

1 STATE OF MISSOURI
2 PUBLIC SERVICE COMMISSION
3
4 TRANSCRIPT OF PROCEEDINGS
5 Hearing
6 October 17, 2016
7 Jefferson City, Missouri
8 Volume 1
9

10 In the Matter of the)
Application of Union Electric)
11 Company d/b/a Ameren Missouri)
for Permission and Approval and)
12 a Certificate of Public) File No.
Convenience and Necessity) EA-2016-0208
13 Authorizing it to Offer a Pilot)
Distributed Solar Program)
14 and File Associated Tariff)

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17 MICHAEL BUSHMANN, Presiding,
Regulatory LAW JUDGE.
18 DANIEL Y HALL, Chairman
STEPHEN M. STOLL,
19 SCOTT T. RUPP,
MAIDA J. COLEMAN,
20 COMMISSIONERS.
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1 P R O C E E D I N G S

2 (WHEREUPON, the hearing began at
3 8:30 a.m.)

4 JUDGE BUSHMANN: Let's go on the
5 record. Good morning. Today is October 17, 2016.
6 The Commission has set this time for an evidentiary
7 hearing in In the Matter of the Application of
8 Union Electric Company d/b/a Ameren Missouri for
9 Permission and Approval and a Certificate of Public
10 Convenience and Necessity Authorizing it to Offer a
11 Pilot Distributed Solar Program and File Associated
12 Tariff. That is File No. EA-2016-0208.

13 My name is Michael Bushmann. I'm the
14 Regulatory Law Judge presiding over this matter.
15 Let's have the attorneys make their entries of
16 appearance. For Ameren Missouri?

17 MS. TATRO: Wendy Tatro,
18 1901 Chouteau Avenue, St. Louis, Missouri 63103.

19 MR. LOWERY: And also Jams B. Lowery,
20 Smith Lewis, LLP, P.O. Box 918, Columbia, Missouri
21 65205.

22 JUDGE BUSHMANN: Thank you.
23 Commission Staff?

24 MS. MERS: Nicole Mers, P.O. Box 360,
25 Jefferson City, Missouri 65102.

1 JUDGE BUSHMANN: Thank you. Office
2 of the Public Counsel?

3 MR. OPITZ: Thank you, Judge. For
4 the Office of Public Counsel, I'm Tim Opitz. My
5 address is P.O. Box 2230, Jefferson City, Missouri
6 65102.

7 JUDGE BUSHMANN: Division of Energy.
8 Is Mr. Antal here?

9 MR. HYMAN: He's running a bit late.

10 JUDGE BUSHMANN: All right. Renew
11 Missouri?

12 MR. LINHARES: Thank you, Judge.
13 This is Andrew Linhares for Renew Missouri.
14 Address is 1200 Rogers Street, Suite B, Columbia,
15 Missouri 65201.

16 JUDGE BUSHMANN: Wal-Mart Stores?

17 MR. WOODSMALL: Good morning, your
18 Honor. David Woodsmall appearing on behalf of
19 Wal-Mart Stores, Inc.

20 JUDGE BUSHMANN: Brightergy, LLC?

21 MR. ZELLERS: Good morning, your
22 Honor. Andrew J. Zellers for Brightergy, LLC,
23 1712 Main Street, 6th Floor, Kansas City, Missouri
24 64108.

25 JUDGE BUSHMANN: Mr. Antal, would you

1 like to make your appearance?

2 MR. ANTAL: Yes. Thank you, your
3 Honor. Alex Antal appearing on behalf of the
4 Missouri Division of Energy. Thank you.

5 JUDGE BUSHMANN: Thank you. Anybody
6 in the audience, I'd remind them to please silence
7 any mobile device or cell phone.

8 Do the parties have any preliminary
9 matters that need to be discussed? I don't see
10 any. As far as the list of witnesses, we'll follow
11 the order filed by the parties on their Joint List
12 of Issues and Witnesses. And I wanted to ask about
13 Mr. Chriss. Is he scheduled to testify tomorrow?

14 MR. WOODSMALL: He is scheduled to
15 testify tomorrow, but he will be here late this
16 afternoon. So I'm hoping that we might be able to
17 wrap up today, and if we get that far, he'll be
18 available, I believe.

19 JUDGE BUSHMANN: And I assume there
20 is cross for him?

21 MR. OPITZ: I do have some cross for
22 him, Judge.

23 JUDGE BUSHMANN: All right. Well,
24 we'll see what we can do as far as his arrival.
25 We'll take him out of order and just hold onto him

1 and do him at the end. Anybody need to have any
2 exhibits marked?

3 All right. Well, let's go ahead and
4 have opening statements, then. First opening
5 statement would be by Ameren Missouri.

6 MS. TATRO: Good morning.

7 JUDGE BUSHMANN: Good morning.

8 MS. TATRO: Your Honor, we're here
9 today asking for approval of the terms and
10 conditions of the Nonunanimous Stipulation &
11 Agreement, which is now the joint position of the
12 signatories, so that Ameren Missouri may move
13 forward with its solar partnership pilot.

14 This program is simple: \$10 million
15 for multiple solar installations located on
16 customers' properties within Ameren Missouri's
17 service territory. As Ameren Missouri witness
18 William Barbieri will testify, we anticipate the
19 result of this pilot will be three to five
20 generation sites and an accumulated total of around
21 5 megawatts of solar generation.

22 Ms. Barbieri will also testify that
23 this pilot will cost a typical residential customer
24 less than a dollar a year; in fact, more like
25 42 cents, 42 cents annually.

1 So why is this pilot being proposed?

2 The purpose of this pilot is to gain experience and
3 knowledge in a type of solar generation that Ameren
4 Missouri does not have at this time. Ameren
5 Missouri does have experience with solar, but
6 mainly with utility scale solar. Our O'Fallon
7 facility is a centralized large-scale solar
8 generation, about 5.7 megawatts in one location.
9 This pilot is about smaller facilities likely put
10 in different areas throughout the company's service
11 territory.

12 In the future, Ameren Missouri is
13 going to need additional solar generation to comply
14 with Missouri's Renewable Energy Standard or to
15 comply with whatever rules come out of the Clean
16 Power Plan, or perhaps just the cost of solar
17 generation will decrease to the point that adding
18 more solar to our generation mix will save
19 customers money.

20 Those needs are in the future. But
21 right now, to prepare for that future, Ameren
22 Missouri needs to gain an understanding of the
23 benefits and risks of small distributed solar
24 facilities, such as it has with larger centralized
25 solar facilities, so that when it makes decisions

1 in the future and for the future, it will have that
2 information. That is why we are here today.

3 Now, as you're likely aware, your
4 Staff recommends approval of this pilot, and that
5 recommendation is also made by the Division of
6 Energy, by Renew Missouri and by United for
7 Missouri. Now, neither Brightergy or Wal-Mart have
8 signed the stipulation, but both have indicated
9 they do not oppose it.

10 So that just leaves us with Office of
11 public Counsel who does oppose this pilot. The
12 Office of Public Counsel doesn't accept that
13 learning about a technology can be a justifiable
14 reason for a pilot. They're ignoring your
15 findings, Commissioner, in the KCP&L Greenwood
16 case.

17 In that case the Commission stated,
18 Gaining experience now is important so that GMO,
19 Greater Missouri Operations of KCPL, can remain in
20 front of the upcoming adoption curve. Furthermore,
21 GMO will need to build more solar generating
22 facilities as well as other renewable generating
23 resources to comply with the federal Clean Power
24 Plan or other regulations designed to reduce the
25 injection of carbon dioxide and other pollutants

1 into the environment -- I'm sorry, the atmosphere.

2 This pilot represents a good first step.

3 Your order continued: The financial
4 cost that will result from the construction of this
5 plant will be very small when compared to the
6 amount of money GMO must spend each year to provide
7 electric service to its customers. As a result,
8 the impact on customer rates will be minimal. The
9 small increase in rates that may result from this
10 project will be amply offset by the last tangible
11 benefits that will result from the lessons GMO will
12 learn from the project and the benefits that will
13 result from the increased use of solar power in the
14 future made possible by the construction and
15 operation of this pilot solar project.

16 Commissioners, I submit that Ameren
17 Missouri's pilot is justified for much the same
18 reasons.

19 Now, the Office of Public Counsel is
20 going to tell you that Ameren Missouri doesn't need
21 these facilities to serve its customers, and if
22 we're only looking at today, then that is true.
23 We do not. But the purpose of this pilot is not to
24 meet a capacity or energy need today. It's how to
25 inform how we best meet that need in the future.

1 The Office of Public Counsel is going
2 to tell you that Ameren Missouri doesn't need the
3 facility in order to comply with Missouri's
4 Renewable Energy Standard. And if we're only
5 looking at today, that statement is true. We do
6 not. But the purpose of this pilot is not to
7 comply with environmental regulations today, but to
8 better prepare us for how we comply in the future.

9 The Office of Public Counsel is going
10 to tell you that Ameren Missouri isn't going to
11 gain any operational knowledge because we already
12 have the O'Fallon facility. And that is true in
13 that we have the O'Fallon facility, but what OPC
14 misses is the point of this pilot.

15 We've learned lessons from O'Fallon,
16 but we learned different things, and Mr. Barbieri
17 can speak to those lessons with you. The key thing
18 to remember is that O'Fallon is a centralized
19 utility large-scale project, which is different
20 from what's being proposed in this pilot.

21 OPC is going to tell you we did not
22 provide another detail in our application: Where
23 are we going to build, what customers are we going
24 to partner with, what does the design for each
25 facility look like? And that information is not in

1 our application. It's not there because it's not
2 yet known. But the very issue is addressed in the
3 stipulation. Prior to any construction, we'll be
4 back with all of that detail.

5 Furthermore, the blanket certificate
6 is an approach the Commission has used before in
7 2011 when you granted KCP&L a blanket certificate
8 to install solar facilities related to a smart grid
9 project that KCP&L was undertaking. So you've
10 already determined that a blanket certificate in
11 certain instances can be appropriate.

12 Now, there are some differences
13 between the two cases. KCP&L had identified a
14 subset of its service territory rather than the
15 entire service territory as Ameren Missouri is
16 requesting. But the stipulation deals with that
17 issue by requiring that Staff and others, even
18 including OPC, have the opportunity to review the
19 site-specific information which Ameren Missouri is
20 required to file prior to constructing any of these
21 solar projects.

22 Next OPC is going to tell you that we
23 should wait because the cost of solar is dropping.
24 Ameren Missouri agrees that the cost of solar
25 continues to decline, but as Mr. Harding will

1 testify, that decline is slowing. And even if OPC
2 is correct, its argument only provide all the more
3 reason to learn now about the benefits and risk of
4 distributed solar generation as compared to
5 centralized utility scale generation. Right now
6 Ameren Missouri doesn't have that experience.

7 With that pilot, Ameren Missouri is
8 adding -- I'm sorry. With this pilot before we are
9 faced with adding significant amount of solar
10 generation and before we have to make the decision
11 to expend significant amounts of money, we need to
12 learn the information to make better decisions
13 about how to approach solar in the future.

14 Now, finally OPC is going to tell you
15 that we should wait so that the facilities can be
16 used for compliance with the CPP. Now, presuming
17 for a moment that the CPP rules survive as drafted,
18 Ameren Missouri is going to need a lot more solar
19 than 5 megawatts that are at issue here today.

20 Mr. Barbieri's surrebuttal testimony
21 points you to the spread of distributed solar
22 throughout the nation. He will also tell you that
23 our integrated resource plan shows us spending a
24 billion dollars on renewables for our RES
25 compliance.

1 So the question for us is, is the
2 best strategy to construct centralized utility
3 scale facilities or aggressively pursue distributed
4 generation, or is the best approach a combination
5 of the two?

6 If Ameren Missouri needs solar to
7 comply with the CPP or another environmental
8 regulation, it has to know the answer to those
9 questions so that when it's making its decision it
10 has the best information possible.

11 Commissioner, this case, this pilot
12 is about determining the benefits and challenges
13 unique to distributed generation while we have the
14 luxury of the time to learn. Then Ameren Missouri
15 can apply that knowledge when making decisions on
16 facilities that will need to be constructed not
17 today but in the future.

18 It's about distributed generation
19 versus centralized power generation. It's about
20 making a small investment now to allow for smarter
21 decisions down the road. Borrowing your language
22 from the Greenwood order, this pilot is about
23 getting experience now so that Ameren Missouri can
24 remain in front of the upcoming adoption curve. It
25 represents a good first step, and the pilot should

1 be approved by the Commission.

2 Thank you.

3 JUDGE BUSHMANN: Questions?

4 COMMISSIONER STOLL: No questions.

5 Thank you.

6 JUDGE BUSHMANN: Commission Staff?

7 MS. MERS: Good morning, Judge. Good
8 morning, Commissioner Stoll. This is Nicole Mers
9 on behalf of Staff.

10 Our state has come to a crossroads.
11 We can no longer continue pursuing only traditional
12 energy sources. The Clean Power Plan,
13 Massachusetts v EPA, solar investment tax credits,
14 these are all signs the direction that some in our
15 nation are heading. In 2015, 78 percent of
16 Missouri's energy came from coal. Only 3.7 percent
17 came from renewables, and this was mostly
18 hydroelectric and wind.

19 However, Staff cannot and will not
20 forsake its duties in ensuring that ratepayers are
21 protected through cost control measures,
22 shareholders taking part in the risk, and
23 maximizing potential benefits for customers. This
24 is a delicate balancing test but one that we
25 believe we have achieved in the Nonunanimous

1 Stipulation & Agreement.

2 I have to commend Ameren at the
3 outset for working with the stakeholders and its
4 efforts to compromise in order to create the
5 program you see before you today.

6 Staff, Ameren Missouri and other
7 parties have negotiated an agreement to study the
8 potential benefits for siting solar on
9 customer-owned property interconnected at the
10 distribution system level. This has safeguards for
11 both investors and customers.

12 The Nonunanimous Stipulation &
13 Agreement sets out site selection criteria and an
14 expedited site approval process for the benefits of
15 the customers hosting the site, shareholders and
16 the customers that will benefit from the experience
17 gained, the learning objectives and the energy
18 generated.

19 The Nonunanimous Stipulation &
20 Agreement along with the filed testimony in this
21 case supports the Commission granting Ameren the
22 certificate of convenience and necessity in this
23 case. This pilot program will encourage
24 distributed generation on the grid. It will
25 encourage the development of solar generation in

1 our state. It will provide Ameren a learning
2 opportunity to see how customers will react to this
3 program, what benefits and disadvantages generation
4 may have, distributed generation may have versus
5 utility scale generation.

6 And in order to detail the effects of
7 this Ameren, Ameren as part of the negotiated terms
8 has committed to file detailed reports for the life
9 span of the facility. Appendix B of the
10 Nonunanimous Stipulation & Agreement outlines the
11 contents of these reports in detail.

12 But in general, the reports will
13 document insight and knowledge gained about
14 distributed generation, impacts to the electric
15 grid, challenges both legal and technical in using
16 customer property to site Ameren-owned facilities,
17 financial benefits gained from this form of solar
18 generation, and customer insights gained.

19 These reports will help the
20 Commission, Staff and other parties make informed
21 decisions in future cases.

22 OPC alleges this application does not
23 meet the requirements to be granted a CCN. OPC
24 argues that Ameren has not provided sufficient
25 information for the Commission to make an informed

1 decision because there's been no contractor hired,
2 no location for the project chosen, no cost
3 estimated and no consent from municipal
4 authorities.

5 OPC while making these arguments
6 ignores the processes and reporting requirements
7 that Staff and other parties have included in the
8 Stipulation & Agreement to ensure that there's
9 oversight and review of the site selection process.

10 Outlined in the Nonunanimous
11 Stipulation & Agreement in paragraphs 4, 5 and 8,
12 as well as Appendix A, there are criteria that
13 Ameren must meet when choosing a site. Staff and
14 other parties will review to ensure that this site
15 does, in fact, meet the criteria outlined in
16 Appendix A and is suitable for the solar facility.

17 The Commission will receive all
18 information required by 4 CSR 240-3.105 and the
19 Missouri Revised Statutes 393.170 before Ameren can
20 begin construction. The Commission is well within
21 its authority to grant a CCN with conditions.

22 In its position statement, OPC relies
23 on the first South Harbor case, StopAquila.org
24 versus Aquila, Inc., to argue the application as
25 modified by the Nonunanimous Stipulation &

1 Agreement does not meet the requirements of
2 Section 393.170.

3 But reliance on this case is
4 misplaced as the Commission has already decided in
5 the KCPL Smart Grid case, EA-2011-0368, that such
6 an interpretation is overly restrictive. In that
7 case Staff put forth the argument that KCPL should
8 only be granted a CCN for solar facilities in which
9 a specific installation site has been identified.

10 The Commission found that the purpose
11 of the statute was to protect the public interest
12 and that it would be a waste of resources for both
13 the Commission and KCPL to apply for a new
14 application for a CCN each time KCPL identified a
15 new structure on which it wished to install solar
16 facilities. Specifying the parameters of the area
17 in which KCPL intended to install small solar
18 facilities gave the Commission sufficient
19 information to satisfy the requirements of the
20 statute.

21 The one in the Stop Aquila case was
22 distinguished further by the Commission from the
23 instant CCN action because the public interest of
24 the natural gas fired electric generating plant in
25 the Stop Aquila case had potential to strap

1 residential neighborhoods without regard to local
2 zoning requirements, as opposed to the placement of
3 a few solar rays on a few buildings in a way that
4 would not implicate local zoning requirements.

5 Ameren's proposed pilot program is
6 more analogous to the EA-2011-0369 Smart Grid case
7 than it is the Stop Aquila decision. Ameren, much
8 like KCPL, is trying to request small solar
9 facilities to be constructed on three to five
10 customer-owned sites.

11 Ameren has also specified the
12 parameters under which they intend to install the
13 facilities, and these will be reviewed by Staff and
14 other parties, which is sufficient information to
15 satisfy the requirements of the statute and allow
16 the Commission to approve the application, much
17 like they approved the Smart Grid application in
18 the EA-2011-0368.

19 OPC also makes the argument that the
20 pilot program does not meet the Tartan criteria.
21 Although the Tartan criteria are merely factors
22 that the Commission may examine when determining to
23 grant a certificate of convenience and necessity
24 and not statutory requirements in granting of a
25 CCN, this pilot program satisfies the waiting

1 factors outlined in the Tartan case showing that
2 this program is in the public interest, especially
3 in light of the guidance the Commission recently
4 provided concerning the Greenwood solar case.

5 The first factor is commonly stated
6 as, is there a need for service? Ameren Missouri
7 has represented customers have requested this
8 service and has provided names of specific
9 customers who have indicated interest.

10 But more than that, viewing the
11 Tartan criteria through the lens of the recently
12 decided Greenwood solar case, need encompasses more
13 than just essential or indispensable for safe and
14 adequate service, which is what OPC's argument
15 would distill into.

16 Ameren currently does not have
17 widespread distributed solar generation. Solar
18 generation will play a role in complying with
19 future regulations aimed at reducing carbon
20 emissions, such as the Clean Power Plan. Giving
21 Ameren this experience now at a low-cost controlled
22 manner allows Ameren to stay ahead of emerging
23 technologies and promote renewables in a cost
24 effective, beneficial way.

25 The second and third factors are not

1 at issue in this case. These factors are commonly
2 phrased as, is the applicant qualified to provide
3 the service, and does the applicant have the
4 financial ability to provide the service? No party
5 is arguing that Ameren is not qualified to provide
6 the service and that it does not have the financial
7 capability.

8 The fourth factor, economic
9 feasibility, also must be evaluated through the
10 guidance of the Greenwood solar case. When looking
11 at pilot programs, especially those that involve
12 emerging technology or renewables, the Commission
13 has indicated that least cost is not the sole
14 determinative factor.

15 Staff has and will continue to
16 promote least cost options for utilities. We will
17 continue to ensure that ratepayers do not pay for
18 imprudent investments. We will not abdicate our
19 duties to the ratepayers.

20 However, our analysis will not end
21 with determining whether a generation source is the
22 least cost option of all generating sources. We
23 must consider other potential benefits that are
24 difficult to quantify.

25 As the Commission said in the

1 Greenwood solar decision, the purpose of this pilot
2 program is not to provide the cheapest power
3 possible. Here, too, Ameren is not simply looking
4 to add capacity or provide the cheapest power
5 possible. Ameren is looking to fulfill a need that
6 its own customers have requested and at the same
7 time gain insight on a path towards utilizing more
8 solar energy.

9 Through the Stipulation & Agreement,
10 Staff has ensured, while this project is not the
11 least cost, the overall project cost and the price
12 per watt will be capped. Furthermore, no party has
13 signed away its authority to conduct a prudency
14 review to ensure that this project is built in the
15 most economical and beneficial way.

16 Finally, the fifth factor is public
17 interest. Both Ameren's customers and Missourians
18 have an interest in the development of cost
19 effective renewable resources to provide safe,
20 reliable and affordable service that also will
21 improve the environment, cut emissions and spur
22 green job growth in our economy.

23 The Commission should approve the
24 Nonunanimous Stipulation & Agreement without any
25 modification. Approving this pilot program is a

1 step towards increasing solar generation in a
2 controlled, responsible manner.

3 I'm available for any questions, and
4 Staff witness Claire Eubanks will be on the stand
5 later for questions as well.

6 COMMISSIONER STOLL: No questions at
7 this time. Thank you.

8 MS. MERS: Thank you.

9 JUDGE BUSHMANN: Missouri Division of
10 Energy?

11 MR. ANTAL: Good morning again,
12 Judge, Commissioner Stoll. May it please the
13 Commission? My name is Alex Antal, and again, I'm
14 representing the Missouri Division of Energy in
15 this case today.

16 It's deja vu all over again. As I
17 was preparing for this case, I was reminded of the
18 infamous quote by the late and great Yogi Berra. I
19 say that because just several months ago we were
20 here arguing much of the same things in the GMO
21 Greenwood Solar case.

22 Now, both counsel for Ameren Missouri
23 and Staff have touched upon those points, so I'll
24 try not to belabor it, but I think it is important
25 to acknowledge that many of the same arguments

1 particularly regarding the Tartan criteria that the
2 Office of the Public Counsel puts forth in this
3 case are the same arguments that the Commission
4 rejected in the Greenwood case; namely, the issue
5 of need.

6 As in the Greenwood case, the Office
7 of Public Counsel again states there's no need for
8 these facilities because Ameren Missouri does not
9 need it for generation capacity, it's not needed to
10 comply with Missouri's Renewable Energy Standard at
11 this particular point in time. We believe that's
12 an overly narrow view and a narrow view that the
13 Commission rejected in Greenwood.

14 Some of the Office of the Public
15 Counsel's arguments are new and were not raised in
16 the Greenwood case, and those I would like to
17 address here this morning.

18 Overall, I would state that if the
19 Commission wants to agree with the Office of Public
20 Counsel in this case, then it has to take an overly
21 strict interpretation of not only Section 393.170,
22 but also of its own -- the Commission's own rules
23 governing the application for CCNs.

24 Now, the Missouri courts, in
25 particular I'm thinking of a case, the infamous and

1 often-cited laundry case that the Missouri Supreme
2 Court handed down many years ago in which it
3 stated, and I'm paraphrasing, that statutes with a
4 remedial nature, that is opposed to a penal nature,
5 which the Public Service Commission law is, should
6 be liberally construed to effectuate their purpose,
7 namely the public welfare.

8 Now, for the Commission -- as I
9 stated, for the Office of Public Counsel to
10 prevail, you can't adopt a liberal view of the
11 statute. It has to be a strict interpretation,
12 which the courts have said is not the way to
13 interpret the public utility statutes in this
14 state.

15 So with that in mind, I would state
16 that Section 393.170 subsection 3 gives the
17 Commission the ability to order or impose
18 conditions upon its authority to -- the
19 Commission's grant of authority to build and
20 construct new generation facilities.

21 Liberally construing the statute,
22 that allows the Commission to order or grant
23 conditional authorities. Now, both counsel for
24 Ameren Missouri and Staff have touched upon this
25 this morning and said the Commission has used that

1 authority on numerous occasions when granting CCNs,
2 that there are usually conditions precedent to a
3 utility's ability to construct new facilities.

4 That is the same case as it is here
5 where Ameren Missouri, in accordance with the
6 Nonunanimous Stipulation & Agreement, will have to
7 identify the particular sites for these solar RES,
8 will have to submit those to the signatories and
9 the Commission for review, and that the
10 signatories, the parties to this case actually,
11 will have the ability to review those sites and
12 bring it to the company's and the Commission's
13 attention on whether or not in their assessment
14 that they're complying with the provisions of the
15 Nonunanimous Stipulation & Agreement.

16 So I think it is both within the
17 liberal construction of the Commission's statute
18 and rules that it has the authority to approve the
19 Nonunanimous Stipulation & Agreement of which the
20 Division of Energy is a signatory and it is within
21 the well-established practice of the Commission to
22 do so.

23 And I would also just note briefly
24 that I concur with counsel with -- counsel from
25 Staff in stating that the Stop Aquila case that OPC

1 cites in its position statement is distinguishable
2 from the present case. The Stop Aquila case dealt
3 with a case in which Aquila utilities built a
4 generation facility where it relied on its CCN for
5 a service territory and did not even bother to come
6 in and ask the Commission for a specific CCN to
7 build those generation facilities.

8 That's not the case here. That is
9 what Ameren Missouri is doing right now. They have
10 filed an application for these specific facilities
11 that it has set out in its application and which is
12 amended by the Nonunanimous Stipulation &
13 Agreements. So the holding in Stop Aquila should
14 not weigh heavily on the Commission's mind in this
15 proceeding.

16 With that, I'll leave -- I'll close
17 my remarks, and if you have any questions, I'll be
18 happy to answer them.

19 COMMISSIONER STOLL: No questions.
20 Thank you.

21 MR. ANTAL: Thank you very much.

22 JUDGE BUSHMANN: Renew Missouri?

23 MR. LINHARES: Good morning, Judge,
24 Commissioner Stoll.

25 COMMISSIONER STOLL: Good morning.

1 MR. LINHARES: May it please the
2 Commission? My name is Andrew Linhares, and I have
3 the pleasure of representing Renew Missouri this
4 morning in this case.

5 Renew Missouri is committed to
6 transforming Missouri into a leading state in
7 renewable energy. While Ameren Missouri's proposed
8 solar partnership pilot program is far from ideal,
9 we support its approval because it will lead to an
10 increase in installed renewable capacity in the
11 state.

12 It will bring up to 5 megawatts of
13 new solar generation online in Ameren Missouri's
14 service territory, and it will cost ratepayers no
15 more than \$10 million or, as you heard from Ameren
16 Missouri counsel, roughly 42 cents per year per
17 customer.

18 The terms laid out in the
19 Nonunanimous Stipulation & Agreement, which is now
20 a joint position of the signatories, presents a
21 clear plan for meeting the requirements of
22 Section 393.170, and it establishes that the
23 project is necessary and convenient for the public
24 service.

25 In addition to the CCN approval

1 sought in this case, Ameren Missouri is committed
2 to obtaining the consent of all necessary municipal
3 authorities, and Ameren Missouri will give the
4 Commission and parties to this case the opportunity
5 to review and resolve all the specific details and
6 investments at each given solar site.

7 Furthermore, parties will have the
8 opportunity to challenge specific investments on
9 the basis of prudence in the following rate case.
10 And these additional occasions for review satisfy
11 the Section 170 requirements and the requirements
12 of the Commission's rule at 4 CSR 240-3.105. And
13 if they do not, then at the very least they provide
14 the Commission with good cause to grant a waiver
15 from Section 170 if necessary.

16 Furthermore, this program is
17 necessary or convenient for the public service both
18 due to the learning benefits related to distributed
19 solar that the company will gain from this pilot
20 and the incremental RES compliance and reduction in
21 fossil fuel intensity that will result from this
22 addition of 5 megawatts of solar generation.

23 So we recommend that the Commission
24 approve Ameren Missouri's request for a blanket
25 certificate of convenience and necessity in this

1 case as amended by the Nonunanimous Stipulation &
2 Agreement.

3 Now, although Renew Missouri is a
4 signatory to the Nonunanimous Stipulation, we agree
5 with the position of Wal-Mart that the stipulation
6 should not be viewed as a policy precedent for the
7 rollout of future distributed solar facilities in
8 Missouri.

9 This solar partnership pilot, if
10 approved, should not be seen as a way to address
11 the very real growing demand for renewable energy
12 among large consumers. As of today across the
13 country, 62 major corporations have signed on to
14 the Corporate Renewable Energy Buyers' Principles,
15 and they've committed to increasing the percentage
16 of renewable energy they consume as corporations.

17 These businesses account for roughly
18 45 million megawatt hours of renewable energy
19 demand and \$5 trillion in market capital.
20 Some of these businesses have a major presence in
21 Missouri, such as Wal-Mart, Sprint, Ikea, Unilever,
22 Nestle, McDonald's, Lockheed Martin, Target,
23 Staples, Starbucks, many others.

24 Many tech companies have considered
25 locating here in Missouri, but they've passed in

1 part due to the lack of policies giving them access
2 to the renewable energy that they need to meet
3 their own internal goals. Last year several
4 businesses, including Wal-Mart, Cargill, General
5 Mills and Unilever delivered a signed letter
6 supporting legislation that would allow large
7 consumers to access renewable energy from third
8 parties through power purchase agreements.

9 Now, these companies' renewable
10 energy goals continue to go unmet because there is
11 no policy available in the state that will allow
12 them the choice to purchase renewable energy. It
13 should be understood that Ameren Missouri's
14 proposed solar partnership pilot will do nothing to
15 help these companies address their internal
16 renewable energy needs.

17 Mr. Harding's testimony makes clear
18 that, quote, Ameren would retain and own all
19 electricity and associated renewable benefits from
20 the facility, end quote. Participating partners
21 will receive no solar output, no renewable energy
22 credits, no economic benefit of any kind aside from
23 the potential public relations benefit of having
24 visible solar on their or near their properties.

25 So to conclude, we support the

1 Commission's approval of Ameren Missouri's proposed
2 solar partnership pilot program as it will allow
3 the company to learn how to optimize large
4 distributed solar generation across its system and
5 because it will bring an additional 5 megawatts of
6 solar online in the state.

7 However, we do hope that Ameren
8 Missouri will not pursue this model beyond this
9 pilot, if approved, and will instead consider new
10 models for providing its larger customers with a
11 viable choice to purchase renewable energy. We
12 believe these types of programs and policies are
13 essential in order to keep jobs in the state and
14 attract new businesses to Missouri.

15 So with that, thank you very much,
16 and I'm happy to answer any questions.

17 COMMISSIONER STOLL: No questions.
18 Thank you.

19 JUDGE BUSHMANN: Thank you. Wal-Mart
20 Stores?

21 MR. WOODSMALL: Good morning, Judge.
22 Good morning, Commissioner. David Woodsmall
23 appearing on behalf of Wal-Mart.

24 As has been indicated, Wal-Mart is
25 not a -- is not a signatory to this stipulation,

1 but Wal-Mart is not opposing the stipulation. That
2 said, Wal-Mart filed testimony in this case to
3 point out a couple things.

4 Wal-Mart is very interested in the
5 rollout of renewable energy. As Mr. Linhares said,
6 Wal-Mart is a signatory to the Corporate Renewable
7 Energy Buyers Principle Guide. Given this,
8 Wal-Mart has a goal being supplied 100 percent by
9 renewable energy. So Wal-Mart very much supports a
10 rollout of distributed solar facilities.

11 That said, while Wal-Mart does not
12 oppose the settlement, it is concerned with the
13 settlement. Under the settlement, the solar
14 partner is required to give Ameren a 25-year lease
15 to its rooftop or other space so that Ameren can
16 put in solar facilities. In addition, the solar
17 partner is required to pay any installation costs
18 that exceed \$2.20 per watt DC.

19 What does the solar partner get for
20 these concessions? Largely nothing. The customer
21 doesn't receive a lease payment for using its
22 space. It doesn't receive any of the solar
23 renewable energy credits, and it doesn't even
24 receive any of the energy from the solar
25 installation on its facilities.

1 So given these deficiencies, Wal-Mart
2 is worried that distributed solar installation will
3 not be as ubiquitous as it otherwise could be. For
4 this reason, Wal-Mart asks that the Commission not
5 make any policy determinations regarding the
6 structure of future distributed solar projects.

7 So why did Wal-Mart not oppose the
8 stipulation? As has been repeatedly pointed out,
9 this is a pilot program. As such, this is a
10 learning opportunity. Ameren has agreed to study
11 this project and consider the need for lease
12 payments for future solar installations.

13 Given that this is a pilot program
14 and given Wal-Mart's interest in renewable energy,
15 Wal-Mart does not oppose the settlement. Instead,
16 as I indicated, Wal-Mart asks that the Commission
17 specifically state that it is not making any policy
18 determinations regarding the structure of future
19 distributed solar installation projects.

20 Thank you.

21 COMMISSIONER STOLL: No questions.

22 JUDGE BUSHMANN: Brightergy?

23 MR. ZELLERS: Good morning, your
24 Honor, Commissioner Stoll.

25 Brightergy is in this case to make

1 some points about policy and ask you to make some
2 specific determinations going forward. We come to
3 you remaining the leader in solar installations in
4 the midwest. We've completed over 1,400 projects,
5 commercial and industrial, municipal, churches,
6 school districts, Missouri, Kansas and now Iowa in
7 the midwest.

8 We've also recently not quite
9 completed, on the cusp of completing a 5.5 megawatt
10 installation at the University of Massachusetts -
11 Amherst. That's our first utility scale project.
12 The university serves as its own utility. So that
13 gives us some insight into what utilities need,
14 what they're looking for when they develop these
15 programs.

16 We also notably are working with more
17 than one investor-owned utility outside the state
18 of Missouri on developing their own utility DG
19 projects similar but not quite the same to what
20 Ameren is proposing here. All of this gives
21 Brightergy a unique insight into how these things
22 work, into how these things play out.

23 We don't stand to benefit from this
24 particular program, but echoing what you've heard
25 from Wal-Mart and echoing what you've heard from

1 Renew Missouri, we ask that going forward, should
2 you approve the program, you specifically state
3 that this is not a policy determination of the
4 Missouri Public Service Commission; it's merely an
5 approval of this particular CCN pilot project. If
6 Ameren comes back, that's going to have to be
7 reevaluated in terms of price and in terms of
8 policy going forward.

9 We'd also like to make a brief point
10 about the two goals that Ameren has for this CCN,
11 one of them being a learning process. And I'm
12 going to argue to you that it's difficult to learn
13 when you're not playing by the same rules everyone
14 else plays by. If you're not paying essentially
15 for what you're getting, you're not out there in
16 the commercial space really learning how things
17 work.

18 So we want to make sure that the
19 policies approved in this CCN application are not
20 policies going forward and specifically related to
21 price. Ameren pointed out in its application and
22 in its testimony that there are a lot of costs that
23 they're incurring that an independent power
24 producer or someone like Wal-Mart installing on
25 their own building would not incur, such as

1 upgrades to the billing system, such as learning
2 how to market.

3 These are costs that are going to go
4 into their price of power and reflected in that
5 price that wouldn't necessarily be reflected for an
6 independent power producer.

7 It also does not reflect the values
8 and the benefits that you'll get from a solar
9 installation. A lot of states are struggling with
10 this right now -- Arizona is one of them -- coming
11 up with a metric for the so-called value of solar.
12 And you install a solar system, it costs a certain
13 amount of money, how do you determine what the
14 avoided costs are? How do you determine what the
15 environmental benefits are and the social benefits?

16 These are not questions for today,
17 but these are questions that you'll have to
18 consider at some point in the future when you are
19 setting precedential policy for these things.

20 A lot of the other inputs for the
21 price of solar -- and I'm not going to go into too
22 much detail here. There will be plenty of time for
23 that in a future docket -- but how you levelize
24 costs, how you take into account various incentives
25 at the federal, state and local level, how you

1 account for depreciation of the assets, how you
2 calculate avoided fuel costs and the value of the
3 power produced itself.

4 Regarding Ameren's goals, they set
5 out two in the application. One of them is
6 understanding how the generation, the distributed
7 generation can impact, challenges and benefits its
8 distribution system. Undoubtedly they will get
9 some information about this from installing these
10 systems.

11 But the second one is gauging
12 customer willingness to participate and share in
13 the cost of small-scale renewable energy
14 facilities. This one they will likely not get the
15 information they need. Because they're out there,
16 essentially what they're doing is -- and they
17 represented to us that they've been told, several
18 of their customers have come to Ameren on their own
19 and said, we would like to host solar. Can you
20 help us do that?

21 And the deal that Ameren is working
22 on apparently is host our system on your roof,
23 we'll maintain it, you're not going -- but we're
24 not going to give you any benefit for it.

25 The way these programs typically work

1 is the utility will go out and look for available
2 roof space or land space, pay the owner of that
3 roof space or land space in some fashion, whether
4 it's a cash amount, a monthly lease payment or some
5 kind of bill credit or some kind of bill deduction.
6 There's some sort of value you get for hosting that
7 system, and Ameren is not proposing to do that.

8 So the argument here is that it's
9 difficult to go out there and say we understand the
10 market as well as an independent power producer
11 does even though we're not playing by the same set
12 of rules.

13 So we're not standing in the way of
14 this. We're not asking you to approve it or
15 disapprove it. But in the event that you do, keep
16 these things in mind, and please make clear that
17 we're not setting precedent going forward.

18 Any questions?

19 COMMISSIONER STOLL: No questions.

20 JUDGE BUSHMANN: Thank you. Office
21 of the Public Counsel?

22 MR. OPITZ: May it please the
23 Commission? Good morning.

24 And first I want to commend Ameren
25 for its efforts in this case. Even though we

1 ultimately disagree, its representatives have been
2 gracious and accommodating in conducting multiple
3 technical conferences and settlement conferences
4 before Office of Public Counsel broke off, and I
5 assume that continued with the other parties. And
6 I appreciate that willingness to work together.

7 Solar generation, to be clear, is a
8 good thing in many respects, but this Commission is
9 tasked with protecting the public from the monopoly
10 power of a utility. And in this case the evidence
11 does not support that it should grant a CCN right
12 now.

13 As was alluded to that I would
14 suggest by counsel, the company does not need this
15 project to meet its generation needs. The company
16 does not need this project for RES compliance right
17 now. The company has not provided basic
18 information about this project or its locations.
19 And importantly, I ask you to remember that it is
20 the company as the applicant that has the burden to
21 show each project is necessary or convenient for
22 the public service.

23 Keeping those facts in mind, you are
24 presented with five issues in this case, and from
25 Public Counsel's perspective, each issue is a

1 reason that the Commission should reject this
2 application.

3 Issue one asks the Commission to
4 determine whether or not the company has presented
5 a plan meeting the requirements of 393.170, also
6 known as the CCN statute. And so what does that
7 law require? Simply the law requires that public
8 utilities seek and receive permission from the
9 Commission before doing certain things. This
10 permission is often called the CCN.

11 And so the next question is, well,
12 permission to do what? And that really depends on
13 what the company is asking for permission to do.
14 If the company is seeking, for example, permission
15 to exercise a right or privilege under any
16 franchise, known as an area certificate, they must
17 provide certain information. And the statute is
18 clear that the information must be provided before
19 such certificate shall be issued.

20 You know, in that case the applicant
21 has to provide certain things, including a
22 certified copy of the charter of the corporation,
23 along with a verified statement of the president
24 and secretary of the corporation, quote, showing
25 that it has received the required consent of the

1 proper municipal authorities, end quote.

2 Now, this prerequisite step cannot be
3 skipped because courts have held that a CCN does
4 not confer any new powers on a utility. It simply
5 permits the utility to exercise rights and
6 privileges already conferred upon it by state
7 charter and municipal consent.

8 And so only after the applicant has
9 provided such documentation does the Commission
10 have power to grant that CCN. In other words, once
11 the company has the permission it would otherwise
12 need from local authorities to perform the public
13 service, it must provide that information to the
14 Commission.

15 And through granting CCNs after
16 evaluating that information, the Commission
17 determines whether or not permitting that
18 corporation to operate in that service territory or
19 do that thing is in the public interest.

20 Now, in this case Ameren has not
21 provided the Commission with that kind of
22 information, likely because it plans to build these
23 facilities in its existing service territory. And
24 so presumably the company already has all the
25 franchises and permission that it needs for these

1 projects. But we don't know for sure because we
2 don't have the locations.

3 And so even though the company
4 provided me documentation of all of their
5 franchises, approximately 400 of them or so, I
6 cannot look at where the project will be and then
7 compare it to the company's franchise for that area
8 and see if they qualify.

9 I have reviewed a number of those
10 documents, and it is likely that the company will,
11 once a location is identified, be able to point to
12 a specific franchise giving it permission. The
13 company may say, look, we don't need to show that
14 in this case because that's not the permission
15 we're seeking. We're seeking permission to build
16 generating facilities. Certainly, however, that
17 generating plant will be connected to the grid in
18 some way.

19 And the fact is that we don't know
20 what all will be necessary to build or what rights
21 might need to be exercised to fulfill this
22 proposal. And as regulators, you cannot accept
23 without evidence that this is the case. You have
24 to verify that they are able to do this by
25 requiring the company to provide such information.

1 Now, importantly, as it relates to
2 the kind of permission that the company says that
3 it's seeking in this case, that is to build various
4 facilities or electric plants, the Commission
5 cannot act until the company provides certain
6 information in that case either.

7 Before beginning construction of an
8 electric plant, the law is clear that the utility
9 must obtain permission from the Commission, and it
10 does this after due hearing and only if the
11 Commission determines that such construction is
12 necessary or convenient for the public service.

13 The Court of Appeals has explained
14 that by requiring public utilities to seek
15 commission approval each time they begin
16 construction, the Legislature ensures that a broad
17 range of issues, including county zoning, can be
18 considered.

19 And so for each generating plant, the
20 Commission must consider current conditions,
21 concerns and other issues before granting the
22 specific authority or permission to begin
23 construction. And this specific authority, after
24 considering relevant information, is especially
25 important for a CCN as it relates to construction

1 because a CCN can in some cases obviate the need to
2 seek county zoning approval, and it may preempt a
3 variety of local or municipal ordinances.

4 You know, and we know that solar is a
5 problem. Yes, it's not the -- doesn't rise to the
6 level of a combined cycle unit, but there are
7 issues. And we've seen cases this Commission has
8 participated in cases where customers or certain
9 groups are opposing solar installations from being
10 put in in their neighborhood or their housing
11 development area.

12 So here Ameren seeks a blanket CCN
13 from the Commission permitting it to partner with
14 certain customers in its service territory and own
15 the distributed solar facilities located on that
16 customer's property. And this request is
17 problematic because it does not seek specific
18 authority for any particular location.

19 The company admits that it hasn't
20 provided this information, and I think all parties
21 acknowledge that. But instead, it and the
22 signatories to the Stipulation & Agreement offer a
23 novel process, which is included in Appendix A,
24 purporting to comply with the law and which would
25 permit the company to provide information after the

1 CCN is granted.

2 Ameren has said it does not know
3 which customers will participate, it does not have
4 the exact locations for these solar facilities,
5 construction plans haven't been finalized, it has
6 not identified or requested permits or approvals
7 required for construction, and it admits it has not
8 determined if any facilities will require crossing
9 electric or telephone lines, railroad tracks or
10 other underground facilities.

11 How can the Commission grant specific
12 authority to build a power plant after considering
13 a broad range of issues, including county zoning,
14 before granting a CCN if the company has not even
15 provided where the plant will be build? I suggest
16 that it cannot.

17 And this deficiency cannot be cured
18 by the provisions in the Nonunanimous Stipulation
19 offering that signatories will review the
20 information upon submission by the company after
21 the CCN is granted.

22 I want to talk about a particular
23 provision in Appendix A listing additional
24 considerations for site evaluation, and this
25 includes, quote, type of facility, office,

1 educational, industrial, manufacturing, retail,
2 religious, data center, warehouse, health care,
3 military, recreational and other, end quote.

4 So setting aside for a moment all of
5 the other legal and policy considerations, the
6 religious nature of a site has nothing to do with
7 it being a suitable location. Making religion a
8 selection criteria likely causes constitutional
9 problems, the 1st Amendment as made applicable to
10 the states through the 14th Amendment.

11 But as troubling as that provision
12 might be, even if it were removed the remaining
13 process for selection is unlawful. In total, the
14 site selection criteria in Appendix A creates a
15 procedure lacking any basis in law and deliberately
16 minimizes the Commission's statutory authority.

17 For each generating facility, the
18 Commission must review, not the signatories, not
19 any number of stakeholders in the room. It's the
20 Commission that must remove. And this renew must
21 be done prior to granting a CCN.

22 For these reasons, the Commission
23 must resolve Issue 1 by finding the company's
24 application does not present a plan meeting the
25 requirements of the CCN statute.

1 Issue 2 asks the Commission to
2 determine whether or not the evidence establishes
3 that the company's project is necessary or
4 convenient for the public service. It does not.
5 Section 393.170 provides the standard to be applied
6 when evaluating an application for a CCN, stating
7 the Commission shall have the power to grant the
8 permission and approval whenever it shall after due
9 hearing determine that such construction or such
10 exercise of right, privilege or franchise is
11 necessary or convenient for the public service.

12 The Missouri Court of Appeals has
13 explained that when making that determination, the
14 term necessity does not mean essential or
15 absolutely indispensable, but that an additional
16 service would be an improvement justifying its
17 cost.

18 You have heard in previous cases and
19 again today that when evaluating CCN applications
20 the Commission looks at the Tartan criteria. Now,
21 we disagree upon Staff's view that it was met, and
22 several parties noted that, you know, Public
23 Counsel's position is contrary to the Commission's
24 holding in the Greenwood solar facility case.

25 I will note that Public Counsel is

1 appealing that case presently. And so I do not see
2 that as an issue that our position now may appear
3 to be inconsistent with the Commission's findings
4 in that case.

5 Whether it be under Tartan or any
6 other consideration to look at the public interest,
7 under any standard the Commission must base its
8 decision on the evidence in the record. And here
9 the company's application, as supplemented by the
10 Stipulation & Agreement, does not demonstrate the
11 project is necessary to provide safe and adequate
12 service, and it does not show that this project is
13 an improvement justifying its cost.

14 No party has presented any
15 quantification of the putative benefits that would
16 enable Ameren to meet its burden to show that this
17 project is required to provide safe and adequate
18 service or is otherwise justified.

19 Instead, the signatories present
20 another novel and unlawful process for the
21 Commission to consider: Appendix B. The process
22 and terms outlined in Appendix B are merely an
23 attempt to permit the company to avoid meeting its
24 burden of proof. Without actually offering
25 evidence that the project is necessary or

1 convenient for the public service, the signatories
2 attempt to justify this project as a means for the
3 company to exploring learning opportunities and key
4 keys.

5 Now, absent from either list, though,
6 is any quantification of the putative benefits. In
7 fact, a review of the items listed in Appendix B
8 reveals it to be little more than marketing
9 research plans, documentation the company should
10 develop before signing any contracts or beginning
11 this project, and questions that could be answered
12 without the \$10 million project.

13 Importantly, for each of these Ameren
14 does not explain why investigating these
15 opportunities or key questions will provide any
16 benefit to ratepayers. If the benefit of this
17 project is learning whether it is less expensive to
18 build something without having to pay for land or a
19 25-year lease, well, the answer is already obvious.

20 One listed learning opportunity
21 suggests that Ameren should be able to determine if
22 there are any specific financial benefits from this
23 form of solar generation. This objective inverts
24 the CCN process and avoids the burden of proof,
25 attempting to justify the project with the

1 commitment to determine the very things it is
2 required to prove before a CCN is granted.

3 As the applicant, Ameren bears the
4 burden to show its project is necessary and
5 convenient to the public service. No such evidence
6 has been presented to support the application.
7 This project is not necessary to comply with RES.
8 It's not necessary for capacity to serve its
9 customers. No benefit has been quantified. All we
10 know is the cost.

11 Because the evidence does not show
12 this project is necessary or convenient for the
13 public service, the Commission must find in favor
14 of Public Counsel on Issue 2 and reject the
15 application.

16 Issue 3 asks the Commission to
17 determine whether or not the evidence demonstrates
18 that the company has provided information required
19 under the Commission's rules. The Commission's
20 rules supplement the CCN statute and require
21 applicants to provide certain information when
22 seeking a CCN.

23 This information has not been
24 provided. Instead, the company states that it will
25 provide the required information later, quote, as

1 allowed by 4 CSR 240-3.015 paragraph 2, end quote.
2 The course preferred by the company would have the
3 Commission grant a CCN and then the company would
4 provide the required information.

5 To be clear, this is not permitted by
6 the rule. The language of the rule provides,
7 quote, if any of the items required under this rule
8 are unavailable at the time the application is
9 filed, they shall be furnished prior to the
10 granting of the authority sought, end quote.

11 The provision of certain information
12 is a prerequisite to granting a CCN. At this point
13 the company has not provided the required
14 information, and so the Commission must reject the
15 CCN application.

16 Now, Issue 4 is related to Issue 3
17 because it asks the Commission to determine whether
18 or not the evidence shows that good cause exists to
19 support a waiver from the issue -- from the rules
20 in Issue 3.

21 There is no evidence to support such
22 a waiver. Of course the Commission may waive its
23 rules for good cause shown. In this case the
24 company has not sought a waiver of the rule. It
25 interprets it differently than I do.

1 If the company did seek a waiver from
2 the Commission's rule, however, there is no
3 evidence to support a showing of good cause. On
4 the contrary, the failure to provide this
5 information indicates that the company's CCN
6 application is premature.

7 Nothing prevented the company from
8 finding a partner to participate. Nothing
9 prevented them from selecting a location, from
10 developing construction plans or requesting the
11 permits and approval required from local
12 authorities.

13 As the applicant, the company bears
14 the burden to do so when making its filing, but by
15 choosing to forego these required steps, Ameren has
16 not presented a plan meeting the requirements of
17 the CCN statute or the Commission's rules. Neither
18 has the company shown good cause to depart from
19 that rule.

20 Issue 5 asks the Commission to decide
21 whether or not the company's plan outlining
22 treatment of the proposed facilities at the end of
23 25 years is lawful. Section 393.190 requires that
24 no electrical corporation shall hereafter sell,
25 assign, lease, transfer, mortgage or otherwise

1 dispose of or encumber the whole or any part of its
2 works or system necessary or useful in the
3 performance of its duties to the public without
4 first having secured from the Commission an order
5 authorizing it so to do.

6 In this case, the testimony
7 describing the company's plan indicates, quote, at
8 the end of the 25-year term, the customer may
9 purchase the facility, renew the lease, or have the
10 facility removed from the property, end quote.

11 No explanation about the process for
12 seeking Commission approval or commitments has been
13 made or has been provided. Offering a potential
14 partner the listed options without making them
15 aware that future treatment of the facilities is
16 subject to Commission approval could be misleading.
17 And without a plan in place to address that
18 situation, it will create future problems.

19 The company's plan, to the extent
20 that one exists, will create a dilemma for future
21 commissioners. 25 years from now, or whenever the
22 project would be built, if the site owner wants the
23 project removed, the commissioners will be asked to
24 choose between approving the removal of generation
25 facilities the customers have paid for and paid to

1 maintain and used the energy for and used the
2 SRECs, or denying approval of that removal of the
3 asset and requiring a host site to keep the
4 facility on its property that it wants removed.
5 Neither one of those is in the public interest.

6 And failure to consider the impact of
7 its proposal further indicates that this CCN
8 proposal is premature.

9 Under the pretense of complying with
10 the law, the company and certain parties have
11 agreed to a Stipulation & Agreement. In it are
12 contained two appendices. Appendix A speaks in
13 terms of a site selection process, and this process
14 abrogates the Commission's statutory oversight and
15 has no basis in the law.

16 Appendix B addresses the company's
17 learning -- addresses the company's learning
18 objectives in an attempt to mask the failure to
19 meet its burden to show that the project is
20 necessary or convenient for the public service.

21 Each appendix attempts to cure the
22 company's failure to provide required information,
23 and each fails to meet the requirements of the law.
24 Nothing prevented the company from finding a
25 partner to participate, selecting a location,

1 developing construction plans or requesting the
2 permits and approval from local authorities.
3 Nothing prevented the company from performing
4 studies or otherwise quantifying the benefits in
5 order to show that this project would be an
6 improvement justifying its costs.

7 The company chose to forego these
8 required steps, and in so doing it has not
9 presented a plan meeting the requirements under
10 Section 393.170. Therefore, for the foregoing
11 reasons, the Commission must reject the company's
12 CCN application in this case.

13 Thank you, and I'm available for
14 questions.

15 JUDGE BUSHMANN: Questions,
16 Mr. Chairman?

17 CHAIRMAN HALL: No questions. Thank
18 you.

19 COMMISSIONER STOLL: No questions.
20 Thank you.

21 JUDGE BUSHMANN: Thank you. Let's go
22 ahead and try and have a witness testify. Would
23 Ameren Missouri like to call its first witness?

24 MS. TATRO: Michael Hardy.

25 (Witness sworn.)

1 MICHAEL HARDING testified as follows:

2 DIRECT EXAMINATION BY MS. TATRO:

3 Q. Good morning. Will you state your
4 name and business address for the Commission,
5 please.

6 A. Michael Harding.

7 Q. And your business address?

8 A. 1901 Chouteau Avenue, St. Louis,
9 Missouri.

10 Q. And are you the same Michael Harding
11 that prefiled direct testimony in this case?

12 A. Yes.

13 Q. Do you have any corrections or
14 additions to make to your testimony?

15 A. No.

16 Q. If I were to ask you the same
17 questions that are in your written testimony, would
18 your answers be substantially the same?

19 A. Yes.

20 MS. TATRO: I move Exhibit 1 into the
21 record and tender the witness for
22 cross-examination.

23 JUDGE BUSHMANN: Any objections to
24 the receipt of that exhibit?

25 (No response.)

1 JUDGE BUSHMANN: Hearing none, it
2 will be received.

3 (AMEREN EXHIBIT NO. 1 WAS RECEIVED
4 INTO EVIDENCE.)

5 JUDGE BUSHMANN: First cross will be
6 by Staff.

7 MS. MERS: May I inquire from the
8 bench?

9 JUDGE BUSHMANN: You may.

10 CROSS-EXAMINATION BY MS. MERS:

11 Q. Mr. Harding, did you prepare any
12 answers to data requests submitted by Staff in this
13 proceeding?

14 A. Yes, I did.

15 MS. MERS: May I approach the
16 witness?

17 THE WITNESS: Yes.

18 BY MS. MERS:

19 Q. Do you recognize this document I'm
20 handing you titled Missouri Response to Staff Data
21 Request 0023?

22 A. Yes, I do.

23 Q. Did you prepare this response?

24 A. Yes, I did.

25 MS. MERS: Okay. I'd like at this

1 time to have this exhibit marked.

2 JUDGE BUSHMANN: What number did you
3 want to put on it?

4 MS. MERS: I believe that would be
5 Staff Exhibit 102.

6 JUDGE BUSHMANN: You had previously
7 submitted 102 as Eubanks surrebuttal. Do you want
8 to do 103?

9 MS. MERS: Yeah, 103 works.

10 (STAFF EXHIBIT NO. 103 WAS MARKED FOR
11 IDENTIFICATION BY THE REPORTER.)

12 BY MS. MERS:

13 Q. Mr. Harding, is this document,
14 without getting into any HC -- without getting into
15 highly confidential information, does this data
16 request purport to be justification behind the
17 dollar per watt suggested in this case?

18 A. Yes, that's correct.

19 Q. You were also part of the Montgomery
20 Solar case; is that correct?

21 A. Yes.

22 Q. Did you prepare any answers to data
23 requests submitted in that case?

24 A. No, not that I'm aware of.

25 MS. MERS: May I approach the

1 witness?

2 THE WITNESS: Yes.

3 JUDGE BUSHMANN: Could I get one more
4 copy of Exhibit 103? Thank you.

5 BY MS. MERS:

6 Q. Does this refresh your memory?

7 A. Yes.

8 Q. Did you prepare this response?

9 A. Yes, I did.

10 Q. Is this document a compilation of RFP
11 proposals related to a solar generation project?

12 A. This document is the lowest cost
13 winning RFP response we received.

14 Q. And this document was prepared in
15 2015, correct?

16 A. Yes.

17 Q. Did you use the responses gathered in
18 this data request to form the basis of the watt
19 figure used in the initial application?

20 A. Yes, we did.

21 MS. MERS: All right. I'd also move
22 to have this highly confidential exhibit marked.

23 (STAFF EXHIBIT NO. 104HC WAS MARKED
24 FOR IDENTIFICATION BY THE REPORTER.)

25 BY MS. MERS:

1 **Q. Is there anything else you used to**
2 **arrive at 2.20 a watt cap?**

3 A. That price also includes some Ameren
4 direct costs, as well as some indirect costs.

5 **Q. Would you consider the 2.20 a watt**
6 **cap a form of ratepayer protection?**

7 A. Yes, definitely.

8 **Q. Is there any other purpose to the**
9 **cap?**

10 A. That is the primary purpose is to
11 ensure the ratepayers do not pay more than what the
12 lowest cost would be for us to construct a utility
13 central facility.

14 **Q. OPC alleges the price of solar will**
15 **continue to decline over time. Do you expect it to**
16 **decline at the current rate?**

17 A. No. I expect over the next few years
18 we'll see that rate of decline lessen. While we
19 have seen tremendous rates of decline over the last
20 ten years, that acceleration has slowed.
21 Currently, I believe the best forecasts have us
22 declining over the next few years 3 to 6 cents per
23 year per watt.

24 **Q. Will this project help determine if**
25 **there are benefits to the diversification of**

1 **Ameren's generation fleet?**

2 A. Yes, I believe so. We're -- we're
3 hoping that we'll find out if this is going to be
4 the appropriate strategy for solar deployment
5 moving forward in the next few years.

6 **Q. In your opinion, are there**
7 **difficulties in modeling solar generation in**
8 **simulated runs?**

9 A. Yes, definitely. If -- modeling
10 things in a simulated run is just merely that.
11 It's a simulated run. Until you actually put
12 something out there on the grid in a real world
13 situation, it's -- you can only speculate.

14 **Q. Would this project help determine if**
15 **there's benefits to diversification among**
16 **centralized and distributed generation sources?**

17 A. I believe so, yes. Right now I think
18 there's really two schools of thought out there.
19 You have those that believe their large central
20 station solar facilities are the lowest cost, and I
21 think there's really no disputing that from a
22 direct cost basis, that larger central facilities
23 are cheaper. What's not quite certain is what are
24 those intangible and those other benefits from
25 having a distributed system of solar facilities.

1 Q. If the Clean Power Plan is put into
2 place, is there any uncertainty, in your opinion,
3 how a wind PPA across state lines would work?

4 A. You know, I'm not that familiar with
5 the Clean Power Plan. That would probably be a
6 better question for someone else.

7 Q. Okay. Do you have an estimate of how
8 much carbon emission reduction Ameren would be
9 required under the Clean Power Plan? I know you
10 said you weren't super familiar, but --

11 A. No. No, I do not.

12 Q. Okay. Is it reasonable for a utility
13 such as Ameren to plan for compliance under the
14 Clean Power Plan even though it is currently
15 stayed?

16 A. I believe so, yes.

17 Q. Is regulatory compliance the only
18 motive Ameren would have in building renewable
19 generation?

20 A. Definitely not.

21 Q. Does Ameren believe environmental
22 stewardship is an important goal of the corporate
23 stewardship of the company?

24 A. Yes.

25 Q. Turning to your direct testimony, do

1 you have that in front of you?

2 A. Yes.

3 Q. Page 4. You state, At the end of the
4 25-year term, the customer may purchase the
5 facility, renew the lease or have the facility
6 removed from the property.

7 Does anything in this statement or in
8 the Nonunanimous Stipulation & Agreement mean that
9 Ameren will not seek Commission approval for any
10 sale, transfer or getting rid of the facility?

11 A. I'm not a lawyer, so I'm not quite
12 sure the answer to that. I would defer to my --

13 Q. Your counsel?

14 A. Yeah, counsel.

15 Q. Okay. How long is the useful life of
16 an average solar facility?

17 A. Anywhere from 25 to 30 years.

18 MS. MERS: Thank you. I have no
19 further questions.

20 JUDGE BUSHMANN: I want to just sort
21 out the exhibits that you had. You had Staff
22 Exhibit 103, which was the Data Request No. 23; is
23 that correct?

24 MS. MERS: Correct.

25 JUDGE BUSHMANN: Did you want to

1 offer that into evidence?

2 MS. MERS: I was going to offer it
3 later, but if no one's going to object, I'll offer
4 it now.

5 JUDGE BUSHMANN: Any objections to
6 the receipt of that?

7 (No response.)

8 JUDGE BUSHMANN: Hearing none, it
9 will be received into the record.

10 (STAFF'S EXHIBIT NO. 103HC WAS
11 RECEIVED INTO EVIDENCE.)

12 JUDGE BUSHMANN: There was a second
13 document you provided to the Bench and it was Data
14 Request No. 3?

15 MS. MERS: Yes.

16 JUDGE BUSHMANN: And did you ask that
17 that be marked?

18 MS. MERS: Yes.

19 JUDGE BUSHMANN: As Exhibit 104?

20 MS. MERS: Yes.

21 JUDGE BUSHMANN: Were you intending
22 to offer 104?

23 MS. MERS: I can go ahead and offer
24 it now if there's no objections.

25 JUDGE BUSHMANN: Any objection to the

1 receipt of Staff Exhibit 104?

2 (No response.)

3 JUDGE BUSHMANN: Hearing none, that
4 exhibit will be received.

5 (STAFF EXHIBIT NO. 104HC WAS RECEIVED
6 INTO EVIDENCE.)

7 JUDGE BUSHMANN: Am I correct those
8 are both highly confidential?

9 MS. MERS: Yes, they are.

10 JUDGE BUSHMANN: Okay. Thank you.
11 Next cross would be Division of Energy.

12 MR. ANTAL: No cross. Thank you very
13 much.

14 JUDGE BUSHMANN: Renew Missouri?

15 MR. LINHARES: No cross, Judge.
16 Thank you.

17 JUDGE BUSHMANN: Wal-Mart?

18 MR. WOODSMALL: No questions. Thank
19 you.

20 JUDGE BUSHMANN: Brightergy?

21 MR. ZELLERS: No questions, your
22 Honor.

23 JUDGE WOODRUFF: Public Counsel?

24 MR. OPITZ: Thank you, Judge. May I
25 have permission to cross from my seat?

1 JUDGE BUSHMANN: You may.

2 CROSS-EXAMINATION BY MR. OPITZ:

3 Q. Good morning, Mr. Harding.

4 A. Good morning.

5 Q. This is your first time working on a
6 proposal to build utility-owned solar facilities on
7 customer-owned property; is that correct?

8 A. Yes, that's correct.

9 Q. And you participated in the
10 development of the company's application, right?

11 A. Yes.

12 Q. And Ameren has not developed or
13 drafted an application for participants related to
14 this project, has it?

15 A. We have a rough draft, yes. We've
16 begun drafting one.

17 Q. But there's no finalized application
18 at this point that's been provided to the parties?

19 A. Correct.

20 Q. And Ameren has not completed a
21 communication plan related to this project,
22 correct?

23 A. No. That's incorrect. We have a
24 communication plan that we're currently working on.

25 Q. You're saying that you're currently

1 **working on it. Has it been completed?**

2 A. I'm not sure what you mean by
3 completed. We have an overall idea, I believe, of
4 how we're going to communicate this. Much depended
5 on the results of this hearing.

6 **Q. And has that plan been documented in**
7 **any way and provided to the parties?**

8 A. I believe we have documented some of
9 that communication plan at a very early stage.

10 **Q. But has it been provided to the**
11 **parties?**

12 A. I'm not sure.

13 MR. OPITZ: Judge, may I approach?

14 JUDGE BUSHMANN: You may.

15 (OPC EXHIBIT NO. 202 WAS MARKED FOR
16 IDENTIFICATION BY THE REPORTER.)

17 BY MR. OPITZ:

18 **Q. Mr. Harding, do you recognize what**
19 **I've had marked as 202?**

20 A. I'm sorry. What is 202?

21 **Q. 202 is the document that I just**
22 **handed you. I guess I'm -- I had it marked as**
23 **Exhibit 202. Do you recognize that document?**

24 A. Okay. Yeah. I have MPSC 0031,
25 Claire Eubanks.

1 Q. Okay. And what is this document that
2 you're looking at?

3 A. It says, Has Ameren Missouri
4 developed or drafted a communication plan for this
5 pilot project? If so, please provide. Has Ameren
6 Missouri developed or drafted any language for
7 mailings or its website to advertise this pilot
8 project? If so, please provide.

9 Q. And this was -- so is it your
10 understanding that this was a data request sent to
11 the company by Staff?

12 A. Yes.

13 Q. And did you prepare the response to
14 this data request?

15 A. Yes.

16 Q. And in your response, you indicate
17 that a communication plan is being drafted but is
18 not complete?

19 A. That is correct, as of 6/3/2016.

20 MR. OPITZ: Judge, may I approach
21 again?

22 JUDGE BUSHMANN: You may.

23 (OPC EXHIBIT NO. 203 WAS MARKED FOR
24 IDENTIFICATION BY THE REPORTER.)

25 BY MR. OPITZ:

1 **Q. Mr. Harding, what is the document**
2 **that I just handed you?**

3 **A. This is a data request from**
4 **Mr. Opitz, and it states, Refer to Appendix B of**
5 **the Nonunanimous Stipulation & Agreement. Provide**
6 **the company's plan to answer the question "can**
7 **Ameren Missouri identify a system reliability**
8 **benefit arising from the addition of these**
9 **generation assets?"**

10 **Q. My apologies. That's the wrong**
11 **exhibit. I'll move on from that question.**

12 **So you are testifying that since the**
13 **time you submitted that data request, the company**
14 **has updated the information, correct?**

15 **A. Yes, I believe so. That would be a**
16 **better question for our communications head, but**
17 **yes.**

18 **Q. Mr. Harding, has Ameren developed any**
19 **language for mailings or its website to advertise**
20 **this pilot project?**

21 **A. I don't know.**

22 **Q. Mr. Harding, has Ameren applied for**
23 **any permits related to the solar partnership**
24 **project?**

25 **A. No.**

1 **Q. And, Mr. Harding, did you perform a**
2 **quantification of the benefits to customers for**
3 **this project?**

4 A. What do you mean by quantification of
5 the benefits exactly?

6 **Q. Any analysis or calculation showing**
7 **the value of the benefit from completing this**
8 **project.**

9 A. I believe that's what the pilot's
10 trying to explore is we're going to try to find out
11 what those benefits may be. We don't -- we
12 recognize we don't know what all the potential
13 benefits could be, and that's what we're hoping to
14 do is put some steel in the ground and find out
15 what some of those may be.

16 **Q. So at this time you haven't performed**
17 **any quantification or calculation related to that?**

18 A. I'm not real clear on what the
19 quantification would be of.

20 **Q. Okay. Now, earlier you were asked**
21 **about simulated runs, and you indicated you were**
22 **familiar with that. Do you recall that?**

23 A. Yes.

24 **Q. And for my information, what does a**
25 **simulated run mean?**

1 A. Well, I believe you're asking me to
2 describe what a simulated run means to Mrs. Mers.

3 **Q. To you.**

4 A. To me?

5 **Q. Yes.**

6 A. A simulated run would be putting in
7 any amount of variables that you -- that you would
8 want to assume into a model and then running the
9 simulation to see what the output would be.

10 **Q. And for this application, did you**
11 **perform any simulated runs related to this project?**

12 A. Did we make up fictitious sites and
13 fictitious capacity factors and locations and then
14 aggregate them and -- over the life of the plants?
15 No, we did not.

16 **Q. Did you personally do any of that?**

17 A. No, I did not.

18 **Q. And you were also asked about the**
19 **25-year lease term, and that's in your testimony as**
20 **well, correct?**

21 A. I believe so. Where are you
22 referring?

23 **Q. At page 4 of your direct testimony,**
24 **near the top, line 2. Are you there?**

25 A. Got it.

1 Q. Okay. So you agree that your
2 testimony is that, at the end of the term, the
3 customer may have the option to purchase the
4 facility, renew the lease or have the facility
5 removed from the property?

6 A. Yes.

7 Q. Have you developed any plan to carry
8 out the customer's wishes at the end of the life of
9 the project?

10 A. We have discussed this with internal
11 counsel. I'm not a lawyer, so I don't have the
12 details that you may be looking for. The thought
13 was, it just seemed reasonable at the end of the
14 life that the customer would have the option to
15 have that removed, to have the option to purchase
16 that at a remaining salvage value, any benefit
17 which of would go back to our customers, or
18 potentially even renew the lease if there was some
19 value there. It would be renegotiated at that
20 time.

21 MR. OPITZ: That's all the cross I
22 have, Judge. I'd like to offer Exhibit 202 into
23 evidence, and that was the first document I had
24 marked.

25 JUDGE BUSHMANN: Any objections?

1 (No response.)

2 JUDGE BUSHMANN: Hearing none, it
3 will be received into the record.

4 (OPC EXHIBIT NO. 202 WAS RECEIVED
5 INTO EVIDENCE.)

6 JUDGE BUSHMANN: Questions from the
7 Bench. Mr. Chairman?

8 QUESTIONS BY CHAIRMAN HALL:

9 Q. Good morning.

10 A. Good morning.

11 Q. How many facilities does this pilot
12 envision?

13 A. We're hoping to get between three to
14 five, as much as \$10 million can get us in between
15 that 100 KW to 2 megawatt range.

16 Q. Okay. So we're not talking rooftop
17 solar here. What we're talking about is utility
18 scale but just smaller utility scale?

19 A. We like the better economics of the
20 slightly larger systems to retain some of that, but
21 it could be as small as 100 KW. And we're not
22 ruling out rooftops. We're actually wanting to
23 explore to see what types of properties are out
24 there for potential dual use.

25 Q. So this project might involve rooftop

1 **solar?**

2 A. Yes, it could.

3 **Q. Is this program modeled on a program**
4 **that is in existence elsewhere in the country?**

5 A. No, not that I'm aware of.

6 **Q. This would be the first attempt at**
7 **something at this scale?**

8 A. There is one similar in APS where
9 they did a -- something with residential rooftops,
10 but again, they -- I believe they went into 1,200
11 different homes to put these lease systems on
12 there, which seems very aggressive to me. We're
13 looking for a little more conservative approach
14 here for four to five systems with kind of a, I
15 guess a similar approach of having our assets on
16 customer property.

17 **Q. I have heard about a program. I've**
18 **not -- I've heard about a program in San Antonio**
19 **where they've got rooftop solar owned by the -- by**
20 **the utility. Are you familiar with that program?**

21 A. No, I'm not.

22 CHAIRMAN HALL: I have no further
23 questions. Thank you.

24 COMMISSIONER STOLL: No questions.

25 COMMISSIONER RUPE: None for me.

1 JUDGE BUSHMANN: Recross based on
2 Bench questions, Commission Staff?

3 MS. MERS: No recross.

4 JUDGE BUSHMANN: Division of Energy?

5 MR. ANTAL: No questions. Thank you.

6 JUDGE BUSHMANN: Renew Missouri?

7 MR. LINHARES: None. Thank you,
8 Judge.

9 JUDGE BUSHMANN: Wal-Mart?

10 MR. WOODSMALL: No questions.

11 JUDGE BUSHMANN: Brightergy?

12 MR. ZELLERS: No, your Honor.

13 JUDGE BUSHMANN: Public Counsel?

14 MR. OPITZ: No, thank you, Judge.

15 JUDGE BUSHMANN: Redirect by Ameren
16 Missouri?

17 REDIRECT EXAMINATION BY MS. TATRO:

18 Q. Mr. Harding, you had a couple
19 questions about the end of the 25 years and what
20 would happen to the facilities at the end of that
21 time. Do you remember those questions from
22 Ms. Mers and Mr. Opitz?

23 A. Yes.

24 Q. If there are any legal requirements
25 before any of those options can be exercised, would

1 **you expect that Ameren Missouri would comply?**

2 A. Most definitely, yes.

3 MS. TATRO: I have no further
4 questions. Thank you.

5 JUDGE BUSHMANN: Thank you,
6 Mr. Harding. That completes your testimony, sir.
7 You may step down.

8 This seems to be a good time -- did
9 you have something?

10 MS. TATRO: I forgot to give this to
11 the court reporter. May I?

12 JUDGE BUSHMANN: Certainly. Let's
13 take a short break. We'll be in recess until
14 10:30.

15 (A BREAK WAS TAKEN.)

16 JUDGE BUSHMANN: Let's go back on the
17 record. And we're ready for the next Ameren
18 Missouri witness.

19 MS. TATRO: William Barbieri.

20 (Witness sworn.)

21 JUDGE BUSHMANN: You may proceed.

22 WILLIAM BARBIERI testified as follows:

23 DIRECT EXAMINATION BY MS. TATRO:

24 **Q. Good morning. Can you state your**
25 **name and business address for the Commission?**

1 A. Yes. My name is William Barbieri,
2 and my business address is 1901 Chouteau Avenue,
3 St. Louis.

4 Q. And are you the same William Barbieri
5 that prefiled direct and surrebuttal testimony?

6 A. Yes, I am.

7 Q. Do you have any corrections or
8 additions to your testimony?

9 A. No, I do not.

10 Q. If I were to ask you the same
11 questions that are listed on your prefiled
12 testimony, would your answers be substantially the
13 same?

14 A. Yes, they would.

15 MS. TATRO: I'd like to move
16 Exhibit 2, which is the direct testimony of
17 Mr. Barbieri, and Exhibit 3, which is the
18 surrebuttal testimony of Mr. Barbieri, into the
19 record and tender the witness for
20 cross-examination.

21 JUDGE BUSHMANN: Any objections to
22 the receipt of those exhibits?

23 (No response.)

24 JUDGE BUSHMANN: Hearing none, they
25 are received into the record.

1 (AMEREN EXHIBIT NOS. 2 AND 3 WERE
2 RECEIVED INTO EVIDENCE.)

3 JUDGE BUSHMANN: First cross would be
4 by Staff.

5 CROSS-EXAMINATION BY MS. MERS:

6 Q. What is the impact of the \$10 million
7 in capital expenditures on the average residential
8 customer?

9 A. The rate department of Ameren
10 Missouri ran a calculation for us at our request,
11 and they determined that with the investment tax
12 credit, that it would be approximately 42 cents per
13 customer per year.

14 Q. Okay. Did you receive any data
15 requests from OPC inquiring into the impact of the
16 average residential customer?

17 A. I don't recall.

18 Q. Have you seen any calculations from
19 OPC on the impact of the average residential
20 customer?

21 A. I don't recall seeing any, no.

22 Q. All right. OPC one of their claims
23 is that no learning will be accomplished from this
24 pilot program. Has Ameren learned anything from
25 installing solar in its general office building?

1 A. Yes, we definitely have. So we've
2 done two solar installations. One is at our
3 general office building, and in that one we applied
4 three different types of technology. So we were
5 able to determine which type of panel technology
6 operated the most efficiently.

7 And so we actually took then that
8 learning and applied that into our O'Fallon
9 facility that we constructed, and so basically from
10 that we also learned that the capacity factor was
11 higher than what we anticipated. We went to a
12 little over 18 percent versus an assumed 15
13 percent.

14 We also learned that -- we are
15 learning the maintenance cost operation with that
16 facility. It's been operational about a year now.
17 So we are learning what the average annual
18 maintenance cost is.

19 We're also learning which products
20 and services were most effective. Case in point,
21 we would probably not utilize the same inverter
22 manufacturer as we would move forward.

23 So with the new program, some of the
24 learnings that we see built upon those, we're
25 anticipating to determine if multiple sites are

1 going to be cost effective, trying to determine
2 truly the benefit of locating closer to our load,
3 the benefit of being spread out over a wider area
4 in a region basically to minimize cloud cover
5 impact and the impact of any power-type surges that
6 could occur with the multiple sites and dealing
7 with the intermittency issues.

8 **Q. So to summarize, you do expect to**
9 **learn new different data, knowledge and experience**
10 **from this pilot program?**

11 A. We do.

12 **Q. If solar is not needed for RES**
13 **compliance till 2018, why not wait till that date**
14 **to construct this facility?**

15 A. Then it definitely would be too late.
16 Obviously we need additional renewables to meet the
17 Mo. RES compliance in 2019, is when your bank goes
18 to a negative. So we will definitely have to have
19 renewables to replace that. And what we're trying
20 to determine is the overall advantage of small
21 scale DG. Is that really a tool that we want in
22 order to meet that compliance?

23 The overall process in and of itself
24 takes a significant amount of time when you think
25 about this program and the initial discussions that

1 we'll have with customers. Then you have site
2 determination and evaluation. You'll have terms
3 and conditions of contracts. You'll have to issue
4 EPC bids. You'll have to evaluate the bids.
5 You'll have to evaluate the contractors, start the
6 construct, commissioning. And only after all of
7 that has been done will you even begin to start to
8 have data collection associated with it.

9 The other concern with the overall
10 would be any implications that could definitely
11 come up because of Clean Power Plan, and we believe
12 strongly that that will come into fruition in one
13 form or fashion. It's basically going to create a
14 de facto federal renewable energy standard, is what
15 it will do.

16 And quite honestly, at that point in
17 time it could very well make the Missouri Renewable
18 Energy Standards somewhat irrelevant. We fully
19 believe that there would be much more renewable
20 requirements underneath a CPP than what we would
21 see and what we project to see underneath the
22 existing compliance requirements of the Missouri
23 RES.

24 So basically we understand, you know,
25 that there is going to be solar and wind

1 development that will be necessary to meet that.
2 They'll both have significant roles. We already
3 know that solar provides power during more of the
4 peaking period and wind is off peak. So how are
5 you going to balance that and integrate that into
6 the overall compliance?

7 We estimate that with the existing
8 Mo. RES that we have right now, our overall
9 estimate that we will be spending close to
10 \$1 billion in capital over the next 10 to 12 years
11 in order to meet just the Missouri Renewable Energy
12 Standard requirements up to the 15 percent
13 requirement that starts in the year 2021.

14 So we believe that this investment of
15 \$10 million to ensure that we're utilizing the most
16 effective and operational effective forms of
17 generation is definitely a necessity. In the end,
18 we don't know what we don't know, and we need to
19 find that out now as opposed to waiting.

20 Q. Thank you.

21 MS. MERS: May I approach the
22 witness?

23 JUDGE BUSHMANN: You may. And you
24 don't need to ask me each time. I'm not that
25 formal.

1 (STAFF EXHIBIT 105HC WAS MARKED FOR
2 IDENTIFICATION BY THE REPORTER.)

3 BY MS. MERS:

4 Q. Did you prepare any answers requested
5 by Staff in this proceeding?

6 A. Yes, I did.

7 Q. Do you recognize the document that
8 was handed to you as Ameren Missouri's response to
9 a data request from Staff No. 39?

10 A. No. 39. Yes, I do.

11 Q. Did you prepare this response?

12 A. Yes, I did.

13 Q. And does this response refer to a
14 data request submitted in EA-2016-0207, DR No. 51?

15 A. Yes, it does

16 Q. And did you prepare the response to
17 that data request as well?

18 A. Yes, I did.

19 Q. And these responses and attached
20 reports are evaluations of benefits that could be
21 gained in adding distributed generation in areas in
22 which distributed generation would be most helpful,
23 correct?

24 A. That is correct.

25 MS. MERS: Judge, at this time I'd

1 like to have this exhibit marked. I believe that
2 is Staff Exhibit 105, and I move to enter it into
3 the record. And it would be highly confidential.

4 JUDGE BUSHMANN: Any objections to
5 the receipt of Exhibit 105?

6 (No response.)

7 JUDGE BUSHMANN: Hearing none, that's
8 received into the record.

9 (STAFF EXHIBIT 105HC WAS RECEIVED
10 INTO EVIDENCE.)

11 MS. MERS: I have no further cross.
12 Thank you.

13 MS. TATRO: Just for clarification,
14 your Honor, in case anyone wants to talk about part
15 of this data request, it's really the map at the
16 end that is HC.

17 CHAIRMAN HALL: The map you said?

18 MS. TATRO: Right. This is critical
19 energy infrastructure. So if you talk about some
20 of the others, we don't have to go into HC.

21 JUDGE BUSHMANN: So if counsel want
22 to ask anything dealing with that particular issue,
23 let me know and we can go into camera.

24 MS. TATRO: Thank you.

25 JUDGE BUSHMANN: Cross by Division of

1 Energy?

2 MR. ANTAL: No cross. Thank you very
3 much.

4 JUDGE BUSHMANN: Renew Missouri?

5 MR. LINHARES: No cross. Thank you.

6 JUDGE BUSHMANN: Wal-Mart?

7 MR. WOODSMALL: No questions.

8 JUDGE BUSHMANN: Brightergy?

9 MR. ZELLERS: No questions, your
10 Honor.

11 JUDGE BUSHMANN: Public Counsel?

12 MR. OPITZ: Yes, Judge.

13 CROSS-EXAMINATION BY MR. OPITZ:

14 Q. Good morning, Mr. Barbieri.

15 A. Good morning.

16 Q. If I may just begin with the document
17 Staff just had you look at, I believe Exhibit 105.
18 That has a connection study attached. Is that the
19 77-page document, the connection study?

20 A. I believe it is.

21 Q. And is that -- I believe the data
22 request says that it is a blue solar PV connection
23 study --

24 A. Yes.

25 Q. -- related to Ameren Missouri's

1 O'Fallon Energy Center?

2 A. Yes, it is.

3 Q. Was such a document formed related to
4 the proposed project in this case?

5 A. No, there was not.

6 Q. Thank you. Mr. Barbieri, is this
7 your first time working on a proposal to build
8 utility-owned solar facilities on customer-owned
9 property?

10 A. On customer-owned property, yes.

11 Q. And part of the basis for that
12 project is to, I guess, achieve learning
13 objectives; is that correct?

14 A. Correct.

15 Q. And you agree that Ameren does have
16 existing solar generation facilities?

17 A. Correct.

18 Q. And one being O'Fallon, correct?

19 A. Correct.

20 Q. As it relates to the O'Fallon
21 generating facility, are you aware of any lessons
22 learned documents being created related to that
23 project?

24 A. No specific documents that we are
25 putting together in one particular file, but we are

1 gathering data through various departments within
2 the organization in order to determine the overall
3 effectiveness of it.

4 Q. And back to this project or the
5 application here, what you're proposing is a
6 project consisting of multiple sites, correct?

7 A. Correct.

8 Q. And you haven't located the sites at
9 this time; is that right?

10 A. No. We've had a couple customers
11 that have approached us, but we haven't specified
12 exactly where those are going to be or even to what
13 size they would be.

14 Q. But you have identified that the
15 budget for this project is going to be capped at
16 \$10 million?

17 A. Correct.

18 Q. And that budget is based on your
19 targeted capacity; is that right?

20 A. No. It's based on what we believe
21 the overall cost of solar will be and how many
22 facilities we can get from that. So in a form, it
23 would obviously yield capacity.

24 Q. Well, what is your target production
25 capacity for these projects?

1 A. We believe that we should be able to
2 get upwards to 5 megawatts of total by nameplate
3 generation, but then the capacity factor is going
4 to be determined based on obviously other factors.

5 Q. Okay. And as it relates to the total
6 nameplate generation, you're not talking about each
7 project, are you? You're talking about all of them
8 together?

9 A. Right. The combined total, the
10 \$10 million should enable us to build and construct
11 approximately a total of 5 megawatts. Underneath
12 our Stipulation & Agreement we've said that the
13 minimum would be 100 kilowatts in size, and the
14 maximum that we would site at any one location
15 would be a total of 2 megawatts.

16 Q. As it relates to the overall, I
17 guess, targeted 5 megawatts, was there any specific
18 analysis done to reach that target?

19 A. I'm not -- I'm not following your
20 question.

21 Q. I guess have you -- what is the basis
22 of determining that it would be 5 megawatts is your
23 goal?

24 A. So what we were just simply assuming
25 was that \$2,000 a KW installed would yield

1 5 megawatts if you spent \$10 million. So all we
2 were simply looking at was trying to maximize as
3 best we could the number of facilities that we
4 could construct.

5 Q. Was there any thought given as to
6 whether you should target a larger number?

7 A. We believed that in this initial
8 phase that 5 megawatts hopefully would be enough to
9 provide us the information as to the value of the
10 distributed generation without being too excessive.

11 Q. And because no site has been
12 selected, the company is -- would you agree the
13 company's limited in the information it can provide
14 at this time?

15 A. As it relates to site-specific,
16 correct.

17 Q. And because there's no site-specific,
18 the company hasn't performed an analysis to
19 determine if other system upgrades might be needed
20 at each location?

21 A. Right, because we don't know what the
22 locations would be. That would all be part of the
23 overall analysis that we would do when we would
24 choose which sites we would pursue.

25 Q. Do you have a copy of your direct

1 testimony with you, Mr. Barbieri?

2 A. Yes, I do.

3 Q. And if I could direct you to page 7,
4 line 8.

5 A. Okay. I'm there.

6 Q. And it's your testimony that placing
7 solar on customer-owned premises as the company
8 proposes to do in this project creates both legal
9 and operational challenges?

10 A. Yes, it does.

11 Q. And would you agree that legal
12 challenges would include drafting a contract to
13 address overall obligations?

14 A. Correct. It would basically be --
15 based on our discussions that we've had with other
16 utilities across the country, they've indicated
17 that as this continues to grow in their regions,
18 you can't just have a boilerplate type contract. A
19 lot of customers have varying requirements that
20 they would have in order to allow the utility to
21 site on their location, and so there are legal
22 challenges associated with that.

23 That's one of the things we hope to
24 be able to determine, the best basis by which we
25 can address the concerns of the customer who would

1 like you to site it there. And then also because
2 it's a utility-owned operation, we have to be able
3 to have access for our people to service that
4 facility.

5 **Q. But you'd agree at this time the**
6 **company hasn't developed an example contract that**
7 **it would circulate to those parties?**

8 A. We have our legal group working on
9 that very thing right now, right, and trying to
10 utilize some information that we have gathered from
11 other utilities across the country.

12 **Q. So no contract was provided in --**
13 **example contract was provided in this case?**

14 A. No. It's not prepared yet. It's not
15 finalized yet.

16 **Q. Thank you. And would you agree that**
17 **legal challenges might include addressing liability**
18 **exposure in the event of property damage should the**
19 **solar facility malfunction?**

20 A. Definitely, yes, sir.

21 **Q. And would you agree that one of the**
22 **operational concerns might be concerns of safety to**
23 **others?**

24 A. Yes, definitely. Those would all
25 have to be integrated into the overall terms and

1 conditions to provide safety for both the customer
2 and people on their side as well as our own people.

3 Q. And you agree that there are concerns
4 about appropriate security and limiting access to
5 others --

6 A. Correct.

7 Q. -- to the facility?

8 A. Yes, very much so. That will be
9 determined within the site selection criteria.

10 Q. Now, you mentioned that Ameren
11 doesn't have sites selected. Does the company have
12 any customers who've committed with certainty to
13 participating in this project?

14 A. We have a couple customers that have
15 expressed keen interest, and we've had several
16 meetings with them.

17 Q. Have they provided any written
18 agreement or commitment to the company that they
19 will participate?

20 A. No. Quite honestly, they're waiting
21 to see how all these proceedings are finalized.

22 Q. And as it relates to identifying
23 customers, you've said that several of them reached
24 out to the company; is that correct?

25 A. That is correct.

1 **Q. Ameren did not conduct any market**
2 **research among its commercial and industrial**
3 **customers to gauge interest in the various**
4 **financing arrangements or ownerships, did they?**

5 A. Not at this point in time, no.

6 **Q. So the, I guess, marketing aspect, is**
7 **it fair to say is -- has been limited to those**
8 **customers who have reached out to you?**

9 A. Right. But at the same time, once
10 this program was formally announced several months
11 ago that we were seeking this program, it was in
12 the -- in the local papers, and we did have a
13 couple additional companies that reached out to us
14 at that point in time just inquiring as to the
15 basis of the program, and they expressed a desire
16 to further those discussions once the program
17 hopefully would become into effect.

18 **Q. So the extent of that marketing to**
19 **those customers was they saw the press release**
20 **related to this?**

21 A. Right. We've developed no marketing
22 overall plan to solicit. We'll be in the process
23 of doing that. Exactly how we would communicate
24 once the program would be approved, it will be
25 critical as to how we're going to enable all of our

1 customers to understand what it is. Since it is
2 limited to 10 million, there may not be, as we
3 said, probably upwards of five sites. So it could
4 be -- it could be very limited in that regard.
5 Again, that's why it's just a pilot.

6 Q. And I asked you about the information
7 limitations because you don't know the location.
8 Do you recall that?

9 A. Correct. Yes.

10 Q. And one of the limitations is the
11 company hasn't been able to develop any detailed
12 engineering, would you agree?

13 A. Correct. Uh-huh.

14 Q. And, you know, because there's no,
15 I'll call it, partners or locations listed, the
16 company hasn't issued any RFPs related to this
17 project?

18 A. Correct.

19 Q. And we talked a little bit about
20 nameplate generation for the entire proposal, but
21 as it relates to each facility, the company hasn't
22 been able to determine a nameplate rating for
23 generation?

24 A. No. As we said in the Stipulation,
25 we've limited it to no less than 100 KW and no

1 greater than 2 megawatts.

2 Q. And would you agree that Ameren has
3 not conducted any economic feasibility studies to
4 determine the benefits as well as the costs related
5 to this project?

6 A. Well, until we -- until we actually
7 start to have these programs or the projects
8 actually implemented, it will be difficult to
9 determine the specific economics related to it, but
10 we do anticipate some overall benefits that we're
11 going to be able to gauge, again, whether -- the
12 points that we talked about earlier about the value
13 that we think could be existing through small scale
14 distributed generation and how that does impact our
15 overall implementation of solar.

16 Q. So as it relates to this project,
17 you've not conducted or had somebody conduct on
18 your behalf a specific feasibility study?

19 A. We don't know how that would be done
20 without having things actually operational.
21 Everything would be speculation again.

22 Q. When preparing to, I guess, go
23 forward with this proposal, has the company
24 developed any potential means of making an
25 assessment of the benefits this pilot will cause to

1 **the larger grid?**

2 A. We will be developing our overall
3 methodologies as these facilities are installed.
4 And obviously one of the things with the
5 stipulation is that we provide information to the
6 parties so that we can gauge the overall success or
7 the knowledge that we're going to gain from these
8 things as they're operational.

9 **Q. So at this point you've not performed**
10 **a study to attempt to quantify what you expect to**
11 **be the benefits to the larger grid?**

12 A. Well, we've listed what we -- what we
13 hope to have from some learning processes that are
14 in the stipulation as well. But again, I think the
15 main object is that what we're trying to do is to
16 gain the knowledge on the type of effective solar
17 mix that could occur. So again, it's the proper
18 mix and balance of DG versus utility central scale.

19 But we haven't developed -- I guess
20 if you're asking for a specific methodology, that
21 that will be developed as we go along.

22 **Q. Do you have a -- well, in your direct**
23 **testimony at page 8, line 18, do you have that with**
24 **you?**

25 A. Yes, I do. Uh-huh.

1 **Q.** And you testify that Ameren sees
2 distributed generation being used by other electric
3 utilities?

4 **A.** Correct.

5 **Q.** And do you agree that you provided
6 certain data requests to Public Counsel in this
7 case?

8 **A.** Yes.

9 **Q.** And one of those you identified the
10 other electric utilities that you were referencing
11 in that statement?

12 **A.** Some that we have spoken with,
13 uh-huh.

14 **Q.** Okay. And those include San Diego
15 Gas and Electric?

16 **A.** Uh-huh.

17 **Q.** Pacific Gas and Electric?

18 **A.** Uh-huh.

19 **Q.** Arizona Public Service?

20 **A.** Uh-huh.

21 **Q.** Duke?

22 **A.** Uh-huh.

23 **Q.** AEP?

24 **A.** Uh-huh.

25 **Q.** Southern Company?

1 A. Uh-huh.

2 Q. And Dominion?

3 A. Yes. Uh-huh.

4 Q. And of that list, you are aware that
5 at least Arizona Public Service and Dominion
6 Resources place solar generation on customer
7 premises, correct?

8 A. Correct. Uh-huh.

9 Q. And have they -- has the company been
10 in contact with either Arizona Public Service or
11 Dominion Resources related to placing solar
12 generation on customer premises?

13 A. As far as this program? Not
14 specifically, no.

15 Q. Now, you have reviewed the
16 Nonunanimous Stipulation & Agreement filed in this
17 case; is that right?

18 A. Yes, I have.

19 Q. Do you have a copy with you?

20 A. Yes, I do.

21 Q. If I could ask you to look at
22 Appendix D.

23 A. Uh-huh.

24 Q. This document lists learning
25 opportunities and key questions that the company

1 intends to explore; is that correct?

2 A. Correct. Uh-huh.

3 Q. For any of the learning
4 opportunities, did you perform any calculations to
5 quantify a benefit to customers?

6 A. No. I think the only -- the only way
7 that we're going to be able to do that is to
8 actually implement the program.

9 Q. So for any of the key questions to
10 explore, did you perform any calculations to
11 quantify a benefit to customers?

12 A. The only thing that we talked about
13 was -- in that regard was basically the value to
14 our customers of having property offered to us from
15 other customers willing to site this at no cost.
16 One the analysis that we have done and what we had
17 done especially when we were looking at our own
18 solar development was the cost of property in our
19 general St. Louis region, which is extremely
20 expensive.

21 So if you're going to locate things
22 closer to the load, if you have -- obviously if you
23 have expensive property being offered up at no cost
24 to you, there's a significant savings to our
25 overall customers if that's where we need to start

1 to go, if that's where solar develops.

2 Q. So other than identifying the, I
3 guess, potential cost of land, was there any other
4 calculation to show a benefit to customers?

5 A. Again, it would be too speculative.

6 MR. OPITZ: That's all the questions
7 I have. Thank you.

8 JUDGE BUSHMANN: Questions from the
9 Bench. Mr. Chairman?

10 CHAIRMAN HALL: Yes.

11 QUESTIONS BY CHAIRMAN HALL:

12 Q. Good morning.

13 A. Good morning.

14 Q. You've noted that there have been
15 some communications with some Ameren customers to
16 discuss this possible program?

17 A. Yes, sir.

18 Q. Can you explain to me why it would
19 not have been possible to enter into an agreement,
20 an arrangement, a conditional contract with any
21 number of customers prior to getting a CCN?

22 A. Yes, sir. One of the primary
23 concerns is as we've dealt with our customers and
24 what we've learned, especially with the larger
25 business customers, is maybe they don't quite fully

1 understand and appreciate the regulatory
2 requirements that the utility has in developing our
3 own -- our generation.

4 So one of the primary concerns is to
5 attempt to get -- to do the negotiations with a
6 customer in advance of this could end up basically
7 frustrating them. Case in point: When we built
8 any of the solar that we currently have in our
9 system, the Maryland Heights landfill project,
10 there was a prolonged period of time in that CCN
11 application process, and that occurred after all of
12 the significant amount of leg work had been done,
13 and that's related to property that Ameren already
14 owned.

15 So what our concern has been is that
16 if you approach a customer in advance and you don't
17 know what timeline the CCN process could end up
18 taking, that the customer is going to be frustrated
19 that they spent a considerable amount of time,
20 energy and money in working with Ameren to develop
21 it, just to then go into a formal CCN process and
22 then at that point in time, for whatever reason, a
23 variety of stakeholders may or may not agree, and
24 so very prolonged period of time before the CCN
25 could eventually be granted.

1 So what we're attempting to do is to
2 make sure that we -- before we sit down in earnest
3 with a customer, that we have a significantly high
4 level of expectation of being able to successfully
5 move through the process, and so we're not trying
6 to --

7 **Q. Let me stop you there. Because it**
8 **would appear to me that a good majority of the**
9 **objections raised by Public Counsel have to do with**
10 **this timing aspect. And so if you had gone to**
11 **customers first, reached an arrangement with them,**
12 **my sense is that a great deal of the opposition**
13 **that you're facing right now in this hearing would**
14 **evaporate. Was that not taken into account?**

15 **A. We did give that some consideration,**
16 but then we were looking at what we had with our
17 existing renewable facilities that were
18 constructed, and we did have a prolonged hearing
19 process for the CCN after that application was
20 actually filed.

21 So all we're simply trying to do is
22 to -- we would still provide all of the same basic
23 information as is stipulated in the stipulation,
24 but with the blanket CCN having -- knowing that as
25 long as we have met this criteria clearly and that

1 the Commission is in approval of that, that we know
2 the project would definitely move forward.

3 Q. So is -- is it a timing issue more
4 than anything else?

5 A. It could be timing and, again,
6 overall frustration with the customer who's not
7 familiar with the regulatory process.

8 Q. Frustration with the customer about
9 timing?

10 A. Correct. Uh-huh.

11 Q. So it really is -- what the company
12 wants to know is with certainty when -- when it
13 would be authorized to enter into these contracts?

14 A. Right. So we would spend a
15 considerable amount of time drafting a contractual
16 agreement with the customer meeting, as we talked
17 before, about the legal terms and conditions. We
18 believe all of that would need to be done up front.

19 So if we spend all of that time up
20 front and then meet all of the other conditions in
21 the Stipulation & Agreement, we know with high
22 degree of certainty that we will be able to move
23 forward with the process after the blanket CCN has
24 been granted.

25 But without the blanket CCN, if we go

1 through the normal CCN process, there's always that
2 level of unknown that we've spent -- the customer
3 spent a lot of time, energy and money in
4 negotiating with us to try and come up with an
5 acceptable agreement only to have it fall through.
6 So we're just trying to avoid that.

7 **Q. Have you been involved in other CCN**
8 **requests?**

9 **A.** Yes, sir, I have.

10 **Q. And in -- give me a couple of**
11 **examples.**

12 **A.** I was involved with the Maryland
13 Heights landfill gas process. I was involved with
14 the O'Fallon solar facility process. Yes, sir.

15 **Q. Okay. So with the O'Fallon solar**
16 **facility, was the land purchased in advance, in**
17 **advance of obtaining a CCN?**

18 **A.** No, sir. That land was already in
19 Ameren property, yes, sir. We already controlled
20 that.

21 **Q. Okay. Other examples?**

22 **A.** Those are the two that I've been
23 personally involved with.

24 **Q. So in other words, it's your**
25 **position, it's the company's position that this**

1 type of CCN request is different from all others in
2 that it is requiring negotiations and contractual
3 relationships with third parties that would be --
4 it would be more difficult to enter into those
5 relationships, those contracts if the CCN was
6 granted only afterwards as opposed to beforehand?

7 A. Yes, sir. That's our opinion, yes,
8 sir.

9 Q. So that's the distinction between
10 this and all other CCN requests?

11 A. Yes, sir.

12 Q. Could you -- you've discussed
13 generally -- actually, pretty specifically the
14 differences between small scale DG and utility
15 central scale solar?

16 A. Yes, sir.

17 Q. Could you -- could you explain to me
18 what -- first of all, what are those differences?

19 A. The primary are the overall scale in
20 size. So the central station we would consider, I
21 believe in the industry it's somewhat accepted as
22 industry practice that if you're basically above a
23 megawatt in size in solar, that you're starting to
24 gain what they would term utility scale because of
25 the -- basically, a megawatt of solar would require

1 about five acres of property to install.

2 So when you start to get beyond that,
3 they start to say that's really -- the larger
4 facilities are really more those that the utility
5 would move forward with, therefore the term utility
6 scale.

7 **Q. Is there a distinction between those**
8 **two that's related to what the generation is fed**
9 **into, whether it's distribution or transmission?**

10 A. At the current time, anything that's
11 generally, again a rule of thumb, below 25
12 megawatts will feed into the distribution grid, and
13 if you're greater than that, you'll most likely
14 have to look to transmission.

15 **Q. So what are the -- what are the**
16 **benefits of small scale DG compared to utility**
17 **scale?**

18 A. So some of the benefits that are
19 being debated throughout the industry and
20 throughout the country right now about those very
21 points is, are there other benefits associating
22 the smaller scale, which you can, you can associate
23 that closer to your load. So can you limit line
24 losses, and what does that mean to being able to
25 limit those line losses?

1 What's the overall impact when you
2 have one particular 5 megawatt facility all in one
3 place and you have a storm that moves through, and
4 so basically that facility quits generating for a
5 certain period of time, versus having 100 kilowatts
6 here, 1 megawatt there, 2 megawatts here, spread
7 throughout your overall region and you don't have
8 the entire system going out at any one point in
9 time.

10 **Q. So it could be part and parcel of a**
11 **micro grid?**

12 A. Exactly, yes, sir.

13 **Q. Which would arguably or absolutely,**
14 **depending on your position, impact reliability?**

15 A. Correct. Yes, sir.

16 **Q. This particular project will involve**
17 **somewhere between three and five customer**
18 **contracts?**

19 A. That's what we anticipate, yes, sir.

20 **Q. And they'd be between 100 KV -- KW**
21 **and two megawatts?**

22 A. Yes, sir.

23 **Q. What does a typical residential**
24 **rooftop system generate?**

25 A. Right now, we would say our average

1 rooftop system is between 3 and 5 KW. So
2 significantly less.

3 Q. So if this were to include some
4 rooftop, it would be a large roof?

5 A. Yes, sir. Just as a case in point on
6 that, what we have at our general office building
7 in St. Louis, we have 100 KW installed on the
8 rooftop of our downtown office building.

9 Q. On page 7 of your direct, you say
10 that Ameren Missouri recognizes that utilities
11 across the country are increasingly placing their
12 solar generation on customer premises. And I
13 believe in cross from Public Counsel and in one of
14 the data requests that you responded to, you
15 indicated that there are seven, eight companies
16 around the country doing this?

17 A. Yes, sir.

18 Q. And then I believe you said that
19 there were at least two that were specifically
20 placing gen-- placing solar on customer premises?

21 A. Yes, sir.

22 Q. And do you know if in either of those
23 situations this particular process was employed?

24 A. The primary difference is that in
25 those instances, from what we understand, they

1 actually pay a lease payment to the facility in
2 order to site on their property. And so the
3 primary difference that our program is we first
4 want to approach customers who have already
5 approached us and then to determine is there a
6 wider base of customers who have an interest in
7 overall promotion of sustainability.

8 So that's what we discovered through
9 these customers. They are interested in helping to
10 promote the image of sustainability for both their
11 business and for the region. And so the difference
12 is we're going to be willingly looking at free
13 property versus paying a fee for property.

14 **Q. But in terms of attempting to get the**
15 **certificate prior to entering into a contract with**
16 **the customer, do you know if that process was**
17 **employed in either of these two other situations?**

18 **A.** No, sir, I'm not aware if they were
19 required to come each and every time for every
20 facility that they were going to construct, to
21 approach their commission for a CCN each time. I'm
22 not aware.

23 **Q. I believe in response to some**
24 **questions from Public Counsel about performing a**
25 **feasibility study, you indicated that it was your**

1 view that the project has to be operational in
2 order to do a feasibility study. Otherwise it
3 would be mere speculation.

4 A. Yes, sir.

5 Q. Can you explain to me why it's
6 impossible to do a feasibility study in advance for
7 this project, whereas for other projects it's not?

8 A. Well, basically, one of the primary
9 issues is going to be the overall intermittency of
10 solar. Case in point, when we first put the solar
11 on at our building downtown, we attended an Earth
12 Day festival there in Forest Park. And so we had
13 the actual screen up that was showing what the
14 generation was, and in that particular time we had
15 customers there and all of a sudden they saw the
16 generation that was going along about 95 KW, all of
17 a sudden it dropped down to virtually zero. And
18 they're like, well, what happened? We're like,
19 obviously a cloud has gone over the office. But it
20 was clear in Forest Park, which is where we were
21 at. And shortly thereafter you could see it
22 starting to ramp back up, and I said, that's the
23 intermittency issue. So you have a cloud bank that
24 comes over in that one location can drop your
25 generation off 100 percent in a short period of

1 time. And so -- so that's again one of the
2 implications of solar because of that intermittency
3 and interruption.

4 So trying to gauge how to handle
5 multiple stages of interruption throughout your
6 grid as these things are generating, and again what
7 we talked about the reliability factor, we believe
8 that's going to be very important to learn how to
9 handle all of that.

10 **Q. Was there a feasibility study for the**
11 **O'Fallon facility prior to construction?**

12 A. Not in that regard, no, sir.

13 **Q. What do you mean, not in that regard?**

14 A. Well, as far as the intermittency
15 issue?

16 **Q. Whatever is involved in a feasibility**
17 **study.**

18 A. Well, what we simply did was we
19 looked at the overall cost to construct and the
20 value that solar was going to bring, and at that
21 point in time we were looking there with the solar
22 facility in O'Fallon was predominantly related
23 specific to the Missouri RES compliance.

24 CHAIRMAN HALL: I believe that's all
25 I have. Thank you.

1 THE WITNESS: You're welcome

2 COMMISSIONER STOLL: No questions.

3 Thank you.

4 COMMISSIONER RUPP: None.

5 JUDGE BUSHMANN: Questions based on
6 Bench questions, Staff?

7 MS. MERS: No, thank you.

8 JUDGE BUSHMANN: division of Energy?

9 MR. ANTAL: No questions. Thank you.

10 JUDGE BUSHMANN: Renew Missouri?

11 MR. LINHARES: No, thank you, Judge.

12 JUDGE BUSHMANN: Wal-Mart?

13 MR. WOODSMALL: No questions.

14 JUDGE BUSHMANN: Brightergy?

15 MR. ZELLERS: Very briefly, your
16 Honor.

17 RECROSS-EXAMINATION BY MR. ZELLERS:

18 Q. Mr. Barbieri, the Chairman asked you
19 a few questions about the timing of contracting
20 with your customers who may be interested in this
21 service?

22 A. Yes.

23 Q. Would such a contract, if you had
24 signed it with a customer before the regulatory
25 process, would that contract have to allow for the

1 customer to got out of the contract if the
2 regulatory process didn't go the way you wanted?

3 A. It's speculation. I would assume we
4 would have to have that provision in the contract.

5 Q. So that's a pretty big condition of
6 that contract?

7 A. I would believe that would be
8 required, yes.

9 Q. Are these -- and not asking you to
10 break any client confidences, but are these fairly
11 large installations that you're putting in, are
12 they fairly large institutional-type customers that
13 you're talking about?

14 A. Yes, they are.

15 Q. Would you find these customers to be
16 willing to enter into a contract to encumber their
17 property with such a large condition attached to
18 that contract?

19 A. I do not personally believe so, no.

20 MR. ZELLERS: That's all I have.

21 Thank you.

22 JUDGE BUSHMANN: Public counsel?

23 MR. OPITZ: Just briefly.

24 RECROSS-EXAMINATION BY MR. OPITZ:

25 Q. A moment ago the Chairman was asking

1 **you about the feasibility study for O'Fallon. Do**
2 **you recall that?**

3 A. Yes, I do.

4 Q. And I think you mentioned one of the
5 **considerations in that study was -- looked at the**
6 **cost and compared it to the value that the solar**
7 **was going to bring. Did I, I guess, recite that**
8 **correctly?**

9 A. Yes. That's fairly accurate. Again,
10 that was in view of the compliance with the
11 Missouri RES and the solar set-aside provision.

12 Q. So how did you -- I guess when you
13 **say value of the solar, how did you come to that**
14 **determination?**

15 A. Basically what we were looking at
16 again would be the overall cost to customers in
17 utilizing that facility to meet the requirements of
18 the Missouri RES. So that's basically the
19 evaluation that would be conducted.

20 Q. And so was that project -- was your
21 **ability to determine the value of that project**
22 **based on a need to comply with the RES?**

23 A. For that particular project, that was
24 one of the considerations.

25 Q. You talked about with the Chairman at

1 the beginning of his inquiry about that the -- a
2 problem with partners is their concern about a
3 level of certainty if there's no CCN granted in
4 advance.

5 A. Correct.

6 Q. Do you recall that?

7 A. Uh-huh.

8 Q. Would you agree that the process in
9 the Stipulation & Agreement filed by the company in
10 this case won't cover everything?

11 A. I'm not -- I guess I'm not sure of
12 all the specifics within the requirements of the
13 CCN, but it's definitely our intention to provide
14 the adequate information before we begin
15 construction on anything related to that.

16 Q. But there is --

17 A. Is that the question?

18 Q. There is still some level of
19 uncertainty involved in that process; would you
20 agree with that?

21 A. I'm not sure what -- what
22 uncertainties exist.

23 Q. Uncertainty as to whether the site or
24 the project would be approved?

25 A. That's the primary why we're going

1 after the blanket. We believe as long as we
2 fulfill the primary criteria related to the site,
3 in order to provide the engineering data and the
4 site-specific analysis and everything that's
5 required in the CCN, we would have that when we
6 fulfill those obligations underneath this
7 stipulation to put forward. We just don't have
8 them in advance.

9 So the concern is not having that in
10 advance and then proceeding along the lines and
11 developing all of this work with our customer only
12 to find out the end there could be some party that
13 would object, could be problematic for the
14 customer.

15 **Q. Doesn't the terms of the stipulation**
16 **still provide that a party can object?**

17 **A.** Well, what the stipulation does is it
18 clearly delineates what requirements that we have.
19 So we feel that as long as we've met all those
20 specific requirements, that the parties would be in
21 acceptance of it.

22 **Q. You talked with the Chairman briefly**
23 **about the size of a meg-- of these facilities, and**
24 **you mentioned that a megawatt is approximately five**
25 **acres.**

1 A. It requires approximately five acres,
2 uh-huh.

3 Q. Do you have any customers that
4 currently have that size of generation on their
5 property?

6 A. Yes, we do.

7 Q. And have you measured their impact on
8 the grid there?

9 A. No, we have not. We've done some
10 preliminary site investigation when we were
11 approached just to ensure that it would be able to
12 house that amount, and then we also did a very,
13 very preliminary look at where the interconnection
14 would occur.

15 Q. For projects of the size of a
16 megawatt or even projects the size of 100 KW, I
17 guess the lower range of your stipulation, do you
18 have any idea of the number of possible customer
19 locations in your service territory that would meet
20 that?

21 A. No, I don't.

22 Q. Would you expect it to be in the
23 hundreds or in the thousands?

24 A. I think the primary question is,
25 again, how many customers are willing to

1 participate at the free property level.

2 MR. OPITZ: That's all I have. Thank
3 you, Mr. Barbieri.

4 JUDGE BUSHMANN: Redirect for Ameren
5 Missouri?

6 MS. TATRO: Thank you, your Honor.

7 REDIRECT EXAMINATION BY MS. TATRO:

8 Q. Mr. Barbieri, in OPC's initial
9 cross-examination of you, you had conversations a
10 couple times about how Ameren had not selected a
11 site for any of these installations. Do you recall
12 those questions?

13 A. Yes, I do.

14 Q. Can you tell me what is different
15 about working with a customer to place an
16 installation on their property and installing these
17 types of installations on Ameren Missouri's
18 property?

19 A. Well, obviously the primary is going
20 to be the overall legal requirements. Trying to --
21 trying to get a contract that the customer is going
22 to be comfortable with is going to be very
23 critical. One of the things in discussions with
24 other utilities that we talked about before,
25 specifically they noted that in their region -- for

1 case in point, Kohl's is a very big proponent of
2 development of solar, and they would like to have
3 solar on their stores. Unfortunately, they don't
4 own their stores.

5 So what we were told by this
6 particular California utility is it becomes very
7 complicated when you have to have a contract
8 between Kohl's, when you have to have a contract
9 with the developer or owner of the property where
10 Kohl's is located and the utility. So you have a
11 three-way contract.

12 So if this is going to truly become
13 the wave of the future as far as solar deployment,
14 we believe we need to start doing that analysis now
15 to determine are there means in which we can
16 satisfy the contractual requirements associated
17 with these customers.

18 **Q. And Mr. Opitz -- and OPC also asked**
19 **you a lot of questions about information that**
20 **hadn't been provided. Do you know how the**
21 **Stipulation & Agreement addresses that issue?**

22 **A.** I believe that the stipulation
23 attempts to provide that we will still meet those
24 obligations of information, but again, the intent
25 is, as long as we've met all of that criteria and

1 the parties have reviewed that and are in agreement
2 that we've met that criteria, that we can then move
3 forward and start with the facility, as opposed to
4 then coming back to the Commission each and every
5 time we had a facility that we would like to engage
6 with and then have to go through the entire CCN
7 process each and every time.

8 Q. Is it your expectation that meeting
9 the conditions of the -- meeting the requirements
10 of the stipulation would be a condition of the
11 Commission order approving the blanket CCN?

12 A. Yes.

13 Q. Chairman Hall asked you some
14 questions about all of OPC's questions about site
15 locations and if we just had a site perhaps OPC
16 wouldn't have all those objections. Do you
17 remember that questioning?

18 A. Yes, I do.

19 Q. Do you believe that if we'd had the
20 site location, that it would have resolved all of
21 OPC's objections in this case?

22 A. Probably not.

23 Q. Do you know what their objections
24 were that did not have anything to do with site
25 location?

1 A. I don't recall.

2 Q. At the very end of the recross from
3 the Office of the Public Counsel there was some
4 conversation about customers that had generation on
5 their site. Do you recall that conversation?

6 A. Yes.

7 Q. Customer-owned generation, and when I
8 ask that, I'm talking about existing, not what
9 would be installed under our program, but
10 customer-owned generation, where is that tied into
11 the grid?

12 A. They basically tie in to their
13 existing home or business. So that's totally
14 different than what we're proposing in this
15 program. So the actual energy is consumed in the
16 home.

17 Q. So what lessons are you able to gain
18 as to the impact on the grid of a system that's
19 tied in behind the meter?

20 A. We don't have any capabilities to do
21 that. We don't have any functional
22 responsibilities or metering associated with that.

23 MS. TATRO: Okay. Thank you. I have
24 no further questions.

25 JUDGE BUSHMANN: Thank you for your

1 testimony, Mr. Barbieri. You may step down.

2 THE WITNESS: Thank you.

3 JUDGE BUSHMANN: Call the Staff
4 witness, please.

5 MS. MERS: Staff calls Claire Eubanks
6 to the stand.

7 (Witness sworn.)

8 JUDGE BUSHMANN: You may be seated.

9 CLAIRE EUBANKS testified as follows:

10 DIRECT EXAMINATION BY MS. MERS:

11 Q. Please state your name and business
12 address.

13 A. Claire Eubanks, 200 Madison.

14 Q. And by whom are you employed and in
15 what capacity?

16 A. The Missouri Public Service
17 Commission. I am employed as a Utility Regulatory
18 Engineer 1.

19 Q. Ms. Eubanks, did you prepare or cause
20 to be prepared rebuttal and surrebuttal testimony
21 in this case labeled as Exhibit 101 and 102?

22 A. Yes.

23 Q. If I were to pose the questions to
24 you today that are included in this testimony,
25 would your answers be substantially the same?

1 A. Yes.

2 Q. And are those answers true and
3 correct to the best of your knowledge and belief?

4 A. Yes.

5 MS. MERS: I offer Exhibit 101 and
6 102 into the record and tender Ms. Eubanks for
7 cross.

8 JUDGE BUSHMANN: Any objections?

9 (No response.)

10 JUDGE BUSHMANN: Hearing none, those
11 exhibits are received.

12 (STAFF EXHIBIT NOS. 101 AND 102 WERE
13 RECEIVED INTO EVIDENCE.)

14 JUDGE BUSHMANN: First cross will be
15 by Ameren Missouri.

16 MR. LOWERY: Thank you, Judge.

17 CROSS-EXAMINATION BY MR. LOWERY:

18 Q. Ms. Eubanks, in your rebuttal
19 testimony you've testified about GMO's Greenwood
20 decision, did you not?

21 A. That's correct.

22 Q. And when I speak of the Greenwood
23 decision, I'm talking about the CCN case decided
24 earlier this year for, I think it was a 3 or 4
25 megawatt facility that GMO is building maybe a

1 little bit west of -- or east of Kansas City; is
2 that right?

3 A. It is -- construction has been
4 completed, yes.

5 Q. So it's actually built now?

6 A. It is built, yes.

7 Q. You quoted some specific statements
8 from the Commission in that case in your testimony,
9 did you not?

10 A. That's correct.

11 Q. I take it the point of you quoting
12 those provisions of the Commission's decision in
13 this case is that you believe that the things the
14 Commission said about the Greenwood facility can
15 also be said essentially about this particular
16 proposal in terms of the Commission's rationale,
17 et cetera; is that true?

18 A. That's true.

19 Q. The purpose of this pilot's not to
20 necessarily build a facility that produces the
21 cheapest power; like Greenwood, it's to allow the
22 utility to gain some knowledge that it doesn't
23 have; is that fair to say?

24 A. That is fair to say.

25 Q. And just to short circuit this,

1 essentially the other things that the Commission
2 pointed to, and they pointed to a number of things
3 in terms of benefits not being easy to quantify,
4 utility may avoid some mistakes by learning some
5 things in advance before it launches into much
6 greater investment, all those things in your
7 opinion are true with this pilot as well, true?

8 A. True.

9 Q. I think the Commission also made note
10 of the fact that GMO's customers have a strong
11 interest in the development of renewable energy,
12 reducing carbon, et cetera. Do you remember that?

13 A. I do.

14 Q. Do you have any reason to believe
15 that Ameren Missouri customers don't have that same
16 strong interest?

17 A. I do not.

18 Q. Do you agree, as the Commission said
19 in its Greenwood order, that solar energy is going
20 to be an integral part of future renewable energy
21 requirements for Ameren Missouri?

22 A. I do.

23 Q. Do you have an opinion regarding
24 whether an investment of \$10 million over three
25 years for a utility the size of Ameren Missouri

1 would be considered a significant investment given
2 Ameren Missouri's typical capital investment over a
3 three-year period?

4 A. I would not consider it significant,
5 particularly in light of Mr. Barbieri's testimony
6 earlier that it was about 42 cents, if I recall
7 correctly, per customer per year.

8 Q. It's almost lost in the rounding of
9 Ameren Missouri's capital investment; wouldn't that
10 be fair to say?

11 A. Yes.

12 Q. Do you know whether diversification
13 of generation types is one of the goals in
14 developing an integrated resource plan?

15 A. My understanding is that it is.

16 Q. Would more solar generation diversify
17 Ameren Missouri's generation portfolio?

18 A. It would.

19 Q. Do you know whether the SRECs, solar
20 renewable energy credits, these facilities would
21 produce can be used to comply with the non-solar
22 renewable energy standard portfolio requirements?

23 A. Yes. The SRECs would be eligible for
24 the non-solar requirements.

25 Q. And Ameren Missouri has some needs in

1 just a couple or three years from now to actually
2 have more renewable generation in its portfolio;
3 isn't that true?

4 A. That is correct.

5 Q. You're familiar with Ameren
6 Missouri's existing renewable portfolio, are you
7 not?

8 A. I am.

9 Q. To your knowledge, does Ameren
10 Missouri itself have any experience with
11 constructing, owning, operating distributed solar
12 generation facilities that are sited on somebody
13 else's property and that would tie into its grid?
14 Does it have any experience in that at all?

15 A. No.

16 Q. Do you have an opinion about whether
17 gaining that experience would be beneficial to
18 Ameren Missouri's customers ultimately?

19 A. I believe it would be beneficial.

20 Q. Let me posit this. Let's imagine
21 that Ameren Missouri pursues this pilot and learns
22 some things and learns it's a bad idea. Do you
23 follow me?

24 A. Yes.

25 Q. Would it be beneficial to Ameren

1 **Missouri's customers for Ameren Missouri to find**
2 **that out now as opposed to later?**

3 A. I believe so.

4 MR. LOWERY: Thank you. I don't have
5 any other questions, your Honor.

6 JUDGE BUSHMANN: Cross by Division of
7 Energy?

8 MR. ANTAL: No questions. Thank you.

9 JUDGE BUSHMANN: Renew Missouri?

10 MR. LINHARES: No questions.

11 JUDGE BUSHMANN: Wal-Mart?

12 MR. WOODSMALL: No questions.

13 JUDGE BUSHMANN: Brightergy?

14 MR. ZELLERS: No questions.

15 JUDGE BUSHMANN: Public Counsel?

16 MR. OPITZ: A few, Judge.

17 CROSS-EXAMINATION BY MR. OPITZ:

18 Q. **Good morning, Ms. Eubanks.**

19 A. Good morning.

20 Q. **Staff was a signatory to the**
21 **Nonunanimous Stipulation & Agreement, correct?**

22 A. That's correct.

23 Q. **And you're aware that the agreement**
24 **included Appendices A and B?**

25 A. I am.

1 Q. And included in Appendix B is a list
2 of learning opportunities and questions to explore.
3 Are you familiar with that list?

4 A. I am.

5 Q. And for each learning opportunity
6 listed on Appendix B, Staff did not perform an
7 analysis to quantify the benefit to ratepayers; is
8 that correct?

9 A. That's correct.

10 Q. And for each question to explore
11 listed in Appendix B, you did not perform any
12 analysis to quantify any benefit to ratepayers; is
13 that correct?

14 A. That's correct.

15 Q. Would you agree that overall you did
16 not quantify any benefit to ratepayers that will
17 result if this solar project is approved?

18 A. If you -- if you mean quantify as in
19 perform calculations, that is correct.

20 Q. In your testimony, your rebuttal
21 testimony, you mention economic feasibility; is
22 that correct?

23 A. That's correct.

24 Q. But in this case you did got quantify
25 any economic feasibility considerations; is that

1 **right?**

2 A. I did evaluate, go back and look at
3 the Greenwood case, the O'Fallon case and the
4 Montgomery Solar case to look at the bid responses
5 that came in and to help support at least from
6 Staff's perspective the 2.20 a watt limit.

7 Q. Can you tell me how you believe --
8 can you tell me the reason you believe the 2.20 a
9 watt limit pertains to economic feasibility
10 considerations?

11 A. I think it helps limit the spending
12 per site.

13 Q. At page -- do you have a copy of your
14 rebuttal testimony?

15 A. I do.

16 Q. At page 3, line 22.

17 A. I'm there.

18 Q. You say that this modified
19 application does not result in least cost options
20 that are necessary for capacity or for solar RES
21 compliance; is that fair to say?

22 A. That is fair to say.

23 Q. And you would agree that Ameren does
24 not need additional capacity at this time?

25 A. I agree.

1 Q. And if it did, this project is not
2 the least cost option for capacity; would you
3 agree?

4 A. I agree.

5 Q. And you base that conclusion on
6 Ameren Missouri's 2015 Resource Plan Volume 6; is
7 that right?

8 A. That's correct.

9 Q. And is that shown as the IRP plan?

10 A. Yes.

11 Q. You did not consider this project as
12 necessary for solar RES compliance; would you agree
13 with that?

14 A. I would.

15 Q. And if it were -- if Ameren did need
16 additional RECs to comply with solar RES
17 compliance, would this be the least cost option?

18 A. Ameren is not in need of solar
19 renewable energy credits until further in the
20 future. So it's difficult to say.

21 Q. And you filed surrebuttal testimony
22 in this case, too, correct?

23 A. I did.

24 Q. And in that testimony you addressed
25 Wal-Mart's witness Mr. Chriss; is that right?

1 A. That's correct.

2 Q. And you talked about the public
3 policy implications that Mr. Chriss raised, and I'm
4 looking at page 2 of your surrebuttal testimony.

5 A. Yes.

6 Q. And you -- am I understanding
7 correctly that you dispute Mr. Chriss' public
8 policy concerns?

9 A. I think I'm merely pointing out that
10 this program wasn't designed to fit every
11 commercial and industrial customer of Ameren's.
12 It's, as Staff sees it, a stepping stone for future
13 distributed generation projects.

14 Q. Based on your review of Mr. Chriss'
15 testimony, is it your expectation that Wal-Mart
16 would participate in this program?

17 A. I don't believe so from reading his
18 testimony. That's my only knowledge on that topic.

19 Q. One of the, I believe, public policy
20 considerations was that -- that was raised in
21 Mr. Chriss' testimony is the fact that the SRECs
22 are maintained by Ameren?

23 A. Yes, I recall that.

24 Q. Is it Staff's position that -- well,
25 let me rephrase.

1 **Mr. Chriss also mentioned that the**
2 **company retaining those SRECs might be problematic**
3 **for other commercial and industrial customers. Do**
4 **you recall that?**

5 A. I do.

6 **Q. And do you believe that Ameren**
7 **retaining the SRECs would be problematic for other**
8 **commercial and industrial customers?**

9 MS. MERS: Objection. He's asking
10 her to speculate on what other customers may or may
11 not feel.

12 JUDGE BUSHMANN: Any response to
13 that?

14 MR. OPITZ: I'll rephrase.

15 BY MR. OPITZ:

16 **Q. Ms. Eubanks, are you aware of**
17 **requirements that certain customers or businesses**
18 **must meet in order to claim that they are a**
19 **sustainable or green in terms of energy use?**

20 A. Generally.

21 **Q. And what is your general**
22 **understanding of that?**

23 A. I think that there's -- you know,
24 typically they would -- if they're doing some sort
25 of voluntary green program, they would be retiring

1 SRECs, much like Ameren retires SRECs for their RES
2 compliance, but it would be a voluntary standard.

3 Q. So if -- let's say if a customer had
4 their own rooftop solar facility, they would own
5 the SRECs; is that right?

6 A. Yes.

7 Q. And if they retired those, they would
8 then retire those SRECs and they could claim they
9 were -- had sustainable energy; is that correct?

10 A. Yes.

11 Q. But they wouldn't be able to do that
12 under the current proposal by Ameren; is that true?

13 A. Correct. Ameren would retain
14 ownership of the SRECs.

15 Q. And could the customers who are
16 partners for the siting of these facilities claim
17 that they are using any more solar energy than they
18 would otherwise?

19 A. I don't know.

20 MR. OPITZ: That's all the questions
21 I have. Thank you.

22 JUDGE BUSHMANN: Questions from the
23 Bench. Mr. Chairman?

24 CHAIRMAN HALL: Yes.

25 QUESTIONS BY CHAIRMAN HALL:

1 **Q. Greetings.**

2 A. Good morning.

3 **Q. What was Staff's concerns with the**
4 **original application?**

5 A. Some of the concerns were about site
6 selection, and since we don't know where the sites
7 will be, just the engineering aspect of that. And
8 then also --

9 **Q. Let's -- so site selection. So how**
10 **was that addressed or rectified in the stipulation?**

11 A. That was included in Appendix A, I
12 believe. Yes, Appendix A.

13 **Q. So how did that satisfy Staff's**
14 **concerns?**

15 A. Primarily that Ameren would file all
16 the information required by the Commission rule as
17 far part of the site documentation.

18 **Q. So that was Staff's first concern.**
19 **Any other concerns with the original application?**

20 A. We were also concerned with the --
21 the original application included 2.45 watt DC
22 limit, and we were concerned that was too high.

23 **Q. And so that was rectified in the**
24 **stipulation by including a 2.20 --**

25 A. That's correct.

1 Q. -- limit?

2 What's the justification for going
3 from 2.45 to 2.20, other than saving residential
4 customers money, which -- all customers money, but
5 anything beyond that? What was the principal basis
6 for the decision?

7 A. I went back and reviewed the bid
8 responses for Greenwood, O'Fallon and Montgomery
9 Solar, and the range of bid responses that either
10 GMO or Ameren had received supports 2.20.

11 Q. So those are the first two concerns.
12 Any other concerns with the original application?

13 A. Not that I can think of at the
14 moment.

15 Q. Would you want to take a second and
16 look at the application?

17 A. Sure. Oh, the learning objectives.
18 I think it was important to Staff to understand
19 what Ameren's goals were and that reporting on
20 those learning objectives would take place.

21 Q. And those learning objectives are set
22 forth in Appendix B?

23 A. Yes. And the stipulation also
24 includes the reporting requirements.

25 Q. Any other concerns with the

1 application?

2 A. I think just clarification on how the
3 customers would host a facility and Ameren's
4 process of selecting customers.

5 Q. And where is that addressed in the
6 stipulation? On page 2, the site selection
7 criteria, is that what you're referring to?

8 A. Yes.

9 Q. Any other concerns?

10 A. No.

11 Q. My understanding of Staff's position
12 is that the knowledge that the company could gain
13 from this project is one aspect of the public
14 interest being served by granting a CCN; is that
15 correct?

16 A. That's correct.

17 Q. Could you explain to me why Ameren
18 cannot obtain this knowledge simply by working
19 with, speaking to other utilities that currently
20 operate similar projects?

21 A. I think this particular project is
22 interesting because it is distributed generation,
23 and I think Ameren will have the ability to look at
24 its effects on its own system. And I know one of
25 the ways they're discussing -- well, it was

1 included in the Appendix B on getting that
2 information is working with their local division
3 directors responsible for those areas. So I think
4 that's primarily --

5 Q. So you don't believe that Ameren
6 could obtain that information from other utilities
7 operating similar projects, or is it your sense
8 that there are not similar projects elsewhere?

9 A. There are similar distributed
10 generation projects, I believe, but I think it's
11 beneficial for Ameren to have that on their own
12 system for that knowledge.

13 Q. So reading between the lines of what
14 you just said, is every utility's system unique in
15 many respects such that it would be impossible to
16 glean all the knowledge that you could obtain from
17 putting this program on your own system from seeing
18 a similar system else?

19 A. I don't know if I can speak that
20 every single system is completely unique, but --

21 Q. Unique enough that you can't take a
22 similar program elsewhere and learn everything that
23 you could compared to putting -- compared to
24 employing such a system on your own?

25 A. I think that's fair.

1 Q. Do you believe other possible benefit
2 from a program such as this is the reliability, the
3 reliability benefits of micro grids?

4 A. I do.

5 Q. Could you explain that a little bit
6 to me?

7 A. Well, I mean, I think as far as --
8 you know, maybe not specifically this program, but
9 possibly what Ameren may use in the future if it's
10 targeted on certain areas where they have a need
11 for improvements and could satisfy that need with
12 distributed generation, I think that's a
13 possibility.

14 Q. And you do believe that this program
15 would aid the company in RES compliance down the
16 line?

17 A. Yeah. In the future it would, yes.

18 Q. And also aid with compliance with the
19 Clean Power Plan if that gets approved by the
20 courts?

21 A. Yeah. It has the potential for that
22 as well.

23 CHAIRMAN HALL: Thank you.

24 THE WITNESS: You're welcome.

25 COMMISSIONER STOLL: I have no

1 questions. Thank you for your testimony.

2 JUDGE BUSHMANN: Recross based on
3 Bench questions, Ameren Missouri?

4 MR. LOWERY: Thank you, Judge. Just
5 a couple.

6 RECROSS-EXAMINATION BY MR. LOWERY:

7 Q. Commissioner Hall was asking you, I
8 think the gist of his questions were, can't Ameren
9 Missouri just talk to other utilities that have
10 similar programs and gain all the knowledge that
11 they might hope to gain here. I think you
12 indicated that you thought there were things they
13 can learn about their system and their own project
14 that they can't gain just by talking to other
15 utilities; is that fair?

16 A. That's fair.

17 Q. One thing that I think Mr. Barbieri
18 testified is unique is that Ameren Missouri is
19 seeking to use properties where it doesn't pay a
20 lease payment, right?

21 A. That's correct.

22 Q. And are you -- and I believe he
23 testified that there aren't, to his knowledge,
24 other similar programs that follow that model; is
25 that right?

1 A. That's what I recall from his
2 testimony.

3 Q. Would it be fair to say that one
4 thing -- that the only way Ameren Missouri can
5 learn of this particular item, that is sort of
6 what's the depth of the willingness or demand or
7 the number of customers that might be out there
8 that might be willing to host these sites without
9 having a payment, the only way to find that out's
10 to go explore that; is that fair to say?

11 A. Can you repeat the question?

12 Q. It's probably a bad question. If
13 there aren't any other programs out there that have
14 followed that model, then somebody's got to try it
15 for the first time to find out whether you can find
16 a significant number of sites that might be willing
17 to host these facilities for free; isn't that true?
18 If nobody else has done it, somebody's got to
19 start, right?

20 A. Yes.

21 Q. As far as you know, Ameren Missouri
22 would be the first one to take that particular
23 approach?

24 A. As far as I know.

25 Q. These other programs that might exist

1 that might have some similarities, do you have any
2 sense at all about where those utilities are
3 located? Do they tend to be located on the coasts
4 or midwest or --

5 A. I think primarily -- I know Arizona
6 Public Service Commission -- or I'm sorry, Arizona
7 Public Service, so the southwest, and I know
8 there's some towards the east coast.

9 Q. The reason I ask that question is, it
10 seems to me at least in my experience in dealing
11 with these cases that operating -- just different
12 characteristics of those utilities in those, you
13 know, southwest, east coast, west coast, there tend
14 to be some significantly different characteristics
15 or conditions that they face as compared to
16 utilities in the Midwest, just as a general matter.
17 Is that true?

18 A. True.

19 Q. Might that be another reason that
20 it's beneficial for Ameren Missouri to have a
21 program like this on its own system, learn some
22 things on its own? Those utilities might have
23 different learnings, but there might be some
24 benefit for Ameren Missouri having its own program;
25 is that fair to say?

1 A. That's fair.

2 MR. LOWERY: Thank you. I don't have
3 any further questions.

4 JUDGE BUSHMANN: Cross by Division of
5 Energy?

6 MR. ANTAL: No questions.

7 JUDGE BUSHMANN: Renew Missouri?

8 MR. LINHARES: No questions.

9 JUDGE BUSHMANN: Wal-Mart?

10 MR. WOODSMALL: No, thank you.

11 JUDGE BUSHMANN: Brightergy?

12 MR. ZELLERS: No questions, your
13 Honor.

14 JUDGE BUSHMANN: Public Counsel?

15 MR. OPITZ: Yes, Judge, a few.

16 RECROSS-EXAMINATION BY MR. OPITZ:

17 Q. Ms. Eubanks, the Chairman was asking
18 you about Staff's concerns with the initial
19 application.

20 A. That's correct.

21 Q. Do you recall that?

22 A. I do.

23 Q. And you listed a number of them.
24 Were you concerned that the company doesn't need
25 this project for any additional generation?

1 A. Initially, yes.

2 Q. And was that concern resolved in the
3 Stipulation & Agreement?

4 A. I think that concern was resolved
5 through the technical discussions that Staff
6 participated with the company.

7 Q. And what was it that changed your
8 mind about your concern?

9 A. I think primarily that Ameren had
10 really put in some serious thought into the
11 learning objectives that they were interested in.
12 I guess, for example, I think one of the DRs that
13 we looked at included Ameren had a grid of the
14 future team put together, and they actually had a
15 couple of various people looking into it and
16 looking at what kind of engineering aspects would
17 need to be addressed to do more distributed
18 generation in the future.

19 So I think it was just the way --
20 they came to the table quite knowledgeable, and we
21 appreciated that.

22 Q. Were you concerned that this project
23 isn't necessary for the company to comply with the
24 Renewable Energy Standards?

25 A. I mean, we considered that, but I

1 don't know if I would really say that was a
2 concern.

3 MR. OPITZ: That's all I have. Thank
4 you.

5 JUDGE BUSHMANN: Redirect?

6 MS. MERS: Yes.

7 REDIRECT EXAMINATION BY MS. MERS:

8 Q. Mr. Opitz was asking you about
9 quantification of benefits. For the learning
10 objectives, to your knowledge, is there any --

11 MR. OPITZ: Judge, I'm going to
12 object. I believe -- I'll withdraw. Sorry.

13 JUDGE BUSHMANN: Proceed.

14 MS. MERS: Am I good? Okay.

15 BY MS. MERS:

16 Q. Is there a method, to your knowledge,
17 to monetize these learning objectives?

18 A. I think it would be hard to quantify.

19 Q. Did you quantify without doing any
20 monetary calculations?

21 A. I think we weighed those when we
22 entered into the stipulation.

23 Q. To your knowledge, did any Staff
24 members as part of this case perform any analysis
25 on retail rate impacts?

1 A. I believe so.

2 Q. Could you identify which Staff
3 member?

4 A. Sarah Kliethermes.

5 Q. Did you send data requests as part of
6 your analysis of this pilot program?

7 A. Yes.

8 Q. Could you estimate how many?

9 A. Nearly 40, if not 50.

10 Q. All right. There was also some
11 questions about economic feasibility. Under the
12 Greenwood case decision, do we think that an
13 economic -- or does Staff believe that an economic
14 feasibility study would be necessary?

15 A. Can you repeat the question?

16 Q. So an actual study performed, do we
17 believe that under the Greenwood case that Staff
18 would believe that to meet that prong of the Tartan
19 criteria you would actually have to perform an
20 economic feasibility study?

21 A. I think to the extent that there are
22 benefits that are not easily quantifiable.

23 Q. Under that Greenwood Solar decision,
24 is least cost, need for capacity or RES compliance
25 reasons to deny based on the need of service or

1 **economic feasibility criteria?**

2 A. Can you repeat the question?

3 Q. **Yes. That was a terrible question.**

4 **For need for service and economic feasibility,**
5 **after reviewing the Greenwood Solar decision -- you**
6 **were part of that case, correct?**

7 A. That's correct.

8 Q **Is denying for need for service**
9 **because there's no need for capacity or RES**
10 **compliance, do you think that comports with the**
11 **Greenwood Solar decision?**

12 A. I think what you're trying to ask me
13 is how we tie the need for service versus the
14 economic considerations, and to the extent that
15 it's not easy to quantify certain things such as
16 what Ameren will learn, that can also be considered
17 an approvement justifying its cost.

18 Q. **All right. Under the Greenwood Solar**
19 **decision, is least cost a reason to deny**
20 **something's economically feasible, that a project's**
21 **not least cost?**

22 A. My recollection -- I'm sorry. Can
23 you repeat the question?

24 Q. **Under the Greenwood Solar decision,**
25 **if a project is not least cost, does that mean it**

1 is not economically feasible?

2 A. Not necessarily.

3 Q. Is Staff making any recommendation
4 about the prudence of using SRECs to meet non-solar
5 RECs in this case?

6 A. Staff is not.

7 Q. All right. We're just pointing out
8 that Ameren can do that, correct?

9 A. That's correct.

10 Q. There were some questions about C&I
11 customers. Do you believe that -- in your
12 testimony you believe that this will not fit every
13 C&I customer's needs, correct?

14 A. It would not fit every commercial and
15 industrial customer's needs, correct.

16 Q. Ameren has represented that there are
17 interested customers for this version of the
18 program, correct?

19 A. That's correct.

20 Q. Is there anything that is preventing
21 Ameren from developing a different program that
22 could entice the other C&I customers?

23 A. Not to my knowledge.

24 Q. If the other companies kept the
25 SRECs, would the pilot program then meet the future

1 RES requirement needs of Ameren?

2 A. It would not.

3 Q. Chairman Hall asked you about
4 Appendix A for site selection. Do you believe that
5 having Staff's oversight and recommendation ability
6 also alleviated some of our concerns from the
7 initial application?

8 A. Yes.

9 Q. Chairman Hall also asked if Ameren
10 Missouri could knowledge from speaking to other
11 utilities. In the Greenwood Solar case that you
12 were a part of, could GMO have discussed solar with
13 other utilities, especially ones in the state like
14 Ameren that have solar facilities, to gain
15 knowledge as well?

16 A. Yes, and I believe that they
17 testified that they did, to my recollection.

18 Q. Yes. And that CCN was still
19 approved, correct?

20 A. That's correct.

21 MS. MERS: Nothing further.

22 JUDGE BUSHMANN: All right. That
23 completes your testimony Ms. Eubanks. You may step
24 down. Thanks.

25 Seems like a good time to break for

1 lunch. We will be in recess until 1:15.

2 (A BREAK WAS TAKEN.)

3 JUDGE BUSHMANN: Okay. Let's go back
4 on the record. Next witness is for Division of
5 Energy.

6 MR. ANTAL: Division of Energy calls
7 Mr. Martin Hyman.

8 (Witness sworn.)

9 MARTIN HYMAN testified as follows:

10 DIRECT EXAMINATION BY MR. ANTAL:

11 Q. Mr. Hyman, please state your full
12 name for the court reporter.

13 A. Martin Hyman, H-y-m-a-n.

14 Q. Where are you employed and in what
15 capacity?

16 A. I'm employed at the Missouri Division
17 of Energy as a Planner 3.

18 Q. And are you the same Martin Hyman who
19 filed rebuttal and surrebuttal testimony in this
20 case marked as Exhibits 250 and 251?

21 A. I am.

22 Q. Do you have any corrections to those
23 exhibits?

24 A. Just a few quick ones. On the front
25 page of both exhibits, it says "Devison of Energy"

1 at the bottom. It should be Division with an I
2 after the D. And then on page 7, line 5, it says,
3 fails to include. That should be fails to fully
4 consider.

5 **Q. Was that your rebuttal or**
6 **surrebuttal?**

7 A. I'm sorry. On my surrebuttal. And
8 then also in surrebuttal, page 9, line 1, there is
9 an extraneous from as before the word much. So
10 delete that.

11 **Q. Okay. Taking those corrections into**
12 **consideration, if I were to ask you the same**
13 **questions today, would your answers be**
14 **substantially the same?**

15 A. Yes.

16 **Q. Are your answers to these questions**
17 **honest and accurate to the best of your knowledge**
18 **and belief?**

19 A. Yes.

20 MR. ANTAL: Judge, I'd like to move
21 that Exhibits 250 and 251 be admitted into the
22 record.

23 JUDGE BUSHMANN: Any objections?

24 (No response.)

25 JUDGE BUSHMANN: Hearing none,

1 they're received into the record.

2 (DOE EXHIBIT NOS. 250 AND 251 WERE
3 RECEIVED INTO EVIDENCE.)

4 MR. OPITZ: I will tender the witness
5 for cross-examination.

6 JUDGE BUSHMANN: First
7 cross-examination will be Ameren Missouri.

8 MR. LOWERY: Thank you, your Honor.

9 CROSS-EXAMINATION BY MR. LOWERY:

10 Q. Good afternoon, Mr. Hyman.

11 A. Good afternoon.

12 Q. Do you have an opinion regarding
13 whether utility customers in Missouri would like to
14 see their electric service providers provide more
15 of their energy using renewable sources?

16 A. It's my understanding that they do
17 prefer that.

18 Q. So you would agree then with Ameren
19 Missouri's testimony to the effect that its
20 customers are demanding that more of Ameren
21 Missouri's energy come from renewable sources.
22 Would you agree with that?

23 A. I would certainly defer to Ameren on
24 that, but yes.

25 Q. And I assume that, from your

1 **standpoint, that would include solar energy,**
2 **correct?**

3 A. Yes.

4 **Q. Do you have an opinion regarding**
5 **whether state policy in effect suggests that more**
6 **solar generation should be built in Missouri?**

7 A. Yes. Just as an example, the
8 Comprehensive State Energy Planner, CSEP, from last
9 year talked about increasing their renewable energy
10 standard, talked about the Corporate Sustainable
11 Buyers Guide and so on. So, yes, there's
12 definitely a state policy to move towards more
13 solar and other renewables.

14 **Q. And from your perspective, or maybe**
15 **I'll broaden that to the Division of Energy's**
16 **perspective, does the RES itself, as far as**
17 **Division of Energy's concerned, suggest that the**
18 **state should have more renewables than perhaps even**
19 **our portfolio standards indicate in the RES itself?**

20 A. Oh, sure. I mean, besides the RES
21 itself indicating a desire for additional renewable
22 energy, the requirements in the RES are not caps.
23 They're just minimum. So a company could certainly
24 go above that.

25 **Q. Company doesn't have to, but from**

1 **your perspective, even if the renewable resource**
2 **isn't always the least cost resource, there's**
3 **benefits to having more renewable generation than**
4 **the RES will provide for. Is that DE's position?**

5 A. Generally, yes. I mean, it would be
6 case by case, but generally, yes.

7 Mr. LOWERY: Thank you, Mr. Hyman.

8 JUDGE BUSHMANN: Staff?

9 MS. MERS: No questions. Thank you.

10 JUDGE BUSHMANN: Renew Missouri?

11 MR. LINHARES: No questions, Judge.

12 Thank you.

13 JUDGE BUSHMANN: Wal-Mart?

14 MR. WOODSMALL: No questions.

15 JUDGE BUSHMANN: Brightergy?

16 MR. ZELLERS: No questions, your

17 Honor.

18 JUDGE BUSHMANN: Public Counsel?

19 MR. OPITZ: Yes, Judge.

20 CROSS-EXAMINATION BY MR. OPITZ:

21 **Q. Good afternoon, Mr. Hyman.**

22 A. Good afternoon.

23 **Q. Mr. Hyman, prior to this case you**
24 **didn't have experience working on applications**
25 **where a utility proposed to build a solar facility**

1 on customer-owned property; is that correct?

2 A. Yes.

3 Q. Would you agree that you have not
4 quantified any benefits to Missouri ratepayers that
5 will result from this project?

6 A. I myself haven't quantified any, but
7 I would note that in my surrebuttal, I believe it's
8 page 6, starting at line 7, there's a discussion of
9 the social cost of carbon that the federal
10 government uses for regulatory purposes.

11 Q. And would you agree you haven't
12 performed any quantitative cost/benefit analysis
13 related to this project?

14 A. Nothing quantitative. Just
15 qualitative in my testimonies.

16 Q. And you've got a copy of your
17 surrebuttal with you, do you?

18 A. I do.

19 Q. If you would look at page 3.

20 A. Which lines?

21 Q. 10 and 11.

22 A. Okay.

23 Q. So you talk about large companies
24 having established goals to increase the use of
25 renewable energy, and the footnote you cite is to

1 a -- and I guess the next sentence is a Corporate
2 Renewable Energy Buyer's Principles; is that
3 correct?

4 A. Yes.

5 Q. Would you agree that just because a
6 company has signed the buyer's guide doesn't mean
7 that they would necessarily support this project?

8 A. I can't speak for those companies.

9 Q. Have you had a chance to read the
10 testimony of Wal-Mart's Mr. Chriss?

11 A. I have.

12 Q. And does he also mention the buyer's
13 principles within his testimony?

14 A. Do you have a copy of that I could
15 look at?

16 Q. I've got one.

17 A. Thank you. Yes.

18 Q. So if you'd look at page 3, I believe
19 is where he discusses it.

20 A. Yes.

21 Q. Okay. And you would agree that
22 Wal-Mart is a signatory to the Corporate Buyer's
23 Principles Guide, right?

24 A. Yes.

25 Q. And you're aware that they don't

1 necessarily support this project?

2 A. I would defer to Wal-Mart on that,
3 but my understanding is they neither support nor
4 oppose the stipulation in this case.

5 Q. Are you -- as it relates to the
6 buyer's principles, are you aware of any
7 limitations that the signatories might be able to
8 make regarding renewable energy claims?

9 A. Are you asking if the signatories are
10 putting limitations on the renewable energy claims?

11 Q. If there's any limitations that they
12 would have to adhere to?

13 A. I guess I'm still unclear as to
14 whether or not the signatories would be adhering to
15 the limitations or whoever participated in the
16 program.

17 Q. Let me rephrase. So I'm not
18 referring to the signatories to this stipulation
19 here.

20 A. Okay.

21 Q. Are there any limitations that
22 corporations, such as the corporations who have
23 signed the Corporate Buyer's Guide, as to what they
24 can make regarding renewable energy claims?

25 A. That is my understanding.

1 **Q. And what is your understanding on the**
2 **limitations that they can claim?**

3 A. This is not a main area that I focus
4 in, but what I understand is that a company would
5 have to have the RECs or SRECs and retire them in
6 order to be able to make the typical claims one
7 thinks of in terms of sustainability. That doesn't
8 prevent them from saying they have solar on their
9 roofs, but does prevent them saying that they are
10 using green energy per se.

11 **Q. So what is the benefit of saying that**
12 **they have solar on their roof?**

13 A. My understanding, that it's a public
14 relations benefit.

15 **Q. Turning back to your testimony on**
16 **page 5 of your surrebuttal --**

17 A. Okay.

18 **Q. -- beginning at line 9, you have a**
19 **discussion about carbon emissions.**

20 A. Yes.

21 **Q. And you talk about -- well, it seems**
22 **that you're disputing the testimony of Public**
23 **Counsel that no renewable generation will**
24 **necessarily come offline because of the addition of**
25 **this project. Is that your testimony?**

1 A. Roughly, yes.

2 Q. And the basis of your disagreement
3 with that statement is that while it may be true
4 that this project under current circumstances
5 doesn't create an offset to generation here, it may
6 do so in the future?

7 A. I'd say that's part of it. Something
8 else that I've considered is that the generation
9 may not come offline here per se. It could come
10 offline somewhere else in the MISO system. My
11 rough understanding of how MISO works is that
12 basically Ameren Missouri generates whatever is --
13 whatever they meet in terms of their bid price from
14 the market, and then they also have to buy back to
15 meet their native load.

16 And to the extent that they are
17 meeting their native load with solar energy, they
18 don't necessarily have to buy as much from the
19 market. And since solar tends to correspond with
20 peak, they would be buying less gas generation from
21 the MISO market.

22 MR. OPITZ: That's all the questions
23 I have. Thank you.

24 THE WITNESS: Thank you.

25 JUDGE BUSHMANN: Questions from the

1 Commissioners?

2 CHAIRMAN HALL: No questions. Thank
3 you.

4 COMMISSIONER STOLL: No questions.

5 COMMISSIONER RUPP: None

6 COMMISSIONER COLEMAN: No, thank you.

7 JUDGE BUSHMANN: No need for recross
8 based on Bench questions then. Redirect?

9 MR. ANTAL: We have no redirect.
10 Thank you very much.

11 JUDGE BUSHMANN: Mr. Hyman, thank
12 you. You may step down.

13 Our next scheduled witness was
14 Mr. Chriss, but I assume we're putting him off at
15 this point.

16 MR. WOODSMALL: Your Honor, I believe
17 I've talked to all the parties, and Mr. Chriss was
18 supposed to be available later this afternoon, but
19 he had travel problems, so he's not going to make
20 it.

21 The other parties are willing to
22 waive cross so that he doesn't have to come in and
23 so that we can finish today, but that's subject to
24 the Commission's preference. If you want him
25 available tomorrow so that you can ask him

1 questions, we'll make him available tomorrow.
2 Otherwise, I'd like to just offer his testimony
3 into evidence now.

4 JUDGE BUSHMANN: Any of the
5 Commissioners going to have questions for
6 Mr. Chriss?

7 CHAIRMAN HALL: No, I don't.

8 COMMISSIONER STOLL: No. His
9 testimony is fine.

10 JUDGE BUSHMANN: So apparently there
11 are no commissioner questions for him. Am I
12 correct that all parties are waiving cross?

13 MR. LOWERY: You are.

14 MR. WOODSMALL: Your Honor, I'd offer
15 Exhibit 400, Mr. Chriss' rebuttal testimony, into
16 the record.

17 JUDGE BUSHMANN: Any objections to
18 receipt of that testimony?

19 (No response.)

20 JUDGE BUSHMANN: Hearing none,
21 Exhibit 400 is received into the record.

22 (WAL-MART EXHIBIT NO. 400 WAS
23 RECEIVED INTO EVIDENCE.)

24 MR. WOODSMALL: Thank you, your
25 Honor, and thank you to the parties as well.

1 JUDGE BUSHMANN: All right. Then the
2 next witness would be from Brightergy.

3 MR. ZELLERS: Brightergy calls
4 Jessica Oakley to the stand.

5 (Witness sworn.)

6 JESSICA OAKLEY testified as follows:

7 DIRECT EXAMINATION BY MR. ZELLERS:

8 Q. Would you please state your full name
9 for the record.

10 A. Jessica Lee Oakley.

11 Q. Where are you employed and in what
12 capacity?

13 A. I'm employed by Brightergy as VP of
14 Client Solutions.

15 Q. Are you the same Jessica Oakley that
16 caused to be submitted in this case rebuttal
17 testimony marked as Exhibit 450?

18 A. I am.

19 Q. Do you have any corrections to that
20 testimony?

21 A. I do not.

22 Q. If I asked you the same questions
23 today, would your answers be the same?

24 A. They would.

25 Q. And are those answers truthful and

1 **accurate to the best of your knowledge?**

2 A. They are.

3 MR. ZELLERS: In that case, your
4 Honor, I would ask to admit Exhibit 450, Jessica
5 Oakley's rebuttal testimony, into evidence.

6 JUDGE BUSHMANN: Any objections?

7 (No response.)

8 JUDGE BUSHMANN: Hearing none, it is
9 received into the record.

10 (BRIGHTERGY EXHIBIT NO. 450 WAS
11 RECEIVED INTO EVIDENCE.)

12 MR. ZELLERS: Tender the witness.

13 JUDGE BUSHMANN: First cross would be
14 Ameren Missouri.

15 MR. LOWERY: No, thanks, your Honor.

16 JUDGE BUSHMANN: Commission Staff?

17 MS. MERS: Just a brief question.

18 CROSS-EXAMINATION BY MS. MERS:

19 **Q. Is there anything in this**
20 **Nonunanimous Stipulation & Agreement that would**
21 **prevent Ameren Missouri from offering programs that**
22 **address some of your concerns, like ownership of**
23 **SRECs or lease payments at a future time?**

24 A. I don't believe so.

25 MS. MERS: Thank you.

1 JUDGE BUSHMANN: Cross by Division of
2 Energy?

3 MR. ANTAL: No questions. Thank you.

4 JUDGE BUSHMANN: Renew Missouri?

5 MR. LINHARES: No questions.

6 JUDGE BUSHMANN: Wal-Mart?

7 MR. WOODSMALL: No questions.

8 JUDGE BUSHMANN: Public Counsel?

9 MR. OPITZ: A few, Judge.

10 CROSS-EXAMINATION BY MR. OPITZ:

11 Q. Good afternoon, Ms. Oakley.

12 A. Good afternoon.

13 Q. Do you have a copy of your testimony
14 with you?

15 A. Yes, I do.

16 Q. If you would turn to page 3, please,
17 and I'm looking at line 6 through 7.

18 A. Okay.

19 Q. You testified that Brightergy assists
20 its clients in applying for necessary permits
21 relating to solar energy installations, correct?

22 A. That's correct.

23 Q. And can you tell me, who are
24 Brightergy's clients?

25 A. Our clients range from commercial and

1 industrial customers, owner/operators, to municipal
2 and government clients, as well as nonprofit and
3 religious customers and some residential.

4 **Q. And what sorts of permits do you**
5 **assist these clients in receiving?**

6 A. So for our scope of work, we usually
7 apply for building permits, electrical permits,
8 occasionally zoning permits or fire permits,
9 depending on the local jurisdiction.

10 **Q. Are there any other permits that you**
11 **normally will help the customer with?**

12 A. I believe those cover all of our
13 circumstances.

14 **Q. And you talked about your customers**
15 **being CI customers, municipalities. How does**
16 **Brightergy go about marketing to these customers?**

17 A. So we have an inside sales department
18 and an outside sales department. Our inside sales
19 department identifies potential customers based on
20 a set of criteria, including size of facility, that
21 it's large enough to support the solar
22 installation, potentially their existing utility
23 rate to make sure there's sufficient financial
24 incentive for solar. And depending on the clients,
25 whether they have a tax appetite to take the tax

1 credits or finding a way to capitalize those tax
2 credits.

3 Q. So when you're marketing to -- when
4 Brightergy is marketing to these customers, is the
5 ability to claim ownership of the RECs an important
6 factor?

7 A. For our Missouri clients, we are
8 targeting mostly within the Kansas City Power &
9 Light and Ameren territories, in which case for
10 Kansas City Power & Light there's still a rebate
11 program, in which case the customers would sign
12 over all of their RECs in exchange for that rebate.
13 So ownership of the RECs for those customers is not
14 a critical component.

15 Q. And is -- when you have met with
16 these customers, have you ever had any permits that
17 aren't granted?

18 A. We have had to make adjustments to
19 our initial plans based on requirements by the
20 permitting authority but have not, to my
21 recollection, been denied a permit.

22 Q. Have you -- are you aware of the, I
23 guess, potential range of solar installation that
24 are contemplated under the company's proposal in
25 this case?

1 A. I'm aware of the overall scope of the
2 project.

3 Q. Is it -- what is your understanding
4 of the overall scope of the project?

5 A. The 5 megawatts of solar distributed
6 among potentially three sites.

7 Q. Would customers fitting in that size
8 of project be a potential client that Brightergy
9 would be competing for?

10 A. We have done projects of that size,
11 not within Ameren's territory. I don't believe we
12 would have competition of that size within their
13 territory.

14 Q. If -- if a regulated utility, I
15 guess, begins installing generation facilities on
16 customer property, would you expect that to impact
17 your ability to attract customers?

18 A. I'm not sure that it would have a
19 substantial impact.

20 Q. And I guess why wouldn't it have an
21 impact on your ability to attract customers?

22 A. Other than potentially having some
23 capacity issues on -- depending on location of the
24 solar, there may be capacity issues on the grid
25 that might prevent additional customers from

1 pursuing it without substantial upgrades. But
2 beyond that, it would not be pertinent to our
3 customers.

4 Q. At page 4 of your testimony, you talk
5 about the price of solar installations.

6 A. Uh-huh.

7 Q. And you testify that the cost of
8 installing solar facilities has consistently
9 trended downwards, correct?

10 A. Correct.

11 Q. And do you expect that trend to
12 continue?

13 A. I do.

14 Q. I guess what is the basis for your
15 expectation that the price of installations will
16 continue to decline?

17 A. The price of solar panels, the
18 modules themselves continue to drop. We've seen a
19 significant drop just in the last two quarters. We
20 have also seen, as we've had more experience with
21 labor and installers, that as they become more
22 experienced, they're able to lower their
23 installation rates as well.

24 MR. OPITZ: That's all the questions
25 I have, Ms. Oakley. Thank you.

1 JUDGE BUSHMANN: Any questions from
2 Commissioners?

3 CHAIRMAN HALL: No questions. Thank
4 you.

5 COMMISSIONER STOLL: No questions.

6 COMMISSIONER KENNEY: No questions.

7 JUDGE BUSHMANN: Redirect?

8 MR. ZELLERS: No redirect, your
9 Honor.

10 JUDGE BUSHMANN: All right.
11 Ms. Oakley, thank you. That completes your
12 testimony.

13 Final witnesses, Public Counsel.

14 MR. OPITZ: Public Counsel calls
15 Mr. Rich Burdge.

16 (Witness sworn.)

17 JUDGE BUSHMANN: You may be seated.

18 RICHMOND BURDGE testified as follows:

19 DIRECT EXAMINATION BY MR. OPITZ:

20 Q. Good afternoon, Mr. Burdge. Would
21 you state and spell your name for the record.

22 A. Richmond Burdge, R-i-c-h-m-o-n-d,
23 B-u-r-d-g-e.

24 Q. And where are you employed and in
25 what capacity?

1 A. At the Office of Public Counsel as a
2 Research Analyst 2.

3 Q. Are you the same Richmond Burdge who
4 prefilled rebuttal and surrebuttal testimony marked
5 as OPC Exhibits 200 and 201?

6 A. Yes.

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

9 A. No.

10 Q. If I were to ask you those same
11 questions that are posed in your prefilled
12 testimony, would your answers be the same?

13 A. Yes.

14 Q. And your answers are true and correct
15 to the best of your information and belief?

16 A. Yes.

17 MR. OPITZ: With that, Judge, OPC
18 moves to enter into evidence Exhibits 200 and 201.

19 JUDGE BUSHMANN: Any objections to
20 their receipt?

21 (No response.)

22 JUDGE BUSHMANN: Hearing none,
23 they're received into the record.

24 (OPC EXHIBIT NOS. 200 AND 201 WERE
25 RECEIVED INTO EVIDENCE.)

1 MR. OPITZ: Thank you, Judge. Public
2 Counsel tenders the witness for cross-examination.

3 JUDGE BUSHMANN: First
4 cross-examination will be by Brightergy.

5 MR. ZELLERS: Thank you, your Honor.
6 CROSS-EXAMINATION BY MR. ZELLERS.

7 Q. Mr. Burdge, do you have a copy of
8 your rebuttal and surrebuttal testimony?

9 A. Yes.

10 Q. Could you please turn to page 10 of
11 your rebuttal testimony.

12 A. Yes. I'm there.

13 Q. Under the headline summary and please
14 summarize your testimony, the first bullet point,
15 it says, The solar partnership should be rejected
16 for the following reason: Ameren Missouri
17 currently carries sufficient generating capacity
18 and will until 2033.

19 So is it OPC's position that no
20 generation should be installed by the company until
21 2033?

22 A. Well, of course, each -- each
23 generating project is evaluated on its own merits,
24 but it would be -- but it would be a very -- it
25 would be a very difficult case to make in the light

1 of the current capacity that Ameren is carrying
2 right now, given its -- given its -- given current
3 capacity and current demand.

4 Q. So it sounds like you're saying no.
5 It sounds like you're saying that they don't need
6 any new capacity until 2033?

7 A. Well, they don't need the capacity,
8 yes.

9 Q. So if one of the reasons you're
10 asking the Commission to reject this CCN is that
11 they have sufficient capacity, the question is
12 should the Commission reject any application for a
13 CCN to install new capacity before that time?

14 I'll tell you what, we don't even
15 need to answer that question. If the answer is
16 there may be circumstances in which the Commission
17 should approve new capacity, what would those
18 circumstances be?

19 A. It's difficult for me to describe
20 right now what the -- what those circumstances
21 would be.

22 Q. Okay. Let's take a look at your
23 surrebuttal testimony. On page 5 of your
24 surrebuttal, you discuss the last two pieces of the
25 Tartan standards. And on line No. 5 you're asked

1 if the project is economically feasible. What's
2 OPC's definition of economically feasible?

3 A. When I use the term economically
4 feasible, I'm referring to -- to costs and benefits
5 as regarding electric customers as a whole. Do we
6 know that the benefits to the customers outweigh
7 the costs to the customers? And we do not --
8 certainly do not know that with regards to this
9 project. There's no quantitative analysis like
10 that has been conducted.

11 Q. So economic feasibility means that
12 the benefits outweigh the costs to the customers?

13 A. From our perspective certainly, yes.

14 Q. When must those benefits outweigh the
15 costs? Must it be immediately or can it take some
16 time before the benefits outweigh the costs?

17 A. I would think that there would be --
18 it would depend on the situation. There could be a
19 reasonable time frame but -- involved, but there --
20 there could be a certain reasonable time frame
21 involved, but there would have to be some sort of
22 benefit seen in the not too distant future, I would
23 think.

24 Q. Okay. So the benefits do not need to
25 outweigh the costs immediately?

1 A. I would say in the not very distant
2 future.

3 Q. Okay. But those benefits can take
4 some time to develop?

5 A. Perhaps.

6 Q. Let's look, continue on page 5,
7 line 15 and beyond. You're asked, Does Ameren
8 Missouri's proposed solar facility promote the
9 public interest? And you answered no.

10 A. Yes.

11 Q. How do you define the public
12 interest?

13 A. Well, as it's been established in the
14 original Tartan case and Tartan criteria, the
15 public interest is generally regarded as sort of
16 the -- a combination of the other four Tartan
17 criteria. And so since we don't -- since I don't
18 regard the project as being -- as meeting the
19 criteria of economic feasibility or as providing a
20 service that is needed, by that standard it would
21 not promote the public interest.

22 Q. So if it's needed and it's
23 economically feasible, it is within the public
24 interest?

25 A. In that case, then it would most

1 likely meet the last criteria.

2 Q. We've talked about your definition of
3 economic feasibility. What is your definition of
4 need?

5 A. Well, providing a needed service, I
6 believe, is how the criteria reads. And that would
7 be providing a service to the customer that is
8 needed, such as, for example, capacity, or which is
9 not needed in this case, or energy, kilowatt hours
10 or even meeting the statutory requirement of SRECs,
11 which is not needed in this case. All of those
12 things would be a more imminent need that would
13 meet that criteria.

14 MR. ZELLERS: That's all I have.
15 Thank you.

16 JUDGE BUSHMANN: Cross by Wal-Mart?

17 MR. WOODSMALL: No questions.

18 JUDGE BUSHMANN: Renew Missouri?

19 MR. LINHARES: No questions, your
20 Honor.

21 JUDGE BUSHMANN: Division of Energy?

22 MR. ANTAL: No questions, your Honor.

23 JUDGE BUSHMANN: Commission Staff?

24 CROSS-EXAMINATION BY MS. MERS:

25 Q. Hi, Mr. Burdge. I have a few yes or

1 no questions. If you have anything further to add,
2 your counsel can help you out at redirect. Okay?

3 Do you acknowledge the
4 diversification of generating sources as a benefit
5 to utilities?

6 A. I can't speak for the utilities.

7 Q. Would you agree that diversification
8 of fuel sources lowers the risk of a fuel spike in
9 one source that would increase costs to ratepayers
10 and the utilities?

11 A. One more time, please.

12 Q. Would you agree that diversification
13 of fuel sources lowers the risk of a fuel spike in
14 one fuel source that would increase cost to the
15 ratepayers and the utilities?

16 A. Perhaps there could be such a
17 situation.

18 Q. The diversification of fuel sources
19 also allows a utility to run a lower cost facility
20 to offset a higher cost facility, correct?

21 A. Correct.

22 Q. You would agree that there's no fuel
23 cost to run a solar facility, correct?

24 A. No fuel cost, correct.

25 Q. Do you acknowledge the

1 **diversification of renewable generation sources as**
2 **a benefit to utilities?**

3 A. Diversification -- say it again,
4 please.

5 Q. **Diversification of renewable**
6 **generation source as a benefit to utilities?**

7 A. That would definitely depend on the
8 situation. It's hard to say.

9 Q. **Okay. Are you familiar with the**
10 **integrated resource planning process?**

11 A. Yes.

12 Q. **Do you acknowledge diversification of**
13 **generating sources is one of the goals of**
14 **developing an integrated resource plan?**

15 A. Yes.

16 Q. **To your knowledge, must utilities**
17 **evaluate several generating mixes as part of their**
18 **integrated resource plan?**

19 A. Yes.

20 Q. **Is least cost the only criteria**
21 **utilities should evaluate when picking a preferred**
22 **plan under an integrated resource plan?**

23 A. No.

24 Q. **Is it true that Ameren will need**
25 **non-solar RECs starting in 2018?**

1 A. Non-solar?

2 Q. Non-solar, correct.

3 A. I --

4 Q. Take your time.

5 A. Give me a moment, please.

6 Q. Of course.

7 A. Actually, I only have a portion of
8 that. I'm not certain about that.

9 Q. Is it your understanding of the Mo
10 RES requirement that solar RECs can be used to meet
11 non-solar REC requirements?

12 A. That's correct.

13 Q. Is it your understanding that
14 Missouri-sited renewable energy generation counts
15 for 1.25 credits for compliance?

16 A. That's correct.

17 Q. Would you agree that the policy
18 reasons for the extra .25 percent credit is to
19 encourage renewable generation inside Missouri?

20 A. That's right.

21 Q. Would you agree that there is an
22 advantage in terms of REC compliance concerning the
23 above fact and using Missouri-sited solar versus an
24 out-of-state wind purchased power agreement?

25 A. In that regard, yes.

1 Q. Are the renewable standards a
2 minimum?

3 A. Yes.

4 Q. Is it OPC's position utilities should
5 not go beyond the minimum as far as renewable
6 energy standards or when using renewable energy
7 sources?

8 A. I don't know of a definite position
9 OPC has in that regard.

10 Q. Are you aware of any CCN case where
11 the Commission imposed a condition that cost does
12 not exceed the least cost option for any kind of
13 generation?

14 A. No.

15 Q. Do you believe as a research analysis
16 you should be familiar with the rules, regulations
17 and statutes?

18 A. To the extent possible.

19 Q. Are you familiar with Title 16,
20 Chapter 46 of the United States Code; this is also
21 known as the Public Utility Regulation Policies or
22 PURPA?

23 A. I'm a little familiar with it. Not
24 intimately.

25 Q. Okay. Well, I have a copy. So --

1 JUDGE BUSHMANN: That would be 106.

2 (STAFF EXHIBIT NO. 106 WAS MARKED FOR
3 IDENTIFICATION BY THE REPORTER.)

4 BY MS. MERS:

5 Q. Are you familiar with Section 262 --
6 260.21 about the consideration determination
7 respecting certain ratemaking standards in
8 subpart D12, the establishment of federal standards
9 regarding fuel sources? I think it's on page 5 and
10 I highlighted it.

11 A. Okay. Yes. There it is.

12 Q. So would you agree that that section
13 calls for each electric utility to develop a plan
14 to minimize dependence on one fuel source and to
15 ensure that electric energy it sells to consumers
16 is generated using a diverse range of fuels and
17 technology, including renewable technologies?

18 A. Yes, but I would note that that does
19 not include any sort of quantitative goals or
20 objectives.

21 MS. MERS: Sure. Okay. At this time
22 I'd like to move to have Exhibit 106 into evidence.

23 JUDGE BUSHMANN: Any objections?

24 (No response.)

25 JUDGE BUSHMANN: It's received into

1 the record.

2 (STAFF EXHIBIT NO. 106 WAS RECEIVED
3 INTO EVIDENCE.)

4 BY MS. MERS:

5 Q. Can Ameren construct one of the solar
6 facilities contemplated under this program without
7 Staff and other parties' review?

8 A. No. In the Stipulation & Agreement,
9 I believe, if I may find it here --

10 Q. I think you've answered the question
11 sufficiently.

12 A. Okay.

13 Q. Thank you. Okay. Turning to your
14 rebuttal testimony, page 7, line 9.

15 A. Page 7 you said?

16 Q. Yes.

17 A. Did you say surrebuttal?

18 Q. Just rebuttal.

19 A. Okay.

20 Q. You state, The details of this
21 project are vague or nonexistent. It is not known
22 at this point, and you go on to state, whether any
23 upgrades to the grid at prospective sites would be
24 necessary or how much they will cost. Is that an
25 accurate reading?

1 A. Yes.

2 Q. Is it correct that when you were
3 writing your testimony, you did not know what type
4 of upgrades might be necessary?

5 A. Yes. That's correct. We had
6 received no such information from Ameren.

7 Q. Did you write any data requests
8 regarding this statement?

9 A. There -- the office did write data
10 requests.

11 Q. Do you have a copy of your deposition
12 in front of you?

13 A. Yes.

14 Q. Can you go to page 42, line 5?

15 A. Yes.

16 Q. All right. So you did not write the
17 date request involving upgrades to the grid,
18 correct?

19 A. Correct.

20 Q. You reported in your deposition. You
21 also reported in your deposition that you did not
22 ask anybody for further detail of what that DR
23 meant, correct?

24 A. Yes. It was very -- it was
25 self-explanatory.

1 Q. Okay. And you just put it in your
2 testimony without asking further detail, correct?

3 A. Yes.

4 Q. And you didn't know at the time of
5 writing your testimony whether the Stipulation &
6 Agreement addressed the issue of upgrades to the
7 grid, correct?

8 A. Correct. The Stipulation & Agreement
9 was not agreed to until after testimony was filed.
10 The negotiation process was ongoing, and the
11 stipulation was not agreed to until six days after
12 the testimony was filed.

13 Q. So you're saying that your testimony
14 was filed after the Stipulation & Agreement?

15 A. No, before. The rebuttal testimony
16 was filed -- this is surr-- no. Yeah. Rebuttal
17 testimony was filed August 25th, and the
18 Stipulation & Agreement was filed on August 31st.

19 Q. I believe that parties asked for an
20 extension, and so testimony was filed after the
21 Stipulation & Agreement was already out. I believe
22 there was an extension from your counsel to give
23 you time to review the Stipulation & Agreement when
24 writing your rebuttal testimony.

25 A. That may be.

1 Q. Okay. Well, at this moment, do you
2 currently know if the Nonunanimous Stipulation &
3 Agreement addresses the issue of capacity upgrades?

4 A. Yes.

5 Q. And how does it address this issue?

6 A. It says that they must be -- the
7 projects must be located in the location where -- I
8 believe it says where no significant capacity
9 upgrades are needed.

10 Q. Okay. Thank you. You also said on
11 page 7 of your rebuttal that it was unknown who the
12 contractor for this construction will be. Is that
13 an accurate rephrasing of your testimony?

14 A. Yes.

15 Q. Do any of the rules and regulations
16 regarding CCN require the contract to be identified
17 before the CCN is granted?

18 A. No, but it would still be useful
19 information.

20 Q. Are you familiar with the Ameren
21 O'Fallon solar site?

22 A. Yes.

23 Q. Did the Commission know who the
24 contractor was before it approved that CCN?

25 A. I'm not sure.

1 Q. Are you aware of any case in which a
2 CCN was not approved because a contractor was not
3 identified?

4 A. No.

5 Q. Yet you list failure to identify a
6 contractor as a reason to deny this CCN?

7 A. It is one contributing factor.

8 Q. Even though it's never been required
9 before?

10 A. Because it is not a requirement does
11 not mean it's not useful information.

12 Q. Okay. On page 7 of your rebuttal you
13 state, No contract to be used with participating
14 customers has been provided. Is this an accurate
15 reading of your testimony?

16 A. Yes.

17 Q. Is there a requirement through
18 regulation or statute that a contract must be
19 submitted for approval of a CCN?

20 A. No.

21 Q. Okay. On page 7 of your rebuttal,
22 again, you state, It is not known how many discrete
23 sites the project will occupy. Is this an accurate
24 rephrasing of your rebuttal?

25 A. Yes.

1 Q. Are you familiar with the
2 Commission's decision in the KCPL Smart Grid
3 case, EA-2011-0368?

4 A. No, I'm not very familiar with that.

5 Q. Okay. I have a copy of the Report
6 and Order right here. I didn't print out copies,
7 so I guess I would take judicial notice of the
8 Report and Order in this case.

9 JUDGE BUSHMANN: Any objection to
10 taking official notice of the court order? And
11 what was the case number again?

12 MS. MERS: EA-2011-0368.

13 JUDGE BUSHMANN: Any objections to
14 taking official notice of the Report and Order in
15 that case?

16 (No response.)

17 JUDGE BUSHMANN: Commission will take
18 official notice of that report.

19 MR. OPITZ: Ms. Mers, may I inquire?

20 MS. MERS: Sure.

21 MR. OPITZ: Since I don't have a copy
22 of the document in front of me, is it a selection
23 of pages or is it the entire Report and Order?

24 MS. MERS: It's the entire Report and
25 Order.

1 MR. OPITZ: Thank you.

2 MS. MERS: It's very small, like
3 three or four pages.

4 BY MS. MERS:

5 Q. All right. After having a brief
6 chance to review that Report and Order, would you
7 agree that KCPL's application in that case to
8 install small solar generating facilities did not
9 specify where these facilities would be located?

10 A. Yes.

11 Q. And the Commission approved that CCN
12 without the specific site locations provided?

13 A. Yes, it appears so.

14 Q. And you were not aware of this case
15 when you wrote your testimony?

16 A. No.

17 Q. How many cases did you review while
18 preparing your testimony?

19 A. At least GMO Greenwood and the
20 original Tartan case.

21 Q. So two. Moving to page 8 of your
22 rebuttal testimony, you state, The number is being
23 presented without justification in reference to the
24 cost. Is that an accurate reading of your
25 testimony?

1 A. Page 8, you said?

2 Q. Yes.

3 A. I'm sorry. Which lines?

4 Q. Let me check. I'm sorry. That would
5 be line 1 and 2.

6 A. Okay.

7 Q. Did you send any data requests into
8 the justification behind the 2.20 a watt cost that
9 was presented in the Nonunanimous Stipulation &
10 Agreement?

11 A. No.

12 Q. I'm handing you what was previously
13 marked as Staff Exhibit 103. I believe since this
14 exhibit was marked HC, we might need to go in
15 camera for a moment.

16 (REPORTER'S NOTE: At this point an
17 in-camera session was held, which is contained in
18 Volume 2, pages 191 through 192 of the transcript.)

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1 JUDGE BUSHMANN: We're now back in
2 public session.

3 BY MS. MERS:

4 Q. Are you familiar with the Montgomery
5 Solar case?

6 A. To some extent, yes.

7 Q. I'm handing you what has previously
8 been marked as Exhibit 104, Staff's. Would you
9 agree this exhibit is a compilation of RFPs
10 regarding a solar generation project?

11 A. Yes.

12 Q. Would you agree that it is more
13 likely than not that Ameren used the estimates
14 contained in this document to justify the cost per
15 watt in the initial application and the
16 Nonunanimous Stipulation & Agreement?

17 A. I would have to examine this to see
18 exactly how this relates to the price quote in the
19 Stipulation & Agreement.

20 Q. So you have no opinion on if it would
21 be more likely than not that Ameren would use
22 previously completed proposals to inform them in a
23 case less than a year after?

24 A. It's certainly possible.

25 Q. Okay. I think your counsel has a

1 copy of those exhibits, so I will take these back.

2 Thank you.

3 You said you're familiar with the
4 Greenwood solar facility case, correct?

5 A. Yes.

6 Q. Are you familiar with the cost per
7 watt estimates in that case?

8 A. I don't recall what the estimates
9 were.

10 Q. Okay. Thank you. So when you say
11 there's no justification for the cost per watt in
12 the Stipulation & Agreement, isn't this just an
13 assumption on your part?

14 A. The main point here is that --

15 Q. Yes or no, please.

16 A. Could you repeat the question,
17 please?

18 Q. Sure. When you say there was no
19 justification for the cost per watt in the
20 Stipulation & Agreement, isn't that just an
21 assumption on your part?

22 JUDGE BUSHMANN: Would you like -- I
23 was going say, would you like the question repeated
24 for you?

25 THE WITNESS: No. I'll -- that could

1 perhaps be considered.

2 BY MS. MERS:

3 Q. Thank you. Do you know the impact of
4 this pilot program on the average residential
5 customer?

6 A. I believe that's been stated earlier
7 today.

8 Q. Okay. But you didn't know this
9 impact when you prepared your testimony, correct?

10 A. We had not performed that calculation
11 and we've not seen any such calculation.

12 Q. Thank you. Do you know if the
13 Nonunanimous Stipulation & Agreement addresses
14 prudence?

15 A. I don't believe so, unless you're
16 about to point it out.

17 Q. Do you have your Stipulation &
18 Agreement?

19 A. I do.

20 Q. It is page 2, paragraph 7.

21 A. All right. Okay.

22 Q. So after reviewing that, you would
23 agree then that no signatory to the Nonunanimous
24 Stipulation & Agreement has waived its abilities to
25 make prudence challenges regarding the cost of

1 investments with the facilities owned and operated
2 under this pilot program?

3 A. Yes.

4 Q. One of OPC's arguments was this pilot
5 program is not necessary or convenient under
6 Section 373.170?

7 A. Yes.

8 Q. Are you aware under Missouri case law
9 that necessity does not mean essential or
10 absolutely indispensable?

11 MR. OPITZ: Objection. Calls for
12 legal conclusion.

13 MS. MERS: I'm just asking for his
14 knowledge.

15 JUDGE BUSHMANN: I'll sustain the
16 objection.

17 BY MS. MERS:

18 Q. Okay. One of your -- of the other
19 OPC arguments is that the pilot program does not
20 meet the Tartan criteria, in particular the need
21 for service, the economic feasibility aspect and
22 the public interest portion, correct?

23 A. You said economic feasibility, need
24 for service and?

25 Q. Public interest.

1 A. Public interest. That's correct.

2 Q. You said you were familiar with the
3 Greenwood Solar decision. Was that facility
4 necessary for capacity or RES compliance?

5 A. No, it was not.

6 Q. Did the Commission still find there
7 was a need for service in the Greenwood Solar case
8 and approve the CCN?

9 A. They did approve it, yes.

10 Q. Will Ameren need more renewable
11 generation to comply with the Clean Power Plan or
12 if a similar plan would go into effect?

13 A. If the Clean Power Plan were
14 approved, it's presumed that they probably would
15 need more renewable generation of some kind.

16 Q. Ameren provided in response to a data
17 request from your office, I think it was previously
18 marked Exhibit A, a list of customers who
19 purportedly requested this program, correct?

20 A. A list of customers with whom Ameren
21 had had discussions about this program.

22 Q. You didn't follow up with those
23 customers to see if those conversations had taken
24 place, correct?

25 A. No.

1 Q. Referring back to the Greenwood Solar
2 decision, did the Commission find a project must be
3 the least cost of any generation source to be
4 considered economically feasible?

5 A. No.

6 Q. One of the arguments the OPC is
7 making is that the timing isn't right for this
8 project and that cost will be lower in the future,
9 correct?

10 A. Yes.

11 Q. What's stopping you from making that
12 argument three years from now?

13 A. Well, for one thing, -- well, we'll
14 have to see what the situation is three years from
15 now, if prices will be -- are projected to continue
16 to decline. Maybe the situation will be similar,
17 maybe it won't. But also the federal incentives
18 that will be in place -- that are in place will be
19 about to expire, that will be -- if I may consult.

20 The federal tax credit will be at its
21 current rate through 2019 and will still remain
22 significant in 2020 and 2021. And under the Clean
23 Power Plan, assuming it is implemented, emission
24 rate credit or allowance equivalent will remain --
25 projects like this would be eligible for them

1 through 2022, and it would receive matching --
2 matching credit for early generation in 2020 and
3 2021 in the clean energy incentive program. So
4 there isn't really just an endless delay that we're
5 talking about here.

6 Q. Okay. Thank you. Does the public
7 have an interest in renewable energy?

8 A. To some extent --

9 Q. Okay. Thank you.

10 A. -- you could argue.

11 Q. Are you familiar with the 2008
12 Proposition C?

13 A. Say that again, please.

14 Q. Were you familiar with the 2008
15 proposition?

16 A. Was that -- did that establish the
17 renewable energy credit program?

18 Q. Exactly.

19 A. Yes.

20 Q. Okay. So then you are aware that
21 that is a voter initiative that was added to the
22 2008 ballot through public support?

23 A. Yes.

24 Q. Well, then would you agree that after
25 voter initiative led to it being on the ballot and

1 it was also passed by voters, that there was public
2 interest in renewable generation?

3 A. Yes, that would be reasonable.

4 Q. Does the public have an interest in
5 carbon-free generation?

6 A. Depends on what part of the public
7 you're talking about.

8 Q. That's a good point. Does the
9 facility admit zero carbon?

10 A. This proposed facility?

11 Q. Yes.

12 A. Yes.

13 MS. MERS: I have nothing further.
14 Thank you very much for your time.

15 JUDGE BUSHMANN: Cross by Ameren
16 Missouri.

17 MS. TATRO: Thank you.

18 CROSS-EXAMINATION BY MS. TATRO:

19 Q. Good afternoon, Mr. Burdge.

20 A. Good afternoon.

21 Q. So you have your rebuttal testimony
22 with you?

23 A. Yes.

24 Q. And on page 8, you state that
25 Ameren -- lines 3 and 4, are you there?

1 A. Yes.

2 Q. You indicate that Ameren Missouri did
3 not comply with Commission regulations, correct?

4 A. That they did not provide information
5 listed in CCN -- listed in the file requirements
6 for a CCN, yes.

7 Q. So I took your deposition in this
8 case, right?

9 A. That's correct.

10 Q. And you have a copy of it with you?

11 A. I do.

12 Q. And is it true that as of the date of
13 your deposition you had not read the Commission's
14 regulations governing applications for certificates
15 of convenience and necessity?

16 A. No, that is not correct. I had read
17 them, and I cited them here in my testimony.

18 Q. Okay. Would you turn to page 46 of
19 the deposition. Start on line 13.

20 Question: Have you read the
21 Commission's regulations on certificates of
22 convenience and necessity?

23 Answer: I don't believe I have.

24 Question: Have you read the statutes
25 that govern the Commission's ability to grant

1 **certificates of convenience and necessity?**

2 **Answer: No.**

3 **Did I read that correctly?**

4 A. Yes, you did.

5 **Q. Okay. What day was the Stipulation &**
6 **Agreement filed in this case?**

7 A. Stipulation & Agreement August 31st.

8 MS. TATRO: I don't have any further
9 questions. I would like to ask the Commission to
10 take official notice of the EFIS docket sheet
11 indicating the dates of when things were filed and
12 of the Greenwood Report and Order. I don't think
13 we've taken notice of that yet.

14 JUDGE BUSHMANN: And what's the case
15 number for the Greenwood?

16 MS. TATRO: EA-2015-0256.

17 MR. OPITZ: Just so we're clear, are
18 you asking to take notice of the EFIS numbers in
19 this case or Greenwood?

20 MS. TATRO: Two separate things.
21 Sorry. I probably wasn't very clear. So the
22 Report and Order in the KCPL EA-2015-0256, and then
23 just notice of the docket sheet in this case.
24 There was some confusion about dates, and that will
25 clear that up.

1 JUDGE BUSHMANN: Any objections to
2 those requests?

3 (No response.)

4 JUDGE BUSHMANN: Those requests are
5 granted.

6 MS. TATRO: Thank you.

7 JUDGE BUSHMANN: That was all your
8 questions?

9 MS. TATRO: I am done. Thank you.

10 JUDGE BUSHMANN: Questions by
11 Commissioners? Mr. Chairman?

12 CHAIRMAN HALL: Maybe one.

13 QUESTIONS BY CHAIRMAN HALL:

14 Q. Good afternoon.

15 A. Good afternoon.

16 Q. Were you in the hearing room earlier
17 today when William Barbieri testified on behalf of
18 Ameren?

19 A. Yes.

20 Q. And he testified -- at least it was
21 my understanding that he testified that -- that it
22 would impede Ameren's ability to enter into
23 contracts with landowners for this project if it
24 had to obtain those contracts prior to the issuance
25 of a CCN. Do you have any reason to disagree with

1 **that testimony?**

2 A. I don't have any reason to agree or
3 disagree with that, I suppose.

4 CHAIRMAN HALL: Thank you. I have no
5 further questions.

6 JUDGE BUSHMANN: Recross based on
7 Commission questions, Brightergy?

8 MR. ZELLERS: No questions.

9 JUDGE BUSHMANN: Mr. Woodsmall is not
10 here, I don't think. Renew Missouri?

11 MR. LINHARES: No, Judge. Thank you.

12 JUDGE BUSHMANN: Division of Energy?

13 MR. ANTAL: No questions.

14 JUDGE BUSHMANN: Staff?

15 MS. MERS: No questions.

16 JUDGE BUSHMANN: Ameren Missouri?

17 MS. TATRO: No questions.

18 JUDGE BUSHMANN: Redirect by OPC?

19 REDIRECT EXAMINATION BY MR. OPITZ:

20 **Q. Mr. Burdge, there were some questions**
21 **about the filing dates of testimony and the**
22 **Stipulation & Agreement in this case. I guess what**
23 **is your understanding -- what is your understanding**
24 **of that interplay between the dates?**

25 A. Okay. Well, one thing my rebuttal

1 says August 25th, 2016 on the front of it. Now,
2 the -- for the stipulation, I may -- it's possible
3 I was in error. I was looking at the date that it
4 was e-mailed to parties. So that may not be the
5 filing date. So I guess it would have been later,
6 if anything, or --

7 Q. You were -- you were asked by counsel
8 for Ameren Missouri about your statement during
9 deposition. Do you recall that series of
10 questions?

11 A. Yes.

12 Q. And I guess what was the -- do you
13 have an explanation as to why your statement here
14 was a little different than what you said in the
15 testimony it sounded like?

16 A. Well, during the deposition, it is
17 true I did not have a strong memory of reading the
18 CCN regulations. They are rather brief. So -- and
19 it did not come to the top of my memory at the
20 time, but -- but I -- my memory has been -- that
21 I've refreshed my memory since then and
22 familiarized, and so now I have a stronger
23 familiarity with them, I'd say.

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

25 JUDGE BUSHMANN: All right, sir.

1 That completes your testimony. You may step down.

2 Thank you.

3 That's all the witnesses we have.

4 Any parties have any matters that they need to
5 bring up at this point?

6 As far as the -- just check the
7 exhibits to make sure that we have those correctly.
8 For Ameren Missouri I have in the record
9 Exhibits 1, 2 and 3. For Staff I have 101 through
10 106, and I have 103, 104 and 105 being highly
11 confidential. For OPC I have Exhibits 200, 201 and
12 202 in the record. Division of Energy I have 250
13 and 251. Wal-Mart's 400, and Brightergy's 450.

14 Correct me if I'm wrong, but I seem
15 to remember that there was -- none of the testimony
16 had the Nonunanimous Stipulation & Agreement
17 incorporated into that testimony; is that correct?
18 Or it's not been offered as an exhibit and has not
19 been included in the testimony.

20 If there's no objections, I'll take
21 official notice of the document itself, the
22 Nonunanimous Stipulation & Agreement that was filed
23 in this case.

24 MS. TATRO: Thank you, your Honor.

25 JUDGE BUSHMANN: And as far as the

1 other official notice, just to make sure, I have
2 the Report and Order in EA-2011-0368; is that
3 correct?

4 MS. MERS: Yes.

5 JUDGE BUSHMANN: Report and Order in
6 EA-2015-0256, and the EFIS docket sheet in this
7 case. Those are the four things then that will be
8 taken official notice of.

9 The transcripts will be available on
10 October 21st. That's this Friday. First Briefs
11 are due on November 4th, and reply Briefs are due
12 on November 18th.

13 Anything further the parties need to
14 put on the record?

15 Hearing nothing, we are adjourned.

16 (WHEREUPON, the hearing concluded at
17 12:03 p.m.)

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*Not offered.

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1 C E R T I F I C A T E

2 STATE OF MISSOURI)

3) ss.

4 COUNTY OF COLE)

5 I, Kellene K. Feddersen, Certified

6 Shorthand Reporter with the firm of Midwest

7 Litigation Services, do hereby certify that I was

8 personally present at the proceedings had in the

9 above-entitled cause at the time and place set

10 forth in the caption sheet thereof; that I then and

11 there took down in Stenotype the proceedings had;

12 and that the foregoing is a full, true and correct

13 transcript of such Stenotype notes so made at such

14 time and place.

15 Given at my office in the City of

16 Jefferson, County of Cole, State of Missouri.

17

Kellene K. Feddersen, RPR, CSR, CCR

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