

Exhibit No.: _____
Issues: The Need for the Amended Grain Belt Express Project
which further Promotes the Public Interest
Witness: Rebecca Atkins
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: MEC
File No.: EA-2023-0017

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

FILE NO. EA-2023-0017

REBUTTAL TESTIMONY

OF

REBECCA ATKINS

ON BEHALF OF

**THE MISSOURI JOINT MUNICIPAL ELECTRIC
UTILITY COMMISSION d/b/a
MISSOURI ELECTRIC COMMISSION**

APRIL 19, 2023

1 **I. INTRODUCTION OF WITNESS AND TESTIMONY**

2 **Q. Please state your name, title, and business address.**

3 A. My name is Rebecca Atkins. I am the Chief Markets Officer of the Missouri Public Utility
4 Alliance (“MPUA”), which includes the Missouri Joint Municipal Electric Utility
5 Commission d/b/a Missouri Electric Commission (“MEC”). MEC’s business address is
6 2200 Maguire Boulevard, Columbia, MO 65201.

7 **Q. Please describe your professional background.**

8 A. I joined MPUA in 2008 as an Energy Economist and have over 14 years of progressively
9 responsible experience where I now supervise MEC’s 24/7 operations in the
10 Midcontinent Independent Operator System (“MISO”), the Southwest Power Pool
11 (“SPP”) and Associated Electric Cooperative Incorporated (“AECI”) balancing authority
12 for the Missouri Public Energy Pool (“MoPEP”) and two other full requirements power
13 pools, and several members for whom we provide part of their energy and capacity
14 requirements. I have experience in market operations including forecasting load in the
15 next hour and up to ten years, front office market submissions, market shadow
16 settlements, resource adequacy and post operating day reporting. I supervise the MPUA
17 analysis department, which analyzes operational strategies and works with front office
18 operations to continually lower member costs. I develop and implement training for staff
19 and members on market operations and rate design. I received a Bachelor of Science in
20 Math and Economics from Furman University in Greenville, South Carolina and a Master
21 of Arts in Economics from the University of Missouri-Columbia. My current curriculum
22 vitae is attached as Schedule RA-1.

23 **Q. On whose behalf are you testifying?**

1 A. I am testifying on behalf of MEC, an intervenor in this proceeding.

2 **Q. Have you previously testified before the Missouri Public Service Commission?**

3 A. Yes, I offered surrebuttal testimony on behalf of MEC in Case No. EA-2022-0099.

4 **Q. What is the purpose of your testimony?**

5 A. My testimony provides further explanation and information additional to the testimony of Grain Belt
6 Express LLC (“Grain Belt”) witness Mark Repsher regarding the benefit to the Missouri
7 cities that have already decided they need Grain Belt’s renewable energy, and how Grain
8 Belt’s requested amendments which I understand will deliver more power to Missouri
9 sooner will benefit those Missouri cities, and others, by lowering energy costs and
10 increasing the accredited capacity available in Missouri which MEC will be able to count
11 toward its resource adequacy requirements.

12 **Q. Please summarize your testimony.**

13 A. The thirty-five municipal members of MoPEP, (Schedule RA-2) Centralia, Columbia,
14 Hannibal and Kirkwood have already contracted to take 136 megawatts (“MW”) of
15 renewable energy to be delivered in Missouri via Grain Belt and it is likely that other
16 MEC members will also choose to participate. Grain Belt will permit MEC’s members to
17 save money through lower locational marginal prices (“LMPs”) at the nodes where they
18 buy power. As a matter of general economics, Grain Belt’s insertion of 2500 MW of
19 renewable energy into Missouri will shift the supply curve to the right and thus lower the
20 marginal energy costs for the entire MISO footprint. Recent analysis by MEC’s
21 consultant, The Energy Authority (“TEA”), suggests the impact could result in over \$1.1
22 billion in marginal energy cost reduction across MISO in 2028, Grain Belt’s first full year
23 of operation.

1 **II. BACKGROUND ON MEC’S INTERACTION WITH MISO, SPP AND AECI**
2 **RELEVANT TO GRAIN BELT**

3 **Q. Would you describe how you interact with MISO, SPP and AECI on behalf of**
4 **MEC’s members?**

5 A. I oversee MEC’s analysis of MISO, SPP and AECI operations and costs on behalf of
6 several of MEC’s members and its three full requirements power pools, one of which is
7 the thirty-five municipal members of MoPEP (Schedule RA-2). I supervise the
8 employees at MEC’s 24/7 energy operations desk who make and take the calls from the
9 counterparties’ real time desks, coordinate as necessary with the counterparties’ subject
10 matter experts, frequently attend virtual stakeholder meetings regarding transmission
11 planning and market rules, “tag” MEC’s generation across balancing authorities to
12 minimize costs and stay within balancing constraints, and I perform the cost allocation of
13 the counterparties’ bills to the appropriate MEC members.

14 **Q. Have any of MEC’s three full requirements pools chosen to participate in Grain**
15 **Belt’s delivery of renewable energy to Missouri?**

16 A. MoPEP has already contracted with MEC for 60 MW of renewable energy to be
17 delivered via Grain Belt, and this contract will be addressed in the rebuttal testimony of
18 MEC’s Chief Electric Operations Officer, John Grotzinger.

19 **Q. Do you expect either of MEC’s other full requirements pools to also choose to**
20 **participate in Grain Belt’s delivery of renewable energy to Missouri?**

21 A. I would expect the Mid-Missouri Municipal Power Energy Pool (“MMMPEP”) to
22 consider the opportunity to participate because of its proximity to AECI from which it
23 could take some of the renewable energy that I understand Grain Belt will now inject into that

1 balancing authority. MMMPEP, and other of MEC's members who are physically located within
2 the AECI region, will be able to take advantage of the Kansas wind without needing a costly
3 separate transmission path through MISO or SPP.

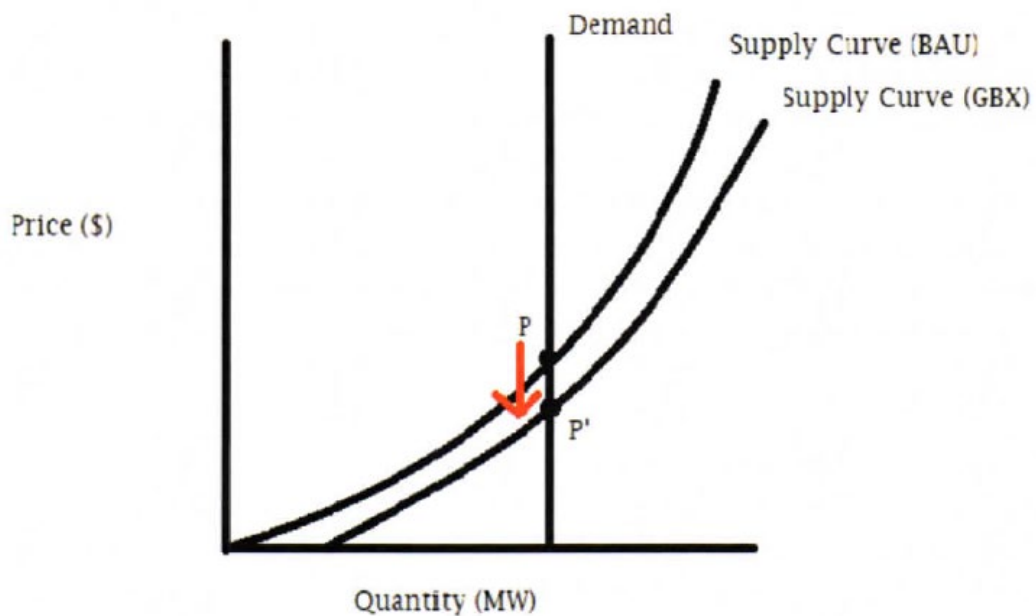
4 **Q. When Grain Belt becomes operational, what will you do to make sure that MoPEP receives**
5 **the 60 MW of renewable energy for which it has contracted?**

6 A. I will perform the market participant work to register/model those contracted resources so the
7 resources in Kansas are receiving the proper dispatch signals based on pricing incentives in MISO.
8 I will also work on MISO transmission reservations and securing congestion hedges between the
9 injection point and our members' load.

10 III. MEC'S SUPPORT FOR GRAIN BELT'S REQUEST TO AMEND ITS CCN

11 **Q. Does Grain Belt's request to amend its CCN promote the public interest?**

12 A. Yes, since Grain Belt is enabling the injection of renewable energy (which typically has
13 very low variable costs) into Missouri, the impact to the energy market is to shift the
14 supply curve to the right, which lowers the marginal energy costs for the entire MISO
15 footprint, as seen in a simplified model in Figure RA-1 below:



1 Q. **In addition to lowering marginal energy costs, do you expect Grain Belt to bring**
2 **other benefits to the public interest?**

3 A. Yes, given the congestion in some areas of MISO, I expect Missouri may see lower prices
4 in comparison to other areas of MISO as a result of the additional transmission path
5 provided by Grain Belt.

6 Q. **Could you explain what “congestion” is?**

7 A. Technically, “congestion” occurs when too many electrons converge at the same time on
8 the same segment of the transmission grid. The market uses pricing signals through the
9 marginal congestion component of LMP to redispatch generation around the congested
10 area. In concept, this power congestion is like the traffic jam we can picture happening if
11 the Super Bowl is played at Arrowhead Stadium and all the fans leave at the end of the
12 game, get into their cars and trucks, and try to drive home via Interstate 70. For a few
13 hours, there will be a traffic jam on I-70, unless Missouri planned for that game and built
14 additional roads leading through Arrowhead Stadium or gave a financial incentive for
15 some fans to stick around the stadium longer or take another route home. The same kind
16 of thing happens when congestion occurs in the power grid – we get too many electrons
17 trying to take the same route and we either need to make a bigger route or redispatch
18 around the area.

19 Q. **Does Grain Belt promote the public interest in any other way?**

20 A. Yes, it will increase the accredited capacity available in Missouri.

21 Q. **Could you please explain that benefit to the public?**

22 A. In addition to providing energy, we expect to receive a capacity benefit for our members’
23 resource adequacy requirements due to the addition of Grain Belt. MISO is currently

1 rewriting the rules on how renewable resources will receive accreditation, but the
2 geographical diversity of the Grain Belt resources as compared to other renewables in
3 MISO should be beneficial regardless of the new accreditation construct.

4 **Q. What are the facts or data upon which you base these opinions and conclusions?**

5 A. I agree with the underlying conclusion of the PA Consulting Study found at Schedule
6 MR-2 of Grain Belt witness Repsher's testimony that the Amended Grain Belt Project
7 will lower energy costs for Missouri consumers and increase the accredited capacity
8 available in Missouri. However, my opinion is not solely dependent upon Grain Belt's
9 evidence. MEC, through Mr. Grotzinger and me, consulted with TEA for its independent
10 strategic perspective, advice, analysis and projected effect of the Amended Grain Belt
11 project on LMPs at certain Missouri nodes identified by MEC as significant to its
12 members. The TEA study, which is attached as Schedule RA-3, substantiates my
13 conclusion that the Amended Grain Belt project will cause an overall decrease in
14 marginal energy costs in MISO.

15 **Q. What are the facts or data from the TEA study upon which you reasonably relied to**
16 **form your opinions expressed in this testimony?**

17 A. I found the entire study to be reasonably reliable. Slide 10 of Schedule RA-3 shows that,
18 as compared to "business as usual," the addition of Grain Belt caused the average annual
19 LMP to drop at each of the pricing nodes Mr. Grotzinger and I identified as relevant to
20 MEC's members, including the nodes used by MoPEP, Centralia, Columbia, Hannibal
21 and Kirkwood. And, Slide 15 of Schedule RA-3 shows that in 2028, the first full year of
22 Grain Belt's operation, the marginal energy component of all LMPs across the MISO
23 footprint is projected to decrease on average by \$1.77 per megawatt hour. That price

1 drop will result in over \$1.1 billion in marginal energy savings for MISO load.

2 **Q. Does MEC need Grain Belt's requested amendments to its CCN?**

3 A. Yes. Approval of Grain Belt's requested amendments will permit MEC's members to
4 save money through lower LMPs where they buy power.

5 **Q. Have you seen a demand from your wholesale customers for renewable energy?**

6 A. Yes. We've received several inquiries about our renewable energy sources from
7 members on behalf of their residential, commercial and industrial customers.

8 **Q. Do you hold the opinions you've expressed in this testimony to a reasonable degree
9 of economic certainty?**

10 A. Yes.

11 **Q. Does this conclude your pre-filed rebuttal testimony in this case?**

12 A. Yes. However, I wish to preserve the right to provide additional testimony in the form of
13 sur-rebuttal or at the hearing to rebut the testimony of any other party.

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

STATE OF MISSOURI)
) SS
COUNTY OF BOONE)


AFFIDAVIT OF REBECCA ATKINS

Rebecca Atkins, being first duly sworn, deposes and says that she is the witness who sponsors the accompanying rebuttal testimony and schedules; that said testimony was prepared by her or under her direction and supervision; that if inquiries were made as to the facts in said testimony and schedules, she would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of her knowledge, information, and belief.



Rebecca Atkins

Subscribed and sworn to before me this 3 day of April, 2023.



Notary Public

My commission expires: 02-02-2027

