
18 **filed. So yes, I mean, our pipeline of projects did**
19 **feed into our 2022 preferred resource plan.**

20 **Q. Are you familiar with the term**
21 **decisional prudence?**

22 **A. Just a little bit. I'm not a lawyer.**

23 **Q. Okay. I was curious what you -- how**
24 **would you define -- you know, in your non-lawyer**
25 **opinion, how you would define decisional prudence?**

1 A. If a resource is needed to meet the
2 energy needs and/or capacity needs and ensures our
3 obligation of meeting reliability and affordability
4 for our customers, I would say it's decisionally
5 prudent, in my non-lawyer view of things.

6 **Q. Do you believe that the Commission**
7 **should make a decisional prudence decision on the CCN**
8 **and the Renewable Solutions Program in this case or**
9 **in a general rate case?**

10 A. I think they certainly have the
11 ability to do so in a rate case for sure. I think it
12 is helpful if they can determine, you know, if a need
13 exists in this case as well.

14 **Q. And then there was mention of it I**
15 **believe in opening statements. But the estimated**
16 **project costs have been increased in this project.**
17 **With those increased costs do you -- would you still**
18 **consider this project economically feasible?**

19 A. I would. And let me tell you why.
20 First of all, like I said, there's a clear need.
21 Secondly, since those costs have gone up a couple of
22 things have happened. We have gained another
23 10 percent on the federal tax credits because of the
24 Inflation Reduction Act so that mitigates a lot of
25 the cost. I will also say that in the last year

1 energy prices have dramatically increased,
2 dramatically. And, you know, given all that the
3 hedge that any generation provides, that is
4 implemented in the near term it's certainly valuable
5 to the customer. So there's a clear defined energy
6 need, there's the benefit of the federal tax credits,
7 and there's a clear hedge against spiking energy
8 prices in the near term.

9 Q. All right. Thank you. Thank you for
10 your -- for answering my questions.

11 A. Thank you.

12 JUDGE SEYER: I'll give the parties an
13 opportunity to re-cross the witness. So Ms.
14 Plescia, do you have any questions?

15 MS. PLESCIA: No questions, thank you.

16 JUDGE SEYER: Mr. Opitz?

17 MR. OPITZ: No thank you, Judge.

18 JUDGE SEYER: Mr. Thompson?

19 MR. THOMPSON: No questions.

20 JUDGE SEYER: Ms. Greenwald?

21 MS. GREENWALD: No questions, Judge.

22 JUDGE SEYER: Mr. Williams?

23 MR. WILLIAMS: Yes.

24 EXAMINATION CONDUCTED

25 BY: MR. WILLIAMS

1 Q. Mr. Arora, do you recall you
2 responded to Commissioner -- or Chairman Rupp that
3 **Ameren Missouri separates capacity energy and**
4 **ancillary services whenever it's reviewing need?**

5 A. I think that's what we need to do,
6 yes. And that's what we did in this IRP, the 2022
7 preferred plan.

8 Q. Do you capture synergies there may be
9 **whenever some asset might fulfill more than one of**
10 **those buckets?**

11 A. Absolutely we do, yes.

12 Q. How do you do that if you're looking
13 **at them each independently?**

14 A. Because, you know, as opposed to the
15 outdated historical view of just looking at capacity
16 we now look at both. And so to the extent one
17 resource can provide energy benefits as well as
18 capacity benefits we would give value to it in both
19 areas.

20 Q. So did you do that with regard to say
21 **combined cycle given the experiences that have**
22 **occurred in SPP and MISO in the past years -- past**
23 **two years?**

24 A. We did. We actually did a
25 reliability study using a consultant, Astrapé, and

1 they looked at the benefit that the combined cycle
2 would bring in once the Sioux Energy Center retires
3 and that's how we placed the combine cycle in that
4 year. So we did an in depth reliability analysis to
5 ensure that the plan that the IRP has laid out not
6 only meets energy needs but also meets reliability
7 needs. So the combined cycle absolutely provided
8 that benefit.

9 **Q. It wouldn't provide benefit earlier?**

10 A. So there's various reasons why we
11 need a mix of resources. Like I said, the most cost
12 effective way to meet energy needs is through
13 renewables, the most cost effective way to meet
14 reliability needs is through a combined cycle. When
15 you have both we essentially are creating what we
16 have leaned on historically for decades and decades
17 and that's a long buffer on both energy and capacity.
18 And that's what helps us meet our obligations to our
19 customers, ensuring reliability as well as
20 affordability.

21 MR. WILLIAMS: No further questions.

22 Thank you.

23 THE WITNESS: Thank you.

24 JUDGE SEYER: All right. Mr. Graham, do
25 you have further questions?

1 MR. GRAHAM: A couple, yes, sir.

2 EXAMINATION CONDUCTED

3 BY: MR. GRAHAM

4 Q. Directing your attention back to the
5 Judge's question about what your definition of
6 decisional prudence was. Could you restate that for
7 me? And this isn't a test of whether you -- I mean,
8 if you don't state it the same way, that's not my
9 point. Just tell me what you mean by that.

10 A. So if we have a resource that meets
11 our obligation to meet the energy needs and our
12 capacity needs or ultimately ensure that we are
13 reliably and affordably able to serve our customers,
14 if a resource is needed for that I would deem it
15 prudent.

16 Q. Okay. Would you accept this
17 amendment at just and reasonable rates?

18 MR. LOWERY: Objection to the extent it
19 calls for this witness to draw a legal conclusion
20 about what just and reasonable means.

21 JUDGE SEYER: Sustained.

22 BY: MR. GRAHAM

23 Q. Do you think that that should be done
24 in a just manner just to rate payers?

25 MR. LOWERY: Same objection. He's asking

1 the witness to opine on what the legal standard ought
2 to be.

3 JUDGE SEYER: I agree. I agree. It's
4 sustained.

5 MR. GRAHAM: Your Honor, I'd like to make
6 an offer of proof.

7 JUDGE SEYER: Go ahead.

8 MR. GRAHAM: I think the witness will
9 accept that as an amendment to his personal
10 definition of just and reasonable -- of prudence.
11 And the question that was placed to him, I believe by
12 the Bench, was what his own definition was. And I'm
13 asking him whether he will accept my amendment as an
14 amendment to his personal definition. I am expressly
15 not asking the witness for a legal answer, I am
16 asking him for his own opinion on the definition of
17 decisional prudence and whether he will accept that
18 as an amendment to his personal definition.

19 MR. LOWERY: Judge, I'm going to lodge the
20 same objection. I'll be perfectly honest, I didn't
21 object to your question because you asked him but
22 that doesn't mean that the question didn't call for
23 legal conclusion. And I don't think this is the
24 proper level of inquiry for Mr. Arora.

25 MR. GRAHAM: I think that Counsel has just

1 admitted he opened the door. He said he wanted to
2 object but he deferred to the Bench. He opened the
3 door.

4 JUDGE SEYER: Right. But there was a
5 difference between what my question was and what
6 you're asking right now. So I'm going to sustain the
7 objection and move on, Counselor.

8 MR. GRAHAM: Thank you.

9 BY: MR. GRAHAM

10 Q. Near the beginning of the questions
11 to you from the Bench you spoke about force majeure.
12 I don't know that the court reporter knows how to
13 spell that and I'm not sure I do either. But majeure
14 is M-A-J-E-U-R-E?

15 A. That's right.

16 Q. All right. What is your
17 understanding of that kind of insurance?

18 A. It's insurance against an act of God.

19 Q. Okay. And is that a kind of -- I
20 didn't understand your answer. Is that part of the
21 project, does Ameren anticipate obtaining that kind
22 of insurance?

23 A. We'll certainly look at it right now.
24 It's not insurance that's generally readily available
25 so it can be costly. Because again, it is to protect

1 against an act of God. But, you know, it is
2 something we will certainly consider.

3 Q. This is a solar powered facility that
4 counts on the sun; is that right?

5 A. That's right.

6 Q. Okay. In some of the questions --
7 one of the questions -- in response to one of the
8 questions I think that you said that this project,
9 the entire project is cost effective?

10 A. Yes. I believe so, yes.

11 JUDGE SEYER: Actually, I think
12 economically feasible was the question.

13 BY: MR. GRAHAM

14 Q. And was the answer -- in your answer
15 did you use the expression cost effective?

16 A. I used that for renewables in
17 general.

18 Q. You're not stating that the Boomtown
19 project is cost effective, correct?

20 A. I believe the Boomtown project is
21 needed to meet our energy needs and it's therefore
22 cost effective by definition.

23 Q. Okay. You're not stating that the
24 revenues over the life, the operational life of this
25 project, that the revenues will cover its costs,

1 correct?

2 A. No. If a project is needed to meet
3 energy needs it's by definition cost effective as
4 long as it's our market (Unintelligible).

5 Q. At the beginning of your answer I
6 heard the word no. Did you mean that this project,
7 the Boomtown project, is not cost effective in that
8 its revenue will not meet its costs?

9 A. It could or it could not. The
10 projection is maybe it doesn't under some
11 circumstances.

12 Q. That's -- I'll accept that answer and
13 that's all the questions I have.

14 A. Okay.

15 JUDGE SEYER: All right. Mr. Lowery, do
16 you have re-direct?

17 MR. LOWERY: I do, your Honor.

18 EXAMINATION CONDUCTED

19 BY: MR. LOWERY

20 Q. I'm probably going to jump around
21 because there was quite a bit of cross so I'll try to
22 be as organized as I can but I may just go in reverse
23 order for the most part. Mr. Williams asked you some
24 questions about -- I think he asked you questions
25 about more or less why not put in a combined cycle

1 **plant earlier, do you recall that?**

2 A. I do.

3 **Q. How is the Company planning to meet**
4 **its capacity needs as distinguished from energy and**
5 **these other needs that you said you separate between**
6 **now and 2031?**

7 A. We have an existing portfolio of coal
8 fired generation that meets our required capacity
9 needs. And the benefit of installing renewables
10 while that portfolio exists is that we can learn how
11 to operate a geographically diverse portfolio of
12 renewables. We eventually get to capacity shortage
13 in the summer in 2031 and that's when the combined
14 cycle would be available to meet reliability needs.
15 It can also produce energy but that's only beneficial
16 for customers because it reduces the cost of the
17 entire transition.

18 **Q. And why in 2031 does that capacity**
19 **need arise?**

20 A. That's because we retire the Sioux
21 Energy Center before then.

22 **Q. Is there another retirement that**
23 **happens then too?**

24 A. There's the Venice Gas Fired
25 Generation that happens at that time as well.

1 Q. How many megawatts is that?

2 A. I think it's about 540 or 550.

3 Q. What need are you trying to address
4 in the interim?

5 A. In the interim we are addressing the
6 very real energy needs. And just under normal
7 conditions we expect to have an energy need
8 potentially by 2028 but under adverse conditions we
9 could have it as of year 2026. And this is pretty
10 dramatic because we have gone from a portfolio that
11 had abundance of energy that protected our customers
12 from various adverse conditions in the market to
13 having an actual shortage, all this while the MISO
14 market that we operate in is also short. So it is a
15 pretty concerning state of affairs from an energy
16 perspective. And Boomtown is just one of the
17 resources that we will need to fulfill that.

18 Q. I think Judge Seyer asked you -- I
19 hope -- yeah, I think it was Judge Seyer asked you
20 some questions about maybe could you have a clean
21 resource by 2031 instead of 2042 or something like
22 that, do you remember that?

23 A. I do.

24 Q. I believe -- well, let me just ask
25 you. Has the Company accounted for or is the Company

1 accounting for, in some way, the possibility that
2 hydrogen or something else might be available earlier
3 than 2042 and therefore could be used in a combined
4 cycle that you're putting in in 2031?

5 A. As we're looking at designing the
6 combined cycle in 2031 we are looking at existing
7 technologies that can allow for a blending of
8 hydrogen in the design itself. I don't think we can
9 build the combined cycle before 2031, it does take
10 time to design and construct it and also get all the
11 approval, there's the CCN and all the permitting.
12 But we are looking at whether we can blend hydrogen
13 in that plant and potentially maybe even capture
14 carbon in the future if possible.

15 Q. The Judge asked you questions about
16 resources being in MISO Zone 4, which I think is
17 essentially Illinois, versus MISO Zone 5, do you
18 remember that?

19 A. I do.

20 Q. Do you have any concerns as I guess
21 the executive in charge of making sure the system's
22 reliable with having generation in Zone 4?

23 A. I don't, no. We have operated that
24 way for decades.

25 Q. Why is that, why should the

1 **Commission not be concerned?**

2 A. Because MISO has a responsibility to
3 ensure MISO wide there's enough capacity. And we
4 have an obligation to ensure enough capacity to meet
5 all our needs. There is free flow between Zone 4 and
6 Zone 5 from a transmission perspective.

7 Q. **Do you know whether Ameren Missouri**
8 **has benefited from having resources in Zone 5 versus**
9 **Zone 4 over the last 10, 15 years?**

10 A. Certainly we have because the
11 capacity prices have been pretty high recently.

12 Q. **In Zone 5 versus Zone 4?**

13 A. In Zone 4 versus Zone 5.

14 Q. **I'm sorry, I had it backwards. Zone**
15 **4 versus 5?**

16 A. Right.

17 Q. **I think you mentioned something about**
18 **energy prices in 4 versus 5. I think you said they**
19 **had been higher in 4. What's the basis for that**
20 **statement?**

21 A. Historically energy prices in
22 Illinois have always been higher than Missouri. And
23 I think that's a function of just how the system
24 operates.

25 Q. **Judge asked you some questions I**

1 think about retiring Meramec and the capacity going
2 away and then capacity that had been added and I
3 think there was some math going on about, you know,
4 added capacity versus capacity taken away. Do you
5 have an opinion about whether that's the issue that
6 the Company's trying to address with these renewable
7 facilities?

8 A. No. The issue we're trying to
9 address with the renewable facility is our energy
10 shortage and the concern we have going from an
11 abundantly long energy position to a short position.
12 So eliminating all our buffer and actually being
13 short while MISO potentially may be short energy as
14 well.

15 Q. And you're addressing the capacity
16 with the combined cycle?

17 A. That's right.

18 Q. You were asked questions by the Judge
19 and I think by Mr. Graham both about force majeure
20 and insurance and so on. If Ameren Missouri was
21 building this plant directly itself, would the
22 insurance that it carry be the same or different than
23 when it's having a developer build it under a BTA?

24 A. I think it would be the same.

25 Q. Commissioner Rupp asked you some

1 questions -- pardon me, Chairman Rupp now asked you
2 some questions about potential tax incentives in
3 Illinois, you remember that?

4 A. I do.

5 Q. I'm assuming you're not the expert at
6 the company that keeps track of and pays attention,
7 et cetera, to, you know, see what all tax incentives
8 and how you qualify for them; is that fair?

9 A. That's fair.

10 Q. But given your position -- well,
11 first of all, does the Company have people that have
12 their ear to the ground so to speak and are always
13 paying attention to that?

14 A. We do. And we talk to the developers
15 about that as well.

16 Q. If there were incentives available in
17 Illinois are you pretty sure you'd know about it?

18 A. I'm pretty sure the people that are
19 experts in that field would know about it and seek
20 them.

21 Q. I mean, would they -- they would tell
22 you about them, wouldn't they?

23 A. Yes.

24 Q. Commissioner Holsman asked you some
25 questions about storage, I believe, did he not?

1 A. He did.

2 Q. Is the Company going to have to make
3 decisions over the next three, five, seven, ten years
4 about what storage to put in and where?

5 A. Yes, absolutely.

6 Q. Is there any relationship between the
7 Company having a diverse portfolio of various
8 renewables on the system and the ability to make good
9 decisions about what storage to use later?

10 A. Certainly. I mean, the operational
11 experience we get by operating renewables allows us
12 to determine how much and where storage should be
13 sited so that we're not over building or under
14 building. That operational experience is vital to
15 make that decision. Otherwise we are just, you know,
16 planning blindly and hoping for the best.

17 Q. And Mr. Williams asked you some
18 questions about, I think, suggesting that the solar
19 facilities or renewables in general maybe either
20 don't provide ancillary services or they don't as
21 effectively provide them, do you remember that?

22 A. I do.

23 Q. From where do you expect to get the
24 needed ancillary services from Ameren Missouri
25 system's perspective?

1 A. Before 2030 I expect to get them from
2 our coal fire generation, after 2030 I expect to get
3 them from our coal fire generation, our hydro
4 generation, as well as the combined cycle. So before
5 2030 hydro and coal fired, after that -- and gas
6 fired, sorry. Hydro, coal fired, gas fired. After
7 that it's the same resources, including the new
8 combined cycle.

9 **Q. Thank you, Mr. Arora.**

10 MR. LOWERY: That's all the questions I
11 have, Judge.

12 JUDGE SEYER: All right. Thank you, Mr.
13 Lowery. Mr. Arora, I believe that takes care of your
14 testimony. So thank you for your testimony.

15 THE WITNESS: Thank you.

16 JUDGE SEYER: Mr. Lowery, would you like
17 to offer the witness's pre-filed testimony as an
18 exhibit?

19 MR. LOWERY: I was just going to say I
20 think I forgot to offer the testimony. I would like
21 to offer Exhibits 1 and 2, all the versions.

22 JUDGE SEYER: Okay. So that would be
23 Exhibit 1HC Highly Confidential, Exhibit 1 Public,
24 Exhibit 2 Highly Confidential, and Exhibit 2 Public?

25 MR. LOWERY: That's correct.

1 JUDGE SEYER: Are there any objections to
2 that? Hearing none, Exhibits 1HC, 1P, 2HC, 2P are
3 admitted.

4 MR. LOWERY: And Judge, I think I did
5 offer Exhibit 14 but if I didn't I would like to
6 offer that, it reflects the correction to Mr. Arora's
7 surrebuttal testimony.

8 JUDGE SEYER: Yes, that has already been
9 admitted.

10 MR. LOWERY: Thank you, Judge.

11 JUDGE SEYER: All right. Mr. Arora, you
12 can step down.

13 THE WITNESS: Thank you.

14 JUDGE SEYER: Okay. It is 11:45. Mr.
15 Lowery, do you anticipate your next witness being
16 able to complete his testimony before 12:30?

17 MR. LOWERY: I'll be honest, I have
18 absolutely no idea because it depends on my
19 co-counsel's propensity to ask him questions or the
20 Bench as well.

21 JUDGE SEYER: Well, how about we take
22 about a five minute break and let's start on his
23 testimony and go up until we get to 12:30 and we'll
24 break then.

25 MR. LOWERY: Very well.

1 JUDGE SEYER: All right. So let's go off
2 the record.

3 (At this point in the proceedings, a short
4 recess was taken.)

5 JUDGE SEYER: Mr. Lowery, call your next
6 witness.

7 MR. LOWERY: I call Matt Michels to the
8 stand, your Honor.

9 JUDGE SEYER: Good morning, Mr. Michels.

10 THE WITNESS: Good morning.

11 JUDGE SEYER: Would you raise your right
12 hand and be sworn in. Thank you.

13 * * * * *

14 MATTHEW MICHELS,

15 The witness, having been first duly sworn
16 upon his oath, testified as follows:

17 * * * * *

18 JUDGE SEYER: All right. Thank you. Go
19 ahead, Mr. Lowery.

20 MR. LOWERY: Thank you.

21 EXAMINATION CONDUCTED

22 BY: MR. LOWERY

23 **Q. Mr. Michels, would you please state**
24 **and spell your name for record?**

25 A. It's Matthew Michels, M-A-T-T-H-E-W,

1 M-I-C-H-E-L-S.

2 Q. Mr. Michels, have you caused to be
3 prepared in this docket direct and surrebuttal
4 testimony that have been marked for identification as
5 Exhibits 3 and 4 respectively?

6 A. Yes.

7 Q. Do you have any corrections to that
8 testimony?

9 A. No.

10 Q. If I were to pose the questions and
11 that testimony to you today, would your answers be
12 the same?

13 A. Yes.

14 Q. Is that testimony true and correct to
15 the best of your knowledge and belief?

16 A. Yes.

17 MR. LOWERY: Your Honor, with that, I
18 offer Exhibits 3 and 4 into the record and tender Mr.
19 Michels for cross-examination.

20 JUDGE SEYER: Okay. Is there any
21 objection to the admission of Exhibits 3 and 4?
22 Seeing none, Exhibits 3 and 4 are admitted.

23 All right. Ms. Plescia, do you have any
24 cross-examination? Is she in here?

25 MR. BRUBAKER: No, Judge.

1 JUDGE SEYER: Can you speak for her?

2 MR. BRUBAKER: I can.

3 JUDGE SEYER: Do you have any
4 cross-examination? And I'm sorry, for the record,
5 what's your name?

6 MR. BRUBAKER: Morris Brubaker, witness
7 for MIEC.

8 JUDGE SEYER: I see. Mr. Brubaker.

9 MR. BRUBAKER: Filling in temporarily.

10 JUDGE SEYER: You slept at a Holiday Inn
11 Express last night, so...

12 MR. BRUBAKER: Exactly.

13 MR. LOWERY: We won't report him to the
14 Bar, your Honor, for unauthorized practice of law.

15 JUDGE SEYER: All right. Mr. Opitz?

16 MR. OPITZ: No thank you, Judge.

17 JUDGE SEYER: Mr. Thompson?

18 MR. THOMPSON: No, your Honor.

19 JUDGE SEYER: And Ms. Greenwald?

20 MS. GREENWALD: No questions.

21 JUDGE SEYER: All right. Mr. Williams, do
22 you have cross-examination?

23 MR. WILLIAMS: Not at this time.

24 JUDGE SEYER: Mr. Graham?

25 MR. GRAHAM: If you'll bear with me, your

1 Honor.

2 JUDGE SEYER: Sure. Yes, sir. Mr.

3 Graham, I'm going to ask you --

4 MR. GRAHAM: Yeah. Get that over here, I
5 know. Thank you. I'm all aflutter here.

6 EXAMINATION CONDUCTED

7 BY: MR. GRAHAM

8 **Q. Is it Michels?**

9 A. Yes.

10 **Q. Yes. Mr. Michels, -- and it's Matt**
11 **Michels -- are you familiar with In the Matter of**
12 **Ameren Missouri's 2020 Utility Resource Filing? In**
13 **EO-2021-0021. That's unfair with respect to the case**
14 **number I know. But do you have a familiarity with**
15 **that case? And if you don't, we'll try it again.**

16 A. Yes. I believe that was Ameren
17 Missouri's 2020 IRP.

18 **Q. And were you involved in that case?**

19 JUDGE SEYER: Excuse me, Mr. Graham.

20 Excuse me, Mr. Graham. I actually didn't have my own
21 microphone turned on. Is your microphone turned on,
22 Mr. Michel?

23 THE WITNESS: Let me check. Is that on?

24 JUDGE SEYER: Yes, that's better. So
25 maybe just --

1 THE WITNESS: Speak a little closer -- --

2 JUDGE SEYER: -- speak a little closer to
3 the microphone, yes. Go ahead, Mr. Graham.

4 BY: MR. GRAHAM

5 Q. Okay. Were you involved in that
6 case?

7 A. Yes, I was.

8 Q. What was your role?

9 A. I'm the Director of Corporate
10 Analysis and so I have immediate responsibility for
11 Ameren Missouri's Integrated Resource Plan.

12 Q. And were you directly involved in the
13 production of that document, that submission to the
14 Public Service Commission?

15 A. Yes, I was.

16 MR. GRAHAM: What number are we, your
17 Honor, on Staff's exhibits, do you happen to know?

18 JUDGE SEYER: For Ameren's exhibits?

19 MR. GRAHAM: I'm sorry, for Staff's
20 exhibits?

21 JUDGE SEYER: Give me a second here.

22 MR. GRAHAM: I'm sorry, I should have that
23 myself. I think I've got it here. I think we're at
24 109. The next exhibit would be 110, I'm thinking.

25 JUDGE SEYER: That's correct.

1 MR. GRAHAM: Okay. Thank you for your
2 indulgence, your Honor. How do I do this? Do I
3 approach the witness and thereby walk away from the
4 microphone?

5 JUDGE SEYER: Yes. Let's go ahead and
6 have the court reporter mark your exhibit.

7 (WHEREIN, Staff Exhibit 110 was marked for
8 identification.)

9 BY: MR. GRAHAM

10 Q. I've handed to you an exhibit which
11 is not marked in your hands but the court reporter
12 has marked another one that is the same as a copy of
13 that as Exhibit Number 110. Are you familiar with
14 that case?

15 A. Yes. Yes, I am.

16 Q. Sir, do you recognize the MPSC 0001
17 as a data request which the Missouri Public Service
18 Commission's Staff would have propounded upon Ameren
19 in that case?

20 A. Yes.

21 Q. Okay. And do you remember the
22 questions and responses that are recorded on this
23 document which is Exhibit Number 110?

24 A. Yes, I do.

25 Q. And does this document fairly and

1 accurately state those questions and the Company's
2 responses?

3 A. Yes.

4 Q. Okay.

5 MR. GRAHAM: I'm going to offer into
6 evidence Exhibit 110.

7 JUDGE SEYER: All right. Just so I
8 understand what is shown in the exhibit, this is a
9 data request and it's the -- a question and the
10 witness's answer, correct?

11 MR. GRAHAM: Well, it's Ameren -- may I
12 verify with the witness, your Honor?

13 JUDGE SEYER: Okay.

14 MR. GRAHAM: Yeah.

15 BY: MR. GRAHAM

16 Q. This was a data request that was
17 directed to the Company, have I said that right, to
18 Ameren?

19 A. That's correct.

20 Q. And was this Ameren's response to
21 this data request?

22 A. This was Ameren Missouri's response
23 as prepared by myself.

24 Q. Okay. So this was your response too,
25 that you prepared for -- on behalf of the Company?

1 A. That's correct.

2 Q. Okay.

3 MR. GRAHAM: With that clarification, I'm
4 offering this Exhibit 110.

5 JUDGE SEYER: All right. Are there any
6 objections to the admission of Exhibit 110?

7 MR. LOWERY: No objection.

8 JUDGE SEYER: Might want to turn on your
9 microphone for that one.

10 MR. LOWERY: No objection, your Honor.

11 JUDGE SEYER: Thank you, Mr. Lowery. Any
12 other objections? All right. Hearing none,
13 Exhibit 110 is admitted into evidence.

14 BY: MR. GRAHAM

15 Q. **Mr. Michels, is the energy produced**
16 **by -- is the energy produced by the Atchison Wind**
17 **Farm included in the Ameren analysis of energy**
18 **deficits in this case?**

19 A. Yes, it is.

20 Q. **And Atchison Wind Farm is**
21 **interconnected to SPP as opposed to MISO; is that**
22 **correct?**

23 A. That's correct.

24 Q. **And for the sake of the court**
25 **reporter, and anyone else that may need it, what is**

1 **SPP?**

2 A. It's the Southwest Power Pool.

3 **Q. Okay. And does Ameren Missouri have**
4 **a firm contract path to get the energy from SPP to**
5 **MISO to serve its retail customers?**

6 A. Not to my knowledge.

7 **Q. How long has the retirement of the**
8 **Meramec been planned?**

9 A. I believe the decision was made in
10 2014, included in the 2014 IRP filed by Ameren
11 Missouri, and reflected in the depreciation study and
12 the rate review case that was on file at that time.

13 **Q. Were you here for Mr. Arora's**
14 **testimony here earlier today?**

15 A. Yes, I was.

16 **Q. Tell me if I'm wrong. Did he discuss**
17 **that having capacity does not mean that you have**
18 **energy to meet load in all hours?**

19 A. Yes.

20 **Q. Okay. And did Ameren provide the**
21 **Commission with 8,760 hour energy production numbers**
22 **from Boomtown and 8,760 load from customers in this**
23 **case?**

24 A. Not to my knowledge. It was -- it
25 was part of the reliability analysis that we did but

1 we didn't explicitly provide the hour by hour.

2 MR. GRAHAM: No more questions, your
3 Honor.

4 JUDGE SEYER: All right. Chairman Rupp,
5 do you have any questions?

6 CHAIRMAN RUPP: I do. Thank you, Judge.

7 EXAMINATION CONDUCTED

8 BY: CHAIRMAN RUPP

9 Q. Hey, good afternoon. Three minutes
10 past noon. All right. Somewhere I read that Ameren
11 had said that there was dispatchable resources that
12 they had mothballed that could potentially be brought
13 back online. And I think Staff had asked what those
14 were but I don't know if they got a response. Do you
15 have -- can you clarify that or update what reference
16 -- what you were referencing?

17 A. I don't recall the reference. Was
18 there -- can you give me some context?

19 Q. No. All right.

20 A. And I'm not aware of any mothball
21 resources that were mothballed in anticipation of
22 bringing them back online.

23 Q. Okay. Well, if someone out there
24 knows what I'm talking about and remembers and can
25 point me to where I saw that, I'd appreciate that.

1 In your knowledge -- and Staff is asking for, like, a
2 hold harmless provision as a compromise position.
3 Has Ameren, or else -- has the Commission approved
4 any -- have we approved any CCN's with a hold
5 harmless provision in the past?

6 A. I'm not aware of any. I mean, I'm
7 aware of the Empire case where they were -- where
8 they had a Customer Savings Plan, I don't remember if
9 that was part of a CCN filing.

10 Q. Okay. All right. I'm going to try
11 to find that and then I'll be back at some point.
12 But thank you.

13 CHAIRMAN RUPP: That's all I had, Judge.

14 JUDGE SEYER: All right. Do any other
15 commissioners have questions?

16 COMMISSIONER HOLSMAN: No questions,
17 Judge. Thank you.

18 JUDGE SEYER: That was Commissioner
19 Holsman, question mark?

20 MR. LOWERY: I believe it was, Judge.

21 COMMISSIONER HOLSMAN: Yes, that's
22 correct.

23 JUDGE SEYER: All right. I've got just a
24 couple of questions, Mr. Michels.

25 EXAMINATION CONDUCTED

1 BY: JUDGE SEYER

2 Q. You were in here earlier when I was
3 asking questions of Mr. Arora?

4 A. Yes.

5 Q. I'll ask you the same questions about
6 nameplate capacity versus accredited capacity. Would
7 you agree that MISO's accredited capacity for coal
8 and gas at 90 percent is higher than the accredited
9 capacity for wind at 16.6 percent and solar at
10 35 percent?

11 A. I'm not sure about the numbers but I
12 believe they are higher, yes.

13 Q. Would you agree that the Company's
14 preferred plan replaces coal capacity with solar and
15 wind capacity through 2030?

16 A. Yes. To the extent that we have
17 needs, mostly energy needs, yes.

18 Q. In general, Ameren is retiring coal
19 generating plants with -- and replacing them with
20 renewable energy, wind and solar?

21 A. Right. While we have an energy need
22 and not yet a large capacity need, yes.

23 Q. Right. But would you agree though
24 that because when we compare accredited capacities
25 we're replacing -- or you're -- the plan, Ameren's

1 **plan, is to replace quite a bit of accredited**
2 **capacity in coal production, coal generation with**
3 **lower accredited capacity, wind and solar?**

4 A. Yeah. Yes, it is important though to
5 keep in mind that we're looking at the capacity
6 position as a whole and we went into the last few
7 years being long capacity. So we don't necessarily
8 have to replace all of it.

9 Q. Okay. And do you -- so is it your
10 **opinion that the Boomtown project addresses a need**
11 **and would be in the best interest of the public?**

12 A. Absolutely. It addresses a near term
13 energy need. It also has some capacity benefits to
14 help to minimize the amount of additional capacity
15 that is needed and is complementary to wind resources
16 from an energy standpoint and from the combined --
17 dispatchable capacity like combined cycle that we
18 have in our plan in 2031.

19 Q. All right. Those are all my
20 **questions.**

21 CHAIRMAN RUPP: Judge.

22 JUDGE SEYER: Yes. Chairman Rupp has a
23 follow up question, I'll say.

24 CHAIRMAN RUPP: I do.

25 EXAMINATION CONDUCTED

1 BY: CHAIRMAN RUPP

2 Q. Been researching diligently up here.
3 Actually, no. I have a phenomenal staff that knew
4 where I was going and pointed me to the right
5 direction. So what I was referencing was Shawn
6 Lange's rebuttal testimony. There was an August 17th
7 presentation that Ameren made in regard to the
8 retirement of Rush Island where Ameren stated it was
9 studying restarting the existing idled equipment for
10 dual fuel capability at its Penon Creek Combustion
11 Turbine Energy Center and installing dual fuel
12 capability at the Audrain Energy Center. Do you know
13 what I'm referencing?

14 A. Yes, I do. And those plants aren't
15 mothballed. What we're talking about is adding oil
16 fired capability so that they can be more reliable in
17 the winter than they are now.

18 Q. Do you have an update on where you
19 are with that?

20 A. We're still examining that. You
21 know, one of the things that we have to consider is
22 how many hours we could run those units on oil, what
23 the permit restrictions are, whether we would have to
24 get a permit modification in order to have that oil
25 backup and operate those units on oil and then also

1 the cost.

2 Q. Let's make sure that -- assuming
3 you've done your due diligence, you've done
4 everything, when is this -- and if you move forward
5 with that, when would be the soonest that that would
6 be available online?

7 A. I believe, you know, some of that
8 could be online the winter of '25, '26. You know, it
9 would be done in stages.

10 Q. That was it. Thank you.

11 CHAIRMAN RUPP: Thank you, Judge.

12 JUDGE SEYER: Okay. Ms. Plescia, Mr.
13 Brubaker was kind enough to answer in your stead.

14 MS. PLESCIA: I apologize for that, your
15 Honor.

16 JUDGE SEYER: He thought that you would
17 have no cross-examination questions for the witness.
18 But I'll ask you whether you do have any
19 cross-examination?

20 MS. PLESCIA: Well, thank you for asking
21 me. And Mr. Brubaker was, as usual, correct.

22 JUDGE SEYER: Do you have any re-cross for
23 this witness based on what you've heard other
24 attorneys ask? I'm asking you, Ms. Plescia.

25 MS. PLESCIA: I'm sorry. No questions.

1 Thank you.

2 JUDGE SEYER: All right. Mr. Opitz, do
3 you have any re-cross?

4 MR. OPITZ: No thank you, Judge.

5 JUDGE SEYER: Mr. Thompson?

6 MR. THOMPSON: No thank you, Judge.

7 JUDGE SEYER: Ms. Greenwald?

8 MS. GREENWALD: No thank you, Judge.

9 JUDGE SEYER: And Mr. Williams?

10 MR. WILLIAMS: Just a few, I believe.

11 EXAMINATION CONDUCTED

12 BY: MR. WILLIAMS

13 **Q. Mr. Michels, you recall when Chair**
14 **Rupp asked you about Audrain and Peno Creek?**

15 A. Yes.

16 **Q. What is currently the fuel source for**
17 **those sites?**

18 A. Natural gas.

19 **Q. And so what you're talking about is**
20 **making them dual fuel capable so they could burn**
21 **diesel as opposed to natural gas?**

22 A. It would be fuel oil.

23 **Q. Is there a difference between fuel**
24 **oil and diesel?**

25 A. I don't know.

1 Q. My understanding from another case is
2 they're -- it's Number 2 diesel. But in any event, I
3 don't know that that matters. There have been
4 several questions about capacity, about nameplate
5 capacity and accredited capacity. Isn't it true that
6 every generating unit, its actual available capacity
7 changes over time?

8 A. I believe that's generally true.

9 Q. So for example, a solar facility
10 would have more capacity during daylight hours than
11 at nighttime?

12 A. It would produce more. I don't know
13 that the capacity necessarily changes if the sun
14 suddenly appeared it could generate.

15 Q. That's what I want to get into
16 exactly what you mean by capacity in that sense. Is
17 capacity what it's capable of producing at any given
18 point in time or is it what it's possible for it to
19 produce at a given point in time given the energy
20 source?

21 A. It's the former, it's what it's
22 capable of producing at any point in time.

23 Q. What would you call what it's capable
24 of producing given the limitation on energy source
25 that's being converted to electricity?

1 A. I don't know that I have a term for
2 that.

3 **Q. Thank you.**

4 JUDGE SEYER: All right. Mr. Graham, do
5 you have re-cross?

6 MR. GRAHAM: Excuse me, your Honor.

7 EXAMINATION CONDUCTED

8 BY: MR. GRAHAM

9 **Q. Do you know what Peno stands for,**
10 **P-E-N-O?**

11 JUDGE SEYER: Mr. Graham.

12 MR. GRAHAM: I forget that there are many
13 interests.

14 BY: MR. GRAHAM

15 **Q. Do you know what Peno, Peno, P-E-N-O,**
16 **stands for as an acronym?**

17 A. I don't. If you're talking about
18 Peno Creek, it's not an acronym.

19 **Q. So that -- okay. Assuming that the**
20 **Peno, is that -- am I saying it right?**

21 A. Yes.

22 **Q. Okay. Assuming that the Peno Creek**
23 **and Audrain units add dual fuel capability, the**
24 **projected winter capacity deficit of Ameren Missouri**
25 **in the late 2020's would be reduced in general; is**

1 **that correct?**

2 A. That's true. It's not clear how much
3 but we wouldn't do it if it wasn't going to provide
4 some capacity benefit.

5 **Q. Okay.**

6 MR. GRAHAM: Thank you. No further
7 questions.

8 JUDGE SEYER: All right. Mr. Lowery, any
9 re-direct?

10 MR. LOWERY: Just a few, your Honor.

11 EXAMINATION CONDUCTED

12 BY: MR. LOWERY

13 **Q. Mr. Michels, going back to a question**
14 **that Mr. Graham just asked you, and some of the**
15 **questions that were asked maybe it was by Chairman**
16 **Rupp about Peno Creek and Audrain. Is Ameren**
17 **Missouri looking to make those dual fuel to provide**
18 **energy or provide capacity primarily?**

19 A. It would only be capacity because
20 they would be very limited in terms of the hours that
21 they could run.

22 **Q. Whether those were made dual fuel or**
23 **not, do you have an opinion about whether that has**
24 **any impact on the Company's need for energy from**
25 **solar facilities or wind facilities?**

1 A. No. I wouldn't expect it to have any
2 impact.

3 Q. **The Judge asked you some questions, I**
4 **think, about, you know, retiring coal and replacing**
5 **with renewables, do you remember that?**

6 A. Yes.

7 Q. **If you're looking at the big picture**
8 **of the Company's plans, would it be fair to say that**
9 **Sioux and Venice go away 2030 or so and they're**
10 **really being replaced by the combined cycle plant?**

11 A. I think that's fair.

12 Q. **Certainly from a capacity standpoint;**
13 **is that accurate?**

14 A. That's correct.

15 Q. **Is the driver to build the combined**
16 **cycle to produce energy or to provide capacity?**

17 A. It's to provide capacity and make
18 sure that we have reliability when wind and solar
19 resources aren't generating or when their output
20 changes dramatically we need those flexible resources
21 to respond.

22 Q. **The Chairman asked you a question I**
23 **think about whether you had any knowledge about other**
24 **-- I think he used the phrase hold harmless decisions**
25 **that might have been made in a CCN case for other**

1 utilities. Do you remember that?

2 A. Yes.

3 Q. And the only one you came up with,
4 and you weren't sure it was a CCN case, but you
5 mentioned an Empire customer savings plan case?

6 A. Correct.

7 Q. Are there differences in your mind
8 between the situation there and the situation we have
9 here?

10 A. Absolutely. My understanding of the
11 Empire case was that the driving purpose was to
12 reduce energy costs to customers. And so that's the
13 way it was being presented. In our case we have an
14 energy need for a resource and more resources on top
15 of Boomtown besides that and then also later capacity
16 resources. And with that capacity need, you know,
17 we're looking for the least cost way of meeting that
18 need. That doesn't mean necessarily that it has to
19 produce more revenue in the marketplace than it
20 costs, in fact it doesn't mean that at all. It just
21 means that we have to provide that need, or meet that
22 need in a least cost way and subject to all the other
23 requirements of any rated resource planning.

24 Q. Is the Company justifying the CCN
25 request in this case on some kind of contention that

1 it will in fact lower revenue requirement?

2 A. No.

3 Q. Do you have an opinion about whether
4 it will lower revenue requirement as compared to the
5 alternative of essentially waiting and adding
6 capacity at the moment a capacity need comes up?

7 A. Yes, absolutely. In fact, in my --
8 both my direct and my surrebuttal testimony I show
9 the comparative economics on a present value revenue
10 requirements basis of doing just that, of doing the
11 renewable expansion that was represented on our
12 preferred plan versus waiting and doing the bulk of
13 the renewable additions in the late 2030's and what
14 that showed was we would expect customers to save
15 about 600 million dollars or so.

16 Q. Is that plan that is disadvantaged,
17 according to your analysis, by about 600 million
18 dollars or so, effectively the -- reflect the
19 position that Staff is taking in this case?

20 A. That's my interpretation, yes.

21 Q. And you've read all the Staff's
22 testimony; is that correct?

23 A. Yes.

24 Q. Mr. Graham asked about whether the
25 Company had provided 8,760 hours of production

1 information, I think it was, for -- I don't know if
2 it was for Boomtown or generally speaking, do you
3 remember that?

4 A. Yes.

5 Q. Did the Staff ask for it?

6 A. No.

7 Q. Did the information in the Astrapé
8 analysis you discussed in your direct testimony get
9 to that issue?

10 A. It does. So a few years ago we
11 brought in Astrapé to start helping us think about
12 reliability needs more deeply. And so their model
13 sort of, which is used by multiple RTO's for just
14 this kind of reliability analysis, looks at
15 historical weather going back close to 40 years,
16 impacts on load, resource mix, access to other
17 resources in the MISO market. And so it looks at it
18 on an hourly and subhourly basis in a probabilistic
19 manner. And we use that as the basis for really
20 honing in on what the reliability need was, that
21 really was one of the main pieces of justification
22 for including the combined cycle in addition to
23 capacity.

24 Q. I'm going to break a cardinal rule
25 that lawyers should probably never break but I'm

1 going to do it anyway. The Astrapé information was
2 also in the preferred resource plan submission that
3 was made last June; is that right?

4 A. That's correct.

5 Q. The Company provided work papers for
6 that preferred resource plan change, did it not?

7 A. That's correct.

8 Q. Which would have included that kind
9 of information, correct?

10 A. That's correct.

11 Q. And Staff had access to those?

12 A. Yes.

13 JUDGE SEYER: And Mr. Lowery, excuse me.
14 How is that spelled?

15 MR. LOWERY: A-S-T-R-A-P-E with an
16 apostrophe, I believe. Accent mark is probably more
17 correct.

18 THE WITNESS: Yes.

19 BY: MR. LOWERY

20 Q. You were asked questions about
21 whether the energy produced by the Atchison Energy
22 Center is included in the energy positions that we've
23 provided and you indicated it was, right?

24 A. Yes.

25 Q. Why -- let me ask it this way. What

1 is the purpose of having the Atchison facility on the
2 Ameren Missouri system?

3 A. The main purpose is to meet the
4 renewable energy standard requirement.

5 Q. And does getting RECs from Atchison,
6 whether it's connected to MISO or not connected to
7 MISO, meet the renewable energy standard credit in
8 the same way regardless of how it's connected?

9 A. Yes, it does. Including the 1.25
10 multiplier for in-state resources.

11 Q. And the last thing I think you were
12 asked about, I was going to ask you about is this DR
13 number 110 from the IRP docket in 2020. I think it's
14 been admitted as Exhibit 110. Do you recall that?

15 A. Yes.

16 Q. Do you have an opinion about whether
17 the Company should be striving to meet its energy
18 needs or its customer generated needs whether or not
19 there's some below minimal standard in the law
20 somewhere that says what it has to do?

21 A. Yes. Absolutely. It's important to
22 remember that when we're doing resource planning
23 things like planning reserve margins are minimum
24 requirements. And so one of the things that we have
25 to be mindful of is risks that we're not going to be

1 able to meet those minimum requirements. So you
2 think about things that could challenge the need for
3 energy or the need for capacity, they include things
4 like changes in load which might be driven by
5 electrification, it might be driven by not seeing the
6 penetration of the distributed energy resources that
7 we bake into our load forecast.

8 On the resource side it could be
9 environmental regulations that restrict the operation
10 of power plants, it could be maybe the sudden need
11 or, you know, maybe a catastrophic loss of a
12 generator. So we have to think about all of those
13 things when we're doing our planning. And that's why
14 it's important, as Mr. Arora was pointing out, that
15 we have a buffer for both energy capacity as a hedge
16 against those risks and a hedge against the market in
17 general.

18 **Q. What does Ameren Missouri's energy**
19 **capacity position look like over the last decade or**
20 **two, if you know?**

21 A. We've been long capacity as much as,
22 I want to say, 2,500 megawatts, certainly 2,000. And
23 we've also been long energy at times over 10 million
24 megawatts a year -- or megawatt hours a year.

25 **Q. And I'm assuming you're not aware of**

1 a legal requirement during those periods to have been
2 that long in energy capacity?

3 A. No.

4 Q. Were you crit -- was the Company, to
5 your knowledge, criticized by the Staff for being
6 that long during those periods?

7 A. I don't recall any criticism in that
8 nature.

9 Q. Do you have an opinion about how that
10 has impacted the Company's customers over the last
11 decade or two?

12 MR. GRAHAM: Objection. Objection.
13 That's just vague and overtly calls for speculation
14 and conjecture.

15 MR. LOWERY: I asked him if he had an
16 opinion about it. I think he either does or he
17 doesn't.

18 JUDGE SEYER: I'll sustain the objection.

19 MR. LOWERY: I don't have any further
20 questions, Judge.

21 JUDGE SEYER: All right. Mr. Lowery, in
22 one of your questions you referred to RECs. And I
23 know what that refers to but could you clarify that
24 for the court reporter?

25 MR. LOWERY: I can. Renewable Energy

1 Credits. RECs is an acronym for that.

2 JUDGE SEYER: Okay. Thank you. All
3 right. Mr. Michels, thank you for your testimony.

4 THE WITNESS: Thank you.

5 JUDGE SEYER: You may step down. And I
6 think we're at a point where we'll break for lunch.
7 So we'll try to start back at 1:30. And we'll go off
8 the record.

9 (At this point in the proceedings, a short
10 recess was taken.)

11 JUDGE SEYER: Let's go back on the record.
12 Mr. Lowery, call your next witness.

13 MR. LOWERY: Judge, if you don't mind,
14 maybe before we do that I wanted to address your
15 question earlier about Mr. Lansford's testimony and
16 him appearing. We visited about it and I'd like to
17 make this proposal. If the commissioners could ask
18 the questions and you ask your questions, you know,
19 probably of Ms. Forsberg or Mr. Wills this afternoon
20 and if you don't feel like you've gotten the
21 information that you need, we certainly will make Mr.
22 Lansford available. And I think we would prefer to
23 do that on Wednesday and by WebEx just because of his
24 other responsibilities and not the expectation. But
25 maybe we can just delay the final decision on that

1 until our witnesses are done and we can deal with it
2 at that point, if that's acceptable to the Bench.

3 JUDGE SEYER: All right. That's perfectly
4 reasonable.

5 MR. GRAHAM: Your Honor, for Staff, we've
6 not had an opportunity to see anything, respond to
7 it, study it, develop the usual analysis and response
8 the Staff would have. So I'm not making an objection
9 at this point but I'm reserving the objection and
10 flagging it for the record.

11 JUDGE SEYER: Are you saying as far as Mr.
12 Lansford's --

13 MR. GRAHAM: Yes.

14 JUDGE SEYER: -- testimony? That is -- it
15 was filed.

16 MR. LOWERY: Well, I will -- Mr. Graham
17 and I don't agree on much. But I will say that well
18 before their testimony was done I think we
19 specifically said we were withdrawing it, we weren't
20 going to offer it. So I think if I was in his shoes
21 I would probably be making the same point.

22 JUDGE SEYER: All right.

23 MR. WILLIAMS: Judge, this is Nathan
24 Williams for Public Counsel. I don't see the
25 relevance of it other than perhaps some testimony

1 about how production tax credits might work with a
2 tax equity partner. But in terms of the specifics
3 for a particular transaction that is not occurring I
4 think it's wholly irrelevant.

5 JUDGE SEYER: All right. We'll table it,
6 we'll set it aside and revisit it if we need to.

7 MR. LOWERY: Thank you for indulging me,
8 Judge, on that. Our next witness, Judge, is Mike
9 Granowski.

10 JUDGE SEYER: All right. Mr. Granowski,
11 would you raise your right hand, please. Thank you.

12 * * * * *

13 MICHAEL GRANOWSKI,

14 The witness, having been first duly sworn
15 upon his oath, testified as follows:

16 * * * * *

17 JUDGE SEYER: Thank you.

18 EXAMINATION CONDUCTED

19 BY: MR. LOWERY

20 **Q. Mr. Granowski, would you please state**
21 **your name for the record and spell it for the court**
22 **reporter?**

23 A. My name is Michael Granowski. That's
24 spelled M-I-C-H-A-E-L, Granowski, G-R-A-N-O-W-S-K-I.

25 **Q. Mr. Granowski, did you cause to be**

1 prepared for filing in this docket surrebuttal
2 testimony --

3 A. Yes, I did.

4 Q. -- that's been marked as Exhibit 5?

5 A. Yes, I did.

6 Q. Do you have any corrections to that
7 testimony?

8 A. I do have one. If you would --

9 Q. Okay. If you could please tell us
10 what it is?

11 A. If you would please turn to Page 9,
12 Line 11, proceeding the word in there should be two
13 sets of quotation marks.

14 Q. Any other corrections?

15 A. No, that's it.

16 Q. If I were to pose the questions in
17 that testimony, which are answered, would that
18 correction be the same as they are in your pre-filed
19 testimony?

20 A. Yes, they would.

21 Q. Is that testimony true and correct to
22 the best of your knowledge, information, and belief?

23 A. Yes, it is.

24 MR. LOWERY: With that, your Honor, I move
25 for the admission of Exhibit 5 and tender Mr.

1 Granowski for cross-examination.

2 JUDGE SEYER: All right. Is there any
3 objection to the admission of Exhibit 5? All right.
4 Hearing none, Exhibit 5 is admitted.

5 And Ms. Plescia, do you have any questions
6 for the witness?

7 MS. PLESCIA: No questions. Thank you,
8 your Honor.

9 JUDGE SEYER: Mr. Opitz?

10 MR. OPITZ: No thank you, Judge.

11 JUDGE SEYER: Mr. Thompson?

12 MR. THOMPSON: No questions, your Honor.

13 JUDGE SEYER: And Ms. Greenwald?

14 MS. GREENWALD: No questions, thank you.

15 JUDGE SEYER: Mr. Williams?

16 MR. WILLIAMS: Not at this time, thank
17 you.

18 JUDGE SEYER: Mr. Graham?

19 MR. GRAHAM: Just a couple.

20 EXAMINATION CONDUCTED

21 BY: MR. GRAHAM

22 **Q. Mr. Granowski, were you here earlier**
23 **for the testimony of Mr. Mitchells -- Michels?**

24 A. Michels.

25 **Q. Michels?**

1 A. Yes, I was.

2 Q. Do you concur that the purpose of the
3 project is not to -- doesn't matter whether the
4 project's revenues meet its operational expenses?

5 A. Could you repeat that, please?

6 Q. Do you agree that with respect to how
7 the Boomtown project fits into Ameren's plan overall,
8 its purpose, it doesn't matter whether its revenues
9 meet its operational expenses?

10 A. I'm not familiar with the revenues
11 that are going to accrue specifically that have been
12 analyzed by Ameren. But at the same time I'm also
13 not familiar with a revenue test for a facility like
14 this in a regulated environment. That's the first
15 time I've heard of such a thing.

16 MR. GRAHAM: That's all I have.

17 JUDGE SEYER: All right. Thank you.
18 Chairman, do you have questions?

19 CHAIRMAN RUPP: No. Thank you, sir.

20 THE WITNESS: Thank you.

21 JUDGE SEYER: Any of the other
22 commissioners have questions?

23 MR. HOLSMAN: No questions, Judge.
24 Holsman.

25 JUDGE SEYER: All right. I don't have any

1 questions myself. So thank you for your testimony.

2 THE WITNESS: Thank you, your Honor.

3 MR. LOWERY: And I have no re-direct, your
4 Honor.

5 JUDGE SEYER: All right. Mr. Lowery, call
6 your next witness.

7 MS. GRUBBS: Actually, it's Ms. Grubbs.

8 JUDGE SEYER: Oh, I'm sorry.

9 MS. GRUBBS: I'll be calling our next
10 witness, which is Rob Dixon, to the stand, please.

11 JUDGE SEYER: All right. I'm sorry. Just
12 give me a second. All right. Mr. Dixon, would you
13 raise your right hand. Thank you.

14 * * * * *

15 ROBERT DIXON,

16 The witness, having been first duly sworn
17 upon his oath, testified as follows:

18 * * * * *

19 JUDGE SEYER: All right. Thank you. Go
20 ahead, Ms. Grubbs.

21 EXAMINATION CONDUCTED

22 BY: MS. GRUBBS

23 **Q. Thank you. Would you please state**
24 **your name for the record, spelling your last?**

25 A. Sure. Rob Dixon. Last name Dixon,

1 D-I-X-O-N.

2 Q. And by whom are you employed and what
3 is your title?

4 A. I'm the Senior Director of Economic
5 Community and Business Development for Ameren
6 Missouri.

7 Q. And you are the same Robert Dixon who
8 filed surrebuttal testimony in this case which has
9 been marked as Exhibits 6C and B for the confidential
10 -- I'm sorry, P for the public version?

11 A. I am.

12 Q. Do you have any corrections or
13 revisions to make to your surrebuttal testimony?

14 A. I do. I have two minor corrections.
15 On Page 22, Line 11, would ask to substitute the word
16 that with the word than. And then on Line 14 would
17 ask to substitute the word subscription with the word
18 solution. And that's all the corrections that I
19 have.

20 Q. So with those corrections, Mr. Dixon,
21 if I asked you the questions in your testimony today,
22 would your answers be the same?

23 A. They would, yes.

24 MS. GRUBBS: Mr. Dixon is tendered for
25 cross-examination and I would move to move his

1 exhibits into the record.

2 JUDGE SEYER: All right. Those are
3 Exhibits 6C and 6P. Are there any objections to
4 that? All right. Then 6C and 6P are admitted into
5 evidence.

6 And Ms. Plescia, do you have any questions
7 for the witness?

8 MS. PLESCIA: I do have a question. Good
9 afternoon, Mr. Wibbenmeyer.

10 JUDGE SEYER: Could I get you to turn your
11 microphone on.

12 MS. PLESCIA: I'm sorry.

13 BY: MS. PLESCIA

14 **Q. Good afternoon, Mr. Wibbenmeyer.**

15 A. Dixon.

16 **Q. I'm sorry, Mr. Dixon. I apologize.**

17 A. No problem. Good afternoon.

18 **Q. I'm sorry. I'll reserve my questions**
19 **for him. I apologize.**

20 JUDGE SEYER: All right. Mr. Opitz?

21 MR. OPITZ: No questions, your Honor.

22 JUDGE SEYER: Mr. Thompson?

23 MR. THOMPSON: No questions, your Honor.

24 JUDGE SEYER: All right. Mr. Greenwald?

25 MS. GREENWALD: No questions, your Honor.

1 JUDGE SEYER: All right. Mr. Williams,
2 any on behalf of Public Counsel?

3 MR. WILLIAMS: Not at this time, thank
4 you.

5 JUDGE SEYER: And Mr. Graham?

6 MR. GRAHAM: One.

7 EXAMINATION CONDUCTED

8 BY: MR. GRAHAM

9 Q. Are -- one I think. Are competitive
10 electric rates an important consideration for
11 attracting new customers?

12 A. Yes, they are. And we're proud of
13 the track record we have on that.

14 Q. That's all I've got.

15 JUDGE SEYER: Okay. Chairman?

16 CHAIRMAN RUPP: Yeah. Just -- he's under
17 oath, right?

18 JUDGE SEYER: He is under oath.

19 EXAMINATION CONDUCTED

20 BY: CHAIRMAN RUPP

21 Q. Okay. So now that you're under oath.

22 A. Yes, sir.

23 Q. How do you like the new position?

24 A. I'm enjoying it. Today -- we'll see
25 how today goes. But other than that, I'm really

1 enjoying it.

2 Q. Okay. Great. It's now officially in
3 the transcript.

4 A. Yes, sir.

5 JUDGE SEYER: All right. Any questions
6 from the other commissioners? All right. Hearing
7 none, I've got a couple of questions.

8 EXAMINATION CONDUCTED

9 BY: JUDGE SEYER

10 Q. You've been here this morning and
11 heard the testimony so it's no secret that the actual
12 solar panels will be located in Illinois, correct?

13 A. Yes, sir.

14 Q. Why would a company want to locate in
15 Missouri when the source of the renewable energy is
16 located in Illinois?

17 A. I think as some of our witnesses have
18 talked about today, your Honor, that generation off
19 of those -- off of the Boomtown project would be a
20 part of the Ameren Missouri generation mix and that's
21 what we would bring to customers who are looking to
22 expand here or considering a relocation to our state
23 and talk about the overall generation mix that they
24 would be able to access and it would be through that
25 process that they would be able to do that.

1 Q. Would there be -- would there be any
2 benefit to a company wanting to relocate here to have
3 both the generation -- both the panels and their
4 electric provider both in Missouri?

5 A. I don't think there would be a
6 specific benefit to that scenario. The benefit that
7 we would look for is to be able to talk about the
8 fact that there is a renewable energy mix, wherever
9 it's coming from in that regard.

10 Q. So nothing as far as -- you can't
11 envision like a public relations benefit of being
12 able to say that these panels are in Missouri?

13 A. It's part of the Ameren Missouri
14 generation mix so no, sir, I don't think having it
15 next door like that would matter in that regard.

16 Q. Okay.

17 JUDGE SEYER: I'll state this generally.
18 Do any of the parties have any re-cross based on my
19 questions? All right. Hearing none, Mr. Lowery, any
20 re-direct -- I'm sorry, Ms. Grubbs?

21 MS. GRUBBS: Just briefly?

22 JUDGE SEYER: Gribbs or Grubbs?

23 MS. GRUBBS: Grubbs.

24 JUDGE SEYER: Grubbs, okay.

25 EXAMINATION CONDUCTED

1 BY: MS. GRUBBS

2 Q. Just briefly. You mentioned, in
3 response to Staff counsel's question, that there was
4 a history of low rates. Can you just clarify that
5 further?

6 A. Sure. You know, when a business or a
7 potential customer is looking at where to relocate
8 they're looking at a variety of factors and one of
9 them that we know that they look at is energy
10 availability, reliability costs. And Ameren Missouri
11 has historically had a track record of having lower
12 costs than other utilities in the state and certainly
13 in the Midwest and U.S. overall. That's something
14 that enhances our ability to attract new customers
15 and create jobs in Missouri.

16 Q. Thank you.

17 MS. GRUBBS: Those are all my questions.

18 JUDGE SEYER: All right. Mr. Dixon,
19 you're excused.

20 THE WITNESS: Thank you.

21 JUDGE SEYER: Thank you. All right. Call
22 your next witness.

23 MS. GRUBBS: Thank you. The Company calls
24 its next witness, Lindsey Forsberg, to the stand,
25 please.

1 JUDGE SEYER: All right. Ms. Forsberg,
2 would you raise your right hand, please. Thank you.

3 * * * * *

4 LINDSEY FORSBERG,

5 The witness, having been first duly sworn
6 upon her oath, testified as follows:

7 * * * * *

8 JUDGE SEYER: All right. Thank you.

9 EXAMINATION CONDUCTED

10 BY: MS. GRUBBS

11 **Q. Ms. Forsberg, could you please state**
12 **your name for the record, spelling your last?**

13 A. Lindsey Forsberg. L-I-N-D-S-E-Y.
14 Forsberg is F-O-R-S-B-E-R-G.

15 **Q. By whom are you employed and in what**
16 **capacity?**

17 A. I am employed by Ameren Missouri as a
18 strategy consultant on the renewable development
19 team.

20 **Q. And you are the same Lindsey Forsberg**
21 **who filed direct testimony in this case which has**
22 **been marked as Exhibit 7, there's actually a highly**
23 **confidential version, a confidential version, and a**
24 **public version, correct?**

25 A. I am.

1 Q. And do you have any corrections or
2 revisions to your direct testimony?

3 A. I do not.

4 Q. You are the same Lindsey Forsberg who
5 filed supplemental direct testimony in this case
6 which has been marked as Exhibit 8. There's a highly
7 confidential, confidential, and public version of
8 that as well, right?

9 A. Correct, I am.

10 Q. And do you have any corrections or
11 revisions to that?

12 A. I do not.

13 Q. And then finally, you are the same
14 Lindsey Forsberg who filed surrebuttal testimony in
15 this case which has been marked as Exhibit 9. There
16 are highly confidential, confidential, and public
17 versions of that?

18 A. Yes.

19 Q. And any corrections to your
20 surrebuttal?

21 A. No corrections.

22 Q. So if I asked you the questions
23 within your testimony today, would your answers be
24 the same?

25 A. They would.

1 MS. GRUBBS: I tender Ms. Forsberg for
2 cross-examination and move her testimony into the
3 record.

4 JUDGE SEYER: All right. Are there any
5 objections to the admission of Exhibit 7, the highly
6 confidential, confidential, and public versions of
7 that exhibit; Exhibit 8, again highly confidential,
8 confidential, and public versions; and Exhibit 9
9 public and highly confidential versions of Ms.
10 Forsberg's testimony, any objections?

11 All right. Then Exhibit 7HC, 7C, 7P, 8HC,
12 8C, 8P, 9HC, and 9P are all admitted into evidence.

13 And Ms. Plescia, do you have any questions
14 for the witness?

15 MS. PLESCIA: No questions. Thank you,
16 your Honor.

17 JUDGE SEYER: Mr. Opitz?

18 MR. OPITZ: No questions, your Honor.

19 JUDGE SEYER: All right. Mr. Thompson?

20 MR. THOMPSON: No questions, your Honor.

21 JUDGE SEYER: And Ms. Greenwald?

22 MS. GREENWALD: No questions, your Honor.

23 JUDGE SEYER: Mr. Williams?

24 MR. WILLIAMS: Not at this time, thank
25 you.

1 JUDGE SEYER: Mr. Graham?

2 MR. GRAHAM: Thank you.

3 EXAMINATION CONDUCTED

4 BY: MR. GRAHAM

5 Q. The work papers provided in support
6 of the net present value of revenue requirement
7 associated with the Boomtown project indicate that
8 the resulting values assume perfect rate pay -- rate
9 making. Are you familiar with that expression,
10 perfect rate making?

11 A. Yes, I am.

12 Q. What does that mean?

13 A. I think it means that essentially all
14 costs and revenues from the facility would
15 immediately be rolled into base rates with no
16 regulatory lag.

17 Q. Okay. Does Ameren Missouri expect
18 for this assumption to reflect the reality of general
19 rate case timing throughout the life of -- the
20 operational life of this asset?

21 A. No. I would expect to be -- there to
22 be some impacts of regulatory lag. Part of why we
23 modeled the project that way was we put together a
24 new model specifically to look at a tax equity
25 partnership and that model had so much complexity in

1 it already it wasn't possible to layer that on as
2 well.

3 Q. But your work papers indicate an
4 assumption of perfect rate making, correct?

5 A. That's correct.

6 Q. But you don't expect those
7 assumptions to be borne out for the reasons that
8 you've just stated, correct?

9 A. No. But I wouldn't expect that
10 change to materially change the results presented, it
11 would be a -- certainly a small impact though.

12 Q. If the perfect rate making does not
13 occur -- well, do you know what the acronym -- I hope
14 this isn't the name of a river like I messed up
15 before. NPVRR. Are you familiar with that acronym?

16 A. I am.

17 Q. Would you tell me what it means?
18 Doesn't refer to a river, right?

19 A. It does not.

20 Q. I am pleased.

21 A. Net present value of revenue
22 requirement.

23 Q. And if perfect rate making does not
24 occur the NPVRR of the project realized by the rate
25 payers will increase, correct?

1 A. I don't -- I don't know if that's
2 true.

3 **Q. Okay. That's your answer?**

4 A. That is my answer.

5 **Q. If all the -- I assume that you**
6 **hedged that answer -- no disrespect because I chose**
7 **that word, but we use it in finances -- because of**
8 **the assumptions that would have to be made, correct?**

9 A. The assumptions and the fact that I
10 haven't done that specific analysis so I can't
11 comment on it.

12 **Q. Okay. Well, I will leave it there**
13 **then. Now, the results of Table 1 on Page 5 of your**
14 **surrebuttal. Are you familiar with that?**

15 A. Yes.

16 **Q. They assume that Ameren utilizes**
17 **invest tax credits and a tax equity partnership,**
18 **correct?**

19 A. That's correct.

20 **Q. Did Ameren review the NPVRR of the**
21 **project assuming the increased Boomtown costs if**
22 **production tax credits are utilized?**

23 A. We did compare the potential outcomes
24 for customers for both the PTC and the ITC. And
25 under the increased project cost it appeared the ITC

1 was more favorable for customers resulted in a lower
2 net present value of revenue requirement. So that's
3 why those results are presented in Table 1.

4 **Q. So assuming production tax credits**
5 **are utilized, do any of the scenarios considered in**
6 **Table 1 of your surrebuttal result in an expected**
7 **NPVRR reduction?**

8 A. I may need you to clarify the
9 question. Table 1 assumes the investment tax credit
10 so I'm -- it seemed like you were asking about the
11 production tax credit.

12 **Q. I did and I'm sorry.**

13 A. Okay.

14 **Q. Wait just a minute. Okay. I'm**
15 **asking about the scenarios. So if you don't know,**
16 **that's fine. But assuming the production tax credits**
17 **are utilized, do any of the scenarios considered in**
18 **Table 1 of your surrebuttal result in an expected**
19 **NPVRR reduction?**

20 A. I don't know.

21 **Q. Okay. Have you been here for the**
22 **testimony of earlier witnesses today?**

23 A. Several of them, yes.

24 **Q. Mr. Michels?**

25 A. Yes.

1 Q. Okay. Do you concur that the overall
2 plan that's involved here that the Boomtown project
3 fits into for the purposes of that plan, whether or
4 not the revenue of the Boomtown meets its expected
5 operational costs over its life, that's not something
6 that Ameren is concerned with one way or another, do
7 you agree with that?

8 A. I do agree with that.

9 Q. Thank you.

10 JUDGE SEYER: Chairman Rupp, do you have
11 any questions?

12 CHAIRMAN RUPP: No, I don't.

13 JUDGE SEYER: Okay. Answer is no. Do any
14 of the other commissioners have questions for the
15 witness?

16 MS. HOLSMAN: No questions, Judge. Thank
17 you. Holsman.

18 JUDGE SEYER: All right. All right. Ms.
19 Forsberg, I do have some questions myself.

20 EXAMINATION CONDUCTED

21 BY: JUDGE SEYER

22 Q. So what -- let me ask you this first.
23 Has there been a decision on whether to utilize
24 investment tax credits or production tax credits?

25 A. There has not been a decision.

1 **Q. Okay. Could you explain what the**
2 **investment tax credit is and how it works?**

3 A. Sure. So the investment tax credit
4 is a -- it's basically an upfront refund on some of
5 the project costs. So the ITC is dependent on the
6 cost of the project and you get a certain percentage
7 of that back as a tax credit. So the standard is 30
8 percent, that's the ITC standard. One of the really
9 great things in this case is that this project is in
10 an energy community as we've discussed so that means
11 it qualifies for an additional 10 percent. So the
12 ITC at 40 percent would mean you get basically a 40
13 percent check back from the IRS for the cost of the
14 project.

15 **Q. And how do -- how does tax equity**
16 **financing come into play with that investment tax**
17 **credit?**

18 A. So it's a way to potentially utilize
19 the value of the investment tax credit. Some people
20 in this room are probably aware that there are
21 specific rules for utilities if they do elect the
22 investment tax credit. They have to do what's called
23 normalization and they give that value back over the
24 life of the asset which then when we're looking at
25 present value of revenue requirement sort of reduces

1 the value, right, if we're focused on that present
2 value. So tax equity financing is a way to capture
3 all of that value in year one and to make sure it
4 really reduces the present value. So it's just a
5 different way -- a different way to capture the value
6 that I think can be more valuable.

7 **Q. Can investment tax credits be sold**
8 **like I believe production tax credits can?**

9 A. They can, yes. This is new in the
10 Inflation Reduction Act. So both the production tax
11 credits and the investment tax credits can now be
12 sold to other entities for cash.

13 **Q. That wasn't the case before?**

14 A. That was not the case.

15 **Q. Okay. What are the differences**
16 **between the two tax credits and why would you choose**
17 **one over the other?**

18 A. So the production tax credit is a
19 credit back per kilowatt hour generated. So it
20 depends on how the resource performs what amount
21 people ultimately get back. The rates for the
22 production tax credit are very high so that can be a
23 really good option, it's been a great option for wind
24 for a long time and it's now an option for solar as
25 well. So, you know, depending on what you think the

1 production of the resource is going to be you might
2 select production tax credit. The investment tax
3 credit, you know, some of the interesting tradeoffs
4 is that the investment tax credit is tied to project
5 cost. So one of the considerations here is is that
6 the project cost has gone up which increases the
7 value of the ITC. So that's one of the things we're
8 weighing. So I really think those are probably the
9 main criteria you'd look at, the project cost versus
10 the expected production and see which one you think
11 would be more valuable.

12 **Q. When considering those two tax credit**
13 **programs, does the timing of implementation of the**
14 **project come into play?**

15 A. A little bit. But with the Inflation
16 Reduction Act those tax credits have both been
17 extended pretty significantly out into the 2030's.
18 So it's not as much of a consideration as it was
19 previously.

20 **Q. Are amortization, allowed return,**
21 **that type of thing, is that a consideration?**

22 A. As far as I know those are
23 essentially comparable between the two options, yeah.

24 **Q. And I can't recall if Mr. Graham**
25 **referred to this particular table, I don't think so.**

1 But in your surrebuttal testimony there's a Schedule
2 S1 and S2?

3 A. Yes.

4 Q. Are those based on the presumption
5 that you're using investment tax credits?

6 A. They are, yes.

7 Q. Okay. Does it therefore assume that
8 a portion of the project costs will be financed
9 through tax equity financing?

10 A. That's how a tax equity partnership
11 would work, right, and then the partner sort of
12 recoups that investment through project revenues. So
13 it sort of ends up, you know, on balance the same,
14 they just pay certain costs up front.

15 Q. And on Page 2 of your surrebuttal
16 testimony, and I think it spills over into Page 3,
17 you indicate that Ameren's analysis has indicated
18 that the investment tax credit is more favorable than
19 the production tax credit with the introduction of
20 the investment -- Inflation Reduction Act and changes
21 to the project cost; is that correct?

22 A. That's correct.

23 Q. Okay. Similarly, on Page 3 you
24 indicated that Ameren will make a decision on tax
25 equity financing at a later date. So Ameren has not

1 **decided -- and I think you answered this already.**
2 **But they have not decided which tax credit program**
3 **they're going to use?**

4 A. That's right. Maybe I can clarify
5 too. There's one particular nuance of the rules that
6 we're waiting on clarification from the IRS and
7 that's related to the transferability of tax credits
8 and whether or not the cash you get from that
9 transfer would still be subject to normalization. So
10 we're hoping, you know, if we wait a bit we may get
11 guidance from the IRS. If they clarify that in a way
12 that means we can transfer the tax credits and do not
13 need to normalize the cash then I think that would
14 make the ITC with the transfer tax credit pretty
15 equivalent in value to the tax equity partnership for
16 customers. So we're kind of waiting to see if we get
17 that guidance and then we can determine if we need a
18 tax equity partner.

19 Q. **Okay. In the two surrebuttal**
20 **schedules, two schedules attached to your surrebuttal**
21 **testimony, that's all based on the ITC?**

22 A. That's right.

23 Q. **Is there some reason why you wouldn't**
24 **provide similar analysis for the production tax**
25 **credit?**

1 A. No, I certainly could. At some point
2 in the case we provided a table to the parties that
3 showed -- not a table, a chart that showed the
4 crossover points in customer value. I think my
5 counsel provided that by e-mail.

6 **Q. Okay. Was that in response to a data**
7 **request?**

8 A. It was just to give parties a heads
9 up that we were reevaluating the tax strategy.

10 **Q. In that Schedule S1, the title of**
11 **that schedule says Boomtown Solar Project Modeling**
12 **Assumptions. So are these the same assumptions that**
13 **are used to -- that led to those results in Schedule**
14 **S2?**

15 A. Yes.

16 **Q. Okay. Can you explain what each of**
17 **these -- what each assumption means?**

18 A. In?

19 **Q. In S1.**

20 A. S1?

21 **Q. Yes.**

22 A. Do you want me to just walk through
23 the whole table?

24 **Q. Sure.**

25 A. Okay. Great. So the project

1 parameters, the first size there that's the nameplate
2 capacity, AC.

3 Q. Okay.

4 A. The total delivered cost at COD is
5 the expected total cost of the project.

6 MS. GRUBBS: And I would just interject
7 that this is all marked highly confidential so we'll
8 just caution --

9 JUDGE SEYER: Right.

10 MS. GRUBBS: The values, yes.

11 THE WITNESS: Yeah. I can just explain
12 and not state the values.

13 MS. GRUBBS: Thank you.

14 THE WITNESS: Then below that you'll see
15 broken out the two amounts of that total cost at COD,
16 that's a value that the model solves for is if we
17 were to pursue a tax equity some of the upfront costs
18 would be paid by the partner, some would be paid by
19 Ameren Missouri. So sponsor AMO equity would be the
20 portion that Ameren Missouri invests.

21 Then we have the expected mechanical
22 completion and COD date. So that would be when the
23 project is commercially operational. Expected
24 project life. And then -- we assume there would be
25 some costs associated with finance -- you know, with

1 putting together a tax equity deal so that's what
2 that TEI deal cost refers to. Then we have a variety
3 of parameters for the revenue requirement, debt and
4 equity percentage, cost of debt, cost of equity,
5 discount year, WACC, discount rate. Those are all
6 things that are kind of consistent with our internal
7 corporate modeling that were provided.

8 Q. And when you say WACC, is that
9 W-A-C-C?

10 A. Yes.

11 Q. Weighted average cost of capital?

12 A. Weighted average cost of capital,
13 right. Then below that we have the different
14 expected production levels for the project that we
15 tested, so these are the capacity factors. P50 is
16 sort of the average, or expected capacity factor. So
17 the 25.8 percent, that's -- that's the base capacity
18 factor used in our analysis. And then we always want
19 to test lower values just to see what would happen if
20 the resource performs at a lower rate. For solar
21 projects we also assume an annual degradation,
22 because solar degrades over time, so that's the
23 .5 percent that you see. I don't think that's highly
24 confidential now that I've said it.

25 Then below that the revenue and price

1 assumption. So for energy and capacity revenues we
2 have used forecasts consistent with those developed
3 by Matt Michels' team through the integrated resource
4 planning process. And because the project is located
5 in Illinois we also applied a basis adjustment for
6 specific location of the project.

7 And if you go to the other column. We've
8 got ongoing expenses modeled in the project. So, you
9 know, obviously we assume that there will be expenses
10 for the project. No fuel costs because it's a
11 renewable resource but we will have property taxes
12 that will be paid over the life to the county and
13 ongoing operations and maintenance expenses, real
14 estate. Real estate expenses in this case would be
15 land leases for the site that the project is on. And
16 then some of the interconnection costs are paid over
17 20 years so those costs are reflected as ongoing
18 expense.

19 Below that we have some assumptions
20 associated with the contract for differences. So
21 this would be a specific nuance that applies only if
22 we do a tax equity partnership. It's part of how the
23 partner gets paid back and recoups their investment,
24 as you said sort of a starting price for that
25 contract for differences. And part of the revenues

1 that they get to recoup their investment are
2 dependent on that.

3 Then below that we get to the tax items.
4 So the ITC rate. This is what I was just discussing
5 with the energy community boost that value goes from
6 30 percent to 40 percent, so you'll see that
7 reflected. Then there's some additional tax
8 assumptions below that about what percentage of the
9 project costs will qualify for the ITC, so that's the
10 five year MACRS, 15 years MACRS, and then the ITC
11 percent on each. There's certain costs of the
12 project that are excluded from qualifying for the
13 investment tax credit. We did assume 12 years
14 straight line alternative depreciation so that's
15 reflected. And then the federal and state tax rate,
16 those are fairly standard.

17 And then below that we have a variety of
18 specific assumptions for the tax equity partnership.
19 Those would depend on the specific transaction we
20 enter into with the tax equity partner if we were to
21 do that. So things like flip yield, target flip
22 yield, what share of the revenues the tax equity
23 partner is getting, those things would be dependent
24 on the specific deal. I will say for these
25 assumptions we worked with a group called CCA,

1 they're pretty much a recognized expert on tax equity
2 deal structures too, for one to develop the model and
3 to come up with those assumptions.

4 **Q. And so are all those assumptions --**
5 **are all those assumptions used to come up with your**
6 **figures in that Schedule S2?**

7 A. That's right, yeah.

8 **Q. Can you -- can you explain how you**
9 **arrive at -- I hate to make you go line by line. But**
10 **I'm trying to understand the net partnership cash**
11 **flows, how did you calculate that?**

12 A. Where is that -- are you looking at
13 Table S2?

14 **Q. Schedule S2, yes.**

15 A. Okay. Oh. The net partnership cash
16 flows, right. So that's essentially -- it's
17 calculated in the model. It's based on the expected
18 energy revenues from the project and the expected
19 capacity revenues. And then from that there's a
20 portion that gets sort of -- I think the word that's
21 often used is swept by the tax equity partner so that
22 they recoup their investment. So like I said, they
23 pay some of that capital up front and then they make
24 sure they recoup that through those costs.

25 **Q. And I apologize if this has already**

1 **been mentioned but PWA stands for?**

2 A. That stands for probability weighted
3 average. That's our sort of middle curve assumption
4 from the IRP.

5 **Q. And then the next line item, net CFD.**
6 **What does CFD stand for?**

7 A. So CFD is the contract for
8 differences. That's another just specific nuance of
9 the tax equity partnership that would exist and has
10 an impact on the ultimate project revenues that
11 Ameren Missouri would see. That's why we've
12 reflected it.

13 **Q. So is that something that would not**
14 **come into play if it were production tax credits?**

15 A. Right. Or if we used the investment
16 tax credit and transferred the value.

17 **Q. Okay. The line credit to**
18 **subscribers, what kilowatt per hour consumption is**
19 **used to calculate this parameter under that P50**
20 **output scenario?**

21 A. Sure. So the columns on the left
22 side of the table assume that P50 value, the
23 25.8 percent. And that's -- that's kind of utilized
24 in combination with the credit rates for the
25 Renewable Solutions Program that are set out in the

1 tariff to calculate what that would be.

2 Q. So there's no -- as far as kilowatt
3 hour consumption?

4 A. It's based on kilowatt hour
5 generation from the resource.

6 Q. Okay.

7 A. Yeah.

8 Q. Okay. And then the figures on the
9 line revenues from subscribers, can you help explain
10 that, help me understand that?

11 A. Sure. So that would be the revenue
12 that subscribers pay into the program through the
13 program charge rate. So as the Renewable Solutions
14 Program is laid out there's a charge and there's a
15 credit so that's what those two lines are
16 representing. And then below that you see the net
17 impact of those two line items.

18 Q. Okay. And how are -- how are those
19 allowed return figures, how do you come up with
20 those?

21 A. So essentially these results are from
22 the tax equity model that we developed and we
23 essentially just built a tiny revenue requirement
24 model within that. So there's a whole host of
25 assumptions that go into that.

1 Q. And how do you come up with the
2 operating expense numbers?

3 A. So those are project specific. For
4 this case, you know, we have O&M, we have
5 interconnection costs. Those are laid out
6 specifically by MISO in the generator interconnection
7 agreement. We have property taxes which like I said
8 are county specific. So our property -- our tax team
9 essentially estimated those based on the specific
10 laws of White County, Illinois. And then the land
11 leases are also kind of known in advance, those are
12 set by the developer at whatever they agreed to with
13 the landowners.

14 Q. And I assume that the TEI deal cost
15 would not be a factor if you were going with
16 production tax credit?

17 A. Correct.

18 Q. Okay. Are there work papers that
19 would allow the Commission to see how you arrived at
20 those numbers?

21 A. Yes. I provided those.

22 Q. You have provided those?

23 A. Yes.

24 Q. Okay. To?

25 A. I'm not sure how that works

1 logistically but they've been provided.

2 MS. GRUBBS: Once the testimony is
3 submitted then the work papers are circulated to all
4 of the parties.

5 JUDGE SEYER: I see. Okay. All right.

6 BY: JUDGE SEYER

7 **Q. Now I want to turn to your direct**
8 **testimony.**

9 A. Okay.

10 **Q. This first schedule, D1, is, I**
11 **believe, the subscriber's contracts?**

12 A. Yes.

13 **Q. The first line of each agreement**
14 **states, the undersigned customer subscribes up to a**
15 **specified number of kilowatt -- of renewable power**
16 **over a specified term. And then it says RE service.**
17 **Please expand on what is included in RE service? In**
18 **other words, what are they getting? What's each**
19 **customer getting for what they are paying for?**

20 A. I expect it's defined below but we
21 will see. It may not be a defined term. One moment.
22 If it has a specific definition in the tariff I may
23 get it wrong. But I can just speak generally to what
24 that refers to if that would be helpful. Essentially
25 what they're -- essentially what they're getting

1 through the program is title to the renewable energy
2 credits generated by whatever portion of capacity
3 that they subscribe to. So I hope somewhere in here
4 it's defined somewhat like that.

5 MS. GRUBBS: And just so that the record's
6 clear, it is a part of the proposed tariff which on
7 EFIS is Document Number 11.

8 JUDGE SEYER: Okay.

9 THE WITNESS: Oh, I think that's my
10 confusion. I have the contract not the tariff in
11 front of me. Thank you.

12 BY: JUDGE SEYER

13 **Q. There is -- correct me if I'm wrong,**
14 **there is a first amendment to the RSP agreement?**

15 A. I believe that's correct.

16 **Q. Do you know what was amended that**
17 **resulted in that first amendment?**

18 A. Is that referring to the updated
19 pricing? Yes. We updated the project -- or the
20 charge rates. Yes, we updated the charge rates for
21 the program.

22 **Q. What project cost was the renewable**
23 **resource rate in that first amendment to the RSP**
24 **agreement based on?**

25 A. So I believe -- in my memory --

1 Q. Without getting into confidential
2 information.

3 A. I believe it was based on a project
4 cost similar to the base case presented in my direct
5 testimony but I am not 100 percent sure.

6 Q. I believe it's in roughly the second
7 or third page of these contracts. There's a term
8 renewable resource charge and it's defined as a
9 charge applied to the monthly energy statement of
10 subscribers. "The renewable resource charge will be
11 calculated at the subscriber's RE service level
12 multiplied by the renewable resource rate provided
13 that if Company -- Ameren -- is unable to meet
14 subscriber's RE service level as a result of the
15 occurrence of an act or event described in Item 10 of
16 the other program provisions and terms that this
17 rider RSP -- the RP -- I'm sorry, the RE service
18 level in the equation above shall be reduced to the
19 level Company can supply during the period Company's
20 performance is reduced or delayed."

21 Which P case net capacity factor is needed
22 to meet the subscriber's RE service needs?

23 A. So the portion of the program costs
24 that you're referring to, the charge rate, is based
25 on capacity not on generation. So that's a per

1 kilowatt charge.

2 Q. Okay. So no relation to -- well,
3 would reduced revenue due to an act or event impact
4 project revenues?

5 A. Reduced production?

6 Q. Reduced revenue?

7 A. Reduced -- can you clarify? Reduced
8 revenue for who?

9 Q. Well, lower revenue due to an act of
10 God, let's say.

11 A. It would hurt the economics of the
12 project certainly. But -- I would say, the way the
13 program is designed customers pay a fixed charge per
14 kilowatt and they get a credit back per kilowatt
15 hour. So in the case that the resource underperforms
16 subscribers actually pay more into the program. So
17 it's kind of a nice risk mitigation for other
18 customer for some of those lower P cases.

19 Q. So if there is not as much renewable
20 energy generated, are you saying the subscribers will
21 cover --

22 A. More of the cost.

23 Q. -- more of the deficit?

24 A. Yeah.

25 Q. But not all of the?

1 A. No, not all of it. But they pay more
2 into the program and they offset a pretty significant
3 portion of that risk.

4 **Q. And you were here earlier when I**
5 **asked Mr. Arora about insurance covering force**
6 **majeure. Are you familiar with that?**

7 A. I'm not.

8 **Q. Okay. I think you touched on this**
9 **earlier but I'm going to take you back to your**
10 **surrebuttal Schedule S1.**

11 A. Sure.

12 **Q. So in that first column there are**
13 **these different net capacity factors?**

14 A. That's right.

15 **Q. Do they represent the average annual**
16 **capacity factor?**

17 A. So they represent modeling of the
18 project that is designed to create kind of a standard
19 deviation curve over the full life of the project.
20 So if you can imagine sort of a -- you know, the
21 normal curve you've seen a million times, P50 would
22 be right in the middle. So that means in 50 percent
23 of the years you'd expect the production to be above
24 that and in 50 percent of years you'd expect it to be
25 below. And then if you go to lower P values it just

1 increases the certainty that production will be above
2 that level. So P99 should be the value where only,
3 you know, one year out of a hundred you would see
4 production below that level.

5 **Q. And this annual degradation factor of**
6 **.5 percent, how is that incorporated into that**
7 **analysis?**

8 A. So it shows up in the project model.
9 It essentially just takes a small haircut on the
10 expected megawatt hours generated each year. I don't
11 know a ton of specifics about it but it's just a fact
12 of life for solar projects that over time they
13 produce slightly less each year.

14 **Q. In that same schedule, you show a**
15 **discount rate of ***HIGHLY CONFIDENTIAL*** -- well, I**
16 **don't know if that's confidential information.**

17 A. Probably is. I can see it though.

18 **Q. Okay. What's the basis for that**
19 **discount rate?**

20 A. So as I understand it, calculating
21 WACC is a pretty standard process. Internally at
22 Ameren Missouri we also use a discount rate that is
23 just a -- I think it's post tax WACC's -- WACC. So
24 it's just an adjusted level of the WACC based on
25 taxes.

1 **Q. Your modeling scenarios. Other than**
2 **price, do you consider the generation level or the**
3 **resource output?**

4 A. Yes. So there's, I would say, three
5 variables we focused on most in creating the 12
6 scenarios you see in my direct testimony. Mostly we
7 focus on those variables because they have a pretty
8 big impact on the project economics. So one is
9 project cost, we varied that; the second is expected
10 generation output, or production, so that's the P50,
11 the P99 levels we've been talking about. And then
12 the third is the expected -- or forecasted energy
13 prices that we looked at to assess how much revenue
14 the project would generate. So for those we looked
15 at three levels that correspond with the Integrated
16 Resource Plan, the high prices, low prices, and
17 probability weighted average.

18 **Q. On that Schedule S2, can you explain**
19 **how the amortization amount was calculated?**

20 A. That's -- I would have to get out the
21 work paper and walk you through it.

22 **Q. Okay. And I think you first touched**
23 **on it in response to Mr. Graham's question. But the**
24 **NPVRR that's presented in the schedule, what time is**
25 **it for, is it for the 15 year subscriber period?**

1 A. It's for the full 30 year life of the
2 project.

3 Q. Okay.

4 A. Yep.

5 Q. Okay. When I compare Schedule, I
6 guess it would be D1 -- I'm sorry, I'm a little
7 sloppy on these. D1 versus S1, your direct testimony
8 versus your surrebuttal testimony, they're similar
9 tables, correct?

10 A. I think you're referring to D2 versus
11 S1, is that what you're referring to?

12 Q. That sounds right.

13 A. Okay. Yes. They should be identical
14 with the exception of the project cost which we've
15 updated and the ITC percentage which we indicated the
16 project's now eligible for 40 percent?

17 Q. But if I remember -- if I recall
18 correctly there's a significant difference in the
19 amortization and allowed return figures. Why is
20 that?

21 A. The project cost has increased so
22 that could be why.

23 Q. Okay. When it comes to repairs or
24 upgrades required for the project during the first
25 15 years who will cover those costs, will it be the

1 **shareholders, will it be the subscribers, will it be**
2 **some combination?**

3 A. So to price the program we look at
4 all expected costs over the first fifteen years of
5 the program. So that included estimates for
6 operations and maintenance. So certainly those
7 estimates were included in the charge rate that we
8 set for the program. If things arose beyond that
9 that we didn't expect it wouldn't be reflected.

10 **Q. You spoke about increased project**
11 **costs. Did an increase in energy prices factor into**
12 **your analysis?**

13 A. We considered reflecting that because
14 energy prices have also seen pretty significant
15 inflation. But I'll say the reason that I modeled
16 several energy price scenarios to start with was to
17 capture some of that uncertainty and that's what we
18 set out to do in the IRP as well. So if you look at
19 those different results, you know, perhaps you could
20 give a little more weight to the high price scenario
21 under current conditions. But the future's uncertain
22 so we felt it was best to just stick with the range.

23 **Q. The investment tax credit, does it**
24 **require a tax equity partner or it just makes sense**
25 **to use a tax equity partner?**

1 A. It doesn't require a tax equity
2 partner. But like I said, if Ameren were just to
3 elect the ITC without a tax equity partner we would
4 be subject to normalization which means we can't give
5 all the value back to customers in year one, we have
6 to spread it out over thirty years. And then when we
7 look at, you know, present value, the value of that
8 credit is reduced dramatically. So really the only
9 reason to pursue a tax equity partnership would be to
10 capture the value more fully for customers.

11 **Q. And you had mentioned earlier about
12 where this particular project would be located is in
13 energy community and that provides another 10 percent
14 added onto the 30 percent tax credit that is already
15 available?**

16 A. That's right.

17 **Q. Did that -- was that included in your
18 assumptions and the results that were presented in
19 the surrebuttal schedules?**

20 A. They are, yes. That was included.

21 **Q. Okay. I think that's all the
22 questions I have. All right.**

23 JUDGE SEYER: Ms. Plescia, do you have
24 any?

25 MS. PLESCIA: No questions. Thank you,

1 Judge.

2 JUDGE SEYER: Mr. Opitz?

3 MR. OPITZ: No thank you, your Honor.

4 JUDGE SEYER: Mr. Thompson?

5 MR. THOMPSON: No questions, your Honor.

6 JUDGE SEYER: Ms. Greenwald?

7 MS. GREENWALD: No questions, your Honor.

8 JUDGE SEYER: Mr. Williams?

9 MR. WILLIAMS: Yes. Thank you.

10 EXAMINATION CONDUCTED

11 BY: MR. WILLIAMS

12 **Q. Ms. Forsberg, do you recall when you**
13 **talked about waiting for information from the IRS**
14 **about normalization of proceeds from sales of**
15 **credits?**

16 A. I do.

17 **Q. In what -- well, has Ameren Missouri**
18 **made some request of the Internal Revenue Service**
19 **regarding normalization of those proceeds?**

20 A. I don't think Ameren Missouri
21 specifically has but I believe EEI, which I'm going
22 to forget what that stands for, Edison Electric
23 Institute, which represents investor owned utilities
24 in the industry, I believe they've made that request.

25 **Q. So Ameren Missouri has not requested**

1 a letter ruling?

2 A. We're part of EEI so sort of on our
3 behalf. That's my understanding.

4 Q. Well, where I'm really trying to get
5 -- go to with it -- and I don't know that it matters
6 that much. But are you trying to get a binding
7 representation from the Internal Revenue Service for
8 how you go forward or are you just looking for some
9 kind of a general advisory position by the IRS?

10 A. I'm not sure. I would have to ask
11 our tax team. I just know we need some sort of
12 guidance, some sort of rules or regulations to make
13 it clear if we can take that cash and directly give
14 it back to customers or if we have to normalize.

15 Q. Are you familiar with letter rulings?

16 A. No, I am not. Not closely.

17 Q. And then you talked about a
18 degradation rate of -- since it's public now -- at
19 least half a percent a year and the service life that
20 you're using is a 30 year life. If I did the math
21 right that would be a 15 percent degradation. So 150
22 megawatt facility should still be capable of
23 generating 127 and a half megawatts; is that correct?

24 A. I think it's more appropriate to
25 think of it in terms of megawatt hours and the impact

1 it would have on production, that's a little simpler.
2 But that's probably reasonable to think of it that
3 way as well.

4 Q. Well, if you have the same hours
5 available --

6 A. Yeah. Yeah.

7 Q. -- and you look at the capacity that
8 it generates, is there a difference between looking
9 at it megawatt hours and megawatts?

10 A. Probably comes out the same.

11 MR. WILLIAMS: No further questions.

12 JUDGE SEYER: All right. Mr. Graham, do
13 you have questions?

14 MR. GRAHAM: Yes. Thank you.

15 EXAMINATION CONDUCTED

16 BY: MR. GRAHAM

17 Q. We are on the CFD Schedule LJF-S1.
18 Are you with me?

19 A. I can't hear you very well.

20 Q. We are on the CFD Schedule LJF-S1
21 Schedule, okay?

22 A. Great.

23 Q. Great. And I will not try to read
24 out or I will not read out confidential numbers. But
25 starting with the column down under that title,

1 Contracted Cash Flow, CfD, that's underlined in bold.
2 Read down to starting price, dollars per megawatt
3 hour. You with me?

4 A. Yes.

5 Q. You see that number there that we're
6 not going to read out?

7 A. Yes.

8 Q. Is that value higher than the
9 expected average revenue from Boomtown in year one;
10 is that correct?

11 A. I believe it is, yes.

12 Q. Okay. Next question. If the
13 locational marginal price, the LMP, for Boomtown were
14 less than the value titled starting dollars per
15 megawatt hour, which we have just been referring to,
16 who would pay that difference?

17 A. I have to say if we want to get into
18 the details of the CfD I'm probably not the expert at
19 the Company on that.

20 Q. Now, these tables that we've been
21 looking at have been about the Renewable Solutions
22 Program?

23 A. Yes.

24 Q. All these operational expenses, all
25 of these other expenses, every expense that we've

1 **been talking about has been about that program?**

2 A. No. The expenses we've been talking
3 about are the ongoing expenses for the resource
4 itself for the entire project.

5 **Q. For the entire project?**

6 A. Correct.

7 **Q. Right. And so you worked up five**
8 **tables that concern expenses, not only the expenses**
9 **of building the facility but the expenses of**
10 **operating the facility for its entire operational**
11 **life, correct?**

12 A. I'm not sure which tables you're
13 referring to.

14 **Q. Well, the tables you've been**
15 **referring to in your testimony here.**

16 A. Those include the ongoing expenses
17 for the project, yes.

18 **Q. Right out to the end of its**
19 **operational life, --**

20 A. Yes, exactly.

21 **Q. -- correct? But it was not important**
22 **to Ameren that there be a comparison to establish**
23 **whether or not those operational expenses over the**
24 **operational life of the project would be covered by**
25 **the revenues?**

1 A. Which revenues?

2 Q. **The common -- the revenues that come**
3 **in from rate payers.**

4 A. I may need additional clarification.
5 Are you referring to the project revenues?

6 Q. **I'm talking about the project**
7 **revenues.**

8 A. Sure. I mean, I will say in the
9 results I presented --

10 Q. **Let me just explain it this way.**

11 A. Okay.

12 Q. **The rate payers are going to have to**
13 **cover a deficit; is that right?**

14 A. That's right. That's what the
15 present value of revenue requirement results are
16 designed to capture.

17 Q. **I'm sorry, I didn't ask my question**
18 **right. I asked it the way I intended to ask it and I**
19 **got the answer. Thank you very much.**

20 A. Okay.

21 MR. GRAHAM: I'm done. Thank you, your
22 Honor.

23 JUDGE SEYER: All right. Ms. Grubbs,
24 re-direct?

25 MS. GRUBBS: Yes. Thank you.

1 EXAMINATION CONDUCTED

2 BY: MS. GRUBBS

3 Q. So Ms. Forsberg, when Staff was
4 initially cross-examining you there was a question
5 about the regulatory lag benefits, do you recall
6 that?

7 A. I do.

8 Q. And so is it true that the regulatory
9 lag benefits are as proposed under the tracker to be
10 tracked?

11 A. I believe so but I may have to defer
12 to Mr. Wills, my colleague, on that.

13 Q. And any revenues that are generated
14 by the project's projection -- production would flow
15 through the FAC, at least in the interim; is that
16 correct?

17 A. Correct.

18 Q. So on cross-examination from Staff
19 you also described -- or you were asked about the
20 overall plan and whether you -- Ameren Missouri was
21 looking at revenue meeting all costs, do you remember
22 that?

23 A. Can you say that again, sorry.

24 Q. Sure. I believe it was Staff
25 counsel's cross-examination, he asked whether Ameren

1 Missouri had been looking at revenue meeting all
2 costs?

3 A. Oh, yes.

4 Q. Yes. And so how was the project --
5 or I'm sorry, the program designed to address
6 revenues and cost?

7 A. So we did layer the program revenues
8 and costs on top of the revenue requirement, and
9 that's some of what I went through with the Judge.
10 And so those kind of feed into the overall revenue
11 requirement. And really what we're seeing is across
12 essentially every feasible scenario subscriber
13 contributions lower the revenue requirement of the
14 project and it's a benefit to all customers in that
15 way.

16 Q. And then I believe it was the Judge's
17 questions, just want to clarify. There are two tax
18 strategies that are options under the ITC. So with
19 tax equity partnership and without as you described
20 it then just transferability; is that right?

21 A. That's correct.

22 Q. And so what was reflected in your
23 surrebuttal attachments, or Schedules LJF-S1 and S2,
24 which tax strategy is reflected in those?

25 A. In the surrebuttal testimony we

1 assumed the investment tax credit.

2 **Q. And with tax equity partnership?**

3 A. With tax equity solely because, as
4 discussed, we don't have full clearance from the IRS
5 on the other option.

6 **Q. And I believe you were discussing**
7 **schedule LJF-S1 and you used a term MACRS. Can you**
8 **just define that so the record's clear?**

9 A. Oh, that's a good test if I can
10 remember what it stands for. Accelerate -- I might
11 need help, sorry. Do you have it, Jermaine?

12 **Q. I don't.**

13 A. Okay. Apologies.

14 **Q. So then the Judge was asking you some**
15 **questions about the first amendment to the**
16 **agreements, the repricing that occurred?**

17 A. That's right.

18 **Q. Are the updated charge rates that you**
19 **described reflected in the tariff that's been**
20 **proposed and submitted in this case?**

21 A. Yes.

22 MS. GRUBBS: I think that's all I've got.

23 Thank you.

24 JUDGE SEYER: All right. All right.

25 Thank you, Ms. Forsberg. You may step down. Let's

1 go ahead and take a break and reconvene, I'll say at
2 2:55. Let's go off the record.

3 (At this point in the proceedings, a short
4 recess was taken.)

5 JUDGE SEYER: All right. Let's go back on
6 the record. It's about 3:02. Ms. Grubbs, Mr.
7 Lowery, call your next witness.

8 MS. GRUBBS: Thank you, your Honor. Call
9 to the stand Scott Wibbenmeyer, please.

10 JUDGE SEYER: All right. Mr. Wibbenmeyer,
11 good afternoon.

12 THE WITNESS: Good afternoon.

13 JUDGE SEYER: Would you raise your right
14 hand, please.

15 * * * * *

16 SCOTT WIBBENMEYER,

17 The witness, having been first duly sworn
18 upon his oath, testified as follows:

19 * * * * *

20 JUDGE SEYER: All right. Thank you. Go
21 ahead, Ms. Grubbs.

22 MS. GRUBBS: Thank you.

23 EXAMINATION CONDUCTED

24 BY: MS. GRUBBS

25 Q. Please state your name for the

1 record, spelling your last.

2 A. Scott Wibbenmeyer,
3 W-I-B-B-E-N-M-E-Y-E-R.

4 Q. By whom are you employed and in what
5 capacity?

6 A. Ameren Missouri. I'm Director of
7 Renewable Development.

8 Q. And you are the same Scott
9 Wibbenmeyer who filed direct testimony in this case
10 which has been marked as Exhibit 10? There's an HC,
11 highly confidential, and public version of that,
12 correct?

13 A. That is correct.

14 Q. Do you have any revisions or
15 corrections to make to your direct testimony?

16 A. I do not.

17 Q. And so if I ask the questions
18 contained in your testimony today, would your answers
19 be the same?

20 A. They will.

21 MS. GRUBBS: Mr. Wibbenmeyer is tendered
22 for cross-examination and I move for 10HC and 10P to
23 be moved into the record.

24 JUDGE SEYER: All right. Are there any
25 objections to those documents coming into evidence?

1 All right. Hearing none, 10P and 10HC are admitted
2 into evidence.

3 And Ms. Plescia, do you have any questions
4 for the witness?

5 MS. PLESCIA: Yes, I do have questions for
6 this witness.

7 EXAMINATION CONDUCTED

8 BY: MS. PLESCIA

9 Q. Mr. Wibbenmeyer, good afternoon. I
10 just have a couple of questions pertaining to land.
11 If you know, could you explain or tell me the amount
12 of land that's required for the Boomtown Solar
13 Project?

14 A. Absolutely. I'll give estimates --

15 Q. Sure.

16 A. -- because not everything's final.
17 Boomtown's not a small project. At 150 megawatts
18 these solar projects take quite a bit of land to put
19 into production. So when we look at Boomtown it's
20 about 1,200 acres will be utilized for the facility
21 itself. And then there's almost double that that we
22 call undeveloped land, maybe it's ditches or just not
23 usable, that the site may be keeping from others
24 using it for farming or whatnot or just land that
25 wasn't used in the past. So about 1,200 for the site

1 specific though.

2 Q. So would you say an acre is roughly
3 the size of a football field?

4 A. That's probably a fair -- fair -- you
5 know, fair comparison.

6 Q. So 1,200 football fields, maybe 2,400
7 if you consider all the land that's not usable; is
8 that fair to say?

9 A. Correct. Correct.

10 Q. Okay. I don't have any further
11 questions. Thank you.

12 JUDGE SEYER: All right. Mr. Opitz?

13 MR. OPITZ: No questions. Thank you.

14 JUDGE SEYER: All right. Mr. Thompson, do
15 you have any questions?

16 MR. THOMPSON: No questions, your Honor.

17 JUDGE SEYER: All right. Ms. Greenwald?

18 MS. GREENWALD: No questions. Thank you.

19 JUDGE SEYER: All right. I don't know if
20 that was captured. No questions. Mr. Williams?

21 MR. WILLIAMS: Not at this time. Thank
22 you.

23 JUDGE SEYER: Mr. Graham?

24 MR. GRAHAM: Not at this time. Not at
25 this time.

1 JUDGE SEYER: Chairman Rupp?

2 CHAIRMAN RUPP: No. Thank you, sir.

3 JUDGE SEYER: Any other -- any of the
4 other commissioners have questions? All right. I've
5 got just a couple questions, Mr. Wibbenmeyer. Let me
6 find your testimony.

7 EXAMINATION CONDUCTED

8 BY: JUDGE SEYER

9 **Q. On Page 7 of your direct testimony**
10 **you speak to the estimated capital costs of the**
11 **project. How -- how were those -- how was that**
12 **dollar figure arrived at?**

13 A. So that dollar figure really came
14 from our RFP process, right. We had an open bid
15 process to see what projects came out. Part of that
16 evaluation, or part of that bid process was a price.
17 As we screened down through those projects and we
18 narrowed out, let's say, the more risky projects, got
19 down to the preferred project so that was that 51
20 projects down to nine. When we start looking at
21 diligence we start negotiating with the contractors,
22 or the developers really, around their price,
23 understanding where their price is coming from, what
24 would they do the project for or kind of refining
25 their bid and understanding it. And that's where

1 that price came from at that time.

2 Q. And when you arrived at that price --
3 when did you arrive at that price, what date?

4 A. So that price -- I don't know if I
5 recall a specific date. But it would have been early
6 2021, right before we signed the BTA.

7 Q. Okay. And you've since --

8 A. Early 2022, late '21, sorry. Got my
9 years mixed up.

10 Q. But you have since revised that
11 estimate, correct?

12 A. That is correct.

13 Q. All right.

14 A. That's correct.

15 Q. When do you expect to finalize the
16 cost of the project?

17 A. The -- one of the obligations under
18 the BTA is the developer, 30 days prior to firm date
19 or prior to both parties agreeing that we'd move
20 forward with this to give us a final cost estimate.
21 So that 30 days is when we would expect to get the
22 final numbers from the developer. With that said,
23 we've gotten preliminary numbers based on competitive
24 bids for some of the major equipment and the major
25 contractors since that time, that's where the new

1 numbers are derived from. So we would not expect a
2 lot of deviation from that but more refined from the
3 developer as we move forward.

4 **Q. How would -- assuming those numbers**
5 **change. How would that affect the Renewable**
6 **Solutions Program, what would be what the subscribers**
7 **would be asked to pay?**

8 A. Probably -- and I'm not the right
9 expert to discuss the Renewable Solutions Program. I
10 think as it sits now the tariff would go unchanged.
11 But Steve Wills would probably be the right expert on
12 that question.

13 **Q. Okay. And again, you may tell me the**
14 **same thing in answer to this question that you're not**
15 **the right witness to have asked this question.**

16 A. Yeah.

17 **Q. But under that -- under that RSP, who**
18 **would be responsible for the operating expenses of**
19 **the project?**

20 A. So the programs -- or the Boomtown
21 project's being proposed because we have an energy
22 need. So under that need we would expect Ameren to
23 run this plant like it does all of its facilities and
24 O&M cost would be beared similar to other facilities
25 within our rates.

1 Q. If there -- if there are changes in
2 the project cost beyond what was used to develop the
3 renewable resource rate, who would be responsible for
4 that?

5 A. Again, this project would -- we were
6 proposed that this project is needed with or without
7 that program and therefore it would be captured in
8 the rates. The program really offsets cost and
9 brings benefit to the customers ultimately.

10 Q. Okay. All right.

11 JUDGE SEYER: Ms. Plescia, do you have any
12 re-cross?

13 MS. PLESCIA: No thank you, your Honor.

14 JUDGE SEYER: Mr. Ops?

15 MR. OPITZ: Opitz.

16 JUDGE SEYER: I don't know why I'm having
17 problems with your name today. Go ahead and state
18 your name for me.

19 MR. OPITZ: Mr. Opitz.

20 JUDGE SEYER: Opitz.

21 MR. OPITZ: No questions, your Honor.

22 JUDGE SEYER: Mr. Thompson?

23 MR. THOMPSON: No questions.

24 JUDGE SEYER: Ms. Greenwald?

25 MS. GREENWALD: No questions, your Honor.

1 JUDGE SEYER: All right. Mr. Williams?

2 MR. WILLIAMS: No, thank you.

3 JUDGE SEYER: All right. And Mr. Graham?

4 MR. GRAHAM: No, thank you.

5 JUDGE SEYER: All right. Ms. Grubbs, do
6 you have re-direct?

7 MS. GRUBBS: I do not. Thank you.

8 JUDGE SEYER: Okay. Then Mr. Wibbenmeyer,
9 you're excused. Thank you.

10 THE WITNESS: Thank you.

11 JUDGE SEYER: All right. Ms. Grubbs, call
12 your next witness.

13 MR. LOWERY: And it's back to me, Judge.
14 It will be Mr. Steve Wills.

15 JUDGE SEYER: Okay. All right. Mr.
16 Wills, raise your right hand, please. Thank you.

17 * * * * *

18 STEVE WILLS,

19 The witness, having been first duly sworn
20 upon his oath, testified as follows:

21 * * * * *

22 JUDGE SEYER: Thank you.

23 EXAMINATION CONDUCTED

24 BY: MR. LOWERY

25 Q. Mr. Wills, would you please state

1 **your name for the record?**

2 A. Steven Wills, spelled W-I-L-L-S.

3 **Q. And Mr. Wills, what's your position?**

4 A. I'm the Director of Regulatory
5 Affairs for Ameren Missouri.

6 **Q. Did you cause to be prepared for**
7 **filing in this docket direct testimony that's been**
8 **marked for identification as Exhibit 11 and**
9 **surrebuttal testimony that's been marked for**
10 **identification as 12HC, 12C, and 12P, the three**
11 **versions of surrebuttal?**

12 A. Yes, I did.

13 **Q. Do you have any corrections to any of**
14 **those testimonies?**

15 A. Just a couple. On the surrebuttal
16 only. On Page 40 of the surrebuttal testimony I just
17 wanted to point out that there was a formatting error
18 on Table 1. But in the center column labeled base,
19 as you go down there's certain numbers that kind of
20 wrapped into the cell below. So for the subscriber
21 charges on the base it should read 14,886,000. That
22 trailing zero is a part of the number that fits in
23 there. Same thing on the renewable energy to
24 subscriber kilowatt hours, it should be 339,012,000.
25 So the wrapped zero should be a part of the number.

1 And I've got two more of those. On subscriber
2 credits it should be 13,153,666, so the 6 that wraps
3 in there. And on the market revenue to benefit of
4 non-subscriber should be 11,865,420. So again,
5 there's just -- the zero belongs with the line above
6 it.

7 Then on Page 48, on Line 15, the word
8 provide should be provided and on Line 17 there
9 should be a period at the end of the sentence at the
10 end of Line 17. And that is all my corrections.

11 **Q. With those corrections, if I posed**
12 **the questions in Exhibits 11 and 12 in each of those**
13 **three versions to you again here today would your**
14 **answers be the same?**

15 A. Yes.

16 **Q. And are those answers true and**
17 **correct to the best of your belief?**

18 A. Yes.

19 MR. LOWERY: With that, your Honor, I
20 would offer into evidence Exhibits 11 and 12, all
21 three versions, and tender the witness for
22 cross-examination.

23 JUDGE SEYER: All right. Are there any
24 objections to those documents coming into evidence?
25 All right. Hearing none, Exhibit 11 is admitted and

1 the three versions of Exhibit 12 are admitted.

2 And Ms. Plescia, do you have any questions
3 on cross-examination for the witness?

4 MS. PLESCIA: No questions. Thank you.

5 JUDGE SEYER: Mr. Opitz?

6 MR. OPITZ: No thank you, your Honor.

7 JUDGE SEYER: Mr. Thompson?

8 MR. THOMPSON: No questions, your Honor.

9 JUDGE SEYER: Ms. Greenwald?

10 MS. GREENWALD: No questions. Thank you.

11 JUDGE SEYER: Mr. Williams?

12 MR. WILLIAMS: Not at this time. Thank
13 you.

14 JUDGE SEYER: Mr. Graham?

15 EXAMINATION CONDUCTED

16 BY: MR. GRAHAM

17 **Q. Okay. Mr. Wills, can we discuss the**
18 **contract for differences assumptions included in Ms.**
19 **Forsberg's surrebuttal testimony at LEJ-S1?**

20 A. I don't have a copy of that testimony
21 and I will do my best to answer questions about it.
22 Like Ms. Forsberg I'm not, you know, the Company's
23 expert on that. But if someone wants to present me
24 with a copy of it, I'll answer what questions I'm
25 able to.

1 JUDGE SEYER: Mr. Graham, can I ask you
2 to --

3 MR. GRAHAM: Let me just jump down here
4 and -- I'm sorry?

5 JUDGE SEYER: Yes. I was going to ask you
6 to adjust your microphone.

7 MR. GRAHAM: Thank you. Well, let's see
8 if we can get some information without reference to
9 specific numbers. Assume a tax equity partnership.
10 If the locational marginal price for Boomtown were
11 less than the value that's titled in that document,
12 without reference to the numbers, starting dollars
13 per megawatt hour, rate payers will pay that
14 difference; is that correct, or do you know?

15 A. I mean, not having it in front of me,
16 I don't know what the starting dollars per megawatt
17 hour refers to. So I guess I -- I guess the answer
18 is I don't know.

19 Q. That's fair. Since Ameren Missouri's
20 supplemental direct filing in this case indicated
21 that the Company did not expect to pursue a tax
22 equity partnership Staff and other parties did not
23 have an opportunity to provide written testimony
24 responsive to potential concerns of that approach; is
25 that correct?

1 A. That is correct.

2 Q. And you heard any number of questions
3 that came from the Bench in that regard; is that
4 correct?

5 A. Are you referring to Ms. Forsberg?

6 Q. Yes, I am, sir.

7 A. Yes.

8 Q. Okay. Ameren indicated that the
9 Company would not move forward with this project if
10 the Staff's recommended hold harmless agreement --
11 hold harmless was ordered. Are you familiar with
12 that? Is that the Company's position?

13 A. I don't know that we've stated that
14 in testimony. But I do believe that is our position,
15 yes.

16 Q. Would Ameren move forward with this
17 project if the risk that the project's cost -- costs
18 exceed revenues were shared among shareholders as
19 well as rate payers?

20 A. No, we would not. There's really no
21 economic litmus test for a needed project in terms of
22 it paying for itself. I mean, with anything that we
23 need to provide service. So for example, the
24 transformer hanging out outside of my house, the
25 transformer hanging out outside of your house, it

1 doesn't provide revenues but it's needed to provide
2 service. The costs of that are reflected in the
3 revenue requirements that are used to set rates. The
4 Boomtown facility is needed to provide service. Now,
5 the fact that it can provide market revenues is great
6 and it actually might pay for itself. But there's
7 really no reason that the Company would assume the
8 risk that it will pay for itself when it's a needed
9 asset that we have to invest in for the benefit of
10 our customers.

11 **Q. So the need for this project, with**
12 **respect to the first Tartan factor -- are you**
13 **familiar with the Tartan factors?**

14 A. Yes.

15 **Q. The need is not so great that it**
16 **would make economic sense for the Company to share in**
17 **any part of the risk?**

18 A. I'd say it the other way that the
19 need is so great that it wouldn't make sense for us
20 to share in the economic risk for it.

21 **Q. You would? All right. Thank you.**
22 **That's all the questions I've got.**

23 JUDGE SEYER: Chairman Rupp, do you have
24 any questions?

25 CHAIRMAN RUPP: I do.

1 EXAMINATION CONDUCTED

2 BY: CHAIRMAN RUPP

3 Q. Good afternoon.

4 A. Good afternoon.

5 Q. So maybe you touched on this in your
6 testimony but, as we've already shown, I struggle
7 with pinpointing testimony today.

8 A. No problem at all.

9 Q. So how much would an RSP subscriber
10 pay to purchase RECs on their own versus their net
11 cost to go through this and have Ameren retire them
12 on their behalf?

13 A. So I mean, I think -- I mean, it's
14 hard to pinpoint that there's one number that they
15 would. But there is a market for RECs and they can
16 purchase those. We worked with our, you know, kind
17 of marketing function to look at what the market
18 price of RECs is and we felt like what our -- kind of
19 what we called the implied cost of a REC under the
20 program if you look at their net payments and how
21 many RECs they get and divide that out and say this
22 is the cost per REC that it was in line with what
23 they would pay. But I think one of the big
24 differences is this gives the customer an opportunity
25 to kind of lock in a 15 year term at a known price.

1 The visible market that we worked with
2 our -- you know, kind of again our marketing function
3 on. That will give you a price for the next, I don't
4 know, two, three -- you know, maybe you can see out
5 to four years. But there's really not a product that
6 I'm aware of or that our folks were aware of that
7 would kind of give you visibility to fifteen years.
8 So what it really does is offer both sides of the
9 transaction, which is the subscriber and, you know,
10 the Company, it gives you some certainty to locking
11 in a certain amount of value for those RECs.

12 **Q. I think you touched on this in your**
13 **testimony. But the secondary market for Ameren to**
14 **sell those, walk me through how that -- the tradeoffs**
15 **between what they would do, kind of refresh me on**
16 **that?**

17 A. Sure. Yeah, yeah, yeah. Thank you.
18 So you -- we as a company could certainly -- those
19 same markets that we went out and looked at what it
20 would cost to buy RECs, we could market and sell our
21 RECs there. Now, to me there's two things. One is
22 there would be uncertainty because that -- you know,
23 we couldn't forward a contract for 15 years to sell
24 the RECs and figure out, you know, how much revenue
25 we would get, it would be kind of subject to market

1 fluctuations over time. But to me the bigger thing
2 is if we sell those RECs to an entity that's outside
3 of our service territory then with that goes any
4 legitimate claim that we're providing renewable
5 energy to our customers.

6 So I mean, Mr. Dixon talked about -- in
7 his testimony about how important it is for our
8 customers to know that they're being provided with
9 clean energy. We wouldn't be providing that clean
10 energy to our customers if we sold it to third
11 parties outside of the service territory, right,
12 they'd be offsetting their own needs for renewables
13 they might build somewhere else so we couldn't claim
14 to be providing our customers clean energy. You
15 know, any customers that were interested in that
16 would then really not care that we built that solar
17 'cause they don't get any claim to the renewable
18 attribute of it so to speak.

19 **Q. Okay.**

20 JUDGE SEYER: Excuse me. Chairman, is
21 your microphone on?

22 CHAIRMAN RUPP: I believe it is. I just
23 need to turn it.

24 JUDGE SEYER: Sorry.

25 BY: CHAIRMAN RUPP

1 Q. OPC has talked about a 50/50 cost
2 share?

3 A. Correct.

4 Q. In your words what -- why is that not
5 appropriate under this proposal?

6 A. So I think, you know, there's been
7 some history around cost sharing on voluntary
8 programs. But I think the really important
9 difference here is irrespective of this program we
10 brought this resource because it's a needed part of
11 our forward looking generation portfolio to serve
12 customers. If you look at our generation portfolio
13 there's no other resource, there's no other
14 generating facility where we share in risk. I mean,
15 it essentially would make the renewable generation
16 that we know we need going forward kind of almost
17 second class in terms of cost recovery to the other
18 types of resources, right. We have -- you know, it
19 could be that Callaway doesn't cover its costs in a
20 given year, it could be that any of our other
21 facilities doesn't. But we don't take on that
22 economic risk.

23 And I think even if you read Staff's
24 testimony they'll say once a -- once a resource is
25 determined to be needed its costs -- its prudent

1 costs -- they should be prudent, of course, right.
2 Our prudent costs should be reflected in the revenue
3 requirement and the risk that things don't turn out
4 exactly like you thought they were at the time you
5 made the decision shouldn't bear on shareholders per
6 se because they needed to build that resource or that
7 asset or whatever it is in order to serve its
8 customers.

9 **Q. So what is there is a protection for**
10 **you to just underprice the cost of this program for**
11 **participants to ensure that it is fully subscribed**
12 **and just to make sure you have a fully subscribed**
13 **program?**

14 A. Well, I think one thing is, you know,
15 you can look at the prices and see if we've
16 underpriced it. At the time that we priced it we had
17 full models that said what we expected the cost to
18 be. But the larger point to me is that no matter
19 what happens, having the subscribers is going to
20 reduce cost for all customers, there's going to be
21 net revenues that are coming in from that program.
22 So you say -- I mean, it actually is, I think, in
23 non-subscribing customer's interests that we price it
24 at a levels that guarantees we attract enough
25 customers. Because those customers are going to come

1 in and pay something towards that resource, it's
2 going to be the net of the program charge and the
3 resource credit. But if we price it at a level that
4 doesn't attract folks we get no contribution from
5 them so we're left maybe we can try to sell the RECs
6 on the third party market. But again, we have no
7 guarantee at what those revenues would be and we
8 would lose the clean attributes for the benefit of
9 Missouri customers.

10 So I guess what I would say to you,
11 Chairman, is that if we happened to have underpriced
12 it -- and again, we used a snapshot in time of what
13 we thought the costs were going to be and our
14 witnesses have said the cost has gone up since then.
15 So we didn't knowingly underprice it but the world
16 has turned out that if you were going to, you know,
17 look at that cost it would be underpriced from that
18 perspective. But it's still beneficial to all
19 customers because it provides a really good market,
20 long term locked in essentially to provide value for
21 those RECs that's going to lower the revenue
22 requirement for all customers.

23 **Q. Maybe you're not the right person to**
24 **ask for this. But my memory is telling me that**
25 **Ameren had a solar proposal plan several years ago**

1 where they were going to put solar panels on top of
2 commercial industrial businesses. Basically the
3 business would not own the panels, it was just a,
4 hey, let us use your roof. To my knowledge, was that
5 fully subscribed or did that go anywhere?

6 A. I think that was called solar
7 partnership program. And I believe we had -- I'm not
8 a hundred percent sure that there was not more. But
9 there was at least one customer that we did do that
10 with. And I wouldn't necessarily call it a
11 subscription in that case, right. They weren't
12 actually getting energy, they weren't getting RECs.
13 But it was a partnership. It was a way to, you know,
14 essentially work with our customers so that they
15 could have, you know, the visibility of renewable
16 resources and aid us in finding good locations for
17 solar and we could, you know, then develop a resource
18 to serve all customers. I'm pretty sure we have one
19 customer that we entered into a project and completed
20 that's in service under that. There may possibly be
21 more than that but I'm not a hundred percent sure of
22 it myself.

23 Q. Did that conversation come up when
24 you were creating your pricing models that you wanted
25 to have a solar project with commercial and

1 industrial people that was fully subscribed versus
2 the one that only had one customer and so therefore
3 you wanted to ensure that it would be fully
4 subscribed?

5 A. So I mean, I don't think we have --
6 the solar partnership, we -- I don't think we were
7 really even thinking about that framework at all when
8 we were -- in fact, really what we were thinking
9 about we had a Renewable Choice Program where we were
10 trying to do something similar to this Renewable
11 Solutions. That one just had some really program
12 design issues that made it never really take off.
13 But that's really what we were trying to replace.
14 The solar partnership is really kind of separate and
15 apart from this model, the way I think about it at
16 least. I don't think if that's helpful or not.

17 Q. No. Just curious what the thought
18 process was present during your discussions of
19 pricing this. If the Commission were to go forward
20 with a 50/50 proposal, would you have to go back and
21 renegotiate with all of your pre-subscribed clients?

22 A. Well, the only way we would have to
23 negotiate with clients is if something changed in the
24 tariff. So if -- you know, I think the bigger
25 question would be would -- because 50/50 I believe

1 would impose the risk on shareholders not the
2 subscribing customers. The bigger question is would
3 Ameren proceed with the program and I don't believe
4 that we would plan to. You know, I mean, I guess if
5 the subscribers wanted to take on the risk that we
6 weren't taking on there could be a negotiation around
7 that. But my expectation is it wouldn't change the
8 tariff so it wouldn't kind of let the subscribers out
9 of their commitment. But it would make Ameren
10 Missouri question its own ability to kind of go
11 forward with the program.

12 **Q. Is there any type of penalty to --**
13 **sorry. Is there any type of penalty to a**
14 **pre-subscriber for backing out of the --**

15 **A.** Well, so there is a termination
16 provision. So if a customer wants to back out, the
17 first thing that we would do is try to market it, and
18 we do have a substantial wait list of customers. So
19 if there's someone who's willing to assume the
20 subscription then the subscriber can walk away but
21 you have a backfill for it on our list. If there is
22 no backfill and they want out there is a defined
23 termination fee in the tariff which essentially kind
24 of looks at the commitment that they've made and
25 projects what it would be and charges kind of that

1 net amount under the contract. So it kind of
2 projects what the net bills would be expected to be
3 based off of whatever experience you've had in the
4 program up to that point and tries to recover the
5 cost from that customer that would terminating. Our
6 preference would be for them to find a backfill
7 subscriber and at least at this point we think that
8 would be pretty easy because we have a lot of
9 interested customers, you know, on a wait list and/or
10 just expressing interest.

11 **Q. So if you have a lot of interested**
12 **customers on a wait list do you think that you priced**
13 **it competitively or do you think it's -- everyone's**
14 **lining up because it's one heck of a deal?**

15 A. I think we priced it fairly is my own
16 sense. When I say the wait list, I mean there's a --
17 they certainly haven't signed on at a particular
18 price. So if we ran the price up I think we would
19 test that theory, right. And if we do another
20 resource we'll have to figure out what our pricing,
21 you know, philosophy is there. I'll tell you, when
22 we did price this we didn't know, we didn't know what
23 the market would bear and so we had to, you know, do
24 our best analysis of what we thought was fair. We
25 looked at the prices of RECs in the market, we looked

1 at the cost of the resource, we looked at the
2 benefits of the resource and tried to figure out from
3 all of it what did we think was a reasonable price.
4 We were worried that it could be too high or too low,
5 we didn't know that, you know, no one would sign up
6 or we didn't know if we would get a flood. We can
7 take that information back and try to do a better
8 job.

9 But it's always going to be, you know,
10 trying to feel out what the market is in addition to
11 really looking at what's fair in terms of the costs
12 of the project and of RECs and things like that. I
13 mean, it is a balancing act for sure pricing a
14 program like this. To me the real question of is it
15 priced well is that it's going to make a significant
16 contribution to affordability for all customers and
17 it's at a price where we were able to subscribe it
18 and bring that benefit forward.

19 CHAIRMAN RUPP: I think that's all I have,
20 Judge. Thank you.

21 JUDGE SEYER: All right. Thank you,
22 Chairman. Do any of the other commissioners have
23 questions for the witness?

24 MR. HOLMAN: No questions, Judge. Thank
25 you. Holsman.

1 JUDGE SEYER: Thank you, Commissioner.

2 All right. I've got some questions myself.

3 EXAMINATION CONDUCTED

4 BY: JUDGE SEYER

5 Q. Mr. Wills, have you been here all
6 day?

7 A. Yes, I have.

8 Q. And so you've heard other witnesses
9 testify?

10 A. Yes.

11 Q. Okay. I'd kind of like to touch on
12 what I asked Ms. Forsberg as far as the investment
13 tax credit versus the production tax credits. Can
14 you -- well, first of all, do you agree with her that
15 use of the investment tax credits generally is
16 benefited by a tax equity partner?

17 A. I definitely agree, pending the --
18 kind of the IRS guidance that Ms. Forsberg was
19 talking about. If the transfer of ITC credits is
20 subject to normalization, which we don't know right
21 now, then I do think a tax equity partnership would
22 be beneficial. If it's not subject to normalization,
23 my personal opinion is I expect it probably wouldn't
24 but we would still need to do the analysis. We
25 wouldn't decide that based off what I just said right

1 here, we would look at it closely at the time.

2 **Q. And I apologize if she explained**
3 **this. But when you say normalization does that just**
4 **mean the ability to sell in the open market?**

5 A. No. So the normalization -- and let
6 me try to explain it. I think Ms. Forsberg tried to
7 explain it a little bit. So if we invest, you know,
8 X dollars in a solar facility today the investment
9 tax credit would say you've got 30 percent of X or
10 40 percent of X, depending on if it's in an energy
11 community, as a tax credit immediately. Now, -- so
12 that's cash that comes into the company. But IRS
13 normalization rules say that when you're building
14 your revenue requirement in a rate case you can't
15 provide the benefit of that cash to your customers to
16 lower the revenue requirement today, you have to
17 spread it out over 30 years. And that's -- you know,
18 we would prefer to give it back to our customers
19 today, that's cash that would improve the
20 affordability.

21 But they say that the normalization means
22 you have to put that cash into your revenue
23 requirement -- and I hope I'm saying this from an
24 accounting perspective right but I think practically
25 it's right. You have to spread it out and use it to

1 offset rates gradually over 30 years rather than
2 taking the benefit of all that cash right up front.

3 **Q. But the Company itself is able to use**
4 **-- take a tax credit of 40 percent of the cost up**
5 **front?**

6 A. That's correct. And so we're looking
7 for how can we make sure that we take that tax credit
8 and provide the benefits back to customers, what's
9 the best mechanism to do that in as close to realtime
10 as we can.

11 **Q. And then can you compare that to the**
12 **use of the production tax credits?**

13 A. Sure. So the production tax credits
14 already come in over time over the life of the
15 product because -- of the facility because they're
16 tied to production, right. So when the facility
17 generates a kilowatt hour we get a tax credit.

18 **Q. Right.**

19 A. Next year it generates one we get
20 another tax credit. So it's already spread out over
21 the life.

22 **Q. As opposed to project cost?**

23 A. Right. That's right.

24 **Q. Okay. How do you compare the two tax**
25 **credit programs when it comes to allowed return and**

1 **amortization and those types of parameters?**

2 A. I mean, essentially we look at the
3 impact on the net present value of revenue
4 requirement. So in a revenue requirement, you know,
5 the tax -- the production tax credits would just come
6 in as an essentially dollar for dollar offset to the
7 revenue requirement as it -- as energy is produced
8 over its life. So you would just calculate your
9 projected revenue requirements reflecting that offset
10 to costs, right. If you're doing ITC it's more
11 complicated because you need to know again is it
12 subject to normalization or not.

13 But if it's not subject to normalization
14 and that cash comes in I believe the way it would be
15 handled in a revenue requirement is it would just
16 reduce the amount of rate base that you apply your
17 cost of capital to. So, right, if you had X dollars
18 of investment but you got a 40 percent tax credit
19 you'd only put 60 percent of X in rate base to build
20 your rates off of up front. So -- and then I think
21 as you -- I mean, you'd just go through normal
22 appreciation and amortization of the resource over
23 time normally but you would have this cash benefit up
24 front that would reduce rate base and reduce the
25 amount of return that customers had to pay for the

1 cost of capital of that investment.

2 I hope that made sense.

3 **Q. Close enough. Would you agree with**
4 **Ms. Forsberg when she said that the Company hasn't**
5 **decided on which of those two tax credit programs**
6 **they're going to use?**

7 A. Yes, that is correct. And part of
8 that is because we're still learning about the rules
9 that will surround these things. And then part of it
10 is also because it depends on the tradeoff between
11 how much investment you're going to make versus how
12 much production you're going to expect. And we want
13 to see how much investment it's going to take plus
14 get that additional IRS guidance about the rules that
15 are going to impact it.

16 **Q. So when it comes to the -- when it**
17 **comes to the cost of this project, can you kind of**
18 **lead me through what the subscribers will be**
19 **responsible for versus the non-subscribers?**

20 A. Yeah. So I'm trying to think the
21 best way to do that because there's a little bit of
22 complexity to it. So the easiest way probably to
23 think about it is there's -- you know, we have got
24 this charge and credit but there's going to be net
25 revenue from that. It's going to be, you know, a

1 positive contribution that offsets the cost of this.
2 Now, we're not in the -- we're not trying to get down
3 to the, you know, the weeds of saying that it's
4 paying for this cost versus this cost and the revenue
5 requirement, we're just saying, look, there's
6 \$12 million in the base case net present value
7 benefit, that's going to offset some costs.

8 Now, there was some cost of service theory
9 that underlies the way we get there. And so what --
10 you know, the way we got to the charge and to the
11 credit. And so the cost of service theory we had was
12 we priced it off of customers paying really more than
13 -- slightly more than a hundred -- subscribers paying
14 slightly more than a hundred percent of the expected
15 cost. So they would pay for everything that was
16 expected. But we built the program knowing we did
17 not intend to true up that cost to the actuals that
18 come in over time. So variances in that cost would
19 impact the revenue requirement. And just like they
20 would with, you know, if this resource were done
21 without the program and we were doing it solely for
22 the need, which we are doing it for anyway.

23 **Q. Can you help me understand what is**
24 **behind -- why the estimated project cost has**
25 **increased?**

1 A. So I can give you what I know about
2 that. It's going to be limited. But essentially my
3 understanding of it is that, you know, the price of
4 the actual equipment, the panels, doesn't get locked
5 into until we have a decision to go forward. And
6 various pressures on the solar panel market, I
7 believe, are causing the estimate of what that cost
8 will be to have increased. I'm not the -- you know,
9 the person dealing with that up close, so...

10 **Q. I've read a lot of testimony, and I**
11 **apologize if I get a little confused on the**
12 **testimony. But Renewable Choice, was that a prior**
13 **program that was similar to this Renewable Solutions**
14 **Program?**

15 A. Yes. We have an effective tariff for
16 the Renewable Choice Program and there are many, many
17 similarities between it and Renewable Solutions.
18 Renewable Choice just though had a few design issues
19 we learned about as we tried to both subscribe
20 customers and acquire projects to serve that program
21 that caused it to -- it never gelled so to speak, we
22 never got subscribers and resources lined up. So
23 this is an attempt to kind of fix some of those
24 problems and make some of that work.

25 **Q. I believe in your direct testimony**

1 **you said that the -- with the Renewable Choice**
2 **Program you didn't like the idea that the credit was**
3 **being linked to market prices and so the Renewable**
4 **Solutions Program was developed based on a fixed**
5 **price, right?**

6 A. Right. And I would say more so it
7 was we didn't believe our customers who wanted to
8 subscribe liked it being linked to market prices and
9 we had real trouble, you know, getting people over
10 the hump to sign, you know, a commitment to
11 participate in the program not knowing kind of what
12 the costs per kilowatt hour -- I shouldn't say cost,
13 the credit per kilowatt hour of their generation
14 would receive. So that was kind of a learning from
15 the program.

16 **Q. And is the RSP program -- is the RSP**
17 **based on fixed revenues?**

18 A. The RSP? Yeah. So the charge is
19 fixed. So say a customer wants 10 megawatts of
20 capacity dedicated to them, we'll take 10 megawatts
21 times the rate stated in the tariff -- actually the
22 tariff is stated in per kilowatts. So we'd take
23 10,000 kilowatts times the rate stated in the tariff
24 and that's their bill regardless of how much -- for
25 the charge side. The credit is what gives them

1 benefits in proportion to the amount of energy that
2 it generates. And again, that's something that helps
3 absorb some of the production risk so that it won't
4 impact non-subscribers.

5 **Q. Is there -- is there a risk of market**
6 **revenue fluctuations that falls on the subscribers or**
7 **the non-subscribers?**

8 A. Revenue -- sorry, market price
9 fluctuation, is that --

10 **Q. Market -- well, I called it market**
11 **revenue fluctuations.**

12 A. If the market revenues just due to
13 production level changes all or the majority of that
14 would fall on subscribers. If market prices change,
15 just like with any of our other resources that we use
16 to serve all customers, the benefits of higher prices
17 would go to all customers and the cost of lower
18 revenues would go to all customers. So price -- the
19 market price is kind of impacting non-subscribers but
20 the volume is impacting subscribers. So that's
21 something that doesn't exist with any of our other
22 resources. You know, if any of our other plants'
23 production declines there's no hedge against that
24 from a program. So we do -- are able to shield
25 subscribers -- I'm sorry, non-subscribers from a

1 certain amount of market risk that they wouldn't be
2 shielded from if the resource were done without the
3 program.

4 **Q. So the subscribers to the Renewable**
5 **Solutions Program, for what they pay, are they -- are**
6 **they paying for renewable energy credits?**

7 A. I mean, you can think of it that way
8 certainly.

9 **Q. Indirectly?**

10 A. Yes. That's right. So basically
11 they're saying that, you know, I -- certain customers
12 really do care about buying what they call a bundled
13 product, I think, where the energy source is also
14 providing energy and -- you know, by virtue of the
15 fact that it's on our system, you know, that is
16 meaningful to some of our customers. Some customers
17 care about just buying a REC at its simplest level,
18 they're just paying for a REC. But the fact that we
19 can bundle it as a tariff product in our service
20 territory is a meaningful distinction, I think, to
21 some of our customers.

22 **Q. And again, -- I don't know, maybe the**
23 **answer to this is indirectly as well. But are they**
24 **paying for that -- the energy that they consume?**

25 A. So they're paying their base tariff

1 still. So they pay 100 percent of their underlying
2 tariff. So they're paying for the energy that they
3 consume at the underlying tariff. Again, I think we
4 did come at this program, you know, looking at it
5 through a variety of lenses. But the easiest way to
6 think about the program is probably just what you
7 said is that they're kind of paying an implied rate
8 for a REC to go on top of the energy they're paying
9 for under their base tariff.

10 **Q. Are they paying for the capacity cost**
11 **of the project?**

12 A. That's what the renewable resource
13 charges is based off of, yes.

14 **Q. Okay. As it stands now, or how it's**
15 **envisioned, will the plant be included in the rate**
16 **base?**

17 A. Yes.

18 **Q. And how is that -- how will that cost**
19 **be recovered from customers?**

20 A. Just through normal base tariff
21 rates. So it would get reflected -- it would get
22 billed, we would have to have a rate review where we
23 were resetting rates. We would calculate a revenue
24 requirement that included that in rate base and rates
25 would be set based off of that level going forward.

1 You know, the benefit of the program is that there
2 would also be certain revenues coming in that would
3 offset some of that that would also get reflected in
4 the revenue requirement to reduce the total cost.
5 But you would see both pieces in a revenue
6 requirement calculation. The full cost of the
7 resource would be reflected in those rates and so
8 would some benefit from the program as an offset to
9 it.

10 **Q. And would that -- would that cut**
11 **across all rate payer classes?**

12 A. Yeah. 'Cause our -- you know, our
13 assessment of need for this is the need to serve all
14 of our customers. We need energy resources to serve
15 all of our customers.

16 **Q. Okay. I mentioned the renewable**
17 **energy credits a second ago. Do you know how many**
18 **RECs will be produced by the project?**

19 A. We have an estimate. So the easiest
20 way to get there -- Ms. Forsberg talked about, I
21 think, 25.6 percent net capacity factor being the
22 expectation. So what you would do is you'd take 150
23 megawatt capacity times that 25.6 percent capacity
24 factor times the number of hours in a year,
25 8,760 hours in a year. There actually happens to be

1 a calculator sitting up here. I could do that, if
2 the calculator works.

3 **Q. State property.**

4 A. I've got a calculator on my phone
5 that might be faster, if you want me to do the math
6 on it. You know what, it was in that table in my
7 testimony also.

8 **Q. I was going to say, but does your**
9 **phone spit out a paper tape?**

10 A. But there was table in my testimony
11 also. So renewable energy to subscriber kilowatt
12 hours. In the base case it was 339,012,000 kilowatt
13 hours so that's 339,012 megawatt hours, if you want
14 to think of it in megawatt hours. That's the base
15 case. And you can -- in my testimony on Page 40,
16 Table 1, there's also a low generation and a high
17 generation case.

18 **Q. Is that your direct?**

19 A. My surrebuttal.

20 **Q. Surrebuttal, okay. I see. If you**
21 **know, what is the current market value of the RECs in**
22 **Missouri?**

23 A. I don't know with a lot of
24 specificity. We looked at some numbers with our
25 trade group. And really if I said them out loud I'd

1 be going off of a memory that's a few months old
2 because we did it when we were doing the pricing
3 exercise here. There is information in like our
4 renewable compliance plans, you know, our
5 demonstration that we've complied with Renewable
6 Energy Standard. We buy RECs there and there's
7 numbers reported in that report.

8 I feel a little unconfident in putting a
9 number out there because it's just -- it's not fresh
10 in my mind exactly what those are. I will say though
11 it was -- the range that we had for -- in my direct
12 testimony there was an implied cost of REC that we
13 say that the subscribers will be paying and I felt --
14 I felt and we felt as a team putting this program
15 together that it was very much in line with what we
16 believed the market was at that time.

17 So for example, in my direct testimony on
18 Page 18 I said that the implied cost of a REC to the
19 subscriber at the P50 level was \$3.91 a REC and at
20 the P75 production level it was \$5.62 per REC and at
21 the P99 production level we said it was \$10.36 per
22 REC. Now at that P99 that to me was well above what
23 we believed that the market was at that time but it
24 was also a very low probability of occurring. The
25 P50 and the P75 at \$3.91 and 5.62 we thought were in

1 line with the market of what a customer would pay for
2 a REC.

3 **Q. Now do the value of RECs fluctuate**
4 **over the life of the renewable generation asset**
5 **whether it be solar or wind?**

6 A. It depends on if you're -- how you're
7 selling it. If you're selling them under a, you
8 know, a contractual commitment they'll -- you know,
9 that price is set in the contract. But if we were to
10 just sell them on the market, yeah, that's absolutely
11 subject to market price fluctuations.

12 **Q. What would cause those fluctuations?**

13 A. Just general supply and demand of
14 RECs in the market.

15 **Q. If we were to -- well, if we were to**
16 **separate out the Renewable Solutions Program and the**
17 **Commission were to approve only the CCN for the solar**
18 **project, would those RECs be owned by Ameren**
19 **Missouri?**

20 A. Yes.

21 **Q. And could Ameren Missouri monetize**
22 **those RECs?**

23 A. Probably. Assuming that there
24 remained, you know, liquid market out there to sell
25 to. To me, I would -- I still think it's in our

1 interest to sell them to our own customers for the
2 economic development reasons that I talked about
3 earlier and that Mr. Dixon talked about. And we
4 could potentially still sell them to our customers, I
5 mean, we've have to enter a new agreement to sell
6 them, you know. But for as long as there continued
7 to be demand then yes, we could sell them.

8 **Q. Would those RECs be sold throughout**
9 **the life of that project?**

10 A. They could -- they potentially could
11 be. I mean, we'd have to continue to evaluate, you
12 know, what the best thing to do with them was,
13 whether there was, you know, a contract to enter into
14 or whether we valued, for economic development and
15 other reasons, to make sure that they went to our
16 load. We might retire them on behalf of our load.
17 There would be a variety of options that we would
18 consider.

19 **Q. And I'm hesitant to this ask question**
20 **because it may reveal my lack of knowledge about the**
21 **RECs and Ameren's role with them. But in the past**
22 **has Ameren had these RECs to sell?**

23 A. No. We've been -- in fact, we've
24 bought -- I mean, in given years we've bought RECs to
25 comply with Renewable Energy Standard. I think the

1 other thing is that we can -- under the Renewable
2 Energy Standard we can bank RECs for up to three
3 years. So I don't think we've ever gotten into a
4 position where we had RECs that wouldn't go toward
5 either our Renewable Energy Standard requirement in a
6 given year or into our bank that could be used. I
7 mean, it's possible that I'm forgetting about a time
8 when we've ever had excess RECs. I mean, I haven't
9 gone back right before this and reviewed every, you
10 know, RES compliance filing that we had to refresh my
11 memory. But my recollection is that we haven't sold
12 off excess RECs. That's to the best of my
13 recollection. It certainly hasn't been a lot.

14 **Q. Does Ameren have a policy whereby**
15 **they've retired those RECs?**

16 A. Yes. Certainly for the Renewable
17 Energy Standard compliance assets we retire them, you
18 know, specifically pursuant to the requirement under
19 the RES standard. I don't think we've had excess
20 RECs beyond that. Like I said, to my recollection.
21 Under the -- if we have the program we'll set up a
22 policy that they'll be retired on behalf of
23 subscribing customers.

24 **Q. And how does that benefit the**
25 **customers?**

1 A. Essentially they own the attributes
2 of the renewable energy so they can make public
3 statements that they're served by 100 percent clean
4 energy, emissions free energy, meets their
5 sustainability goals, it meets -- you know, things
6 like that.

7 **Q. If the RECs that result from this**
8 **Boomtown project are owned by Ameren Missouri and**
9 **they are eventually retired by Ameren on behalf of**
10 **subscribed customers, will the non-subscribers see**
11 **any benefit from the retirement of those RECs?**

12 A. If the program -- I'm sorry. Was
13 your question if the program is happening or if it's
14 not happening?

15 **Q. Well, I mean, if it's happening where**
16 **-- if the scenario is Ameren receives those R-E-Cs,**
17 **those RECs, and sells those, retires them, on behalf**
18 **of the subscribed customers, will the non-subscribers**
19 **receive a benefit from that?**

20 A. Certainly they'll receive the benefit
21 of the revenues. I would argue that they also
22 receive a benefit in terms of they are being retired
23 for load in Missouri. Which when you talk about the
24 business climate and, you know, Mr. Dixon earlier
25 talked about how businesses that are trying to site

1 here and locate here that create economic activity in
2 our service territory and that help pay for the fixed
3 cost of our system care about knowing what is the
4 energy mix in that territory and we can legitimately
5 claim that our energy mix is cleaner if they're
6 retired for customers in our territory. So the
7 benefits to me are, one, the revenues that they would
8 get from the program, from the subscribers; and two
9 is the -- essentially the reality that clean energy
10 is in Missouri and that provides a lot of, you know,
11 enhancements in terms of these things like economic
12 development and things like that.

13 **Q. If the project produces excess RECs**
14 **how will the sale of those benefit customers?**

15 A. Every REC that gets produced -- as
16 long as the program is fully subscribed every REC
17 that gets produced goes to a subscriber.

18 **Q. And then how would the Company treat**
19 **those revenues?**

20 A. They would all go back to
21 non-subscribers. Every dollar of revenue that comes
22 -- so we actually proposed a tracker in this case
23 because it was possible that due to the operation of
24 regulatory lag Ameren Missouri shareholders would
25 essentially benefit from the revenue from those RECs.

1 We wanted to make it 100 percent clear that we're
2 trying to promote the affordability of the resource
3 for non-subscribers. So we proposed a tracker that
4 every dollar that comes in from this program gets
5 deferred so that it can be amortized in rates as an
6 offset to revenue requirement to reduce rates for all
7 of our customers.

8 **Q. Outside of this Boomtown project, is**
9 **that how the sale of RECs had been treated, where**
10 **they benefit all the rate payers?**

11 A. So outside of it they've been retired
12 just for RES standard compliance so they don't
13 produce revenues. We're not allowed to sell them and
14 also retire them for RES compliance.

15 **Q. All right. I'm going to change the**
16 **subject a little bit and talk about Illinois.**

17 A. Uh-huh.

18 **Q. And Illinois has recently passed**
19 **legislation and I think you speak to it in your**
20 **surrebuttal?**

21 A. Yes.

22 **Q. And it's aimed at reducing carbon**
23 **emissions. And I think the legislation itself states**
24 **that it reflects the -- or maybe this is your**
25 **testimony -- reflects the, quote, political reality**

1 that supports renewable development in the state
2 along with the need for capacity in Illinois which is
3 MISO Zone 4. And the state's obvious preference for
4 emission free sources. Yeah, I believe that was in
5 your surrebuttal.

6 Are there any Missouri laws that
7 demonstrate a similar preference for additions of
8 renewable energy in Missouri?

9 A. I think the RES standard is
10 recognized as a policy preference for renewables.
11 There's a number of Commission orders that I cited in
12 my surrebuttal testimony where the Commission relied
13 on that not only as, you know, we have to meet that
14 Renewable Energy Standard but that it does say in
15 some of those orders, if I recall correctly, that
16 that indicates just a policy preference that this
17 Commission has kind of expressed towards renewables.
18 Now, there's not any legal requirement that we go
19 above 15 percent renewables but I think that has been
20 recognized by the Commission in certain cases as kind
21 of being representative of the fact that there is a
22 policy directive to support renewable development in
23 the state.

24 Q. Does Ameren, does their recognition
25 of the differences between Illinois and Missouri, as

1 far as politics go, mean that in practice Ameren will
2 only pursue additions of carbon intensive generation
3 facilities in Missouri despite the need for capacity
4 in both Illinois and Missouri?

5 A. So are you asking like if we were
6 building a gas plant would we take Illinois off the
7 table as a place to -- I think the law would -- I
8 believe the law would take it off the table and I
9 think --

10 Q. Illinois' law would?

11 A. I believe it would. And if not, I do
12 think it would give us significant pause, even if the
13 law didn't prevent it, because I think we would take
14 that into consideration for sure.

15 Q. All right. Quote, unquote, the
16 political realities in Illinois versus Missouri?

17 A. Yeah.

18 Q. Okay. Will there be any impact of
19 the Clean Air Act on compliance for your generation
20 facilities in Missouri?

21 A. Any impact of the Clean Air Act?

22 Q. Has that -- has the Clean Air Act, I
23 guess, affected the Company's decisions on how to --
24 how and when to retire coal generation facilities and
25 so forth?

1 A. Yes. Speaking to which exact
2 environmental regulations are most impactful would
3 have really been Mr. Michel's wheelhouse. But I will
4 say that the existing and potential for new
5 environmental regulations absolutely has, you know,
6 impacted our view on the need to transition and the
7 kind of risks around the lives of our existing coal
8 facilities and natural gas facilities for that
9 matter. But as far as, you know, which specific
10 regulation drove -- drives what decision, it would
11 really be a question that would have -- unfortunately
12 would have been better suited to Mr. Michels earlier.

13 **Q. Can you speak to the -- the decision**
14 **on siting these panels in Illinois? Is there any**
15 **risk in that going forward as far as the political**
16 **climate in Illinois?**

17 A. From the political climate? There's
18 nothing that I can think of that would create a risk
19 around solar development in Illinois from the
20 political climate.

21 **Q. Is it possible that the Illinois**
22 **legislature could also pass legislation that might**
23 **change the perception of its receptiveness of**
24 **renewable projects?**

25 A. I mean, I guess I suppose in the

1 future anything is possible. I find it unlikely that
2 they would shut down existing resources that are
3 providing service over something like that. They
4 might move away from a preference for promoting more
5 new development in that way. I mean, anything's
6 possible in the future, right. But...

7 **Q. Is it possible that -- well, I guess**
8 **again anything's possible. But is it possible that**
9 **Illinois law makers could pass land use restrictions**
10 **that could affect additional installations of solar**
11 **in Illinois?**

12 A. Like you said, I imagine anything's
13 possible. I don't know too much about those issues
14 and how they would be perceived in Illinois. But --
15 I probably can't say really too much more about that.

16 **Q. Has Ameren Missouri given thought to**
17 **the possibility that there might be future**
18 **restrictions on the mining of heavy metals and rare**
19 **earth minerals and components that would be needed**
20 **for the production of battery storage?**

21 A. I think probably so. I mean, that's
22 really something that's outside of my line of sight
23 really and the things that I'm involved in
24 day-to-day. So I'm not really well positioned to
25 answer your question on that.

1 Q. Okay. All right. This is -- I'm
2 going to test both of our memories. But early on
3 when Mr. Arora testified I was asking him about the
4 preferred plan resource timeline in the preferred
5 resource plan. In regard to 700 megawatts of wind
6 coming online in 2021 and then in 2022 827 megawatts
7 for the Meramec Energy Center was retired. Does that
8 mean that Ameren Missouri is currently short in
9 capacity 127 megawatts? I'll ask that question
10 first.

11 A. Okay. And I would say no, it
12 doesn't. And the thing that you are -- I mean, I
13 think Mr. Michels got into this a little bit. But we
14 were already long capacity when we had that. But,
15 you know, we're not really looking at this in terms
16 of a one for one exchange of capacity. We're looking
17 at what are our forward looking needs and what's the
18 mix of the right types of resources there. So when
19 Meramec retired that didn't create a short capacity
20 position for us so there wasn't any kind of one for
21 one consideration of a new resource to replace that
22 on a capacity basis.

23 Q. But there -- it's fair to say, right,
24 that --

25 A. Our relative length got less by some

1 amount, if that's where you're going. I'm sorry, I
2 didn't mean to jump your question.

3 Q. No. All I was going to -- I don't
4 guess it's so much a question. But there is a
5 concern, is there not, long term with the retirement
6 of the coal and gas generated -- generating
7 facilities having to be replaced and having to meet
8 -- and again, I apologize if I get the terminology
9 wrong. But the capacity to replace those plants?

10 A. Absolutely. And that's really why we
11 think that the right lens to look at a resource
12 decision is the Integrated Resource Plan because, I
13 mean, you know, the Integrated Resource Plan looks at
14 all of those factors in an integrated fashion, that's
15 why we call it that, right. And so, you know, our
16 plan does have quite a bit of renewables in it and
17 does have a certain amount of accredited capacity
18 value but it is lower than some of the other
19 resources. That's why it's really important that
20 we've started doing this what we call all hours
21 probabilistic.

22 Mr. Michels talked about the Astrapé
23 analysis that we do earlier. We're trying to pick
24 the right attributes or resources to construct kind
25 of what does our fleet look like in the future when

1 it's -- you know, meeting really the three pillars
2 that I talked about in my surrebuttal testimony, that
3 is used all of the three pillars of affordability,
4 reliability, and sustainability. You know, reduce
5 emissions, still provide that level of reliable
6 service to customers in an affordable manner. And
7 you can't do that by just looking at what's the one
8 resource I need next and then wait and then say,
9 okay, now what's the one resource I need next. You
10 need to like do a thoughtful staging of like what
11 does that new fleet look like and build it in a
12 systematic manner over years and pick -- so the
13 combined cycle that we've got in 2031 will help with
14 that capacity element. We've got a certain amount of
15 battery storage in there.

16 And then these energy resources, these
17 carbon free energy resources that will help meet, you
18 know, sustainability goals but also provide the low
19 cost energy that we need will be a part of that.
20 We're designing kind of this vision of the future
21 fleet and you can't do that by one at a time saying,
22 okay, now what's the next problem, 2027 winter, let's
23 go get something for that. That's not how it works,
24 you have to build this with a vision for the entire
25 process.

1 Q. Earlier you referred to that Table 1
2 in your surrebuttal testimony, it's on Page 40.

3 A. Yeah.

4 Q. It's got columns for low generation,
5 base, and high generation. Ms. Forsberg testified to
6 the P values. Are there P values that kind of
7 correspond with low generation and high generation
8 and base?

9 A. There definitely are. I'm trying to
10 remember -- because I don't know if I noted them in
11 here. I know the base is 50, P50, that's no doubt.
12 Subject to check -- and I don't know how I can check
13 while I'm up here -- but I believe it was maybe 25
14 and 75. It's something in that order -- or P25 on
15 one end and P75 on the other. They were symmetric, I
16 can tell you that.

17 Q. Meaning the same?

18 A. Yeah. Right.

19 Q. The same distance from base?

20 A. Right.

21 Q. Okay. Since we are on your
22 surrebuttal testimony. On Page 50, Missouri
23 Industrial Energy Consumers -- Customer's witness
24 Maurice Brubaker, you were asked about him supporting
25 the request for the CCN but suggesting that the

1 program price should be lowered. You testified that
2 the pricing was fairly set and not designed to
3 fluctuate in order to, quote, true up subscriber
4 costs precisely to experienced costs, and then in
5 parens, and benefits.

6 If tax credits or grant funds resulting
7 from the Inflation Reduction Act, or the
8 Infrastructure Investment Jobs Act are utilized, if
9 the subscriber would not experience the benefit from
10 the resulting reduced project cost, who would?

11 A. Non-subscribers.

12 Q. Non-subscribers.

13 A. All customers.

14 Q. Where would those benefits show up?

15 A. They would show up as an offset -- so
16 if it was -- it would show up as either an ITC or a
17 PTC. We talked about earlier how those get reflected
18 in the revenue requirement. So those would get
19 reflected in the revenue requirement to reduce rates
20 for all customers.

21 Q. I want to shift gears a little bit.
22 And you've heard me ask other witnesses this. But
23 when it comes to the operations and maintenance costs
24 for Boomtown, will the subscribers contribute to
25 those costs?

1 A. I would answer that with yes. And
2 let me maybe clarify that, you know, the renewable
3 resource charge included an assessment of the
4 estimated cost of the resource including O&M. So
5 there is some level -- you know, there's a base level
6 of O&M expectation built into the renewable resource
7 charge rate. Now, just like everything else we
8 didn't plan to true that up, right, so if the O&M
9 comes in a little bit higher or a little bit lower,
10 actually that's something that the Company would
11 experience regulatory lag on at first and would be
12 absorbed by the Company for a period of regulatory
13 lag and then once rates were reset the new level of
14 that O&M would impact non-subscribers. But keeping
15 in mind that there was some base amount of that built
16 into the renewable resource charge that subscribers
17 are already covering. So it's really just the
18 variation in that from the levels that we projected
19 at the time that the program was designed.

20 **Q. Okay. I believe that's all the**
21 **questions I have.**

22 JUDGE SEYER: So Ms. Plescia, do you have
23 follow up questions?

24 MS. PLESCIA: Yeah. I just have a few
25 questions, Mr. Wills.

1 EXAMINATION CONDUCTED

2 BY: MS. PLESCIA

3 Q. Is it correct that RECs are an
4 attribute that gets created when a solar panel
5 generates energy?

6 A. A solar panel or another qualified
7 renewable source, I think that's fair to say.

8 Q. Okay. And can you generate solar
9 energy without RECs, without getting RECs?

10 A. I mean, I think you could not go
11 through the process of certifying it perhaps and not
12 get a REC. But I think it inherently has the
13 capability -- you know, anything is a potential REC,
14 I guess I would call it.

15 Q. Right. But there's no way that you
16 can generate solar energy and not get a REC?

17 A. That's fair.

18 Q. It's going to generate a REC?

19 A. That's fair.

20 Q. So would you agree that it's fair to
21 say that there is no incremental cost to Ameren by
22 producing a REC?

23 A. Yes.

24 Q. Okay. No other questions. Thank
25 you.

1 JUDGE SEYER: All right. Mr. Opitz?

2 EXAMINATION CONDUCTED

3 BY: MR. OPITZ

4 Q. Mr. Wills, you recall a little while
5 ago you and the Chairman were discussing the price
6 that subscribers will pay, do you recall that?

7 A. Yes.

8 Q. Customers who subscribed will
9 continue to pay their existing tariff rates; is that
10 correct?

11 A. Yes.

12 Q. And so this subscription is something
13 that would be an additional charge that they're
14 voluntarily undertaking, correct?

15 A. That's correct.

16 MR. OPITZ: That's all I have. Thank you.

17 JUDGE SEYER: All right. Mr. Thompson,
18 any follow up?

19 MR. THOMPSON: No questions, your Honor.

20 JUDGE SEYER: Ms. Greenwald?

21 MS. GREENWALD: No questions, your Honor.

22 JUDGE SEYER: All right. Mr. Williams?

23 MR. WILLIAMS: No, thank you.

24 JUDGE SEYER: Mr. Graham?

25 MR. GRAHAM: Yes, sir.

1 JUDGE SEYER: All right.

2 EXAMINATION CONDUCTED

3 BY: MR. GRAHAM

4 Q. Mr. Wills, you remember the questions
5 that the Commissioner asked you with respect to risk
6 sharing arrangements and your answer that Staff had
7 stated that when a need is established then the risk
8 should not be and Staff had admitted that the risks
9 of the project should not be shifted to rate payers,
10 you remember saying that?

11 A. I do.

12 Q. And were you referring to testimony
13 that you had read from Staff?

14 A. Yes.

15 Q. Were you referring to Mr. Luebbert's
16 testimony?

17 A. Yes.

18 Q. May I approach the witness?

19 JUDGE SEYER: Yes.

20 MR. GRAHAM: I think everybody's got this,
21 it's pre-filed. I'm going to hand you -- I'll go
22 back to my microphone and you can look at the
23 document. I've handed you Exhibit Number -- what I
24 believe to be -- what number is that? 105. And I'll
25 represent to all other attorneys in the room that

1 that is the rebuttal testimony of J Luebbert that has
2 been long on file in EFIS in this case. I'll direct
3 you to Page 10.

4 JUDGE SEYER: All right. Page 10.

5 MR. GRAHAM: Right.

6 BY: MR. GRAHAM

7 Q. **And Line 6. I'm going to read to**
8 **you, and you correct me if I read this wrong.**

9 JUDGE SEYER: All right. I apologize, Mr.
10 Graham, I'm going to interrupt you and ask you to
11 speak more into the microphone. Thank you.

12 MR. GRAHAM: Thank you, your Honor.

13 BY: MR. GRAHAM

14 Q. **"Once the need is established and the**
15 **project is determined to promote the public interest,**
16 **based upon the best information available at the**
17 **time, it is reasonable for rate payers to assume the**
18 **risks that that project selected -- to assume the**
19 **risk that the project selected is uneconomic."**

20 **First of all, did I read that correctly?**

21 A. I believe you did.

22 Q. **Is that the testimony you were**
23 **relying upon?**

24 A. That's at least one part of it.
25 There might have been -- there may have been others.

1 But that's part of it.

2 Q. Well, let's look at the rest of it.
3 Does he go on to say, "This assumption of risk is
4 justified because absent the load of the rate payers
5 the utility would not be obligated to invest in
6 additional resources."

7 Did I read that correctly?

8 A. Yes.

9 Q. That's what Mr. Luebbert's said?

10 A. That's right.

11 Q. Let's go onto the next question.
12 "Does that same principal hold when a given project
13 is either not necessary to serve the needs of rate
14 payers, is not an economically efficient use
15 resources, or is not in the public interest?"

16 Did I read the question correctly?

17 A. I believe you did.

18 Q. And did Mr. Luebbert state, "No.
19 Captive rate payers should not be expected to
20 shoulder the risk that an electric generating plant
21 built beyond the energy and capacity needs of the
22 rate payers being served is uneconomic."

23 Did I read that correctly?

24 A. I believe you did.

25 Q. Let's look at the next thing that

1 provides the context that you were looking for.

2 "Question, are these solutions to avoid this
3 unnecessary risk to rate payers?" That's the
4 question. You understand that?

5 A. I understand that.

6 Q. And then did Mr. Luebbert say, "Yes,
7 the Commissioner's role is the regulator of the
8 monopoly as a key protection against the introduction
9 of unnecessary risk by utility management on behalf
10 of rate payers. The Commission has typically
11 exercised this role through the application of the
12 Tartan factors when considering the request to build
13 new generating facilities by ensuring that all of the
14 Tartan factors are met by the utility and ensuring
15 that the utility provides all crucial supporting
16 analysis establishes needs, economic feasibility, and
17 promotion of the public interest. If the Commission
18 determines that adding additional renewable resources
19 is appropriate --" I'll read that again. "If the
20 Commission determines that adding additional
21 renewable resources is appropriate but recognizes the
22 potential risk of uneconomic outcomes should not be
23 borne solely by the rate payers it is within the
24 Commission's discretion to condition approval of the
25 CCN.

1 One potential solution is for the
2 Commission to condition any potential approval of an
3 asset with a hold harmless provision that would shift
4 some of the risk of an uneconomic outcome back to
5 shareholders and away from the captive customers."

6 Did I read that correctly?

7 A. I believe you read it correctly.

8 Q. And isn't that indeed exactly what
9 Mr. Luebbert stated in toto -- in total with respect
10 to the single statement that you had picked out and
11 quoted to the Commissioner? Isn't that what Mr.
12 Luebbert actually said?

13 MR. LOWERY: I'm going to object. I don't
14 think -- I think it mischaracterizes Mr. Wills'
15 answer. He said those are some of the statements he
16 may have relied on but that's not all of the
17 statements.

18 MR. GRAHAM: I'd like an answer to my --
19 that's an objection or is that an argument?

20 MR. LOWERY: Object to the form of the
21 question, misstates the witness's testimony. Assumes
22 facts not in evidence.

23 JUDGE SEYER: Mr. Graham, can you rephrase
24 the question?

25 MR. GRAHAM: Well, I'll just rephrase the

1 question.

2 BY: MR. GRAHAM

3 Q. Mr. Wills, is this what Mr. Luebbert
4 said in providing the rest of the text of his answer
5 that you quoted one sentence from?

6 A. Well, I -- again, I didn't quote that
7 one sentence. But what I'll tell you is I think this
8 whole statement still supports exactly what I said.
9 The question you read is are there solutions to
10 unnecessary risks to rate payers. We are making the
11 case that this is necessary. So I don't think that
12 question is relevant to the way I -- our disagreement
13 with Staff is whether this is necessary, right. But
14 I'm putting forth to the Commission that this is
15 necessary. If that's the case, I don't care what the
16 sentence says about what do you do with unnecessary
17 risk, there aren't any.

18 Q. Well, there is certainly a risk that
19 you have, and every Ameren witness has admitted to,
20 an absolute risk, indeed as far as I can tell from
21 listening to Ameren a certainty, that this project
22 will not generate revenues sufficient to cover its
23 costs?

24 MR. LOWERY: Objection, states facts not
25 in evidence. No Ameren witness has testified that

1 certain -- that the revenues from this resource won't
2 cover its costs.

3 MR. GRAHAM: I'll rephrase the question.

4 BY: MR. GRAHAM

5 Q. Isn't it true that Ameren has stated
6 repeatedly in response to my questions that if those
7 facts as I've stated them materialize, and that is to
8 say that revenues do not meet expenses, isn't it true
9 that Ameren has said that doesn't matter?

10 A. I believe our group said that that
11 should not be borne by shareholders. I mean, if
12 that's what you're getting at by doesn't matter. I
13 mean, we do care about the revenues, we think they're
14 good for our customers, but if they don't materialize
15 just like there's -- there's no revenues from the
16 transformer outside my house but those costs are
17 needed to serve customers and they're reflected in
18 the revenue requirement that's used to set rates.

19 Q. Let's get this straight then. You
20 stated you believe in response to questions that
21 Ameren will not pursue this project with a hold
22 harmless?

23 A. That's my expectation based -- I
24 mean, that's a management decision but that's my
25 expectation of management's decision based on what

1 I've --

2 Q. And you've stated -- I'm sorry, I
3 didn't mean to step on you.

4 A. Just based on the conversations I've
5 had that's my expectation of what management's
6 decision would be.

7 Q. And you've stated that that's a
8 justified conclusion because if the need is as great
9 as you state it is that the rate payers should pay
10 the whole freight, right?

11 A. Correct.

12 Q. And so your conclusion from that is
13 that if that need is that great and you are
14 nevertheless ordered by the Commission to task
15 yourself with a hold harmless provision you will not
16 build this project even though it's as great a need
17 as you said it is, you just won't do it?

18 A. If the Commission tells us it's not
19 as great of a need as we've said it is then that
20 means that we will listen to them and realize that
21 it's not as great of a need and have to regroup and
22 find something else to do to meet that need.

23 Q. Fair enough. One more. Couple more
24 questions. Does the implied program -- this is on a
25 different line, I think a follow up on what the Judge

1 was asking you. Does the implied program cost per
2 renewable energy credit, REC, decline over time, does
3 the cost of that implied program cost decline over
4 time?

5 A. It may.

6 Q. Okay.

7 A. I'd have to go back through --
8 because the renewable energy -- renewable resource
9 charge and the renewable benefit credit both escalate
10 over time at different rates. And so the cost per
11 REC in one year is not the same as the cost per REC
12 in another year.

13 Q. Okay. And you mentioned that there
14 is not an incremental cost for RECs?

15 A. Assuming they're building the
16 generation already, right.

17 Q. Okay. So there's not a -- let me get
18 this right -- an incremental cost of REC production;
19 is that right?

20 A. That's right.

21 Q. Okay. Is that true with a tax equity
22 partnership?

23 A. I believe it's true. I mean, I don't
24 know what would change about it. I can't think of
25 what would change about it.

1 Q. Thank you. I think that's all the
2 questions Staff has. Beg your pardon. You mentioned
3 the Astrapé, A-S-T-R-A-P-E, analysis?

4 A. Yes.

5 Q. Have you reviewed the cases evaluated
6 in that analysis?

7 A. I mean, I've looked at them at some
8 point in time. I didn't review them yesterday to be
9 able to rattle off a lot of answers about them but I
10 have looked at them.

11 Q. I'll try not to rattle off a bunch of
12 questions to you then. But this one. If so, did
13 Astrapé -- if you looked at some -- if you don't know
14 that's fine. If so, did Astrapé consider any case
15 that did not include solar prior to 2029? You may
16 not know.

17 A. Yeah, you're correct. I don't know.

18 Q. Okay. I believe that's it. Thank
19 you very much.

20 A. Thank you.

21 JUDGE SEYER: Mr. Graham, just so I'm
22 clear on this. Are you referring to the Astrapé?

23 MR. GRAHAM: Yeah. I did the best I could
24 with the pronunciation. It's an acronym. I think my
25 pronunciation was right.

1 JUDGE SEYER: Is it an acronym?

2 MR. GRAHAM: Is it a river?

3 JUDGE SEYER: I'm going to say it's not a
4 river.

5 MR. LOWERY: I don't believe it's an
6 acronym either, Judge.

7 JUDGE SEYER: Okay. Mr. Lowery, do you
8 have re-direct?

9 MR. LOWERY: I do, your Honor.

10 EXAMINATION CONDUCTED

11 BY: MR. LOWERY

12 **Q. You were asked some questions, pretty**
13 **sure this was by the Judge, about O&M costs, you**
14 **know, and subscriber contributions to O&M cost of the**
15 **Boomtown resource, correct?**

16 A. Yes.

17 **Q. And you mentioned that because of**
18 **regulatory lag if those O&M costs go up the Company**
19 **would actually for a time bear that increased expense**
20 **not the customers through rates, right?**

21 A. That's correct.

22 **Q. If the Company's able to drive O&M**
23 **out of the operation of Boomtown, in other words**
24 **lower O&M, once rates reset who gets that benefit?**

25 A. If it happens in between rates then

1 the Company would get the benefit of it on a
2 regulatory lag basis until the next rate review.

3 Q. But once rates are reset who gets the
4 benefits, subscribers or non-subscribers?

5 A. Non-subscribers.

6 Q. Judge asked you questions, I think,
7 about possible legislation in Illinois and you said
8 anything's possible, right?

9 A. Right.

10 Q. Like restricting use of land for
11 example, correct?

12 A. He mentioned that as an example. I
13 didn't feel very confident in knowing the details of
14 that issue but yeah.

15 Q. Is it possible the Missouri
16 legislature might restrict land for solar?

17 A. Sure. I mean, inasmuch as it is in
18 Illinois. I mean, I don't know any more about it in
19 Missouri than I do in Illinois but inasmuch as
20 anything it's possible in Missouri as much as in
21 Illinois.

22 Q. Judge asked you some questions about
23 whether the value of RECs can fluctuate, did he not?

24 A. Yes.

25 Q. And I think you said, well, supply

1 and demand could have an impact on that, correct?

2 A. Correct.

3 Q. Do you have an opinion over, let's
4 just say the next 15 years, because the customers in
5 -- the subscribers in the program would be locked
6 into buying the RECs at a certain price for 15 years.
7 Do you have an opinion about what you might expect
8 the cost -- the price of RECs in the market to do
9 over the next 15 years given supply and demand?

10 A. Yes. I would expect them to -- my
11 personal expectation, this is my view of it, is that
12 the prices would go down over time. If you look at
13 the amount of renewables in the construction queues
14 and the plans of utilities to build new renewables I
15 think supply of RECs is going to go up pretty
16 substantially. You hear MISO talking about, you
17 know, potential growth where there's 50 percent or
18 more renewable penetration, that's a lot of RECs on
19 the market. I think the supply side of that would be
20 more likely to have a long term decrease in REC cost
21 and by locking in for 15 years I think that's a good
22 thing. Again, my personal view on the market.
23 There's -- you know, if I knew I was right I'd go
24 speculate on the market and I --

25 Q. You wouldn't be here answering

1 questions from all of us today, right?

2 A. Right.

3 Q. But if your personal opinion comes
4 true then locking in those RECs at a higher price
5 than what that market price is going to be is going
6 to be of benefit, right?

7 A. It's good for all customers.

8 Q. You were asked some questions about
9 Renewable Choice Program. And if I could summarize,
10 I think what you more or less said, if I can boil it
11 down, was the program didn't work that well, we had
12 difficulty getting subscribers, right?

13 A. Yes.

14 Q. Is that why we went out and designed
15 a program and actually got subscriptions before we
16 proposed it?

17 A. That is exactly why we did.

18 Q. You're not seeing those same kind of
19 problems with this program?

20 A. No.

21 Q. Judge asked you some questions about
22 tax equity partnership, do you recall that?

23 A. Yes.

24 Q. If the Company determines that it's
25 in the best interest of its customers to use a tax

1 equity partnership in connection with the ITC,
2 presumably because it thinks it has to because of the
3 normalization rules you talked about, is the Company
4 intending to come back to the Commission and get
5 whatever permissions it needs to do that?

6 A. Yes. Again, we withdrew our request
7 for approval of anything related to tax equity in
8 this case. So we would be back to get those
9 permissions.

10 Q. I think the Judge asked you some
11 questions, and I think this was -- I don't know if it
12 was about the tax equity partnership but it certainly
13 dealt with the tax credits PTC versus ITC. And I
14 think he asked about cost of capital in the two cases
15 maybe with the tax equity partnership or otherwise.
16 Just so the record's clear -- and I'm not sure this
17 is even what he meant by the question. But so the
18 record's clear. For Ameren Missouri's investment in
19 the facility, if it uses the ITC and tax equity
20 partnership, you didn't -- we didn't assume a
21 different weighted average cost of capital for Ameren
22 Missouri in that case than we would have assumed in a
23 PTC case, right?

24 A. No. I mean, I didn't do the
25 modeling, I have no reason to think we did and I'm

1 pretty sure we didn't.

2 Q. If a tax equity partnership has to be
3 used to get those benefits immediately to customers,
4 you know, with the ITC and avoid the normalization,
5 is the tax equity partner -- are they providing
6 something that's akin to a loan? I mean, it's
7 financing of some kind, right?

8 A. Yeah. It's -- it is financing. It's
9 -- they contribute capital and then they get a
10 revenue stream to pay back that capital with a
11 return. So just --

12 Q. Do you know whether or not a company
13 would expect that cost of capital to be higher than
14 its own cost of capital?

15 A. I probably should but I'm not sure
16 that I can say that I know for sure off the top of my
17 head.

18 Q. Okay. I know you were asked some
19 questions about this hold harmless certainly by Mr.
20 Graham and I think Chairman Rupp asked you a little
21 bit about it as well. When a utility installs a
22 generator, for example, and the Commission's decided
23 it's needed because the Commission has to allow us to
24 do that, right?

25 A. I'm sorry, could you say that again?

1 Q. And the Commission would have had to
2 decide it was needed if we install the generator
3 because we have to get the Commission's permission to
4 do that, right?

5 A. Right.

6 Q. Putting aside any regulatory lag
7 between rate cases, if that generator performed way
8 better in the market than everybody thought, does the
9 Company get to keep the upside?

10 A. In the scenario where there was a
11 hold harmless?

12 Q. No. Just in the --

13 A. It doesn't matter. The hold harmless
14 doesn't say you also get -- right, yeah. So no,
15 there would be no benefit to the Company necessarily.
16 That would still go back through the fuel adjustment
17 clause as a benefit to reduce cost for all customers.

18 Q. Yeah. My question really was sort of
19 flawed. Except for the five percent sharing there's
20 no lag. If that unit produces way more revenues in
21 the market than everybody thought when it was
22 approved and billed customers are getting 95 percent
23 of that almost in realtime for the fuel
24 adjustment clause --

25 A. That's right. So basically the

1 economic risk of the unit can benefit customers. And
2 nobody's asking us to, you know, take away the
3 benefit but they are asking us to ensure the down
4 side. So we would be providing insurance for no
5 upside and the customers would get the benefits.

6 Q. Mr. Graham, I think in his initial
7 cross-examination, asked you about need and asked you
8 if you had either read or -- I don't know if he asked
9 you read Tartan but he said just is needs one of the
10 factors in the Tartan factors, right?

11 A. Yes.

12 Q. And he asked you, I'm pretty sure,
13 whether you were familiar with the Tartan factors,
14 did he not?

15 A. He did.

16 Q. Have you read the Tartan case
17 carefully?

18 A. Yes.

19 Q. Do you have an opinion about whether
20 the approach that Staff is taking to need in this
21 case is consistent with how the Commission approached
22 need in the Tartan case?

23 MR. GRAHAM: Objection. His opinion on
24 this case is irrelevant and -- objection, his opinion
25 on that score is irrelevant and immaterial and will

1 not assist the Commission in deciding any material
2 issue in this case. It also is speculative and
3 vague.

4 MR. LOWERY: I think Mr. Graham asked Mr.
5 Wills about need and whether or not he had reviewed
6 the Tartan factors and the Tartan factor meaning.
7 And I think Mr. Wills can testify about his
8 understanding of need based on Tartan factors.

9 MR. GRAHAM: That's not the question that
10 Counsel asked, your Honor. I'd ask the Court to
11 remember -- the Commission to remember the question
12 and the question was whether this witness had an
13 opinion on whether Staff's position was consistent
14 with the Tartan -- with something.

15 JUDGE SEYER: Mr. Lowery, would you like
16 to rephrase your question?

17 MR. LOWERY: I'll take a shot at it, your
18 Honor.

19 BY: MR. LOWERY

20 **Q. Let me ask about the Company's**
21 **position. Do you have an opinion about whether the**
22 **Company is approaching need in a manner consistent**
23 **with the Commission's application of the need factor**
24 **in the Tartan case?**

25 MR. GRAHAM: Objection, calls for a legal

1 conclusion.

2 MR. LOWERY: I don't believe Tartan sets
3 the law, Judge, it's an administrative decision. The
4 Commission doesn't make the law, doesn't have the
5 power to declare the law, the Commission has
6 developed guidelines that it generally follows from
7 Tartan but it's not a legal conclusion that I'm
8 asking him for.

9 MR. GRAHAM: The fact that it is not a
10 regulation or a law does not erase the fact that this
11 witness is being called to express an opinion that is
12 legal. It is not engineering opinion, it's not an
13 accounting opinion, it's not layman's opinion that's
14 competent here, it's an opinion. And this witness is
15 not competent to render an opinion that would be of
16 use to the Commission in deciding any material issue
17 that's presented in this case.

18 MR. LOWERY: Mr. Wills is the Director of
19 Regulatory Affairs at the Company and he's an expert
20 on regulation and rate making and that's exactly what
21 we're talking about here.

22 JUDGE SEYER: I'm going to overrule the
23 objection. You can answer the question.

24 BY: MR. LOWERY

25 Q. Do you remember the question?

1 A. No. Unfortunately.

2 MR. LOWERY: Could I ask the court
3 reporter to just read it back, your Honor?

4 JUDGE SEYER: Go ahead.

5 (WHEREIN, the requested portion of the
6 record was read by the court reporter.)

7 MR. GRAHAM: I'm going to have another
8 objection.

9 MR. WILLIAMS: I'm going to object based
10 on relevancy.

11 MR. GRAHAM: And I'm going to add that
12 approaching an issue is vague and so general that it
13 -- the question cannot be answered. That's my
14 objection.

15 JUDGE SEYER: Okay. Mr. Lowery.

16 BY: MR. LOWERY

17 **Q. Are you able to answer the question,**
18 **Mr. Wills?**

19 A. I feel like I could.

20 JUDGE SEYER: How do you respond, Mr.
21 Lowery?

22 MR. LOWERY: Well, I don't think the
23 question's vague, if the witness is able to answer
24 the question.

25 MR. WILLIAMS: Judge, my basis is that his

1 opinion about whether or not there's need in
2 anybody's case is irrelevant. That's a question for
3 the Commission.

4 MR. LOWERY: Judge, I don't think that's
5 correct at all when you have Mr. Luebbert testifying
6 about the Tartan factors and applying them and giving
7 opinions about what they need -- what need means
8 under those factors. I think if Staff can provide
9 that testimony this witness can certainly provide the
10 Company's viewpoint about the same issue.

11 JUDGE SEYER: I agree. And I'm overruling
12 the objection and if you still remember the question
13 you can answer that question.

14 THE WITNESS: I think I do. So yes, I do
15 think that our approach to need is consistent with
16 the Tartan decision. The Tartan decision, you know,
17 basically recognized that need did not mean
18 absolutely indispensable but it was an improvement
19 justifying its cost. And so what that improvement
20 that's justifying the cost could be is much broader
21 than some narrowly defined issue in Tartan.

22 The Commission took into consideration its
23 own preference for expanding natural gas service to
24 underserved parts of the state, it took into
25 consideration economic development benefits that

1 would arise from the project, it took into
2 consideration customers' preferences to be -- so
3 basically the communities that were going to be
4 receiving natural gas service had essentially
5 solicited the Company to come to them and deliver gas
6 to them. And the Commission took into consideration
7 those customers' preferences and essentially it
8 looked at the totality of the benefits of that and
9 said do they justify the cost.

10 So really ultimately what we're looking at
11 is the totality of the benefits. We have, you know,
12 an energy need, we have customers who want new
13 renewables, we have environmental risks that we have
14 to prepare for for our customers. We have a major
15 job ahead of us to, you know, build enough resources
16 to replace all these retiring facilities over the
17 next two decades. And the totality of those issues
18 to me is -- easily justifies the cost. And I mean,
19 I'm flummoxed really by the fact that we're even
20 debating the need of it, to be quite honest.

21 MR. GRAHAM: I'm going to ask that the
22 last part of that response be stricken, his being
23 flummoxed. I've seen that too many times in your
24 testimony and the reports.

25 JUDGE SEYER: Well, I don't think that's

1 necessary so I won't strike that.

2 MR. LOWERY: Judge, that's all the
3 re-direct I have. Thank you.

4 JUDGE SEYER: All right. Okay. Mr.
5 Wills, thank you for your testimony.

6 THE WITNESS: Thank you.

7 JUDGE SEYER: And it's 4:41 and I know Mr.
8 Graham must be out of here by five o'clock so I think
9 if there's no objection I think we'll adjourn for the
10 day.

11 MR. WILLIAMS: We're starting with Mr.
12 Brubaker tomorrow?

13 JUDGE SEYER: Correct.

14 MR. WILLIAMS: Nine o'clock?

15 JUDGE SEYER: Nine o'clock. That's right.
16 So we're adjourned for the day and we're going off
17 the record.

18 (Hearing was concluded at 4:42 p.m.)

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CERTIFICATE OF REPORTER

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