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Issues: Energy Efficiency; Renewable  
Energy  
Witness: Martin Hyman  
Sponsoring Party: Missouri Department of Economic  
Development – Division of Energy  
Type of Exhibit: Rebuttal Testimony  
Case Nos.: EM-2016-0213

**MISSOURI PUBLIC SERVICE COMMISSION**

**THE EMPIRE DISTRICT ELECTRIC COMPANY**

**LIBERTY UTILITIES (CENTRAL) CO.**

**LIBERTY SUB CORP.**

**CASE NO. EM-2016-0213**

**REBUTTAL TESTIMONY**

**OF**

**MARTIN R. HYMAN**

**ON**

**BEHALF OF**

**MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT**

**DVISION OF ENERGY**

Jefferson City, Missouri

July 20, 2016

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


In The Matter of the Joint Application        )  
Of the Empire District Electric Company,    )  
Liberty Utilities (Central) Co., and         )       File No. EM-2016-0213  
Liberty Sub Corp. for Approval of an        )  
Agreement and Plan of Merger and         )  
For Other Related Relief                    )

**AFFIDAVIT OF MARTIN HYMAN**

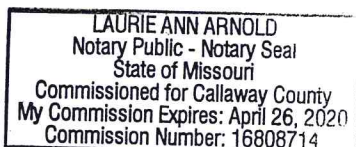
**STATE OF MISSOURI**                    )  
  )       ss  
**COUNTY OF COLE**                    )


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 Rebuttal 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 20<sup>th</sup> day of July, 2016.



  
\_\_\_\_\_  
Notary Public

My commission expires: 4/26/20

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1 **I. INTRODUCTION**

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

3 A. My name is Martin R. Hyman. My business address is 301 West High Street, Suite 720,  
4 PO Box 1766, Jefferson City, Missouri 65102.

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

6 A. I am employed by the Missouri Department of Economic Development – Division of  
7 Energy (“DE”) as a Planner III.

8 **Q. Please describe your educational background and employment experience.**

9 A. In 2011, I graduated from the School of Public and Environmental Affairs at Indiana  
10 University in Bloomington with a Master of Public Affairs and a Master of Science in  
11 Environmental Science. There, I worked as a graduate assistant, primarily investigating  
12 issues surrounding energy-related funding under the American Recovery and  
13 Reinvestment Act of 2009. I also worked as a teaching assistant in graduate school and  
14 interned at the White House Council on Environmental Quality in the summer of 2011. I  
15 began employment with DE in September, 2014. Prior to that, I worked as a contractor  
16 for the U.S. Environmental Protection Agency to coordinate intra-agency modeling  
17 discussions.

18 **Q. Have you previously filed testimony before the Missouri Public Service Commission**  
19 **(“Commission”) on behalf of DE or any other party?**

20 A. Yes. I submitted testimony in EO-2015-0055 on behalf of DE regarding Union Electric  
21 Company d/b/a Ameren Missouri’s proposed Cycle II portfolio under the Missouri  
22 Energy Efficiency Investment Act. I also submitted testimony on behalf of DE in ER-  
23 2014-0370 regarding Kansas City Power & Light Company’s proposed changes to its

1 customer charges and time-differentiated rates, as well as testimony regarding that  
2 company's proposals for the Clean Charge Network. In WR-2015-0301 and SR-2015-  
3 0302, I submitted testimony on behalf of DE regarding Missouri-American Water  
4 Company's and the Commission Staff's ("Staff") rate design proposals and in order to  
5 propose a demand-side efficiency mechanism. I provided "live" testimony on behalf of  
6 DE in EA-2015-0256 in support of KCP&L Greater Missouri Operations Company's  
7 application for a Certificate of Convenience and Necessity to construct its Greenwood  
8 solar facility. Most recently, I submitted testimony on behalf of DE in ER-2016-0023  
9 regarding The Empire District Electric Company's ("EDE") demand-side management  
10 ("DSM") portfolio, EDE's and Staff's proposed residential rate designs, and the need for  
11 a working docket on residential rate design.

12 **II. PURPOSE AND SUMMARY OF TESTIMONY**

13 **Q. What is the purpose of your Rebuttal Testimony in this proceeding?**

14 A. The purpose of my Rebuttal Testimony is to respond to the Direct Testimony filed by  
15 witnesses for EDE, Liberty Utilities (Central) Co. ("LU Central"), and Liberty Sub Corp.  
16 (collectively, "Applicants") in EM-2016-0213. Specifically, I discuss the Commission's  
17 regulatory standards for merger applications and then indicate what DE hopes will result  
18 from this merger. Specifically, DE supports a commitment by the Applicants to the  
19 following:

- 20 1. Continued progress towards a larger, increasingly effective DSM portfolio by  
21 EDE;

- 1           2. The use of LU Central parent company Algonquin Power & Utilities Corp.’s  
2           (“Algonquin”) expertise and resources in considering the development of  
3           renewable energy resources for EDE; and,  
4           3. Initiatives to facilitate the deployment of combined heat and power (“CHP”) and  
5           microgrids in EDE’s service territory.

6 **Q. Have the Applicants addressed these issues in an agreement?**

7 A. Yes. DE has entered into a stipulation and agreement with the Applicants and Earth  
8 Island Institute d/b/a Renew Missouri (“Renew Missouri”) resolving these issues.<sup>1</sup> DE  
9 requests that the Commission approve the *Stipulation and Agreement as to Division of*  
10 *Energy and Renew Missouri*.

11 **III. COMMISSION STANDARDS FOR MERGER APPLICATIONS**

12 **Q. What are the Commission’s regulatory standards for merger applications?**

13 A. The Commission’s regulatory standards for electric, gas, and water company merger  
14 applications are found at 4 CSR 240-3.115 (Filing Requirements for Electric Utility  
15 Applications for Authority to Merge or Consolidate), 4 CSR 240-3.215 (Filing  
16 Requirements for Gas Utility Applications for Authority to Merge or Consolidate), and 4  
17 CSR 240-3.610 (Filing Requirements for Water Utility Applications for Authority to  
18 Merge or Consolidate), respectively. All three rules contain similar requirements,  
19 including a mandate for applications to include, “The reasons the proposed merger is **not**

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<sup>1</sup> Missouri Public Service Commission Case No. EM-2016-0213, *In The Matter of the Joint Application of the Empire District Electric Company, Liberty Utilities (Central) Co., and Liberty Sub Corp. for Approval of an Agreement and Plan of Merger and For Other Related Relief, Stipulation and Agreement as to Division of Energy and Renew Missouri*, July 19, 2016.

1           **detrimental** to the public interest” (emphasis added) (4 CSR 240-3.115(1)(D), 4 CSR  
2           240-3.215(1)(D), and 4 CSR 240-3.610(1)(D)).

3           **Q. How does DE view the “not detrimental” standard in the context of this merger**  
4           **application?**

5           A. As further discussed below, EDE recently committed to continue and strengthen its DSM  
6           portfolio, and Algonquin has experience with renewable energy resource development.  
7           DE views this application as an opportunity for the Applicants to increase their  
8           commitments to energy efficiency and renewable energy, solidifying the case so that  
9           there will be no detriment to the public interest resulting from this merger.

10           **IV. ENERGY EFFICIENCY**

11           **Q. Do the Applicants explicitly discuss (or provide details regarding) demand-side**  
12           **management or energy efficiency in their testimonies?**

13           A. No.

14           **Q. Are there direct public policy statements in Missouri law with regard to promoting**  
15           **energy efficiency?**

16           A. Yes. The Missouri Energy Efficiency Investment Act (“MEEIA”) states at §393.1075.3,  
17           RSMo. that, “It shall be the policy of the state to value demand-side investments equal to  
18           traditional investments in supply and delivery infrastructure ....” Furthermore,  
19           §393.1040, RSMo. (which predates MEEIA) states:

20                     In addition to the renewable energy objectives set forth in sections 393.1025,  
21                     393.1030, and 393.1035, it is also the policy of this state to **encourage electrical**  
22                     **corporations to develop and administer energy efficiency initiatives** that

1                   reduce the annual growth in energy consumption and the need to build additional  
2                   electric generation capacity. (Emphasis added.)

3 **Q. Does EDE have a DSM portfolio?**

4 A. Yes. EDE's DSM programs are specified under its Promotional Practices tariffs  
5 (Missouri Public Service Commission Case and Tariff Nos. ER-2008-0093, YE-2011-  
6 0615, and JE-2010-0061, The Empire District Electric Company, Schedule PRO, various  
7 dates, Sec. 4, Sheet Nos. 8a and 8d-8j). However, EDE does not have a DSM proposal  
8 under MEEIA.

9 **Q. Did EDE recently commit to strengthening its DSM portfolio?**

10 A. Yes. Under the Stipulation and Agreement in EDE's most recent rate case (ER-2016-  
11 0023), EDE agreed to continue its current DSM programs until at least the beginning of  
12 2017, when new programs designed in collaboration with EDE's DSM Advisory Group  
13 are implemented for a minimum period of two years.<sup>2</sup> As a result of the Revised  
14 Stipulation and Agreement in EDE's prior rate case (ER-2014-0351), EDE is separately  
15 required to continue its low-income weatherization program without a specified end  
16 date;<sup>3</sup> additionally, EDE agreed, under the Stipulation and Agreement in ER-2016-0023,  
17 to increase weatherization funding and undertake a process evaluation.<sup>4</sup>

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<sup>2</sup> Missouri Public Service Commission Case No. ER-2016-0023, *In the Matter of The Empire District Electric Company for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area*, Stipulation and Agreement, June 20, pages 5-7.

<sup>3</sup> Missouri Public Service Commission Case No. ER-2014-0351, *In the Matter of The Empire District Electric Company for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area*, Revised Stipulation and Agreement and List of Issues, April 8, 2015, page 4.

<sup>4</sup> ER-2016-0023, Stipulation and Agreement, page 8.



1 **Q. Does The Empire District Gas Company (“EDG”) also have a DSM portfolio?**

2 A. Yes. EDG’s DSM programs are specified under its tariffs at Missouri Public Service  
3 Commission Tariff Nos. JG-2013-0445 and YG-2010-0568, The Empire District Gas  
4 Company, various dates, Sheet Nos. 51g-51n.

5 **Q. Does Liberty Utilities (Midstates Natural Gas Corp.) d/b/a Liberty Utilities**  
6 **(“Liberty MNG”) have a DSM portfolio as well?**

7 A. Yes. Liberty MNG, Liberty Utilities’ Missouri gas affiliate, has DSM programs as  
8 specified under the tariffs at Missouri Public Service Commission Tariff Nos. JG-2011-  
9 0517, YG-2011-0073, JG-2013-0069, and JG-2015-0299, Liberty Utilities (Midstates  
10 Natural Gas Corp.) d/b/a Liberty Utilities, various dates, Sheet Nos. 112.2-112.4 and 115-  
11 119.

12 **Q. Do any subsidiaries of Liberty Utilities Co. (“Liberty Utilities”) support electric**  
13 **energy efficiency programs?**

14 A. Yes. Liberty Utilities owns two electric distribution companies: Liberty Utilities (Granite  
15 State Electric) Corp. and Liberty Utilities (CalPeco Electric) LLC (“Granite State” and  
16 “CalPeco,” respectively).<sup>5</sup> Granite State offers energy efficiency programs funded partly  
17 through a statutory system benefits charge, consisting of weatherization, ENERGY  
18 STAR new homes and home performance programs, an ENERGY STAR lighting and  
19 appliance program, small and large business programs, and a municipal facility program.  
20 CalPeco offers residential and small commercial audit programs, an ENERGY STAR

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<sup>5</sup> Liberty Utilities Response to Data Request DED-DE 201.

1 lighting program, a refrigerator recycling program, and incentive programs for  
2 commercial customers and public schools.<sup>6</sup>

3 **Q. Has the Commission indicated support for electric utility DSM portfolios?**

4 A. Yes. In addition to the recent agreement in ER-2016-0023, the Commission's Report and  
5 Order in ER-2014-0351 discussed the energy efficiency implications of shifting cost  
6 recovery towards customer charges.<sup>7</sup>

7 **Q. What does DE recommend based on these facts?**

8 A. Given the policy importance of energy efficiency and the continuing efficiency programs  
9 of EDE, Liberty MNG, and EDG, DE supports a commitment by the Applicants to  
10 further strengthen EDE's future DSM portfolio through increased outreach to customers  
11 and additional programs and measures.

12 **V. RENEWABLE ENERGY**

13 **Q. Do the Applicants discuss the relationship of the merger to previous renewable  
14 energy projects by Liberty Utilities?**

15 A. Yes. Both Liberty Utilities witnesses Mr. David Pasioka and Mr. Christopher D. Krygier  
16 state:

17 By combining the expertise of both companies, a joint entity will now enjoy  
18 expertise in:

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<sup>6</sup> Liberty Utilities Response to Data Request OPC – Marke – No. 2007.

<sup>7</sup> Missouri Public Service Commission Case No. ER-2014-0351, *In the Matter of The Empire District Electric Company for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area*, Report and Order, June 24, 2015, page 16.

1 a. Electric utility operations ... including vertical integration with utility  
2 owned and developed renewable energy and conventional generation fleet;

3 ...

4 d. Access to renewable energy development expertise that has already  
5 proven to be beneficial to Liberty's electric utilities it owns in other  
6 jurisdictions, with investments in utility-owned solar generation that is  
7 expected to reduce overall customer energy costs.<sup>8</sup>

8 Additionally, Mr. Pasieka cites Liberty Utilities' affiliates', "... significant expertise  
9 developing and operating renewable generation assets ...,"<sup>9</sup> further claiming that, "This  
10 experience may be useful as the region considers the role of renewable generation in  
11 renewable portfolio standards or otherwise."<sup>10</sup>

12 **Q. Has the state placed a high value on the use of renewable energy?**

13 A. Yes. This is evidenced by the enactment of the Renewable Energy Standard ("RES")  
14 (§393.1030, RSMo.). Additionally, in a recent Certificate of Convenience and Necessity  
15 case regarding a utility-owned solar facility, the Commission recognized the, "... strong  
16 interest in the development of economical renewable energy sources to provide safe,  
17 reliable, and affordable service while improving the environment and reducing the

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<sup>8</sup> Missouri Public Service Commission Case No. EM-2016-0213, *In The Matter of the Joint Application of the Empire District Electric Company, Liberty Utilities (Central) Co., and Liberty Sub Corp. for Approval of an Agreement and Plan of Merger and For Other Related Relief*, Direct Testimony of David Pasieka on Behalf of Liberty Utilities Co., March 16, 2016, page 5, lines 10-14 and 20-23

Missouri Public Service Commission Case No. EM-2016-0213, *In The Matter of the Joint Application of the Empire District Electric Company, Liberty Utilities (Central) Co., and Liberty Sub Corp. for Approval of an Agreement and Plan of Merger and For Other Related Relief*, Direct Testimony of Christopher D. Krygier on Behalf of Liberty Utilities Co., March 16, 2016, pages 6 and 7, lines 13-17 and 1-4.

<sup>9</sup> Pasieka Direct, page 18, lines 13-14.

<sup>10</sup> *Ibid*, lines 17-18.

1 amount of carbon dioxide released into the atmosphere.”<sup>11</sup> This recognition came despite  
2 the facts that the proposed facility was neither essential to meet RES requirements<sup>12</sup> nor  
3 the least-cost resource.<sup>13</sup>

4 **Q. What is EDE’s current generation portfolio?**

5 A. The majority of EDE’s generation portfolio (83.97 percent) consists of fossil fuel-fired  
6 units, either owned or as purchased power; over half of EDE’s total capacity comes from  
7 natural gas-fired units,<sup>14</sup> although over half of the company’s 2015 generation came from  
8 coal-fired power plants.<sup>15</sup> The utility-scale renewable energy sources in the company’s  
9 portfolio consist of 16 MW of hydroelectric capacity and 255 MW of purchased  
10 nameplate wind capacity; together, these renewable energy sources account for 16.03  
11 percent of EDE’s portfolio.<sup>16</sup> EDE should be commended for its purchase of wind energy  
12 as a least cost resource prior to enactment of the RES in Missouri, demonstrating the  
13 company’s increasing support for environmental stewardship. Table 1 below reproduces  
14 information from the Company’s 2016 triennial Integrated Resource Plan filing.

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<sup>11</sup> Missouri Public Service Commission Case No. EA-2015-0256, *In the Matter of the Application of KCP&L Greater Missouri Operations Company for Permission and Approval of a Certificate of Public Convenience and Necessity Authorizing it to Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage Solar Generation Facilities in Western Missouri*, Report and Order, March 2, 2016, Page 15.

<sup>12</sup> *Ibid*, page 7.

<sup>13</sup> *Ibid*, page 15.

<sup>14</sup> Missouri Public Service Commission Case No. EO-2016-0223, *In the Matter of The Empire District Electric Company’s 2016 Triennial Compliance Filing Pursuant to 4 CSR 240-22*, EDE, Volume 1 – Integrated Resource Plan (IRP) Executive Summary, April 1, 2016, page 10, Table ES-3.

<sup>15</sup> EO-2016-0223, EDE IRP, Volume 4 – Supply-Side Resource Analysis, April 1, 2016, page 5, Table 4-2.

<sup>16</sup> EDE 2016 IRP Executive Summary, page 10, Table ES-3.

1 **Table 1. EDE 2015 generation portfolio. Wind data based on nameplate capacity.<sup>17</sup>**

Type	Capacity (MW)	Percent of Total
Owned Coal	434	25.67%
Coal (Purchased)	50	2.96%
Natural Gas	936	55.35%
Hydroelectric	16	0.95%
Wind (Purchased)	255	15.08%
Total	1,691	100.00%

2 **Q. Is there information which can be shared regarding Liberty Utilities' or**  
3 **Algonquin's generation portfolios?**

4 A. Granite State owns no generation assets, but CalPeco recently received approval for a 50  
5 MW solar project in Nevada.<sup>18</sup> It should also be noted that Algonquin owns numerous  
6 generation assets which are not associated with Liberty Utilities' distribution subsidiaries.  
7 These Algonquin assets primarily consist of low-carbon and renewable energy, including  
8 hydroelectric power, biomass, wind, and solar, as shown below in Figure 1.<sup>19</sup>

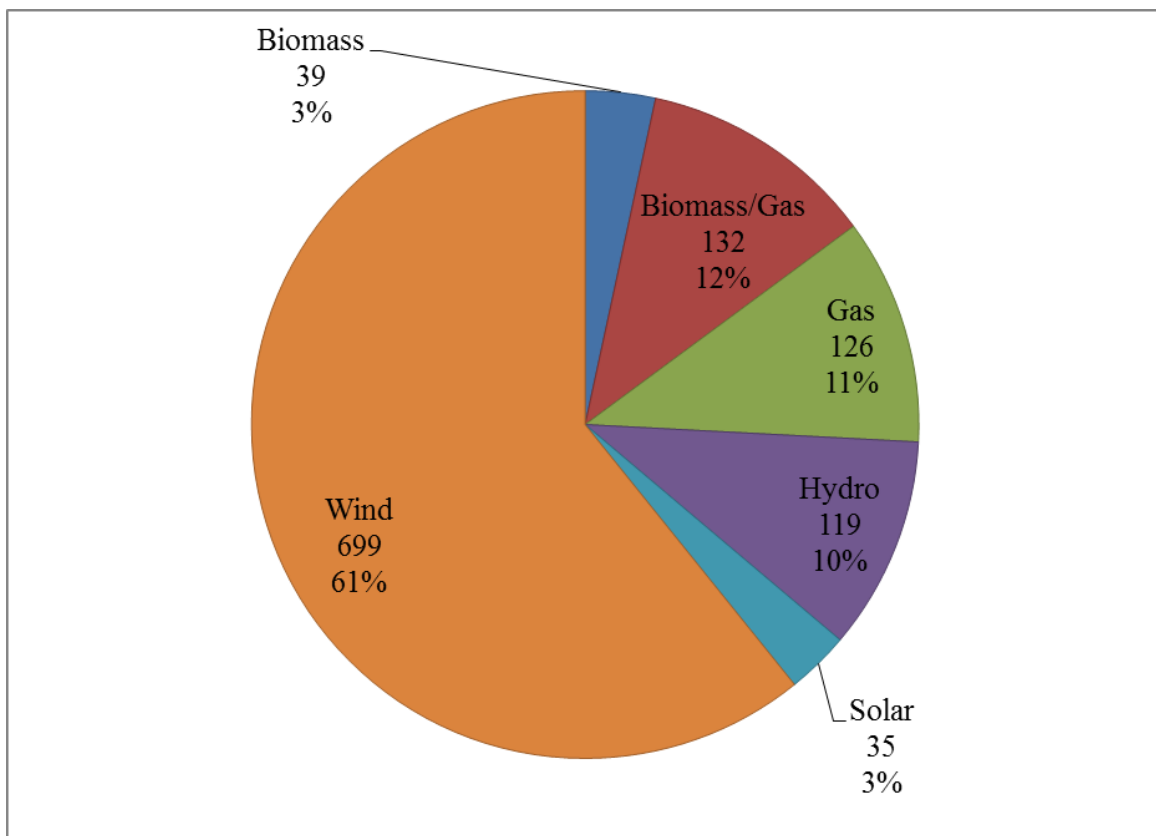
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<sup>17</sup> *Ibid.*

<sup>18</sup> Liberty Utilities Response to Data Request DED-DE 201.

<sup>19</sup> Attachment to Liberty Utilities Response to Data Request DED-DE 203.

1 **Figure 1. Generation Portfolio of Algonquin (MW).<sup>20</sup>**



2 **Q. What does DE recommend based on these observations?**

3 A. DE agrees with Mr. Pasieka and Mr. Krygier that the Applicants appear well-positioned  
4 to use Algonquin’s renewable energy resource development expertise to the benefit of  
5 EDE. To solidify these benefits, DE supports a commitment by the Applicants to  
6 consider the development of renewable energy resources for EDE in Missouri. In-state  
7 development of renewable energy resources – even if such resources are not in EDE’s  
8 service territory – will provide economic development and environmental benefits for the  
9 state and the Applicants, as well as a 25 percent incentive towards RES compliance.

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<sup>20</sup> *Ibid.*

1 **VI. COMBINED HEAT AND POWER AND MICROGRIDS**

2 **Q. What is DE's interest in CHP?**

3 A. The Missouri Comprehensive State Energy Plan ("CSEP") makes several  
4 recommendations related to CHP. Recommendation 3.6, "Expanding Combined Heat and  
5 Power Applications," supports the development of a statewide CHP potential study, as  
6 well as the establishment of both cost-based standby service rates and interconnection  
7 practices based on best practices.<sup>21</sup>

8 **Q. Has EDE agreed to any past proposals related to CHP?**

9 A. Yes. In ER-2014-0351, EDE agreed to state in its tariffs that, "... Any 'qualifying  
10 facility' as defined in 4 CSR 240-20.060(1)(G) shall be provided, upon request, stand-by  
11 power at the otherwise applicable standard rates which would apply if the Company  
12 provided energy at the customer's full service requirements." EDE also agreed to develop  
13 standby service rates and to perform a standby service cost study.<sup>22</sup>

14 **Q. What is the status of the discussion of standby service rates?**

15 A. The discussions on this matter are ongoing.

16 **Q. Can EDE take other actions to facilitate CHP development in its service territory?**

17 A. Yes. DE supports EDE conducting an outreach survey report of CHP development in its  
18 service territory. The outreach survey report should focus on those customers most likely  
19 to be able to deploy CHP (e.g., those with large steam or process heat requirements).

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<sup>21</sup> Missouri Department of Economic Development – Division of Energy. 2015. "Missouri Comprehensive State Energy Plan." Pages 231-232. <https://energy.mo.gov/energy/docs/MCSEP.pdf>

<sup>22</sup> ER-2014-0351, Revised Stipulation and Agreement and List of Issues, page 5.

1 **Q. What are microgrids, and what is DE’s interest in them?**

2 A. The CSEP defines microgrids as, “... localized grids that are usually connected to the  
3 traditional grid but can disconnect from it to operate autonomously.”<sup>23</sup> These small  
4 systems can promote reliability, resiliency, and cleaner energy use. CSEP  
5 recommendation 3.7, “Guiding the Development of Microgrids,” supports the adoption of  
6 standardized microgrid interconnection requirements; the development of microgrid  
7 tariffs which are non-punitive, non-discriminatory, and promote microgrid development,  
8 starting in congested areas or areas with rapidly growing demand; and requiring  
9 microgrid owners and operators to provide utilities with system planning-related  
10 information.<sup>24</sup>

11 **Q. Are there any best practices recommendations for microgrid interconnection in  
12 Missouri?**

13 A. Yes. The Missouri University of Science and Technology, working with its Microgrid  
14 Industrial Consortium, developed a microgrid interconnection best practices report<sup>25</sup> and  
15 an interconnection process document.<sup>26</sup> These documents, which were submitted along  
16 with DE’s comments in EW-2016-0313,<sup>27</sup> can provide utilities with guidance on  
17 developing microgrid interconnection standards. Members of the Microgrid Industrial  
18 Consortium represent a broad group of stakeholders, consisting of The Doe Run

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<sup>23</sup> Missouri Comprehensive State Energy Plan, page 232.

<sup>24</sup> *Ibid*, pages 232-233.

<sup>25</sup> Rolufs, Angela B. 2016. “Missouri Microgrid Interconnection Requirements.” Prepared for the Missouri Department of Economic Development, Division of Energy. Missouri S&T Microgrid Industrial Consortium.

<sup>26</sup> Rolufs, Angela B. 2016. “Missouri Standard Microgrid Interconnection Process.” Prepared for the Missouri Department of Economic Development, Division of Energy. Missouri S&T Microgrid Industrial Consortium.

<sup>27</sup> Missouri Public Service Commission Case No. EW-2016-00313, *In the Matter of a Working Case to Consider Policies to Improve Electric Utility Regulation*, Missouri Division of Energy’s Policy Recommendations to Address Electric Utility Regulatory Challenges, July 8, 2016.



1 Company, Azimuth Energy, Union Electric Company d/b/a Ameren Missouri, the  
2 Missouri Public Utility Alliance, and DE.<sup>28</sup>

3 **Q. Could the development of microgrids also assist with the development of CHP?**

4 A. Yes. Most microgrids in this country incorporate CHP or some other form of natural gas-  
5 fired generation.<sup>29</sup> The CHP and microgrid industries complement each other. The  
6 development of microgrids could also result in the development of CHP, and vice-  
7 versa.<sup>30</sup>

8 **Q. What does DE recommend with regards to CHP and microgrids?**

9 A. DE supports the facilitation of CHP and microgrid deployment in EDE's service territory  
10 by the Applicants through:

- 11 1. A targeted outreach survey report of CHP development, and
- 12 2. Development of a microgrid interconnection tariff consistent with the best  
13 practices document developed by the Microgrid Industrial Consortium.

## 14 **VII. STIPULATION AND AGREEMENT**

15 **Q. Has DE entered into a stipulation and agreement with the Applicants resolving the**  
16 **above issues?**

17 A. Yes. The stipulation and agreement provides that EDE will: evaluate additional energy  
18 efficiency programs; assess the impact of including additional renewable resources in its  
19 portfolio in lieu of using hydroelectric renewable energy credits for RES compliance;  
20 assist with conducting an outreach survey report of CHP development; and develop

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<sup>28</sup> Missouri Microgrid Interconnection Requirements, pages 20-21.

<sup>29</sup> Jones, David, and Tidball, Rick. 2016. "CHP for Microgrids: Resiliency Opportunities Through Locational Analysis." ICF International. Page 4. <http://www.icfi.com/insights/white-papers/2016/chp-for-microgrids>

<sup>30</sup> Wood, Elisa. 2014. "The Speed of Microgrid Market Growth, CHP and District Energy." Microgrid Knowledge. <https://microgridknowledge.com/growth-ahead-microgrids-combined-heat-power-district-energy/>

1 microgrid interconnection requirements based on the best practices document referenced  
2 above.<sup>31</sup> The Applicants' commitment to these initiatives addresses DE's  
3 recommendations.

4 **Q. Were there additional provisions in the stipulation and agreement?**

5 A. Yes. The stipulation and agreement also provides that EDE will apply for a DSM  
6 portfolio under MEEIA no later than one year after the Commission's finding of  
7 substantial compliance of the EDE Integrated Resource Plan that follows Commission  
8 approval of a Statewide Technical Reference Manual, and that EDE will consider filing a  
9 proposal for a community solar or solar subscription program using a Missouri facility.<sup>32</sup>  
10 DE is also supportive of these provisions, since they encourage EDE to further increase  
11 its commitments to in-state energy efficiency and renewable energy.

12 **VIII. CONCLUSIONS**

13 **Q. Please summarize your conclusions and the positions of DE.**

14 A. Meeting the regulatory standard for merger applications – i.e., “not detrimental to the  
15 public interest” – can be assured by Applicants' commitments to continue their efforts  
16 with respect to energy efficiency and renewable energy. Specifically, DE supports a  
17 commitment by the Applicants to:

- 18 1. Continue progress towards a larger, increasingly effective DSM portfolio for  
19 EDE;
- 20 2. Use Algonquin's expertise and resources in developing additional renewable  
21 energy resources for EDE; and,

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<sup>31</sup> EM-2016-0213, Stipulation and Agreement as to Division of Energy and Renew Missouri, pages 1-3.

<sup>32</sup> *Ibid.*

1           3. Facilitate CHP and microgrid deployment in EDE's service territory.  
2           These conditions would assure the Commission that the merger will not be detrimental to  
3           the public interest, but will instead benefit all concerned. The Applicants have signed a  
4           stipulation and agreement with DE and Renew Missouri which would satisfy these  
5           conditions. DE requests that the Commission approve the *Stipulation and Agreement as*  
6           *to Division of Energy and Renew Missouri.*

7 **Q. Does this conclude your Rebuttal Testimony in this case?**

8 A. Yes.