Exhibit No.:	_____
Issue(s):	RES Retail Rate Impact Calculation Policy, Overview
Witness:	Ezra D. Hausman, Ph.D.
Type of Exhibit:	Rebuttal Testimony
Sponsoring Party:	Missouri Solar Energy Industries Assn.
Case No:	ET-2014-0085
Date:	October 25, 2013

MISSOURI PUBLIC SERVICE COMMISSION

File No. ET-2014-0085

REBUTTAL TESTIMONY

OF

EZRA D. HAUSMAN, PH.D.

ON BEHALF OF

THE MISSOURI SOLAR ENERGY INDUSTRIES ASSOCIATION

Cambridge, Massachusetts
October 2013

REDACTED

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of Union Electric Company's d/b/a Ameren Missouri's Application for Authorization to Suspend Payment of Solar Rebates	))))	File No. ET-2014-0085

AFFIDAVIT OF EZRA D. HAUSMAN, PH.D.

STATE OF MASSACHUSETTS)
) **ss**
COUNTY OF MIDDLESEX)

Ezra D. Hausman, Ph.D., being first duly sworn on his oath, states:

1. My name is Ezra D. Hausman, Ph.D. I work in Cambridge, Massachusetts and I am employed by Synapse Energy Economics, Inc. as Vice President and Chief Operating Officer.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Missouri Solar Energy Industries Association consisting of seventeen (17) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Ezra D. Hausman

Subscribed and sworn before me this 25th day of October, 2013.

Notary Public

My commission expires: July 27, 2018

MELISSA SCHULTZ
Notary Public
Commonwealth of Massachusetts
My Commission Expires
July 27, 2018

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EXHIBITS

Exhibit EDH-1: Resume of Ezra D. Hausman, Ph.D.

REBUTTAL TESTIMONY
OF
EZRA D. HAUSMAN, PH.D.
Case No. ET-2014-0085

1. INTRODUCTION AND QUALIFICATIONS

Q: Please state your name, title, and business address.

A: My name is Ezra D. Hausman, Ph.D., and I am Vice President and Chief Operating Officer of Synapse Energy Economics ("Synapse"), located at 485 Massachusetts Avenue, Cambridge, Massachusetts, 02139.

Q: Please describe Synapse Energy Economics.

A: Synapse Energy Economics is a research and consulting firm specializing in energy and environmental issues, including electric generation, transmission and distribution system reliability, ratemaking and rate design, electric industry restructuring and market power, electricity market prices, stranded costs, efficiency, renewable energy, environmental quality, and nuclear power.

Synapse's clients include state consumer advocates, Public Utilities Commission staff, attorneys general, environmental organizations, federal government agencies, and utilities. A complete description of Synapse is available at our website, www.synapse-energy.com.

Q: Please summarize your relevant work experience and your educational background.

A: I have been employed by Synapse since July of 2005, and I have served as Vice President of Synapse since July 2009. While employed at Synapse I have

provided expert analysis and testimony in numerous cases involving electricity, generating capacity, and ancillary service markets, electricity price forecasting, resource planning, environmental compliance, and economic analysis. I have prepared reports on these and other related topics for clients including federal and state agencies; offices of consumer advocate; legislative bodies; cities and towns; non-governmental organizations; foundations; industry associations; and resource developers. I have also facilitated and served as an expert analyst for state-level stakeholder and legislative processes related to electricity resource planning and mitigation of greenhouse gas emissions.

From 1997 until 2005, I was employed as a Senior Associate with Tabors Caramanis & Associates (TCA), now part of CRA International, performing a wide range of electricity market and economic analyses and price forecast modeling studies. These included asset valuation studies, market transition cost/benefit studies, market power analyses, and litigation support. I have extensive personal experience with market simulation, production cost modeling, and resource planning methodologies and software.

I hold a B.A. from Wesleyan University, an M.S. in civil engineering from Tufts University, an S.M. in applied physics from Harvard University, and a Ph.D. in atmospheric chemistry from Harvard University.

A copy of my current resume is attached as Exhibit EDH-1 to this testimony.

Q: On whose behalf are you appearing in this proceeding?

A: I am appearing on behalf of the Missouri Solar Energy Industries Association (MOSEIA).

Q: Have you testified previously before the Public Service Commissions in the State of Missouri or elsewhere?

A: I filed direct testimony on similar issues earlier this year under Case No. ET-2014-0059 and Case No. ET-2014-0071. I also served as an expert participant in a

stakeholder process sponsored by the Missouri Commission under Docket No. EW-2010-0187 in 2010.

I have presented expert testimony before Commissions in the states of Arkansas, Iowa, Kansas, Mississippi, Nevada, New Hampshire, South Dakota, Vermont, and Washington. I have testified before state regulatory and/or legislative bodies in Illinois, Massachusetts, and Vermont, and I have served on an expert technical panel before the Federal Energy Regulatory Commission. Further details are provided in Exhibit EDH-1.

Q: What is the purpose of your rebuttal testimony?

A: I am rebutting the testimony of Ameren witnesses Matt Michels and Richard Wright. Specifically, I am addressing the following issues:

1. Cost accounting for solar rebates;
2. Whether the resource costs described by Mr. Michels, and included in Schedule MM-1, are appropriately considered in the company's RRI calculation;
3. Appropriate consideration of future renewable energy projects and their impact on funds available for solar rebates today.

Q: What are your overall conclusions?

A: I conclude that:

1. Mr. Michels has overstated the short-term cost of solar rebates by accounting for them as cash outlays, whereas a more appropriate treatment in this case would be to amortize them over the life of the resource; further, the "carry-over provision" recommended by Mr. Michels only partly addresses this issue;
2. Mr. Michels has unreasonably reduced the amount of money available for solar rebates by including in his RRI calculation resources that should not be included according to Commission rules; and

3. It is premature, overly conservative, and inappropriate to include the unknown future cost of additional RES-related expenditures on wind in calculating the RRI during the years before such resources are constructed or procured.

2. COST ACCOUNTING FOR SOLAR REBATES

Q: How do Ameren witnesses Michels and Wright treat solar rebate costs when calculating RRI?

A: Mr. Wright states that he "added the amount of rebates already paid this year to the amount [Ameren] estimate[s] will be paid through the end of the year," (4 at 2). He "anticipate[s] the Company would pay out approximately $31 million in solar rebates in 2013" (3 at 20). Mr. Michels states that "Ameren Missouri needs to limit solar rebate funds in order to add other renewable resources" (11 at 21) in later years. Although neither witness articulates it directly, the implication is that both witnesses are describing the number of dollars paid to customers in solar rebates, and assuming that these should be considered dollar-for-dollar (analogous to treatment as expenses in rates) in calculating the rate impact.

Q: Do you believe that this is the correct way to determine the impact of solar rebates on rates? If not, please describe how you feel this impact should be calculated differently.

A: No. The solar rebate program is, in effect, procurement of long-lived resources on behalf of Ameren's customers—and thus these rebates should be financed, amortized, and funded over the life of the resource. I base this conclusion on the fact that in Missouri in particular, solar rebates are treated as resource procurement under the RES law—for example, following the recently signed and enacted House Bill No. 142 of 2013, 393.1030.3 states:

> As a condition of receiving a rebate, customers shall transfer to the electric utility all right, title, and interest in and to the renewable energy credits associated with the new or expanded solar electric system that qualified the customer for the solar rebate for a period of ten years from the date the electric utility confirmed that the

solar electric system was installed and operational. (HB 142, 11 at 88)

Ameren is making investments for the purpose of procuring Solar Renewable Energy Credits (S-RECs) for ten years; therefore, the rate impact of this procurement should be similarly spread over ten years.

Q: How are the costs of compliance with renewable portfolio standards generally passed on to ratepayers?

A: In calculating the appropriate rate treatment of costs incurred for compliance with a renewable portfolio standard (including the RES as defined under 4 CSR 240-20.100 (1)(L)), it is useful to consider the available approaches for meeting such a requirement.

In general, there are four ways to meet a portfolio standard requirement, all of which are available to Ameren and other utilities in Missouri and elsewhere.

1. The utility may use RECs produced by existing qualifying renewable resources in its portfolio, assuming these RECs have not been sold to or retired by any other party. Ameren is partly relying on this approach, using the Keokuk facility, for the non-solar portion of its RES requirement.[1]

2. The utility may self-build qualifying renewable resources, and retire the RECs produced by these new resources.

3. The utility may enter into a long-term power purchase agreement (PPA) with a new or existing qualifying resource owned by third parties, with the stipulation that the purchasing party assumes ownership of the associated RECs. Ameren is also relying in part on this approach (e.g.. the Horizon Pioneer Prairie PPA) for compliance with the Missouri RES.[2]

4. The utility may purchase RECs (or S-RECs) from other renewable energy producers or third parties independent of any energy purchases.

[1] Ameren 2013 Annual Renewable Energy Standard Compliance Plan, section (7)(B) 1 A.
[2] Ibid.

Under each of these standard approaches, the cost of the RECs is appropriately passed directly through to ratepayers much as annual fuel costs are. However, this cost (the cost of RECs) reflects the *annualized* cost of each resource; under a power purchase agreement, for example, the seller expects to recover the capital cost of the resource, with a reasonable return on equity, over the lifetime of the resource. If a resource produces energy and RECs over a 15-year period, it would be unreasonable to ask ratepayers to bear the entire cost of that resource in the first year of its operation, and it is unlikely that any regulatory authority would allow this sort of treatment in rates. Instead, the company would be required to pass through to ratepayers the cost of the energy and RECs used each year; in the case of a resource built and owned by the utility, the company would be required to finance the capital costs of the resource and pass through the amortized capital cost, along with the operating costs, over the useful life of the resource.

Indeed, 4 CSR 240-20.100 (1)(P) defines the "RES revenue requirement" as (emphasis added):

> 1. All expensed RES compliance costs (other than taxes and depreciation associated with capital projects) that are included in the electric utility's revenue requirement in the proceeding in which the RESRAM is established, continued, modified, or discontinued; and
>
> 2. **The costs (i.e., the return, taxes, and depreciation) of any capital projects whose primary purpose is to permit the electric utility to comply with any RES requirement.** The costs of such capital projects shall be those identified on the electric utility's books and records as of the last day of the test year, as updated, utilized in the proceeding in which the RESRAM is established, continued, modified, or discontinued;

This affirms not only that the Commission intended RES costs to be limited to those for projects whose primary purpose is RES compliance, but also that when compliance is achieved through long-lived assets, the cost of these should be treated as depreciable for rate calculation purposes.

If solar rebate costs are to be considered "RES compliance costs" under Missouri law, it is appropriate to give them similar rate treatment as any other RES-

compliant resource. In other words, because this cost is associated with a resource that produces energy and S-RECs for the utility over a period of 10 years, it would be most reasonable to finance and amortize the cost of these payments over 10 years. (Note that a 20 or 25 year period is more consistent with the minimum expected useful life of small-scale solar energy resources; however, because the utility receives the S-RECs for only 10 years, this is the appropriate amortization period.)

Q: Does Ameren Missouri currently charge ratepayers for RECs at the time they are acquired by the company, or at the time they are retired for compliance purposes?

A: At the time of retirement. This is evidenced by the treatment of RECs acquired through the Pioneer Prairie PPA, which exceed the RES requirement in the early years of the contract. According to Mr. Michels (16 at 10), "...those costs are only counted as an expense when the RECs are retired for compliance purposes."

Q: Were Ameren to amortize the costs of the solar rebate program over ten years, how would that impact RRI?

A: Ten-year amortization would significantly decrease the RRI of any given level of solar rebates, providing much more room for the company to provide these rebates under the 1% RRI limit. This is particularly so because of the reduced level of rebates under HB 142 as shown below.

Time Period	Solar Rebate Level under HB 142
Prior to June 30 2014	$2.00/Watt
July 1 2014 to June 30 2015	$1.50/Watt
July 1 2015 to June 30 2016	$1.00/Watt
July 1 2016 to June 30 2019	$0.50/Watt
July 1 2019 to June 30 2020	$0.25/Watt
After June 30 2020	$0.00/Watt

It is reasonable to conclude that the highest cash payments for the rebates will occur during the earlier years, when the rebates have the highest value and are the most attractive to consumers—and when those consumers most likely to take advantage of the rebates will apply for them. Ten-year amortization allows these early-year costs to be spread out into future years in terms of their impact on ratepayers.

Q: How does Ameren Witness Michels propose to limit RES compliance costs to no more than one percent in each year?

A: As Mr. Michels explains, Ameren "developed a non-renewable portfolio" called the "Baseline" (7 at 5) and "a portfolio that is RES compliant regardless of cost" called the "Unconstrained RES Portfolio" (7 at 6). Because the Unconstrained RES Portfolio is projected to have an RRI in excess of 1%, Ameren "scaled down the results…to comply with the 10-year average 1% RRI" in order to create a "Constrained RES Portfolio" (7 at 9). As a result of this method, for any given year between 2013 and 2022 the rate impact due to RES-related expenditures *in that year* may be more or less than 1% so long as the ten year average rate impact is no more than 1.0%.

Mr. Michels then proposes a "carry-over provision" (pp. 12-13) that would allow the company to "carry-over" excess costs from one year to the next, so that the rate impact each year would be no more than 1% even though actual spending might be expected to exceed 1% in any given year.

Q: How would amortization of solar rebates help to ensure that the rate impact of RES compliance will not exceed 1% in any year?

A: Amortizing the solar rebates has a similar effect to averaging for smoothing out peaks in procurement costs. However, when costs are amortized, only a portion of the costs are passed on to ratepayers each year—consistent with the benefits received in that year. If Ameren were to invest more heavily in solar rebates in a given year, the rate impact of this investment would be spread out over the entire amortization period. This would allow Ameren to make more investments in solar

rebates early, satisfying customer demand, without exceeding the 1% RRI limitation.

Q: Does Mr. Michel's proposed "carry-over provision" achieve the same goal as amortization of rebate costs?

A: Only partly. It would similarly allow the company to "front-load" rebate payments to better meet customer demand and the fact that the rebates are only available in the near term. However, there are two problems with this approach. First, the carry-over provision does not meet the principle of paying for each resource over the lifetime that it produces benefits—it results instead in an arbitrary period over which each rebate is "expensed," depending on how much headroom is available under the RRI limitation. It makes more sense to amortize the rebates over the appropriate lifetime, and then to distribute them as applied for, up to the limit imposed by the RRI limitation.

Second, Mr. Michels' calculation in Table 2 (13 at 5) may seem straightforward, but it is actually carefully constructed based on unknown future costs for resources up to a decade into the future. If those costs are misestimated, as is almost always the case for future costs, then by using his approach they artificially constrain the resources available for solar rebates today. As discussed below, it is entirely possible that wind resources can be added in Missouri in the future with a very small, zero, or even negative incremental cost. It is not reasonable to deny Ameren customers the rebates they are applying for today to reserve resources for costs that may well not materialize.

Q: Mr. Michels raises concerns about the Commission's rules for 10-year averaging of RES compliance costs with respect to the RRI limitation. Do his concerns apply to your suggestion that these costs be amortized over 10 years?

A: No. Mr. Michels notes that if the company were to rely on a 10-year, forward-looking average of RES compliance costs, a utility "could spend its entire ten-year 'budget' for RES compliance costs in the first year of each ten-year plan with

nothing thereafter" (12 at 13) and following ten successive plans, "this could result in costs that are not 1% higher than a non-renewable portfolio, but 10% higher" (12 at 15). He notes that, symmetrically, "the utility could always spend nothing in the first year of its plan based on the expectation that it would spend more money in later years," (12 at 16) resulting in "no money at all" spent on RES compliance (12 at 18).

I agree that this makes the use of a forward-looking average impractical and inconsistent with the legislature's likely intention with regard to the 1% RRI limitation. However, 10-year amortization does not present this problem. The point of amortization is to spread the costs out to a time period that is consistent with the period over which benefits are received. In years 2-10, when benefits are still being received from investments made in year 1, an appropriate share of the cost will be included in rates for each year. This is precisely why amortization is the appropriate basis for rate treatment of all long-lived utility assets.

Amortization of costs for rate treatment is the way that the goal of the legislature to have 10-year averaging can be achieved, without introducing the distortion identified by Mr. Michels. It is also the best way to ensure that the costs of the solar rebates and other RES resources are borne by the ratepayers who receive the benefits on a timescale that is consistent with those benefits.

3. RESOURCES INCLUDED IN THE RRI CALCULATION

Q: Are you familiar with the company's calculation of the 2013 RRI, leading to its application to suspend rebate payments in this case?

A: Yes. I have reviewed Mr. Michel's Schedule MM-1, entitled "2013 RES Cost Calculation – YTD August + Forecast for Rest of 2013." Mr. Michels describes this in his testimony (3 at 9) as "based on a report that Ameren Missouri uses to track its costs of compliance with the RES modified to reflect the total expected solar rebate costs for the year. The report shows each of the RES compliance cost components and their associated revenue requirement."

Q: What specific resources, other than solar rebates, are included in this accounting of RES compliance costs?

A: Included resources are the Maryland Heights landfill gas facility (referred to as "MD HTS"), GOB Solar Panels, and RECs from Pioneer Prairie Wind. Some additional costs, such as the RES website and certain labor costs, are also included.

Q: Is it appropriate to include the Pioneer Prairie Power Purchase Agreement (PPA) as an RES compliance cost for the purposes of the RRI calculation?

A: No. 4 CSR 240-20.100 (5)(A) is unambiguous in this regard: "the retail rate impact, as calculated in subsection (5)(B)… shall exclude renewable energy resources owned or under contract prior to the effective date of this rule." Ameren announced the acquisition of the PPA in June 2009;[3] 4 CSR 240-20.100 (5)(A) came into effect September 30, 2010.

According to Mr. Michels, "Ameren Missouri is requesting a variance to include the REC costs portion of this PPA in the RRI calculation" (14 at 12). This waiver has not been granted, and had not as of the date of the filing, so the inclusion of this resource in the RRI calculation was premature at best.

Q: According to Ameren witnesses Michels, what are the Maryland Heights Renewable Energy Center's 2013 contributions to the RRI calculations?

A: Mr. Michel's exhibit MM-1 lists a number of RES cost calculations attributable to the Maryland Heights Renewable Energy Center (MD HTS) in 2013, including

- MD HTS rate base [redacted],
- Maryland HTS Fuel [redacted],
- MD HTS labor & benefits & payroll taxes [redacted],

[3] PRNewswire, *Horizon Wind Energy Signs Power Purchase Agreement with AmerenUE*, June 18 2009. http://www.reuters.com/article/2009/06/18/idUS142719+18-Jun-2009+PRN20090618

- MD HTS other O&M [redacted],
- MD HTS Other [redacted],
- MD HTS Other Taxes – Property [redacted], and
- MD HTS Total Energy Benefits [redacted].

This results in a total of [redacted] being claimed as RES compliance cost—that is, the total cost of every aspect of the facility [redacted] of which [redacted] is for energy, and [redacted], is the cost of RECs to be used for RES compliance.

Q: How many renewable energy credits is MD HTS expected to generate in 2013?

A: According to page 7 of Ameren Missouri's *Renewable Energy Standard Compliance Plan 2013-2015*, the MD HTS facility is expected to provide approximately 96,000 RECs.

Q: What is the cost, per REC, of the renewable energy generated by MD HTS?

A: The costs for RECs calculated above, divided by the 96,000 RECs, yields a cost of about [redacted] per REC.

Q: In your opinion, would this be a reasonable price for Ameren to pay for RECs for the purpose of RES compliance?

A: No, this is an extremely high price for RECs in the region. It is hard to know exactly what Ameren would have to pay to purchase RECs on the market, because many REC transactions in the region are confidential, bilateral contracts. However, one indicator is the price that Ameren itself charges customers for RECs.

Ameren Missouri's Pure Power program sells "1,000 kilowatt hour (kWh) blocks [for customers] to buy each month. Each block costs $10, and customers can

purchase as many blocks as they want."[4] A 1,000 kWh "block" is exactly one REC. If Ameren Missouri is able to sell RECs to their customers for $10 each, surely the company is able to acquire them for no more than that price. I do not believe it would be prudent for Ameren to purchase RECs for [redacted] each and sell them for $10.

Q: Is it appropriate to include nearly seven million dollars of MD HTS costs in the 2013 RRI calculation?

A: No. 4 CSR 240-20.100(1)(N) states that "RES compliance costs means prudently incurred costs, both capital and expense, directly related to compliance with the Renewable Energy Standard." Because Ameren Missouri can obtain RECs at a price no higher than $10 each, it would not represent "prudently incurred costs" to pay almost [redacted] per REC in order to comply with the RES.

Q: Are you suggesting that the construction and operation of Maryland Heights is imprudent?

A: Not necessarily. I have not reviewed the process by which the decision to invest in Maryland Heights was made, nor the considerations that led to that decision. The benefits this resource provides can be divided into two categories: the portion which can be attributed to "least-cost non-renewable resources," (4 CSR 240-20.100(5)(B)), and the RES compliance costs defined by 4 CSR 240-20.100(1)(N). Because prudent RES compliance in 2013 costs no more than $10 per REC, I believe that only this portion of the costs should be included in the RRI calculation for the RES. Ameren errs in including costs in the RRI calculation that should instead be attributed to "least-cost non-renewable resources," or to some driver of resource procurement that is distinct from the RES.

[4] http://www.ameren.com/sites/aue/Environment/PurePower/Pages/FAQs.aspx Friday October 25, 2013, 12:01 pm.

At the "prudently incurred" level of $10 per REC, the Maryland Heights facility should be contributing a total of approximately $960,000 to the 2013 RRI calculation.

Q: What would be the impact of including $960,000 of Maryland Heights costs in the RRI calculation rather than [redacted]?

A: Had Ameren included $960,000 rather than [redacted], there would be an additional [redacted] more available for other RES-related expenditures, such as REC acquisition or payment of solar rebates.

4. Treatment of Future Wind Projects

Q: Does Mr. Michels describe how future wind projects are included in Ameren's proposed RRI calculation method?

A: Yes. Mr. Michels details how Ameren "developed a portfolio that included enough resources to comply with the RES requirements" (9 at 21) and then "scale[d] the spending to not exceed" the budget under the RRI limitation (10 at 16). He later asserts that "Ameren Missouri needs to limit solar rebate funds in order to add other renewable resources in 2018 and beyond." (11 at 21)

Q: What are the consequences if Ameren's estimated cost projection for future resources is too high?

A: If Ameren Missouri's cost projections for 208 MW of wind to be acquired in 2018 (Michels, Table 1) turn out to be too high, the company will have needlessly and inappropriately restricted the availability of solar rebates in the years prior to 2018. Due to the uncertainty of how RRI calculations will ultimately be treated with respect to the "succeeding ten (10)-year period" detailed in 4 CSR 240-20.100 (5)(A), and because of the phase-out of rebates under H.B. 142, this restriction of solar rebate availability may never be fully remedied. Consequently, Ameren could fail to provide the solar rebates as required under Proposition C and H.B. 142, despite having ample headroom under the one percent RRI limitation.

Q: How should Ameren treat future wind projects?

A: The appropriate treatment is for the "cost" side of the RRI calculation to include the portion of current and past RES-related expenditures that are included in rates—in this case, the cost of rebates amortized over 10 years. Once new expenditures are made (such as on future wind resources procured for the purpose of compliance with the Missouri RES) then those costs should be amortized and included in rates over the useful life of that asset. The impact of these costs, if any, will not be felt by ratepayers prior to that time—thus there is no reason these speculative, future resource costs should be used to displace solar rebates from which Ameren customers could be benefitting today.

To be clear, I am not arguing that solar rebates should somehow be given preferential treatment over wind or other renewable resources—it is clear from both 2008 Proposition C and form HB 142 that Missouri has a stated public interest in both least-cost renewable energy including wind and landfill gas (the RES mandate), and in supporting the development of distributed solar resources and a robust solar industry through the rebate program. My point is merely that the company's need for and cost of future renewable resources to meet the RES is speculative—such resources present no cost to ratepayers today, and may present little or no cost in the future. In any case, no costs for wind will be incurred before the solar rebates will be largely or completely phased out under the terms of HB 142, and even then the requirement might be met, for example, with low-cost RECs purchased from out of state. The fact that existing wind resources have recently been selected by other Missouri utilities based on economics suggests that future RES mandates may be met without imposing any additional costs on ratepayers as well.

5. RECOMMENDATIONS FOR THE COMMISSION

Q: Given your opinions and conclusions on the matters addressed in this rebuttal testimony, what are your recommendations for the Commission in this matter?

A: I recommend that the Commission reject Ameren's petition to suspend payment of solar rebates. I further recommend that the Commission direct Ameren to revise its approach to calculating the ratepayer impact of procuring RES-compliant resources, including solar rebates, by amortizing all costs over the lifetime that each resource provides benefits to Ameren and its customers. In the case of solar rebates, this should be the 10-year period over which each resource provides solar RECs to the company.

I further recommend that Ameren be directed to recalculate the RES compliance costs to be included under the RRI limitation by (a) removing the Prairie Wind PPA, which clearly does not meet the criteria for inclusion because it was contracted prior to the effective date of the rule and no waiver from this requirement has been granted; and (b) recalculate the "RES compliance costs" portion of Maryland Heights landfill gas project to more closely reflect the "prudently incurred costs…directly related to compliance with the Renewable Energy Standard"(4 CSR 240-20.100(1)(N)). A reasonable standard for the costs that should be included under the RRI is the market value of the RECs produced by this project, or no more than $10 per REC.

I further recommend that in calculating the allowable spending under the RRI limitation, Ameren not be allowed to include speculative future costs of resources that are not yet producing benefits for the company or its customers, such as the cost of wind resources that are expected to be procured or built several years in the future. Using correctly amortized costs of existing resources, and resources under consideration for procurement today, will enable the company to most accurately and appropriately provide benefits to customers while observing the RRI limitation year-by-year. At the future date when additional resources are

needed and costs are known, the company will be able to make the best decision on how to comply with the RES mandate and the RRI limitation for that future year.

Finally, I recommend that whether or not it determines that solar rebate costs should be amortized, the Commission allow Ameren to pay this aggregate amount of solar rebates "front-loaded" in the early years, in recognition of the step-down in rebate value under HB 142. This will best meet the goals of the voters as expressed through Proposition C, and of solar rebate applicants, while minimizing the impact on the solar industry in Missouri.

Q: Does this conclude your rebuttal testimony?

A: Yes.