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Exhibit No. 16

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REBUTTAL TESTIMONY

OF

JOHN J. REED

ON BEHALF OF

UNION ELECTRIC COMPANY

d/b/a AMEREN MISSOURI

Marlborough, Massachusetts October 15, 2021

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REBUTTAL TESTIMONY OF

JOHN J. REED

1		I. INTRODUCTION
2	Q.	Please state your name and business address.
3	A.	My name is John J. Reed. I am President and Chief Executive Officer of Concentric Energy
4		Advisors, Inc. ("Concentric") and CE Capital Advisors, Inc. ("CE Capital"), which has its
5		headquarters at 293 Boston Post Road West, Suite 500, Marlborough, Massachusetts
6		01752.
7	Q.	On whose behalf are you submitting this testimony?
8	A.	I am testifying on behalf of Union Electric Company d/b/a Ameren Missouri ("Ameren
9		Missouri" or the "Company").
10	Q.	Did you previously submit testimony in this case?
11	A.	Yes, I submitted Direct Testimony on March 31, 2021.
12		II. PURPOSE OF REBUTTAL TESTIMONY AND TESTIMONY SUMMARY
13	Q.	What is the purpose of your rebuttal testimony?
14	А.	The purpose of my rebuttal testimony is to reply to the direct testimony filed by Office of
15		the Public Counsel ("OPC") witness Dr. Geoffrey Marke and Missouri Industrial Energy
16		Consumers ("MIEC") witness Greg Meyer regarding their recommendations to exclude a
17		portion of the costs associated with the Company's investment in the High Prairie Energy

A. Center ("High Prairie") wind generation facility from the Company's revenue
 requirement to be set in this case.¹

3 Q. Did Ameren Missouri receive a certificate of convenience and necessity 4 ("CCN") to construct and operate High Prairie?

A. As detailed in Company witness Ajay Arora's rebuttal testimony, the Company did 5 obtain a CCN to construct and operate High Prairie in Commission File No. EA-6 2018-0202 ("CCN Docket"). As Mr. Arora also discusses, the case was resolved 7 by a Commission-approved stipulation in which the signatories agreed that "[t]hey 8 shall not challenge the prudence of the decision to acquire the facility under the 9 10 terms of the BTA..." The Missouri Public Service Commission ("Commission") approved the CCN Stipulation on October 24, 2018 and ordered the Signatories to 11 comply with it. 12

Q. At the time that the CCN Stipulation was signed did the Signatories know that there would be some level of production curtailment at High Prairie related to the presence of endangered Indiana bats?

A. According to Mr. Arora's direct testimony, they did. Mr. Arora discusses that the evidence in the CCN Docket was that production would be less than the design capability of the facility in order to mitigate wildlife issues. Specifically, the information available in the CCN Docket indicated that during the warm months of the year² between just before sunset to just after sunrise the facility would have to operate at a cut-in speed of 5.0 meters per second ("m/s"), which is above the design

¹ High Prairie is a 400 MW wind generation facility consisting of 175 wind turbines in Schuyler and Adair Counties, MO.

² April to October when temperatures were above 50 degrees.

1		capability of the turbines (which is 3.0 m/s), and that it might have to operate at a
2		cut-in speed of 6.9 m/s, which the evidence indicated was expected to allow it to
3		avoid taking Indiana Bats when operating the facility at night during the warmer
4		months of the year.
5	Q.	Has the Company had to curtail production at night during the warmer
6		months to a greater extent than what was originally believed to be the case at
7		the time High Prairie was constructed?
8	A.	Yes, this is how conditions have turned out, at least for now. Mr. Arora provides
9		details on the curtailments that have occurred due to the unexpected take of Indiana
10		bats at the facility.
11	Q.	What does MIEC recommend in its Direct Testimony? ³
12	A.	MIEC proposes to reduce the pre-tax return paid by ratepayers for the High Prairie
13		investment to recognize the reduced output the wind farm is currently generating.
14		MIEC proposes to exclude from the revenue requirement \$8.8 million of return,
15		reflecting what Mr. Meyer calculates to be the difference between what the units
16		were expected to produce and what they are currently producing.
17	Q.	Has the MIEC stated whether this disallowance should be reduced annually?
18	A.	No, it has not, but over the thirty-year life of the wind facility, this could accumulate

19 to a disallowance of over \$250 million.

³ Direct Testimony of Greg R. Meyer at 21 - 22.

1 Q. What does the OPC recommend in its Direct Testimony?⁴

A. While Dr. Marke suggests that making a firm recommendation is "premature," his 2 testimony suggests that it is OPC's position that 25% of all of the costs related to 3 High Prairie be removed from the revenue requirement to account for OPC's claim 4 that High Prairie is only operational 75% of the year. This disallowance would 5 6 force the Company to immediately write-off approximately *\$160 million* million, plus the Company would forego return on the depreciated balance of that 7 sum for the next 30 years. Again, this disallowance is entirely based on how events 8 9 have turned out, not on whether Ameren Missouri's decisions were prudent or reasonable. 10

11 Q. Do you agree with the recommendations of the MIEC and/or the OPC?

A. No, I do not. My testimony will focus on the regulatory constructs that the OPC 12 and MIEC appear to have disregarded in making their recommendations and why 13 the Commission should reject their proposals. Initially, I will discuss the Prudence 14 Standard in general and how it should be applied to High Prairie in this case. 15 Likewise, I will provide an overview of the used and useful principle, how that 16 17 concept is applied in Missouri and its application to High Prairie. Finally, I address 18 the concept of economic used and useful and why this standard should never be used, certainly not in this case. In my view the costs incurred by the Company for 19 High Prairie were prudently incurred and the adherence to the Prudence Standard 20 21 in this case dictates recovery of 100% of the costs. The regulatory compact does

⁴ Direct Testimony of Geoff Marke at 10.

- not support the need for a second (used and useful) or third (economic used and
 useful) test as thresholds for cost recovery.
- 3

III. THE PRUDENCE STANDARD

4 Q. Please generally describe the regulatory standard for prudence.

A. Under traditional cost-based ratemaking, a utility is permitted to include prudently-5 incurred costs in the revenue requirement used to set its rates. The standard for the 6 evaluation of whether costs are, or are not, prudently incurred is built on four 7 principles. First, prudence relates to actions and decisions. Costs themselves are 8 neither prudent nor imprudent. It is the decision or action that led to cost incurrence 9 10 that must be reviewed and assessed, not simply whether the costs are above or below expectations. The second feature is a presumption of prudence, which is 11 often referred to as a rebuttable presumption. The burden of showing that a decision 12 13 is outside of the reasonable bounds falls, at least initially, on the party challenging the utility's actions. The third feature is the total exclusion of hindsight. A utility's 14 decisions must be judged based upon what was known or reasonably knowable at 15 16 the time the decision was made by the utility. The final feature is that decisions 17 being reviewed need to be compared to a range of reasonable behavior; prudence does not require perfection, nor does it require achieving the lowest possible cost. 18 19 This standard recognizes that reasonable people can differ and that there is a range 20 of reasonable actions and decisions that is consistent with prudence.

21 Q. What happens when a utility's action or inaction is deemed imprudent?

A. Generally, when an action, or inaction is deemed imprudent, the investments or costs associated with the imprudent action are disallowed from <u>cost</u> recovery. In

the case of capital investments, a prudence disallowance would reduce rate base, meaning: 1) no return on the disallowed amount; 2) no depreciation expense on the disallowed amount; 3) a lower overall revenue requirement; and therefore 4) a lower rate overall. If an action is ruled imprudent then a regulator should: 1) define the range of reasonable behavior; 2) consider what the costs would have been if a "minimally prudent" course of action had been followed; and 3) disallow only the amount of costs above that "minimally imprudent" level.

8 Q. Does this Commission adhere to the Prudence Standard?

Yes, the Commission established its Prudence Standard in a 1985 case involving 9 A. 10 the costs incurred by Union Electric Company in its construction of the Callaway Nuclear Plant.⁵ The Commission adopted a standard established by Court of 11 Appeals, District of Columbia in 1981 to determine the costs to be included in that 12 case. Under this standard, the Commission recognizes that a utility's costs are 13 presumed to be prudently incurred, and that a utility need not demonstrate in its 14 case-in-chief that all expenditures are prudent. 'However, where some other 15 participant in the proceeding creates a serious doubt as to the prudence of an 16 17 expenditure, then the applicant has the burden of dispelling those doubts and 18 proving the questioned expenditures to have been prudent.⁶ The Commission, in the case involving the Callaway Nuclear plant, further recognized that the Prudence 19 Standard is not based on hindsight, but upon a reasonableness standard. The 20

⁵ In the Matter of the Determination of In-Service Criteria for the Union Electric Company's Callaway Nuclear Plant and Callaway Rate Base and Related Issues. In the Matter of Union Electric Company of St. Louis, Missouri, for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company, 27 Mo. P.S.C. (N.S.) 183, 192-193 (1985).

⁶ Union Electric, 27 Mo. P.S.C. (N.S.) 183, 193 (1985).

1		Commission cited with approval a statement of the New York Public Service
2		Commission that: "the company's conduct should be judged by asking whether
3		the conduct was reasonable at the time, under all the circumstances, considering
4		that the company had to solve its problem prospectively rather than in reliance on
5		hindsight. In effect, our responsibility is to determine how reasonable people would
6		have performed the tasks that confronted the company." ⁷ The Missouri courts have
7		adopted this standard. ⁸
8	Q.	Is there other Precedent for the Definition of Prudence Standard in the United
9		States?
10	A.	The original standard of prudence in ratemaking was expressed by Supreme Court
11		Justice Louis Brandeis in 1923 as a means of guiding regulators conducting reviews
12		of utility capital investments. As originally proffered, the test provides a basis for
13		establishing a utility's investment or rate base based on the cost of such investment:
14		There should not be excluded from the finding of the base,
15		investments which, under ordinary circumstances, would be
16		deemed reasonable. The term is applied for the purpose of
17		excluding what might be found to be dishonest or obviously
18		wasteful or imprudent expenditures. Every investment may
19		be assumed to have been made in the exercise of reasonable
20		judgment, unless the contrary is shown adoption of the
21		amount prudently invested as the rate base and the amount
22 23		of the capital charge as the measure of the rate of return [would provide] a basis for decision which is certain and
23 24		stable. The rate base would be ascertained as a fact, not
25		determined as a matter of opinion. (Separate, concurring
26		opinion of Justice Louis Brandeis, Missouri ex. Rel.
27		Southwestern Bell Telephone Co. v. Public Service
28		Commission, 262 U.S. 276 (1923)); (clarification added).

⁷ Union Electric 27 MO P.S.C at 194 quoting Consolidated Edison Company of New York, Inc., 45 P.U.R. 4th 331 (1982).

⁸ State ex rel. Associated Natural Gas v. Pub. Serv. Comm'n, 954 S.W.2d 520, 528-29 (Mo. App. W.D. 1997) (quoting with approval the Commission's adoption of the standard quoted in the Union Electric case involving Callaway).

1	The position of Justice Brandeis was endorsed in 1935 when Supreme Court
2	Justice Benjamin N. Cardozo stated:
3	Good faith is to be presumed on the part of managers of a
4	business. In the absence of a showing of inefficiency or
5	improvidence, a court will not substitute its judgment for
6	theirs as to the measure of a prudent outlay. (West Ohio Gas
7	Co. v. Public Utilities Commission of Ohio (No.1), 294 U.S.
8	63, (1935), Opinion).
9	
10	The prudent investment test offered by Justice Brandeis was applied
11	sparingly for the first four decades following its pronouncement. It was not until
12	the nuclear power construction projects of the 1970s and 1980s that the prudent
13	investment test, at least in name, was applied frequently in various electric utility
14	rate cases. The Federal Energy Regulatory Commission ("FERC") offered its view
15	of the prudent investment test in 1984 by stating the following:
16	We note that while in hindsight it may be clear that a
17	management decision was wrong, our task is to review the
18	prudence of the utility's actions and the cost resulting
19	therefrom based on the particular circumstances existing
20	either at the time the challenged costs were actually incurred,
21	or the time the utility became committed to incur those
22	expenses. (New England Power Company, 31 FERC ¶
23	61,047 (1985).
24	The National Regulatory Research Institute ("NRRI") advocated for similar
25	principles in a 1985 research paper entitled, "The Prudent Investment Test in the
26	1980s." In this paper, the NRRI stated that the prudent investment standard should
27	include the following four guidelines:
28	• "a presumption that the investment decisions of
29	the utilities are prudent"
-	1

1	• "the standard of reasonableness under the
2	circumstances"
3	• "a proscription against the use of hindsight in
4	determining prudence"
5	• "determine prudence in a retrospective, factual inquiry.
6	Testimony must present facts, not merely opinion, about the
7	elements that did or could have entered into the decision at
8	the time." (National Regulatory Research Institute, The
9	Prudent Investment Test in the 1980s; (April 1985)).

10

Q. How does the Prudence Standard apply to High Prairie?

11 A. Good ratemaking policy, as reflected in the foregoing authorities including in the practice of this Commission, is that the Prudence Standard should be the standard 12 used for this plant's cost recovery in this case. As discussed above, if a participant 13 14 in a Missouri Commission proceeding creates a serious doubt as to the prudence of a decision that led to an expenditure, the applicant has the burden of dispelling those 15 doubts and proving the questioned expenditures to have been prudently incurred. 16 In this case neither the OPC nor the MIEC has created any doubt as to the prudence 17 of the expenditures at High Prairie and instead are attempting to use pure hindsight 18 - that production is less than hoped because mitigation measures that were believed 19 to be protective of wildlife when the decision was made turned out not to be - in 20 21 support of an after-the-fact disallowance.

Based on the facts of this case as presented by Company Witness Ajay K. Arora, there is no indication that the Company was imprudent in constructing High Prairie via the BTA. While the primary justification for High Prairie was its need for the Missouri Renewable Energy Standard ("RES") compliance as compared to pursuing the project purely to produce net economic benefits for customers, the unrefuted evidence in the CCN docket demonstrates that even if full mitigation (operation at night April to October using a 6.9 m/s cut-in speed) was required, and
 even if power prices were low, the facility was expected to generate positive
 economic benefits for customers over its life on a net present value basis.

- Q. Based on the information the Company had at the time High Prairie was
 constructed could it have known that it would have to curtail production 100%
 between sunset and sunrise during the warm months of the year?
- No, it could not. As discussed above, the Prudence Standard requires the exclusion 7 A. of hindsight. In this case, all the evidence known and available to the Company at 8 the time it signed the BTA indicated that there would be some level of production 9 10 curtailment at night during the warmer months due to the presence of endangered Indiana Bats at or near the facility.⁹ Such evidence was provided and known to the 11 parties (OPC and MIEC included) and the Commission in the CCN docket. In fact, 12 the CCN Stipulation states that "The Signatories agree that they shall not challenge 13 the prudence of the decision to acquire the facility under the terms of the BTA."¹⁰ 14 Based on any standard of reasonableness under the circumstances, Ameren 15 Missouri's decision to move forward with the project was within a range of 16 reasonable behavior, as attested to by the fact that other Signatories to the 17 18 settlement agreed that it was prudent, and the Commission approved the settlement.

⁹ File No. EA-2018-0202.

¹⁰ CCN Stipulation, ¶12.

1		IV. USED AND USEFUL PRINCIPLE
2	Q.	Please generally explain the regulatory ratemaking principle of used and
3		useful.
4	A.	The used and useful principle is a ratemaking concept that relates to one element of
5		establishing the revenue requirement of a public utility, i.e., the valuation of the
6		rate base upon which a return will be granted. In essence, it provides that the rate
7		base should only include those assets that are used to provide the regulated service,
8		and that are useful in the provision of that service (e.g., needed, in this case for
9		Renewable Energy Standard compliance). While simple in concept, this principle,
10		in application, has been one of the most disputed and contentious issues in rate
11		proceedings over its 150 years of application in North America.
12	Q.	Is the Used and Useful Principle defined in the Missouri Revised Statutes?
13	A.	Yes. The Revised Statutes of Missouri, Section 393.135 states the following:
14		"Charges based on nonoperational property of electrical corporation prohibited. —
15		Any charge made or demanded by an electrical corporation for service, or in
16		connection therewith, which is based on the costs of construction in progress upon
17		any existing or new facility of the electrical corporation, or any other cost
18		associated with owning, operating, maintaining, or financing any property before it
19		is fully operational and used for service, is unjust and unreasonable, and is
20		prohibited." The law is clear that utility property may only be put into rates if it is
21		"fully operational and used for service."

11

1 Q. Has the Commission applied this principle in the past?

- A. Yes, the Commission has cited this statute as being Missouri's application of the
 "used and useful" concept.¹¹
- 4 Q. Do you believe that High Prairie meets the standard of being used and useful?

A. Yes, High Prairie easily passes the used and useful principle established by
Missouri statute in that the facility is fully in-service and producing power seven
days per week, 365 days per year. That production is providing Renewable Energy
Credits that are being used for RES compliance, generating Production Tax Credits
that are being passed back to customers, and is generating energy and capacity
revenues also being credited to customers in rates.

Q. Does the Used and Useful Principle have anything to do with the OPC and the MIEC proposed disallowances?

A. No, neither party is claiming that the facility is not fully operational or that it isn't
being used for service. A review of the Staff's Cost of Service Report indicates
that the Staff agrees the facility has met the in-service criteria agreed upon by the
Signatories in the CCN Stipulation. And as addressed earlier, the Company has
met the Prudence Standard.

¹¹ Public Service Commission, File No. ER-2010-0355, April 12, 2011, at 17.

1		V. ECONOMIC USED AND USEFUL
2	Q.	Please explain the economic used and useful standard.
3	A.	The economic used and useful standard is an after-the-fact, hindsight-based
4		economics test, that has almost never been used, and that when used was applied
5		by regulators in addition to the prudence standard principle before investors were
6		able to recover their costs. Under this standard, even if it has been determined that
7		an asset's costs were prudently incurred and the asset is used and useful, a
8		determination could potentially be made that the asset is uneconomic based on the
9		current market values.
10	Q.	Do you believe that the OPC and MIEC witnesses are proposing that the
11	-	Commission apply this test to the cost recovery of High Prairie?
12	A.	Yes, they clearly are, although they fail to acknowledge that this is what they are
13		doing. Both the OPC and the MIEC recommend a disallowance of an asset that has
14		passed the Prudence Standard and is clearly used and useful solely based on their
15		belief that the facility is not producing as much energy value as it was projected to
16		generate at the time the facility was approved for construction. This after-the-fact
17		economic review is entirely inconsistent with the Prudence Standard as applied in
18		Missouri and throughout the United States. In fact, the OPC and MIEC
19		recommendations violate the principal foundations of the Prudence Standard,
20		namely the use of hindsight which the Commission has prohibited in the past.
	6	

21 Q. Is the economic used and useful approach used in any state currently?

A. No, this is no longer the cost recovery standard in any state, nor has it been in quite
a long time.

1 Q. Has this approach been used by regulators in the past?

A. Almost never. Unfortunately, there have been a few times that regulators have been 2 asked to change the rules for cost recovery after the fact, and this concept of an 3 "economic" used and useful standard was proposed. However, it is far outside the 4 norm for public utility regulation. Over the past 50 years it has been adopted by 5 6 only three of 52 regulatory jurisdictions in the U.S., of which two have now effectively reversed their precedent and the third has repealed it for all "public 7 interest" projects, such as renewable energy generation. Thus, today no jurisdiction 8 9 endorses it as a generally applicable cost recovery standard, and it has been widely criticized as an inequitable, unworkable, and economically inefficient approach to 10 ratemaking. 11

Q. Please expand on how the development and application of the economic used and useful approach has been criticized.

I have written about this standard since it was first created in the Wolf Creek 14 A. Nuclear Generating Station ("Wolf Creek") case by the Kansas Corporation 15 Commission in the 1980s, but I will not refer the Commission to my prior work. 16 What I believe to be the most comprehensive research and analysis on this topic 17 18 was presented in the Energy Law Journal law review article (Volume 23:349) prepared by Dr. Jonathan Lesser, and published in 2002. Dr. Lesser concluded that 19 the use of this approach "creates an untenable regulatory and economic situation. 20 21 Utilities can never fully know whether their actions are reasonable or whether their shareholders may be exposed to asymmetric risks."¹² He further concludes that: 22

¹² The Used and Useful Test: Implications for a Restructured Electric Industry, by Jonathan Lesser, 2002, at 351.

1	The electric utility industry has changed dramatically over
2	time. In its current state, it is more important than ever to
3	address economic concepts, not only to promote greater
4	efficiency in the provision of electric services to ratepayers,
5	but also to promote equity. An economic used and useful test
6	promotes neither. Instead, it allows regulators a "second bite
7	of the apple" that combines the "end results" standard of
8	Hope and the fair-value approach of Smyth v. Ames, while
9	relegating economic, legal, and established regulatory
10	principles to the dustbin. ¹³
11	

12 If the Commission wishes to provide any consideration to the adoption of an after-13 the-fact economic review, such as the economic-used-and-useful approach, I would 14 urge it to fully read Dr. Lesser's law review article.

15 Q. Where has the concept of economic used and useful been applied?

As noted, the concept of economic used and useful was argued in utility cases 16 A. starting in the mid-1980s, amid prudence reviews for nuclear power plants where 17 the ultimate costs for the facilities had dramatically exceeded forecasted costs. In 18 many nuclear power plant cost recovery cases, traditional prudence reviews were 19 used to determine which costs utilities could put into rate base and which were 20 determined to be based on poor management decisions and therefore disallowed. In 21 a very few stand-out cases, public utility commissions determined that additional 22 23 costs should be disallowed because the investment had turned out to be uneconomic, rather than imprudent, and therefore an asymmetrical risk sharing 24 between ratepayers and shareholders was imposed after-the-fact. The states that 25 26 have used this approach in the past are Kansas, Massachusetts and Vermont.

¹³ *Ibid.*, at 378.

1	In a case involving the recovery of costs related to the Wolf Creek plant,
2	the Kansas Corporation Commission ("KCC") determined that "no return should
3	be allowed on the portion of Wolf Creek which was not used and required to be
4	used and represents unreasonably high capital costs. By allowing a return of the
5	costs through depreciation but no return on the costs, we are dividing the economic
6	consequences between ratepayers and shareholders in an equitable manner". ¹⁴ This
7	approach was labeled as the "economic" used and useful test and relied on a
8	hindsight-based economic review for disallowances of prudently incurred costs.
9	This unprecedented approach led to the owners of Wolf Creek experiencing severe
10	financial distress, and in subsequent rate cases the KCC effectively eliminated the
11	disallowances that its new risk sharing approach had imposed. ¹⁵

Q. Please discuss the Massachusetts Department of Public Utilities' ("MDPU") use of the "economic" used and useful approach.

In 1986, the MDPU determined that Western Massachusetts Electric's nuclear 14 A. power plant, Millstone 3, was not economically used and useful and therefore the 15 utility could not earn a return on a portion of the unit because, the cost of the plant, 16 compared to what the MDPU later regarded as the "optimal supply alternative," 17 was higher.¹⁶ It was determined that approximately 76 percent of the investment 18 was "economically" useful and one-quarter of the investment was not economically 19 useful in providing service to ratepayers, but that all of the investment was 20 prudently incurred. Therefore, the entire unit could be put into rates, but a return 21

¹⁴ 70 P.U.R. 4th 475, at 43.

¹⁵ 82 P.U.R. 4th 539, at 11.

¹⁶ 80 P.U.R. 4th 479, at 38.

could only be recovered on the portion that was considered economically useful.¹⁷ 1 Two years later, after the MDPU's economically used and useful standard was 2 severely criticized, the MDPU opened a generic docket to review the "Pricing and 3 Rate-making Treatment for New Electric Generating Facilities which are not 4 Qualifying Facilities."¹⁸ The proceeding was designed to provide a generic 5 rulemaking proceeding for stakeholders to discuss the various ratemaking 6 alternatives related to new utility investment without the backdrop of specific 7 project conditions. The proceeding relied on the comments of all stakeholders in 8 9 determining whether the ratemaking standard of prudently incurred costs with an after-the-fact economic used and useful ratemaking approach was just and 10 reasonable. In that proceeding, the MDPU determined that it was not, and reversed 11 its prior adoption of this approach. Instead, the MDPU implemented a "pre-12 approval approach" whereby a utility's costs would be pre-approved by the MDPU 13

14 before making investment decisions. The MDPU stated that:

15 The pre-approval contract approach, relying as it does 16 primarily on harnessed competitive forces and secondarily 17 on Department approval of utility proposals, with pre-18 established parameters for cost recovery, enforces implicit 19 penalties and rewards for efficient construction and 20 operation, and better satisfies these competing requirements. 21 We reaffirm our rejection of the used and useful approach.¹⁹ 22

Pre-approval of a proposal gives a utility great certainty as to the pattern of cost recovery it can expect. In this way, the approach recognizes the fact that utilities must plan to meet needs, and thus must take risks a QF or other supplier need not take. Further, for large projects, subject to the uncertainty associated with appreciable lead times, the allocation of risk and reward set forth in this Order provides incentives to

¹⁷ 89 P.U.R. 4th 190, at 27.

¹⁸ 89 P.U.R. 4th 190.

¹⁹ 93 P.U.R. 4th 313, at 23.

5

efficiency while shielding utilities from risks over which
 they have little control. We find that pre-approval contract
 meets the criteria of recognizing the utility's obligation to
 serve and ensuring a reliable supply of capacity.²⁰

This approach was a clear reversal from the concept of an after-the-fact 6 economic review that the MDPU had implemented in its earlier decision. In 7 rejecting its prior adoption of the economic used and useful approach, the MDPU 8 concluded that "we recognize that the [economic] used and useful approach would 9 similarly create financing barriers for utility projects, thereby jeopardizing the 10 ability of utilities to provide service in an efficient manner. Accordingly, we find 11 that the [economic] used and useful standard does not successfully fulfill our 12 13 criteria. It would not, at this time, be practicable, consistent with economic efficiency, the obligation to serve, or the avoidance of bias in the decision-making 14 process."21 15

Q. Were there other states which carefully considered the economic used and useful approach and rejected it?

A. Yea, there were quite a few that did that, including Illinois. Because of cost overruns of nuclear facilities in Illinois, the legislature revised its state's Public Utility Act to include the following language for determining used and useful, "A generation or production facility is used and useful only if, and only to the extent that, it is necessary to meet customer demand or economically beneficial in meeting such demand."²² The law was tested in 1993 when the Illinois Commerce Commission ("ICC) allowed Byron Unit 2 and Braidwood Units 1 and 2 costs in to

²⁰ Ibid., at 31.

²¹ 89 P.U.R. 4th 190, at 24.

²² 220 ILCS 5 / 9-212, from Ch 111 2/3, paragraph 9-212.

1		rate base. Subsequently the decision was appealed, remanded, reconsidered and re-
2		reconsidered. Ultimately, the ICC ruled that all three units were 100 percent used
3		and useful. The ICC rejected the economic used and useful approach concluding
4		that:
5 6 7 8 9 10		This test is a radical departure from the commission's needs and economic benefits test since it requires a needed unit to also be economically beneficial in order to be deemed used and useful. ²³ With this decision, the ICC ended a circuitous decision-making process
11		ending up right where it started, by applying the conventional used and useful
12		principle.
13	Q.	What was the experience in Vermont with the application of the used and
14		useful approach to ratemaking?
14 15	A.	useful approach to ratemaking? Throughout the 1990s and early 2000s the Vermont Public Service Commission
	A.	
15	A.	Throughout the 1990s and early 2000s the Vermont Public Service Commission
15 16	A.	Throughout the 1990s and early 2000s the Vermont Public Service Commission ("VPSC") applied the concept of economic used and useful a number of times in

²³ 158 P.U.R. 4th 458, at 16.

 ²⁴ State of Vermont Public Service Board, Docket No. 5701/5724, Order Entered October 31, 1994, at 109-110.

1	Yet, in two subsequent cases, involving Green Mountain Power ²⁵ and
2	Central Vermont Public Service ²⁶ , the VPSB applied a new type of economic used
3	and useful test as a comparison between the net present value of the projected
4	future cost of a PPA and the projected market price of power over the contract's
5	remaining lifetime. The decision in Central Vermont went to the Vermont
6	Supreme Court, where it determined in 2001 that:
7 8 9 10 11 12 13 14 15	We agree that [the Board] left open the possibility that it might use a market-value approach in the future, and deny recovery of costs that exceed market value, but under very limited circumstances. It stated: 'As utility markets become more open and competitive, it may become increasingly possible and, in many cases, desirable to employ market- based tests to govern the utility's total return As far as we can determine, Vermont has essentially the same electric regulatory system as it had in 1994 and that system
16 17 18	is based on regulation of electric service monopolies, not competition. ²⁷
19	Nevertheless, even after the 2001 Vermont Supreme Court decision, the
20	VPSB has sporadically applied a modified form of this test. As a consequence, in
21	2009, all 11 Vermont distribution utilities developed general guidelines for the
22	implementation of Advanced Metering Infrastructure ("AMI") and specifically
23	asked the VPSB to provide assurances that "the economic used-and-useful test
24	will not be applied to disallow costs due to technological changes or a drop in the
25	price of meters. In support of this argument, the utilities point to the fact that the
26	Board has granted such certainty of cost recovery in the context of DSM

²⁵ 184 P.U.R. 4th 1.

²⁶ State of Vermont Public Service Board, Docket No. 6018, Tariff Filing of Central Vermont Public Service Corporation requesting a 6.6% rate increase, to take effect 11/16/97. ²⁷ Central Vermont Public Service Corp, 769 A.2d 668, Util. L. Rep. 26,768, at 11.

1		programs, so as to remove a disincentive to such investments."28 The VPSB
2		responded by stating that:
3		Based upon the considerations set out in the PFD [Proposal
4		for Decision], including the risks associated with
5		technological changes, we conclude that utility investments
6		as part of an approved AMI Implementation Plan should be
7		treated as if they are economically used-and-useful. Our
8		determination on the treatment of these investments under
9		the economic used-and-useful test is subject to the same
10		limitations that apply to assurances of rate-recovery under
11		the prudence standard. It only applies to investments and
12		expenses reviewed during the pre-approval process.
13		Moreover, the utility bears a continuing obligation to
14		monitor and adapt its Plan in light of changing
15		circumstances. ²⁹
16		
17		This decision was clarified later that year when the VPSB stated:
18		5
19		Where a utility cannot change the underlying circumstances
20		that have called into question whether a particular
21		investment was used-and-useful, AMI investments that are
22		both (1) prudent at the time they are made and (2)
23		consistent with an approved AMI plan will be treated as if
24		they are economically used-and-useful. ³⁰
25		
26		In this ultimate test of economic used and useful approach the VPSB correctly
27		determined that after-the-fact ratemaking was not appropriate or fair to investors.
28	Q.	What is your conclusion regarding the economic used and useful principle?
29	A.	Regulators that have considered the appropriateness of the economic used and
30		useful standard have either rejected it or replaced it with a pre-approval process that
31		provides greater certainty with regard to the recoverability of the return on and of
32		capital investments. The Commission relies on a pre-approval approach today, as

²⁸ 2009 WL 3159436 (Vt. P.S.B) Investigation into Vermont Utilities Use of Smart Metering and Time-Based Rates, Docket 7307, Order, August 3, 2009, at 19.

²⁹ *Ibid.*, at 20.

 ³⁰ 2009 WL 40249000 (Vt P.S.B.), Investigation into Vermont Electric Utilities' Use of Smart Metering and Time-Based Rates, November 16, 2009, at 2.

it used in the CCN docket for High Prairie, and Missouri statute makes clear what
is required to pass the used and useful standard. To adopt any form of a hindsightbased economic review in Missouri would represent a retreat from what the
Commission and other regulators have worked to build as a more effective
approach to utility ratemaking, and would not be consistent with Missouri statute.

6 The adoption of an economic used and useful standard by the Commission, as suggested by the OPC and MIEC, would allow cost disallowances whenever load 7 unexpectedly changed, or fuel prices unexpectedly changed, or even when 8 9 environmental or tax policies unexpectedly changed (i.e., a change in the RES), if these changes resulted in an investment ending up being less attractive than when 10 first undertaken. Such a review could occur after an asset was fully built, or even 11 years after it was built, without any opportunity for the utility to earn an above-cost 12 return when more favorable circumstances arise. This imposition of asymmetrical, 13 unpredictable, and unquantifiable risks on investors is inefficient and highly 14 inequitable. The risk premium that would have to be built into debt and equity costs 15 to accommodate such an asymmetrical risk profile would be very high and would 16 17 significantly increase costs to consumers. For these reasons, the use of such a hindsight-based economic standard should be firmly rejected. 18

- 19 **Q.** Does this conclude your direct testimony?
- 20 A. Yes, it does.

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BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust Its Revenues for Electric Service.

Case No. ER-2021-0240

AFFIDAVIT OF JOHN J. REED

STATE OF Florida CITY OF Holmes Beach

John J. Reed, being first duly sworn on his oath, states:

My name is John J. Reed, and on his oath declare that he is of sound mind and lawful age;

that he has prepared the foregoing *Rebuttal Testimony*; and further, under the penalty of perjury,

that the same is true and correct to the best of my knowledge and belief.

the 1. Rook

John J. Reed

Sworn to me this <u>15th</u> day of <u>October</u>, 2021.