

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of Union Electric)
Company d/b/a Ameren Missouri for a)
Certificate of Convenience and Necessity for a)
Solar Facility, Approval of a Subscription-Based)
Renewable Energy Program, and Authorization)
to Establish Tracking Mechanism)
_____)

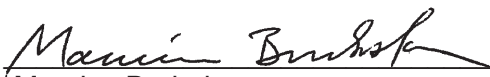
Case No. EA-2022-0245

STATE OF MISSOURI)
)
COUNTY OF ST. LOUIS) SS

Affidavit of Maurice Brubaker

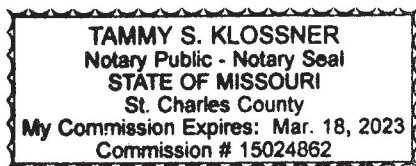
Maurice Brubaker, being first duly sworn, on his oath states:


1. My name is Maurice Brubaker. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Missouri Industrial Energy Consumers in this proceeding on their behalf.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony and schedule which were prepared in written form for introduction into evidence in the Missouri Public Service Commission, Case No. EA-2022-0245.
3. I hereby swear and affirm that the testimony and schedule are true and correct and they show the matters and things that they purport to show.



Maurice Brubaker

Subscribed and sworn to before me this 21st day of December, 2022.





Notary Public

1 **Q PLEASE SUMMARIZE YOUR TESTIMONY AND RECOMMENDATIONS.**

2 A The purpose of my testimony is to address the Boomtown Solar Facility, and in
3 particular the Renewable Solutions Program (“RSP”) associated with that facility. The
4 economics of the project, both as initially submitted, and as revised, are shown on
5 Schedule MEB-1. As shown here, the change which Ameren Missouri (“AMO”) made
6 to utilize production tax credits (“PTC”) rather than Investment Tax Credits (“ITC”)
7 increase the calculated benefit of the Boomtown Solar Project by \$15.7 million on a net
8 present value basis. The schedule also shows that the entire \$15.7 million increase in
9 benefits is proposed to be provided to non-subscribers, despite the fact that the majority
10 of the benefits were being provided by subscribers.

11 I recommend that at least 50% of the \$15.7 million increase in benefits from
12 switching to use of PTCs be provided to the subscribing customers. This can be
13 accomplished by a 5% reduction in the annual Renewable Resource Charge (“RRC”).

14 **Analysis**

15 **Q ARE YOU FAMILIAR WITH THE APPLICATION OF AMO FOR AUTHORITY TO**
16 **CONSTRUCT THE BOOMTOWN SOLAR FACILITY AND ALSO TO IMPLEMENT**
17 **THE RSP USING THE BOOMTOWN SOLAR FACILITY AS THE BASIS FOR THE**
18 **RRC?**

19 A Yes. I have reviewed the application, data requests, responses by Ameren Missouri to
20 data requests and have submitted additional data requests on behalf of MIEC, as well
21 as reviewed the workpapers and other supporting information.

1 **Q DOES MIEC SUPPORT THE APPLICATION FOR A CERTIFICATE OF**
2 **CONVENIENCE AND NECESSITY (“CCN”) FOR THE BOOMTOWN SOLAR**
3 **FACILITY AS WELL AS THE PROPOSED RSP?**

4 A MIEC supports approval by the Commission of a CCN for the Boomtown Solar Facility.
5 This 150 MW facility is consistent with the revised preferred resource plan filed by AMO
6 on June 22, 2022. The Boomtown Solar Facility appears to be a reasonable solar
7 project, the construction of which will support AMO’s long-term planning which includes
8 the retirement of coal-fired facilities and the consequent reduction in greenhouse gas
9 (“GHG”) emissions. AMO has established GHG reduction goals for its operations, as
10 have many MIEC member companies and other customers of AMO. The Boomtown
11 Solar Facility would be a small, but important, component in executing AMO’s most
12 recently adopted Integrated Resource Plan (“IRP”).

13 **Q IS THE RSP ASPECT OF THE PLAN AN IMPORTANT ELEMENT?**

14 A Yes. The RSP component of the plan, which is based on the Boomtown Solar Facility,
15 is an important aspect of the proposal because it provides an opportunity for AMO’s
16 customers to receive Renewable Energy Certificates (“REC”) for the solar output of the
17 facility.

18 **Q HOW DOES THE RSP WORK?**

19 A This is discussed in more detail by AMO witness Steven Wills, but in general, interested
20 customers request RECs to match a specified percentage of their total electricity
21 consumption. Customers submitted their requests and then AMO apportioned the
22 available output of the Boomtown Solar Facility among the customers who had made

1 such requests. At the end of the day, the requests for RECs exceeded the available
2 supply, so there remains an unmet need on the AMO system.

3 **Q HOW IS A SUBSCRIBING CUSTOMER'S REGULAR TARIFF UTILITY BILL FOR**
4 **CAPACITY AND ENERGY AFFECTED BY PARTICIPATION IN RSP?**

5 A No changes are made to the existing regular tariff rates that these customers pay for
6 the electricity that they take from the AMO system. In other words, the RSP is an
7 "overlay" on top of the standard tariff charges, which are unaffected.

8 **Q AS PART OF THE RSP, WHAT IS THE BASIS OF A SUBSCRIBING CUSTOMER'S**
9 **PAYMENTS, OR RRC?**

10 A As explained by AMO witness Wills at pages 7-8 of his direct testimony, the RRC itself
11 is primarily based on the expected cost of the resource. As Mr. Wills' states at page 8
12 of his direct testimony:

13 "However, the basic philosophy is that the charge reflects the costs
14 associated with the development and operation of Program
15 resources for the duration of the term of their subscription. The cost
16 estimated for this process included consideration of the return on and
17 return of investment in the resources, as well as ongoing expenses."

18 **Q SINCE THE FILING IN THIS CASE, HAVE THE ECONOMICS OF THE**
19 **BOOMTOWN SOLAR PROJECT CHANGED?**

20 A Yes. The cost of the Boomtown Solar Project now is lower than it was when AMO
21 filed for its CCN.

1 **Q WHY DID THE COST CHANGE?**

2 A Initially, AMO proposed to utilize a federal income tax feature known as ITC to
3 partially offset the investment cost of the Boomtown Solar Facility. As a part of that
4 initial proposal, AMO was planning to enter into an agreement with a “tax-equity
5 partner” in order to more fully take advantage of the ITC tax option. So, the initial
6 program economics, and accordingly the RRC, were based on the use of an ITC
7 along with a tax-equity partner. Subsequent to the filing by AMO, a new federal tax
8 law that offered a PTC option became available as a part of the Inflation Reduction
9 Act (“IRA”) on August 16, 2022. As explained in the supplemental direct testimony
10 of AMO witness Lindsey Forsberg, filed in October 2022, the ability to utilize the
11 PTC improved project economics, and obviated the need for the tax-equity partner.

12 **Q HOW MUCH DID THE CHANGE IN PROJECT PARAMETERS REDUCE THE**
13 **COST OF THE PROJECT?**

14 A Please refer to Schedule MEB-1. This shows a summary of the solar project
15 economics and the benefits from the RSP both under the original filing and under
16 the revised filing that utilizes PTCs.

17 **Q PLEASE EXPLAIN THIS SCHEDULE.**

18 A Column 1 shows the project only. Line 1 shows the original filing where the project
19 by itself, before RSP benefits, provides customers with a \$1.1 million benefit. The
20 RSP provides net benefits of \$11.7 million to non-subscribers, producing a total
21 benefit of \$12.8 million to non-subscribers. Line 2 shows the same statistics under
22 the revised filing with PTCs. The solar project only has a benefit of \$16.8 million,

1 an improvement of \$15.7 million as shown on line 3. As shown in Column 2, AMO
2 has not proposed to adjust the payment made by RSP subscribers, so that remains
3 at \$11.7 million. Column 3 shows that combining the solar project with RSP, the
4 original benefit to non-subscribers was \$12.8 million; and now with the improvement
5 in project economics, the benefit is \$28.5 million, a change of \$15.7 million.

6 **Q HAS AMO PROPOSED TO REDUCE THE RRC TO SUBSCRIBING**
7 **CUSTOMERS TO REFLECT THIS REDUCED COST OF THE BOOMTOWN**
8 **SOLAR PROJECT?**

9 A No. AMO has not proposed to reflect any of this benefit in the RRC.

10 **Q WOULD IT BE APPROPRIATE TO DECREASE THIS CHARGE BASED ON THE**
11 **IMPROVED ECONOMICS (I.E., REDUCED COSTS) OF THE SOLAR PROJECT?**

12 A Yes, it would. Since the RRC was designed to reflect the costs associated with the
13 Boomtown Solar Project, a reduction in the costs of the Boomtown Solar Project should
14 result in a downward adjustment in the charge to subscribing customers by means of
15 a lower RRC.

16 **Q HOW WOULD YOU PROPOSE TO ADJUST THE RRC TO REFLECT THE LOWER**
17 **COST?**

18 A If all of the benefit of the change were to go to the subscribers, the RRC would need to
19 be reduced by \$15.7 million on a net present value basis. In order to provide
20 incremental benefits to both subscribers and to non-subscribers, I recommend reducing
21 the RRC charge to provide subscribers with 50% of the benefit of the change in

1 economics, or \$7.8 million. This can be achieved by reducing the RRC each year by
2 5%.

3 **Q IS THERE HISTORICAL PRECEDENT FOR ADJUSTING THE RRC BASED ON A**
4 **CHANGE IN PROJECT ECONOMICS?**

5 A Yes. Prior to the time that AMO formally offered this program to customers, it had
6 developed, and shown to potential customers, an initial draft RRC which was based on
7 the economics of the solar project as it was understood by AMO at that time.
8 Subsequently, AMO had to accept higher prices from the project developer to reflect
9 inflation-driven and supply-driven increases in the expected cost of the Boomtown
10 Solar Project. When this happened, AMO increased the charges to customers by
11 increasing the RRC to reflect these increases in project cost. Given that customers
12 were compelled to face higher prices when the project costs increased, equity demands
13 that they now receive the benefit of a reduction in charges since project costs have now
14 decreased.

15 **Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

16 A Yes, it does.

1 **Qualifications of Maurice Brubaker**

2 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A Maurice Brubaker. My business address is 16690 Swingley Ridge Road, Suite 140,
4 Chesterfield, MO 63017.

5 **Q PLEASE STATE YOUR OCCUPATION.**

6 A I am a consultant in the field of public utility regulation and President of the firm of
7 Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

8 **Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

9 A I was graduated from the University of Missouri in 1965, with a Bachelor's Degree in
10 Electrical Engineering. Subsequent to graduation I was employed by the Utilities
11 Section of the Engineering and Technology Division of Esso Research and Engineering
12 Corporation of Morristown, New Jersey, a subsidiary of Standard Oil of New Jersey.

13 In the Fall of 1965, I enrolled in the Graduate School of Business at Washington
14 University in St. Louis, Missouri. I was graduated in June of 1967 with the Degree of
15 Master of Business Administration. My major field was finance.

16 From March of 1966 until March of 1970, I was employed by Emerson Electric
17 Company in St. Louis. During this time I pursued the Degree of Master of Science in
18 Engineering at Washington University, which I received in June, 1970.

19 In March of 1970, I joined the firm of Drazen Associates, Inc., of St. Louis,
20 Missouri. Since that time I have been engaged in the preparation of numerous studies
21 relating to electric, gas, and water utilities. These studies have included analyses of
22 the cost to serve various types of customers, the design of rates for utility services, cost
23 forecasts, cogeneration rates and determinations of rate base and operating income. I

1 have also addressed utility resource planning principles and plans, reviewed capacity
2 additions to determine whether or not they were used and useful, addressed demand-
3 side management issues independently and as part of least cost planning, and have
4 reviewed utility determinations of the need for capacity additions and/or purchased
5 power to determine the consistency of such plans with least cost planning principles. I
6 have also testified about the prudence of the actions undertaken by utilities to meet the
7 needs of their customers in the wholesale power markets and have recommended
8 disallowances of costs where such actions were deemed imprudent.

9 I have testified before the Federal Energy Regulatory Commission ("FERC"),
10 various courts and legislatures, and the state regulatory commissions of Alabama,
11 Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia,
12 Guam, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Michigan, Missouri,
13 Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania,
14 Rhode Island, South Carolina, South Dakota, Texas, Utah, Virginia, West Virginia,
15 Wisconsin and Wyoming.

16 The firm of Drazen-Brubaker & Associates, Inc. was incorporated in 1972 and
17 assumed the utility rate and economic consulting activities of Drazen Associates, Inc.,
18 founded in 1937. In April, 1995 the firm of Brubaker & Associates, Inc. was formed. It
19 includes most of the former DBA principals and staff. Our staff includes consultants
20 with backgrounds in accounting, engineering, economics, finance, mathematics,
21 computer science and business.

22 Brubaker & Associates, Inc. and its predecessor firm have participated in over
23 700 major utility rate and other cases and statewide generic investigations before utility
24 regulatory commissions in 40 states, involving electric, gas, water, and steam rates and

1 other issues. Cases in which the firm has been involved have included more than 80
2 of the 100 largest electric utilities and over 30 gas distribution companies and pipelines.

3 While the firm has always assisted its clients in negotiating contracts for utility
4 services in the regulated environment, increasingly there are opportunities for certain
5 customers to acquire power on a competitive basis from a supplier other than its
6 traditional electric utility. The firm assists clients in identifying and evaluating purchased
7 power options, conducts RFPs and negotiates with suppliers for the acquisition and
8 delivery of supplies. We have prepared option studies and/or conducted RFPs for
9 competitive acquisition of power supply for industrial and other end-use customers
10 throughout the United States and in Canada, involving total needs in excess of 3,000
11 megawatts. The firm is also an associate member of the Electric Reliability Council of
12 Texas.

13 In addition to our main office in St. Louis, the firm also has branch offices in
14 Corpus Christi, Texas; Detroit, Michigan; Louisville, Kentucky and Phoenix, Arizona.

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Boomtown Solar/RSP Economics⁽¹⁾

Line	Description	Solar Project Only (\$/Million) (1)	Renewable Solutions Program⁽²⁾ (\$/Million) (2)	Total Benefit to Non- Subscribers (\$/Million) (3)
1	Original Filing	\$1.1 Benefit	\$11.7 Payment	\$12.8 Benefit
2	Revised Filing with PTCs	\$16.8 Benefit	\$11.7 Payment	\$28.5 Benefit
3	Change	\$15.7	-0-	\$15.7

⁽¹⁾Net Present Value: Base Cost and Capacity Factor, Assumptions, Weighted Average Price Scenario

⁽²⁾Payments by Program Subscribers

Sources:

Line 1: Direct Testimony of Lindsey Forsberg, page 17

Line 2: Supplemental Direct Testimony of Lindsey Forsberg, unnumbered page 6.