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MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. EO-2023-0136

SURREBUTTAL TESTIMONY

OF

MATT MICHELS

ON

BEHALF OF

UNION ELECTRIC COMPANY

D/B/A AMEREN MISSOURI

**St. Louis, Missouri
May, 2024**

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I. INTRODUCTION

1

Q. Please state your name and business address.

2

3 A. My name is Matt Michels. My business address is One Ameren Plaza, 1901
4 Chouteau Ave., St. Louis, Missouri.

3

4

Q. By whom and in what capacity are you employed?

5

6 A. I am employed by Ameren Services Company as Director of Corporate
7 Analysis. In that capacity, I provide services to Ameren Corporation's operating
8 subsidiaries, including Union Electric Company d/b/a Ameren Missouri ("Ameren
9 Missouri" or "Company").

6

7

8

9

**Q. Are you the same Matt Michels that submitted rebuttal testimony in
11 this case?**

10

11

12

A. Yes, I am.

13

II. PURPOSE OF TESTIMONY

Q. To what testimony or issues are you responding?

14

15 A. I am responding to the rebuttal testimonies of Staff witnesses Brad Fortson and
16 J Luebbert regarding the Company's integrated resource plan ("IRP") and its connections to the
17 Company's Missouri Energy Efficiency Investment Act ("MEEIA") application in this case and
18 the Company's avoided costs for capacity and transmission and distribution ("T&D").

15

16

17

18

1 **Q. Are you including any schedules with your testimony?**

2 A. Yes, I am including the following schedules:

3 Confidential Schedule MM-S1 – Ameren Missouri 2023 IRP Chapter 2 –
4 Planning Environment; and

5 Schedule MM-S2 – Ameren Missouri 2023 IRP Chapter 10 – Strategy
6 Selection.

7 **Q. What is the purpose of your surrebuttal testimony.**

8 A. In responding to the testimony of the aforementioned Staff witnesses, I will
9 show that 1) the Company's need for new generation is, in fact, reduced by demand savings
10 from the continuous implementation of MEEIA programs and must be evaluated using a long-
11 term view, and 2) that the Company's assumptions for avoided capacity and T&D benefits are
12 reasonable and consistent with the integrated analysis performed for the Company's IRPs.

13 **III. DEMAND SAVINGS REDUCE GENERATION NEEDS**

14 **Q. Do demand savings reduce the need for generation resources?**

15 A. Of course. This is they very basis for integrated resource planning itself.
16 When IRP processes were introduced in the 1980s and 1990s, it was for the specific
17 purpose of considering demand-side measures alongside new supply-side resources.
18 Missouri investor-owned utilities have operated under IRP requirements since 1993.¹ The
19 Missouri legislature further established the state's commitment to demand-side resources
20 with the passage of MEEIA in 2009. By evaluating demand-side resources and supply-side

¹ The IRP rules were suspended from 1993 to 2005 due to a widespread shift to retail competition in the utility industry and uncertainty regarding Missouri's policy direction. The Company filed its first triennial IRP under the pre-2011 rules in EO-2007-0409.

1 resources in combination through the IRP, we are able to ensure appropriate investments
2 in both.

3 **Q. What does Mr. Fortson say regarding the Company's reduced need for**
4 **generation resources?**

5 A. Mr. Fortson argues that we should examine only the potential for generation
6 resource deferrals or avoidance from the Company's proposed MEEIA Cycle 4 portfolio
7 and that it is not reasonable to expect any such generation deferrals or avoidance.²

8 **Q. Is it reasonable to evaluate the benefits of a single MEEIA cycle in**
9 **isolation?**

10 A. No. Demand savings from MEEIA programs are built over time. Each
11 subsequent cycle of programs builds on the cycles that came before, and in turn adds to the
12 foundation on which future programs can build. MEEIA cycles have typically been three
13 years, but this timeframe is more-or-less arbitrary and much more a function of the process
14 to ensure important regulatory oversight than an indication of a proper timeframe for
15 evaluating the benefits of a sustained commitment to demand-side programs. Otherwise,
16 we could have MEEIA programs that run ten, fifteen, or even twenty years. That is why
17 we have an IRP process, so we can examine the long-term benefits of sustained programs.
18 It is also why the MEEIA process itself is designed to link directly to a utility's IRP.

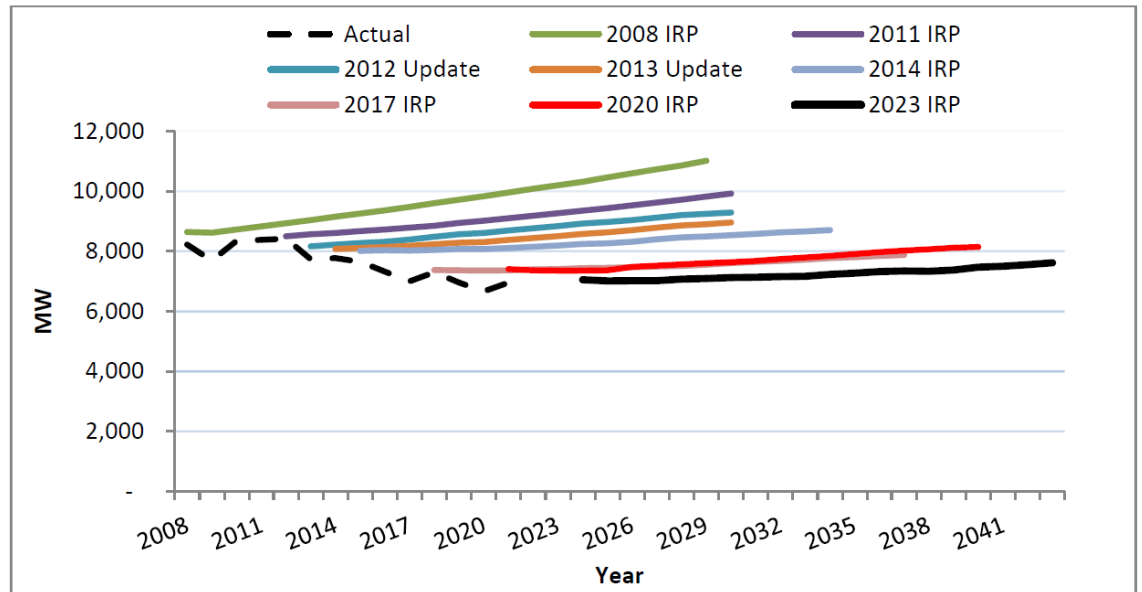
19 **Q. Shouldn't Ameren Missouri or any other utility be able to point to**
20 **specific deferrals that are enabled by a three-year cycle of MEEIA programs?**

21 A. No, for several reasons. First, resource needs today are necessarily affected
22 by the Company's implementation of MEEIA programs in the past. The chart in Figure 1

² File No. EO-2023-0136, Brad Forston Rebuttal Testimony, p. 16, lines 6-11.

1 below shows the Company's forecasted demand for its IRP filings starting with 2008. The
2 chart in Figure 1 shows peak demand forecasts that are progressively lower with each IRP
3 filing. While other factors influencing demand are included, MEEIA programs have played
4 a substantial role in this steady reduction. With each IRP, the starting point for the load
5 forecast reflects the ongoing demand savings that resulted from past programs. This then
6 serves as a basis for evaluating implementation of new programs throughout the 20-year
7 planning horizon.

Figure 1 – Ameren Missouri Past IRP Peak Demand Forecasts³



8 The second reason is uncertainty. IRP analyses, or any analyses involving the
9 future, are necessarily based on assumptions. We don't know with certainty what will
10 happen and when. For example, the early retirement of a generating unit or the addition of
11 a large customer load may not have been expected ten years ago when the Company was
12 implementing its first cycle of MEEIA programs. Yet, the Company will be retiring a large

³ Ameren Missouri 2023 IRP Chapter 3 – Load Analysis and Forecasting, p. 6

1 coal-fired facility later this year, and utilities across the United States, including Ameren
2 Missouri, are seeing interest from companies looking to locate data centers with electric
3 demands in the hundreds of megawatts or more.

4 The third reason is that it is impossible to attribute a resource deferral or avoidance
5 to a single three-year cycle of programs.

6 **Q. Why do you say it is impossible?**

7 A. It is best to answer this by using a relatively simple example. Suppose we
8 have a utility with a peak demand of 1,000 MW and no expectation for load growth and a
9 requirement to carry a 10-percent reserve margin that results in a total resource need of
10 1,100 MW. We will also assume it has 1,500 MW of generation, with planned retirements
11 of 500 MW each in years 5, 9, and 13. We will further assume that new generation can be
12 built in 300-MW increments and that demand side programs can reduce demand by 20 MW
13 in each year implemented. Table 1 below shows this hypothetical utility's capacity position
14 and generation resource additions if no demand-side programs are implemented. Under this
15 set of assumptions, the utility would add 300 MW in year 5, 300 MW more in year 9, and
16 600 MW more in year 13, for a total of 1,200 MW.

Table 1 – Generation Additions with No DSM

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15
Peak Demand (w/o DSM)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Reserve Margin (10%)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Resource Requirement	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Generation	1500	1500	1500	1500	1000	1000	1000	1000	500	500	500	500	0	0	0
Capacity Surplus/(Deficit)	400	400	400	400	-100	-100	-100	-100	-600	-600	-600	-600	-1100	-1100	-1100
Generation Resources Added					300	300	300	300	600	600	600	600	1200	1200	1200
Surplus/(Deficit) after New Gen.	400	400	400	400	200	200	200	200	0	0	0	0	100	100	100

17 Now let's assume we can implement a three-year portfolio of demand-side
18 programs, but we can only implement it once during the 15-year period. For clarity, I refer

1 to the first three years of this hypothetical planning horizon as "Cycle 1" for purposes of
 2 demand-side program implementation, years 4-6 as "Cycle 2" and so forth. The generation
 3 additions for each case in which we only implement programs for one cycle is shown in
 4 Table 2 below. Table 2 shows that implementing only one cycle results in the need to add
 5 generating resources in the same amounts and at the same points in time as is necessary
 6 without implementing any DSM at all, as shown in Table 1.

Table 2 – Generation Additions with Single Cycles of DSM

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15
DSM Demand Reduction - Cycle 1	20	40	60	60	60	60	60	60	60	60	60	60	60	60	60
Surplus/(Deficit) after Cycle 1 only	420	440	460	460	-40	-40	-40	-40	-540	-540	-540	-540	-1040	-1040	-1040
Generation Resources Added					300	300	300	300	600	600	600	600	1,200	1,200	1,200
Surplus/(Deficit) after New Gen.					260	260	260	260	60	60	60	60	160	160	160
DSM Demand Reduction - Cycle 2	0	0	0	20	40	60	60	60	60	60	60	60	60	60	60
Surplus/(Deficit) after Cycle 2 only	400	400	400	420	-60	-40	-40	-40	-540	-540	-540	-540	-1040	-1040	-1040
Generation Resources Added					300	300	300	300	600	600	600	600	1,200	1,200	1,200
Surplus/(Deficit) after New Gen.					240	260	260	260	60	60	60	60	160	160	160
DSM Demand Reduction - Cycle 3	0	0	0	0	0	0	20	40	60	60	60	60	60	60	60
Surplus/(Deficit) after Cycle 3 only	400	400	400	400	-100	-100	-80	-60	-540	-540	-540	-540	-1040	-1040	-1040
Generation Resources Added					300	300	300	300	600	600	600	600	1,200	1,200	1,200
Surplus/(Deficit) after New Gen.					200	200	220	240	60	60	60	60	160	160	160
DSM Demand Reduction - Cycle 4	0	0	0	0	0	0	0	0	0	20	40	60	60	60	60
Surplus/(Deficit) after Cycle 4 only	400	400	400	400	-100	-100	-100	-100	-600	-580	-560	-540	-1040	-1040	-1040
Generation Resources Added					300	300	300	300	600	600	600	600	1,200	1,200	1,200
Surplus/(Deficit) after New Gen.					200	200	200	200	0	20	40	60	160	160	160

7 Now let's assume we implement demand-side programs throughout the planning
 8 horizon. Table 3 below shows that if all four cycles are implemented, there is no longer a
 9 need for 300 MW in year 5, but we now need to add 600 MW in year 9 and only 300 MW
 10 in year 13. The 300 MW addition that was needed in year 5 without DSM (or with only
 11 one cycle of DSM) has been deferred to year 9, and 300 MW of the 600 MW needed in
 12 year 13 without DSM has been eliminated.

Table 3 – Generation Additions with All Cycles of DSM

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15
DSM Demand Reduction -All Cycles	20	40	60	80	100	120	140	160	180	200	220	240	240	240	240
Surplus/(Deficit) after All Cycles	420	440	460	480	0	20	40	60	-420	-400	-380	-360	-860	-860	-860
Generation Resources Added					0	0	0	0	600	600	600	600	900	900	900
Surplus/(Deficit) after New Gen.					0	20	40	60	180	200	220	240	40	40	40

1 We can also examine implementation of different combinations of cycles. Table 4
 2 shows the generation additions for such combinations. None of the combinations results in
 3 the elimination of 300 MW of generation additions that we see by implementing all four
 4 cycles, as Shown in Table 2. Only two combinations – Cycles 1-2, and Cycles 1-3 – show
 5 a deferral of 300 MW from year 5 to year 9.

Table 4 – Generation Additions with Combinations of Cycles of DSM

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15
DSM Demand Reduction - Cycles 1-2	20	40	60	80	100	120	120	120	120	120	120	120	120	120	120
Surplus/(Deficit) after Cycles 1-2	420	440	460	480	0	20	20	20	-480	-480	-480	-480	-980	-980	-980
Generation Resources Added					0	0	0	0	600	600	600	600	1,200	1,200	1,200
Surplus/(Deficit) after New Gen.					0	20	20	20	120	120	120	120	220	220	220
DSM Demand Reduction - Cycles 1-3	20	40	60	80	100	120	140	160	180	180	180	180	180	180	180
Surplus/(Deficit) after Cycles 1-3	420	440	460	480	0	20	40	60	-420	-420	-420	-420	-920	-920	-920
Generation Resources Added					0	0	0	0	600	600	600	600	1,200	1,200	1,200
Surplus/(Deficit) after New Gen.					0	20	40	60	180	180	180	180	280	280	280
DSM Demand Reduction -Cycles 2-3	0	0	0	20	40	60	80	100	120	120	120	120	120	120	120
Surplus/(Deficit) after Cycles 2-3	400	400	400	420	-60	-40	-20	0	-480	-480	-480	-480	-980	-980	-980
Generation Resources Added					300	300	300	300	600	600	600	600	1,200	1,200	1,200
Surplus/(Deficit) after New Gen.					240	260	280	300	120	120	120	120	220	220	220
DSM Demand Reduction -Cycles 2-4	0	0	0	20	40	60	80	100	120	140	160	180	180	180	180
Surplus/(Deficit) after Cycles 2-4	400	400	400	420	-60	-40	-20	0	-480	-460	-440	-420	-920	-920	-920
Generation Resources Added					300	300	300	300	600	600	600	600	1,200	1,200	1,200
Surplus/(Deficit) after New Gen.					240	260	280	300	120	140	160	180	280	280	280
DSM Demand Reduction -Cycles 3-4	0	0	0	0	0	0	20	40	60	80	100	120	120	120	120
Surplus/(Deficit) after Cycles 3-4	400	400	400	400	-100	-100	-80	-60	-540	-520	-500	-480	-980	-980	-980
Generation Resources Added					300	300	300	300	600	600	600	600	1,200	1,200	1,200
Surplus/(Deficit) after New Gen.					200	200	220	240	60	80	100	120	220	220	220

6 Returning to the example with implementation of all cycles shown in Table 3, the question
 7 is to which Cycle can both the deferral of 300 MW in year 5 and the elimination of 300
 8 MW in year 13 be attributed? It doesn't take a great deal of thought to determine that neither
 9 can be attributed to any one cycle of programs. While this is a simplified example, the same
 10 principles and dynamics apply with Ameren Missouri's implementation of MEEIA
 11 programs. The key conclusion from this analysis, that supply side resource deferral and/or
 12 avoidance is maximized through continuous implementation of demand-side programs

1 over a long period of time, is consistent with that yielded by a similar analysis performed
2 by the Company and included in its report in File No. EO-2018-0211.⁴

3 **Q. Mr. Fortson discusses the Company's prior IRPs at length, comparing**
4 **them to the Company's 2023 IRP. What conclusion does he draw from this**
5 **comparison?**

6 A. In short, he concludes that because those IRPs included new resource
7 additions in plans without further demand-side resources and the Company's 2023 IRP
8 preferred resource plan ("PRP") also includes new resource additions, that past MEEIA
9 programs have not resulted in generation deferrals or avoidance.⁵

10 **Q. Is this a reasonable conclusion?**

11 A. It is not reasonable at all. First, conditions and circumstances that affect
12 resource planning are continuously changing. Energy and environmental policies, fuel and
13 power prices, construction costs for all the various types of generating resources, and even
14 customer preferences are subject to change. This is why the Missouri Public Service
15 Commission ("MPSC") requires utilities to perform triennial IRPs, provide annual updates,
16 and make changes to their PRPs when necessary. One example is the loss of load for the
17 New Madrid aluminum smelter formerly served by Ameren Missouri, which represented
18 more than five percent of Ameren Missouri's total peak demand. Second, there have been
19 seismic shifts in Ameren Missouri's planning environment since it filed its 2020 IRP – the
20 passage of the Climate and Equitable Jobs Act ("CEJA") in Illinois, which resulted in
21 acceleration of the planned retirement of about 1,800 MW of gas-fired capacity, a change
22 in the Mid-continent Independent System Operator's ("MISO") to a seasonal basis, which

⁴ See MEEIA 2019-2024 Report, pp. 62-63.

⁵ File No. EO-2023-0136, Brad J. Fortson Rebuttal Testimony, p. 12 l. 18 through p. 14 l. 5.

1 changed the driver of the Company's resource needs from summer peak to winter peak, and
2 the retirement of the Company's Rush Island Energy Center. Had such changes been known
3 during prior IRPs, it would have increased the expected need for resources reflected in
4 those IRPs. Because these things were not known, it renders comparisons of the kind Mr.
5 Fortson makes between the Company's 2023 IRP to any past IRP plans meaningless.

6 **Q. Is it fair to say that the Company's resource needs today would be**
7 **significantly greater than if the Company had not been implementing MEEIA**
8 **programs for the past decade plus?**

9 A. Absolutely. Even though winter peak is now the driver of resource need, the
10 Company's past implementation of MEEIA programs that produce savings year-round has
11 put us in a better position with respect to resource need.

12 **Q. Mr. Luebbert analyzes the Company's capacity positions in his rebuttal**
13 **testimony.⁶ What does he conclude?**

14 A. Like Mr. Fortson, he concludes that the Company's MEEIA Cycle 4 will
15 not result in any resource deferral or avoidance. He also concludes that the Company can
16 delay implementation of MEEIA programs to 2034 to satisfy what he concludes to be a
17 short position in 2037.

18 **Q. Are there problems with Mr. Luebbert's analysis?**

19 A. There are several. First, he attempts to isolate the generation
20 deferral/avoidance benefits of the Company's proposed MEEIA Cycle 4 programs. I
21 addressed the flaws with focusing on a single three-year cycle in this manner earlier in my
22 surrebuttal testimony. Second, he attempts to "sharp-shoot" the implementation of

⁶ File No. EO-2023-0136, J. Luebbert Rebuttal Testimony, p. 19 l. 16 to p. 25 l. 11

1 programs by suggesting a delay in implementation of programs to 2034 to satisfy an
2 expected short position in 2037, based on his analysis. I addressed the hazards of such an
3 approach in my rebuttal testimony. Third, he has made an inappropriate adjustment to the
4 Company's winter capacity position for use in his analysis which ignores the Company's
5 consideration of resource adequacy during extreme weather events.

6 **Q. Please summarize your rebuttal testimony discussion of the hazards of**
7 **"sharp-shooting" implementation of MEEIA programs.**

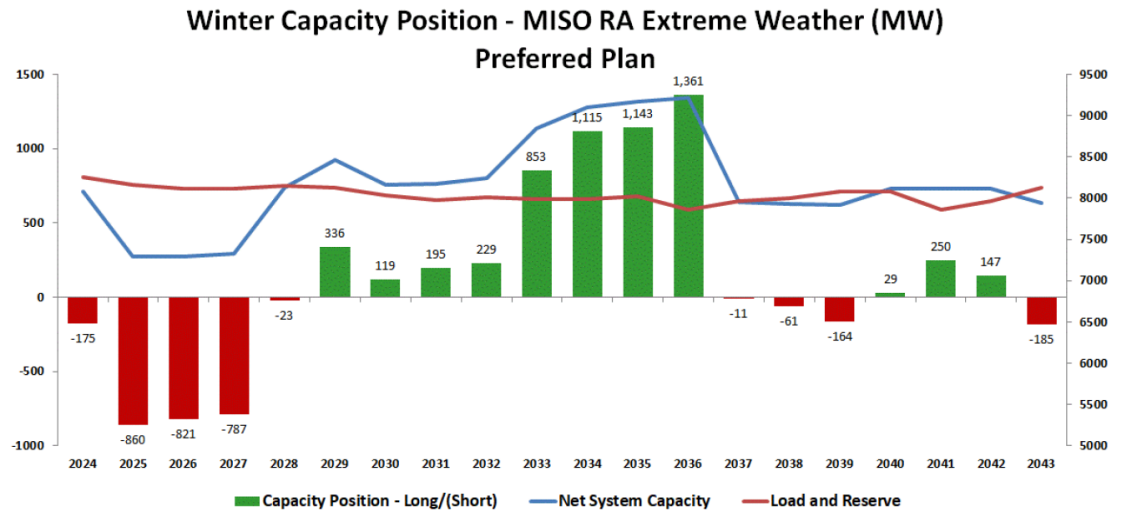
8 A. In short, the planning environment is uncertain and delaying measures today
9 may result in missed opportunities to generate demand savings. Power plant retirements
10 change, load drivers (e.g., the economy, electrification, large customer additions) can
11 change, and such changes can often have large implications for resource needs. On the
12 program side, customers make purchasing decisions that carry energy efficiency
13 implications all the time, and a missed opportunity may not come around again. It would
14 be unwise in the face of such realities to attempt to precisely time the implementation of
15 programs to meet a precise need at some precise future time.

16 **Q. What adjustment did Mr. Luebbert make to the Company's winter**
17 **capacity position that you say is inappropriate?**

18 A. Mr. Luebbert adds the capacity of the Company's planned simple cycle gas
19 generation addition in 2028. This addition is driven by the Company's consideration of
20 extreme winter weather conditions, as explained in its 2023 IRP. As explained in Chapter
21 2 of the Company's 2023 IRP, the Company's planning standard has been enhanced to,
22 "ensure that the Company has resources to provide energy for our customers in all hours

1 and under all conditions, including during extreme weather events."⁷ In Chapter 10 of the
 2 Company's 2023 IRP, several types of capacity positions are presented, including capacity
 3 positions reflecting extreme weather conditions. Figure 2 below shows the Company's PRP
 4 for winter under extreme weather conditions. This capacity position, like others presented
 5 by the Company including extreme weather, includes the capacity for the 2028 simple
 6 cycle gas generation addition. This generation addition was not included for examination
 7 of capacity needs under normal weather conditions. Doing this allowed the Company to
 8 fully examine alternative plans for meeting needs under normal weather conditions and
 9 then layer on resource additions driven by needs during extreme weather.

Figure 2 – Ameren Missouri Winter Capacity Position with Extreme Weather⁸



10 For winter, the load during extreme weather is 600 MW higher than under normal
 11 weather conditions based on actual loads seen during winter storm Elliott in late 2022.
 12 With a winter planning reserve margin of roughly 25%, this translates to a resource need

⁷ Confidential Schedule MM-S1 – Ameren Missouri 2023 IRP Chapter 2 – Planning Environment, p. 12.

⁸ Schedule MM-S2 – Ameren Missouri 2023 IRP Chapter 10 – Strategy Selection, p. 30.

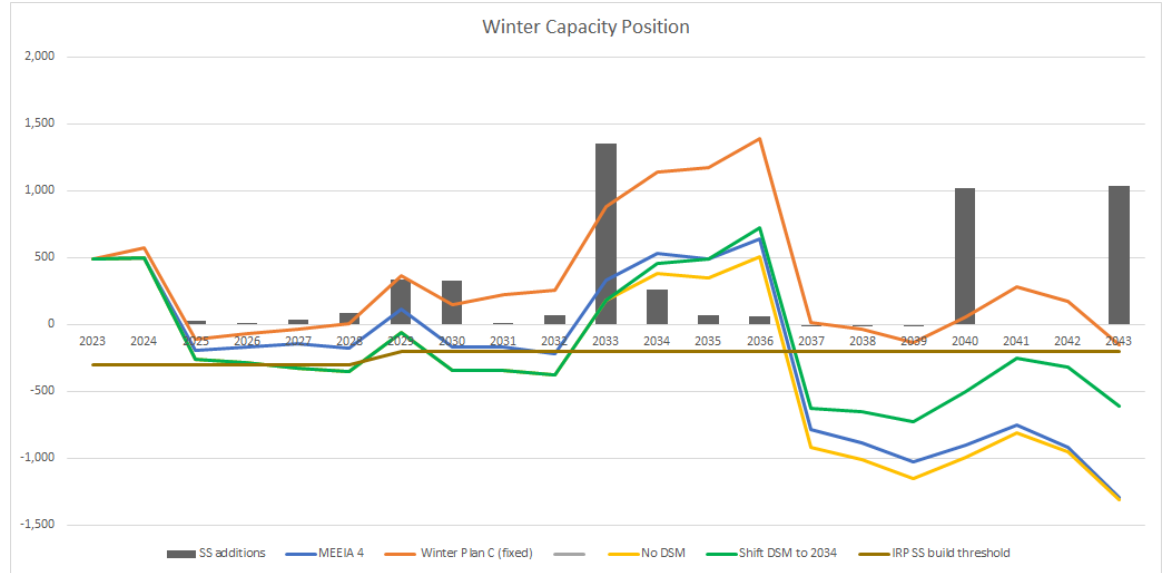
1 of about 750 MW more during extreme weather. The accredited capacity assumption for
2 the 2028 simple cycle generation used in the Company's 2023 IRP is 719 MW. We either
3 include both the incremental load and generation for extreme weather conditions, or we
4 exclude both for normal weather conditions. Including the incremental generation that
5 addresses extreme weather without also including the incremental load due to extreme
6 weather understates the Company's resource needs. The original capacity position file used
7 by Mr. Luebbert as the basis for his analysis excluded both the incremental load and
8 incremental generation. He has added in the simple cycle gas generation capacity starting
9 in 2028, but not the load.

10 **Q. Have you prepared a version of Mr. Luebbert's analysis to remove the**
11 **errant adjustment?**

12 A. Yes. Figure 3 below presents a corrected version of Figure 7 from Mr.
13 Luebbert's rebuttal testimony.⁹ This shows that without DSM (yellow line), the Company
14 is short of its load and planning reserve margin requirement in all but a few years in the
15 early 2030s (after installation of new CC gas and before the retirement of two Labadie units
16 in 2036). Note that this chart also includes a more minor correction to the Company's build
17 threshold, which is reduced from 300 MW to 200 MW starting in 2029.

⁹ File No. EO2023-0136, J. Luebbert Rebuttal Testimony, p. 25, l. 5-6.

Figure 3 – Corrected Version of Luebbert Rebuttal Figure 7



1 **Q. What are the implications of this corrected capacity position analysis?**

2 A. It shows that not only is it unwise to attempt to "sharp shoot" future resource
3 needs by variably throttling the implementation of demand-side programs, but it is also not
4 even possible to do so in the way Mr. Luebbert suggests even if the assumptions reflected
5 in the Company's plan turn out to have perfectly predicted the future under normal
6 conditions. Waiting until 2034 to initiate the Company's proposed demand-side programs
7 would leave the Company and its customers exposed to significant risks associated with
8 extreme weather conditions of exactly the kind that the Company's PRP seeks to address.

9 **Q. Have you previously addressed differences in resource needs with and**
10 **without demand-side programs?**

11 A. Yes. In my rebuttal testimony, I discussed a comparison of the Company's
12 PRP with an alternative plan that substitutes supply-side resources for continued

1 implementation of demand-side programs.¹⁰ That showed that continued implementation
2 of demand-side programs saves Ameren Missouri's customers over \$4.1 billion.

3 **Q. Mr. Luebbert points out that the supply-side additions avoided by the**
4 **Company's PRP are far in the future. Is that a valid criticism?**

5 A. No. The Company has been offering demand-side programs to its customers
6 under MEEIA for over a decade. That has helped to keep some supply-side resource
7 additions out of what we today call the near future. That's part of the idea behind continued
8 implementation of demand-side programs – if we continue to provide customers
9 opportunities to save, we will continue to push out those future resource needs. It would
10 make little, if any, sense to wait until there is a near-term need, scramble to implement
11 some level of uncertain demand savings, and hope it's enough to avoid an imminent
12 generation addition. The planning and implementation timelines for supply side resources
13 are just too long and there are too many uncertainties for such an approach to be effective.

14 **IV. THE COMPANY'S ASSUMPTIONS FOR AVOIDED CAPACITY AND**
15 **T&D BENEFITS ARE REASONABLE**

16 **Q. What does Mr. Luebbert say about the Company's avoided capacity**
17 **costs assumptions?**

18 A. Mr. Luebbert says the Company's assumptions for avoided capacity costs
19 are inappropriate because they are greater than the Company's assumptions for the market
20 price of capacity in MISO¹¹ and do not reflect seasonal variation that reflects the seasonal

¹⁰ File No. EO-2023-0136, Matt Michels Rebuttal Testimony, pp. 5-6, 15-16.

¹¹ File No. EO-2023-0136, J. Luebbert Rebuttal Testimony, p. 16 l. 14 to p. 17 l. 7.

1 nature of the MISO planning resource auction ("PRA").¹² Company witness Steve Wills
2 addresses errors in Mr. Luebbert's analysis on this point in his surrebuttal testimony.

3 **Q. Should avoided capacity costs reflect the market price of capacity?**

4 A. No. As I explained in my rebuttal testimony, the avoided cost of capacity is
5 a "stand-in" for supply side options against which demand-side programs compete as
6 resources on an equivalent basis as required both by MEEIA and by the principles of
7 integrated resource planning.¹³ The market price of capacity helps to balance transient
8 differences in resource balance between alternative resource plans and nothing more. This
9 fact was referenced in the concurrence of Federal Energy Regulatory Commission
10 ("FERC") Commissioner Mark C. Christie, who noted that:

11 No one disputes that the MISO capacity 3 market has always been a purely *residual*
12 option; it is not the primary option 4 for an LSE to obtain the resources needed to ensure
13 reliability. Importantly, 5 states need to focus on their own authority to ensure adequate
14 generating 6 resources to serve their citizens and not default to an administrative 7
15 construct regulated by FERC.¹⁴

16 **Q. Shouldn't such comparison only be made when there is an otherwise**
17 **imminent need for generation resources?**

18 A. No. Doing so could result in missed opportunities to the long-term detriment
19 of customers. As I mentioned previously, the planning environment is constantly changing,
20 and assumptions we make today with the best of intentions may not come to pass. We have
21 a perfect example of this today, with the combination of recent changes I described earlier
22 – CEJA, MISO's move to a seasonal PRA, and the Company's retirement of Rush Island.
23 This combination of changes has shifted the focus of the Company's resource planning to

¹²File No. EO-2023-0136, J. Luebbert Rebuttal Testimony, p. 18 ll. 4-6.

¹³ File No. EO-2023-0136, Matt Michels Rebuttal Testimony, p. 16 l. 6 to p. 20 l. 9.

¹⁴ Order Accepting Proposed Tariff Revisions Subject to Conditions, Concurring Opinion of Commissioner Mark C. Christie, Case No. ER-22-495-000, 001 (Aug. 31, 2022), p. 3-4.

1 the winter season and highlighted the benefits of the Company's prior MEEIA efforts. Had
2 the Company not implemented its MEEIA programs for the last twelve years, we would be
3 faced with an imminent need for even more generation today. Because resource needs and
4 resource decisions are determined over long timeframes, we must consider the long-term
5 marginal cost of electricity rather than the short-run marginal cost. In practical terms, this
6 means we should measure the value of MEEIA programs against the real resource
7 alternatives that would otherwise, sooner or later, have to be deployed to meet customers'
8 needs rather than against forecasts of the volatile short-term fluctuations of MISO's
9 capacity market.

10 **Q. Does that render Mr. Luebbert's criticism regarding the lack of**
11 **seasonal variability moot?**

12 A. Yes. While MISO's seasonal PRA yields seasonal variability, the real
13 supply-side resources against which demand-side resource are competing are potential
14 physical resources that would be in service all year. They don't appear one season,
15 disappear another, and then reappear yet again.

16 **Q. What does Mr. Luebbert say regarding the Company's assumed**
17 **avoided T&D costs?**

18 A. Mr. Luebbert claims that T&D cost can only be avoided through efforts
19 targeted at specific locations on the grid that would otherwise need imminent and specific
20 investment and that because the Company's avoided T&D costs are in part based on actual
21 costs, no T&D savings could be realized through load reduction.¹⁵

¹⁵ File No. EO-2023-0136, J. Luebbert Rebuttal Testimony, p. 28 l. 15 to p. 29 l. 6.

1 **Q. Do you agree with his view?**

2 A. No. I described the Company's approach to avoided T&D costs in my
3 rebuttal testimony.¹⁶ While it is true that the calculation is based in part on actual costs, the
4 purpose of looking at actual costs is to determine the average cost of serving the load. The
5 Company is not suggesting that existing infrastructure would be removed as a result of load
6 reductions. Instead, we assume that incremental infrastructure that would be necessary
7 absent load reductions could be avoided and that the cost of such avoided infrastructure
8 would mirror the cost of the existing system on a per-unit basis. As I explained in my
9 rebuttal testimony, this is a common approach to avoided T&D cost estimation. Mr. Wills
10 also describes industry benchmarking of avoided T&D cost values in his surrebuttal
11 testimony, which shows that the Company's estimated avoided T&D costs are below the
12 industry average in addition to being well within the benchmarked range.

13 **Q. Mr. Luebert indicates that the Company admitted that no planned**
14 **projects would be avoided.¹⁷ How do you respond?**

15 A. Simply put, the Company does not plan projects assuming the absence of
16 load reductions from Company-sponsored demand-side programs because the Company
17 plans to achieve the load reductions expected from Company-sponsored demand-side
18 programs. In theory, the Company could spend the time and effort to conduct planning for
19 its entire T&D system twice – once with demand-side programs and once without – to
20 identify a voluminous list of projects that would be avoided through implementation of
21 demand-side programs. This would come at the cost of great duplication of effort and still
22 have limited value because of the short-term nature of such detailed planning.

¹⁶ File No. EO-2023-0136, Matt Michels Rebuttal Testimony, p. 21 l. 1 to p. 25 l. 10.

¹⁷ File No. EO-2023-0136, J. Luebert Rebuttal Testimony, p. 29 ll. 7-16.

Surrebuttal Testimony of
Matt Michels

1 **Q. Does this conclude your Surrebuttal testimony?**

2 A. Yes, it does.

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

In the Matter of Union Electric Company)
d/b/a Ameren Missouri's 4th Filing to)
Implement Regulatory Changes in Furtherance) File No. EO-2023-0136
of Energy Efficiency as Allowed by MEEIA.)

AFFIDAVIT OF MATTHEW MICHELS

STATE OF MISSOURI)
)**ss**
CITY OF ST. LOUIS)

Matthew Michels, being first duly sworn on his oath, states:

My name is Matthew Michels, and hereby declare on oath that I am of sound mind and lawful age; that I have prepared the foregoing *Surrebuttal Testimony*; and further, under the penalty of perjury, that the same is true and correct to the best of my knowledge and belief.

/s/ Matthew Michels
Matthew Michels

Sworn to me this 29th day of May 2024.