Exhibit No.:

Issues: Support for Non-Unanimous

Stipulation and Agreement

Witness: Martin R. Hyman

Sponsoring Party: Missouri Department of Economic

Development – Division of Energy

Type of Exhibit: Surrebuttal Testimony

Case Nos.: ET-2018-0063

#### MISSOURI PUBLIC SERVICE COMMISSION

#### UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI

**CASE NO. ET-2018-0063** 

#### **SURREBUTTAL TESTIMONY**

**OF** 

**MARTIN R. HYMAN** 

ON

#### **BEHALF OF**

### MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT

#### **DIVISION OF ENERGY**

Jefferson City, Missouri June 8, 2018

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

Electric Company d/b/a Ameren Missouri for Approval of 2017 Green Tariff  Case No. ET-2018-0063  )			
AFFIDAVIT OF MARTIN HYMAN			
ST	TATE OF MISSOURI )		
CO	OUNTY OF COLE ) ss		
	Martin R. Hyman, of lawful age, being duly sworn on his oath, deposes and states:		
1.	My name is Martin R. Hyman. I work in the City of Jefferson, Missouri, and I am employed		
	by the Missouri Department of Economic Development as a Planner III, Division of Energy.		
2.	Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on		
	behalf of the Missouri Department of Economic Development – Division of Energy.		
3.	I hereby swear and affirm that my answers contained in the attached testimony to the		
	questions therein propounded are true and correct to the best of my knowledge.  Martin R. Hyman		
Subscribed and sworn to before me this 8 <sup>th</sup> day of June, 2018.			
	Notary Public		
M	y commission expires: December 13, 2019  MELANIE K. BAX Notary Public - Notary Seal State of Missouri Commissioned for Osage County My Commission Expires: December 13, 2019 Commission Number: 15638889		

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#### I. INTRODUCTION

A.

- 2 Q. Please state your name and business address.
- A. My name is Martin R. Hyman. My business address is 301 West High Street, Suite 720,
   PO Box 1766, Jefferson City, Missouri 65102.
- 5 Q. By whom and in what capacity are you employed?
- A. I am employed by the Missouri Department of Economic Development Division of Energy ("DE") as a Planner III.
  - Q. Please describe your educational background and employment experience.
    - In 2011, I graduated from the School of Public and Environmental Affairs at Indiana University in Bloomington with a Master of Public Affairs and a Master of Science in Environmental Science. There, I worked as a graduate assistant, primarily investigating issues surrounding energy-related funding under the American Recovery and Reinvestment Act of 2009. I also worked as a teaching assistant in graduate school and interned at the White House Council on Environmental Quality in the summer of 2011. I began employment with DE in September, 2014. Prior to that, I worked as a contractor for the U.S. Environmental Protection Agency to coordinate intra-agency modeling discussions. Since joining DE, I have been involved in a number of utility cases and other proceedings before the Missouri Public Service Commission ("Commission") as DE's lead policy witness, as well as legislative issues and the process that resulted in the Comprehensive State Energy Plan ("CSEP"). Topics that I address as a part of my workload include rate design, demand-side programs, information on in-state energy resources, renewable energy, electric vehicles, and grid modernization.

- Q. Have you previously filed testimony before the Commission on behalf of DE or any other party?
  - A. Yes. Please see Schedule MRH-Sur1 for a summary of my case participation.

#### 4 II. PURPOSE AND SUMMARY OF TESTIMONY

#### Q. What is the purpose of your Surrebuttal Testimony in this proceeding?

A. The purpose of my testimony is to respond to the Rebuttal Testimony filed by the Office of the Public Counsel ("OPC") witness Dr. Geoff Marke. My Surrebuttal Testimony also discusses the Non-Unanimous Stipulation and Agreement ("Stipulation") signed in this case by DE, Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri" or "Company"), the Commission Staff, Walmart Inc. ("Walmart"), the Missouri Industrial Energy Consumers ("MIEC"), Wind on the Wires, the Natural Resources Defense Council, the Sierra Club, and Renew Missouri Advocates d/b/a Renew Missouri (collectively, the "Signatories").<sup>1</sup>

DE supports the Stipulation because it provides large energy users and governmental entities with the timely option to purchase renewable energy and receive the associated Renewable Energy Credits ("RECs") in order to meet their renewable energy goals. Enabling such purchases through Ameren Missouri supports business retention, expansion, and attraction and improves the likelihood that Ameren Missouri can improve system utilization, which benefits all customers through reduced rates. To the extent that Ameren Missouri constructs or contracts with wind farms in the state of Missouri, there will be

<sup>&</sup>lt;sup>1</sup> Missouri Public Service Commission Case No. ET-2018-0063, *In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of 2017 Green Tariff*, Non-Unanimous Stipulation and Agreement, April 13, 2018.

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additional economic development benefits, including job creation. DE recommends that
the Commission approve the Stipulation.

#### III. OVERVIEW OF STIPULATION

- Q. Please provide a description of the Non-Unanimous Stipulation and Agreement filed on April 13, 2018.
- A. The Stipulation regarding Ameren Missouri's "Renewable Choice Program" and the associated Renewable Choice Rider allow certain types of customers to subscribe to all or parts of a "block" of wind energy in amounts up to 100 percent of their annual usage.<sup>2</sup>

  Under this "green tariff" program, customers would pay a set price for the wind energy,<sup>3</sup> and would also be responsible for a bill credit or surcharge based on revenues from market sales of the wind energy;<sup>4</sup> RECs would be retired on behalf of participating customers, which is necessary for the customers to claim the renewable energy attribute signified by the REC.<sup>5</sup> All other standard rate elements would apply for participants.<sup>6</sup>

#### Q. Which customers are eligible to participate?

A. Customers served under the Company's Large General Service Rate 3 (M), Small Primary Service Rate 4 (M), or Large Primary Service Rate 11 (M) may participate so long as they have an aggregate load of at least 2.5 megawatts ("MW") based on annual billing demand.

The demand may be met by aggregating multiple meters for a single eligible non-

<sup>&</sup>lt;sup>2</sup> *Ibid*, Exhibit A, Sheet No. 94.3.

<sup>&</sup>lt;sup>3</sup> *Ibid*, page 4-6.

<sup>&</sup>lt;sup>4</sup> *Ibid*, Exhibit A, Sheet Nos. 94 and 94.5.

<sup>&</sup>lt;sup>5</sup> *Ibid*, Exhibit A, Sheet No. 94.5.

<sup>&</sup>lt;sup>6</sup> Ibid.

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governmental entity. Governmental entities, as defined in the tariff, may participate without any minimum load requirements.<sup>7</sup>

#### Q. What subscription lengths will be available?

A. For the initial blocks of available renewable energy, customers will be able to subscribe for a term of 15 years. Subsequently available blocks may have subscription options of 5 or 10 years as well, depending on what projects Ameren Missouri can acquire in the marketplace.

#### Q. How much wind energy might be supported under this tariff?

A. Up to 400 MW of wind energy might be supported by customers participating in this program. <sup>10</sup> Additionally, if the program is fully subscribed prior to its expiration, the Company has agreed to work with the Signatories and interested eligible customers to discuss potential program expansion or modification. <sup>11</sup>

#### Q. Are there other states with this type of program?

A. Yes. Utilities in other states have pursued – and, in some cases, received approval of – green tariff-style arrangements. Such proposals have occurred in states with vertically integrated, regulated electric utilities, such as North Carolina and the state of Washington. <sup>12</sup>

<sup>&</sup>lt;sup>7</sup> *Ibid*, Exhibit A, Sheet No. 94.3.

<sup>&</sup>lt;sup>8</sup> *Ibid*, Exhibit A, Sheet No. 94.

<sup>&</sup>lt;sup>9</sup> *Ibid*, pages 13-14.

<sup>&</sup>lt;sup>10</sup> *Ibid*, Exhibit A, Sheet No. 94.7.

<sup>&</sup>lt;sup>11</sup> *Ibid*, page 15.

<sup>&</sup>lt;sup>12</sup> World Resources Institute. 2017. "U.S. Renewable Energy Map: A Guide for Corporate Buyers." http://www.wri.org/resources/maps/us-re-corporate-buyers-map.

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#### IV. PROGRAM BENEFITS

#### Q. Is there corporate interest in purchasing renewable energy?

- A. Yes. The CSEP notes the emergence of corporate interest in renewable energy with the creation of the Corporate Renewable Energy Buyers' Principles ("Buyers' Principles"). These Buyers' Principles have been signed by Walmart, Target, Bloomberg, General Motors, IKEA, Procter & Gamble, Intel, Sprint, and many other companies. 13 The Buyers' Principles include six criteria:
  - a. Greater choice in procurement options;
  - b. More access to cost-competitive options;
  - c. Longer- and variable-term contracts;
  - d. Access to new projects that reduce emissions beyond business as usual;
  - e. Increased access to third-party financing vehicles, as well as standardized and simplified processes, contracts, and financing for renewable energy projects; and,
  - f. Opportunities to work with utilities and regulators to expand choices for buying renewable energy.<sup>14</sup>

The CSEP states that, "Efforts to help Missouri utilities further diversify their portfolios and increase options for renewable power purchasing coupled with low energy prices will ensure our businesses are well positioned to meet future competition." The CSEP also notes that, "As major companies adopt corporate responsibility and renewable purchasing

<sup>15</sup> CSEP, page 178.

<sup>&</sup>lt;sup>13</sup> Missouri Department of Economic Development – Division of Energy. 2015. *Missouri Comprehensive State Energy Plan* ("CSEP"). <a href="https://energy.mo.gov/sites/energy/files/MCSEP.pdf">https://energy.mo.gov/sites/energy/files/MCSEP.pdf</a>. Page 178.

<sup>&</sup>lt;sup>14</sup> World Resources Institute and World Wildlife Fund. Undated. "The Principles." *Corporate Renewable Energy Buyers' Principles*. <a href="http://buyersprinciples.org/principles/">http://buyersprinciples.org/principles/</a>.

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requirements, Missouri businesses will need to be prepared to respond to customer demands to remain competitive. Even government entities such as local cities with emissions reduction targets and the U.S. Department of Defense have established sustainability goals."<sup>16</sup> As recently as August of 2016, support for renewable energy was communicated through letters from interested companies (General Mills, General Motors, Kellogg's, Nestlé, Procter & Gamble, Target, Unilever, General Electric, and Owens Corning).<sup>17</sup>

#### Q. Have any representatives of large customers signed the Stipulation in this case?

A. Yes. Both Walmart and MIEC are Signatories. Walmart witness Mr. Steve W. Chriss filed Supplemental Direct Testimony in support of the Stipulation, <sup>18</sup> noting that the retailer – which employs 42,000 Missourians <sup>19</sup> – has established a goal to meet half of its energy supply with renewable energy by 2025, with an eventual goal of meeting all of its needs through renewable energy. <sup>20</sup>

# Q. From an economic development perspective, why is corporate interest in renewable energy important?

A. Corporate interest in renewable energy is one of many considerations in supporting business retention, attraction, and expansion. Programs such as the Renewable Choice

<sup>17</sup> Missouri Public Service Commission Case No. EA-2016-0358, In the Matter of the Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity Authorizing it to Construct, Own, Operate, Control, Manage and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood-Montgomery 345kV Transmission Line, Direct Testimony of Michael P. Skelly on Behalf of Grain Belt Express Clean Line LLC, August 30, 2016, Schedule MPS-3.

<sup>&</sup>lt;sup>16</sup> *Ibid*, page 185.

<sup>&</sup>lt;sup>18</sup> Missouri Public Service Commission Case No. ET-2018-0063, *In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of 2017 Green Tariff*, Supplemental Direct Testimony and Exhibits of Steve W. Chriss on Behalf of Walmart Inc., April 27, 2018, page 7, lines 8-12.

<sup>&</sup>lt;sup>19</sup> *Ibid*, page 2, lines 20-21.

<sup>&</sup>lt;sup>20</sup> *Ibid*, page 3, lines 9-12.

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Program can be important tools for creating a business-friendly environment, both from the standpoint of supporting corporate renewable energy goals, which may be demonstrative of corporate environmental consciousness, and in order to enable businesses to have greater control over their energy costs, supporting marketplace competitiveness. As the cost of wind energy continues to decline, it will become an even more attractive option for businesses to limit their exposure to energy price increases.

#### Q. Is there interest in renewable energy on the part of local governments?

A. Yes. As Ameren Missouri notes in the Direct Testimony accompanying the initial filing in this case, <sup>21</sup> local government interest in renewable energy has also increased; St. Louis is among these localities. <sup>22</sup> Providing local governments with access to renewable energy is important both for allowing these localities to meet their own sustainability goals and for attracting businesses interested in sustainability. St. Louis is but one governmental example in the state of Missouri that is pursuing renewable energy, along with Columbia<sup>23</sup> and Kansas City. <sup>24</sup>

#### Q. How else can green tariffs provide economic development benefits?

A. By supporting business retention, expansion, and attraction, green tariffs help utilities improve system utilization. This promotes affordable electricity rates for all customers by

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<sup>&</sup>lt;sup>21</sup> Missouri Public Service Commission Case No. ET-2018-0063, *In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of 2017 Green Tariff*, Direct Testimony of Steven M. Wills on Behalf of Union Electric Company d/b/a Ameren Missouri, November 27, 2017, page 5, lines 1-7.

<sup>&</sup>lt;sup>22</sup> Gray, Bryce. 2017. "Aldermen pass resolution for St. Louis to pursue 100 percent clean energy by 2035." *St. Louis Post-Dispatch*. October 27. <a href="http://www.stltoday.com/business/local/aldermen-pass-resolution-for-st-louis-to-pursue-percent-clean/article">http://www.stltoday.com/business/local/aldermen-pass-resolution-for-st-louis-to-pursue-percent-clean/article</a> 3dcd5d0c-38c6-5d10-ba7e-4a76b2f4ecff.html.

<sup>&</sup>lt;sup>23</sup> City of Columbia Utilities. 2018. "Renewable Energy Portfolio." <a href="https://www.como.gov/utilities/water-and-light/electric/renewable-energy-portfolio/">https://www.como.gov/utilities/water-and-light/electric/renewable-energy-portfolio/</a>.

<sup>&</sup>lt;sup>24</sup> City of Kansas City, Mo. 2017. "Resolution No. 170586, as amended." http://cityclerk.kcmo.org/LiveWeb/Documents/Document.aspx?q=DfoUSXu7pUSJTU5A5Zt%2FoWqkjtNDkyUIa Nl6mdOfwqYjGvJHb50FjMIZ0GCwrJvx.

spreading cost recovery over the same or greater number of billing units. Absent a green tariff program, there is the potential for negative economic development impacts due to the loss of load. If utilities are unable to respond to and/or sufficiently meet the green generation demands of customers, including large Missouri employers, they bear the risk of losing load. The costs of such load loss would be borne by the remaining ratepayers. Additionally, to the extent that green tariffs lead to in-state wind farm development, there are economic benefits from job creation, payments to landowners, tax revenues, and supply-chain economic participation and growth. The Stipulation includes a provision under which, "All else being equal, utilization of in-state resources shall be preferred." This provision preserves the possibilities for future economic opportunity in Missouri.

- Q. How are non-participants protected and potential impacts accounted for under the Stipulation?
- A. There are a number of mechanisms to reduce such risks. These include limiting the amount of capacity that the Company can own under the program, an Administrative Cost Recovery Component, a risk premium, a provision to address undersubscription of capacity, regulatory asset/liability treatment for differences in net costs and revenues (including effects from program undersubscription), a regulatory liability encompassing shares of Production Tax Credits ("PTCs"), and sharing of program Termination Fees under certain circumstances.<sup>26</sup>

<sup>&</sup>lt;sup>25</sup> ET-2018-0063, Stipulation, page 13.

<sup>&</sup>lt;sup>26</sup> *Ibid*, pages 6-7 and 8-11.

- Q. Earlier, you noted the declining costs of wind energy. Why is now a good time to pursue the Renewable Choice Program?
- A. The availability of PTCs will soon begin to decline. PTCs lower the costs of wind projects by providing tax credits based on the amount of energy produced at a wind farm. For projects constructed by the end of 2020 that met Internal Revenue Service Requirements for a construction start date prior to the end of 2016, wind developers can receive the full value of the PTCs. The value of PTCs declines for projects begun in subsequent years, with no more PTCs for wind projects beginning construction after 2019.<sup>27</sup> Therefore, it is important that Ameren Missouri have the ability to take advantage of the PTCs in a timely manner so that the Company can offer the best value to potential participants.

#### V. RESPONSE TO OFFICE OF THE PUBLIC COUNSEL

Q. Are there any aspects of Dr. Marke's testimony with which you agree?

A. Yes. DE supports developing a reasonable set of Frequently Asked Questions for prospective participants. <sup>28</sup> This is consistent with recommendation 4.2 in the CSEP, "Clarifying Green Power Purchasing." Generally, this CSEP recommendation supports creating transparency in utility tariff offerings in order to improve customers' decision-making abilities. <sup>29</sup> In fact, the Stipulation even contemplates creating such information for customers. <sup>30</sup>

<sup>&</sup>lt;sup>27</sup> U.S. Department of Energy. Undated. "Renewable Electricity Production Tax Credit (PTC)." https://www.energy.gov/savings/renewable-electricity-production-tax-credit-ptc.

<sup>&</sup>lt;sup>28</sup> Missouri Public Service Commission Case No. ET-2018-0063, *In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of 2017 Green Tariff*, Rebuttal Testimony of Geoff Marke Submitted on Behalf of the Office of the Public Counsel, May 18, 2018, page 13, lines 6-8.
<sup>29</sup> CSEP, page 239.

<sup>&</sup>lt;sup>30</sup> ET-2018-0063, Stipulation, page 15.

A.

#### Q. What is your general response to the majority of Dr. Marke's testimony?

Dr. Marke raises many points for consideration, although I do not agree that all of them must be addressed in this setting. For example, the Commission's purview does not generally extend to the wildlife permitting conditions provided in his testimony;<sup>31</sup> these questions should be handled by the federal and/or state agencies with purview over such construction and operations matters.

Furthermore, some of his points paint an incomplete and/or questionable picture of economic and regulatory circumstances. For example, his concern about the financial conditions and future viability of corporate customers seems misplaced; <sup>32</sup> Procter & Gamble, for instance, has been in business for approximately 180 years. <sup>33</sup> While Dr. Marke sites a statistic such that, "... the typical company lasts about ten years before it's bought out, merges, or gets liquidated," <sup>34</sup> he does not address the possibility that a future acquiring company may have even more stringent renewable energy goals than the entity being acquired. In addition, a key question regarding Dr. Marke's concern about corporate mortality in Missouri is whether Missouri's renewable energy policies, and particularly Ameren Missouri's present proposal, would be hampered because of his concerns over Missouri's future business viability. In fact, the opposite is probably true, such that renewable energy offerings in the state of Missouri may attract, retain, and sustain viable commerce, which benefits all concerned.

<sup>&</sup>lt;sup>31</sup> ET-2018-0063, Marke Rebuttal, pages 15-16, lines 13-23 and 1-22.

<sup>&</sup>lt;sup>32</sup> *Ibid*, pages 12-13, lines 6-23 and 1.

<sup>&</sup>lt;sup>33</sup> Procter & Gamble. 2018. "Heritage – Who We Are." https://us.pg.com/who-we-are/heritage.

<sup>&</sup>lt;sup>34</sup> ET-2018-0063, Marke Rebuttal, page 12, lines 16-20.

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I also disagree with the premise that customers might have to pursue power purchase agreements for renewable energy with non-incumbent entities.<sup>35</sup> To prevent an investor-owned utility from meeting business customers' evolving needs could reduce how attractive Missouri appears for business retention, expansion, and attraction. Part of the Commission's role in regulating utilities has historically been to protect the public interest, and hampering economic opportunities for Missouri's businesses would not serve the state's economic development goals. Additionally, policies that limit renewable energy purchasing options may make Ameren Missouri's territory a less desirable location for businesses, which may raise rates for the remaining customers.

- Q. Dr. Marke notes a legislative proposal that would have created a moratorium on wind farm development.<sup>36</sup> Did this bill pass?
- 12 A. No.<sup>37</sup>
  - VI. CONCLUSIONS
  - Q. Please summarize your conclusions and the positions of DE.
  - A. The Renewable Choice Program, as provided for in the Stipulation, is a timely program that will support business retention, expansion, and attraction by providing large customers and governmental entities with the ability to purchase wind energy and receive the associated RECs. DE recommends Commission approval of the Stipulation.

<sup>&</sup>lt;sup>35</sup> *Ibid*, page 17, lines 4-9.

<sup>&</sup>lt;sup>36</sup> *Ibid*, page 16, lines 23-26 and Schedule GM-2.

<sup>&</sup>lt;sup>37</sup> Missouri House of Representatives. 2018. "HB 2634."

https://house.mo.gov/Bill.aspx?bill=HB2634&year=2018&code=R.

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- In response to OPC's Rebuttal Testimony, I discussed how many of Dr. Marke's concerns are either not pertinent to the current setting or have no foundation. His statements should not be considered as bases for rejecting the Stipulation.
- 4 Q. Does this conclude your Surrebuttal Testimony?
- 5 A. Yes.