Exhibit No.: Issues: Certificate of Convenience and Necessity Witness: Daniel I. Beck Sponsoring Party: MoPSC Staff Type of Exhibit: Supplemental Testimony Case No.: EA-2012-0281 Date Testimony Prepared: February 18, 2014

MISSOURI PUBLIC SERVICE COMMISSION

REGULATORY REVIEW DIVISION

SUPPLEMENTAL TESTIMONY

OF

DANIEL I. BECK

UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI

CASE NO. EA-2012-0281

Jefferson City, Missouri February 2014

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri) for Permission and Approval and a) Certificate of Public Convenience and Necessity Authorizing it to Construct,) Install, Own, Operate, Maintain and) Otherwise Control and Manage A Utility) Waste Landfill and Related Facilities at its) Labadie Energy Center)

Case No. EA-2012-0281

AFFIDAVIT OF DANIEL I. BECK

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

Daniel I. Beck, of lawful age, on his oath states: that he has participated in the preparation of the following Supplemental Testimony in question and answer form, consisting of 5 pages of Supplemental Testimony to be presented in the above case, that the answers in the following Supplemental Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

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Subscribed and sworn to before me this $19^{4/2}$ day of February, 2014.



Jusan Alleindermeyer Notary Public

1	SUPPLEMENTAL TESTIMONY
23	OF
4 5	DANIEL I. BECK
6 7	UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI
8 9	CASE NO. EA-2012-0281
10	Q. Please state your name and business address.
11	A. Daniel I. Beck and my business address is Missouri Public Service
12	Commission, P.O. Box 360, Jefferson City, Missouri, 65102.
13	Q. By whom are you employed and in what capacity?
14	A. I am employed by the Missouri Public Service Commission ("Commission")
15	as the Manager of Engineering Analysis, which is in the Tariff, Safety, Economic and
16	Engineering Analysis Department in the Regulatory Review Division. My credentials are
17	attached as Schedule 1 to this testimony.
18	Q. What is the purpose of your supplemental testimony?
19	A. The purpose of this testimony is to respond to Union Electric Company d/b/a
20	Ameren Missouri (Ameren Missouri" or "Company") witnesses Craig J. Giesmann, Tyler E.
21	Gass, and Steven F. Putrich on various issues raised in their supplemental testimonies
22	regarding the proposed utility waste landfill adjoining Ameren Missouri's Labadie Energy
23	Center. In addition, I adopt Staff witness Claire M. Eubanks' rebuttal testimony filed in this
24	case, Case No. EA-2012-0281, on May 31, 2013.
25	Q. Why are you adopting the testimony of Staff witness Claire M. Eubanks?
26	A. When staff witness Claire Eubanks filed Rebuttal Testimony on May 31, 2013,
27	the evidentiary hearing was scheduled for September 23, 24, and 25, 2013. After several

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postponements, that hearing is now scheduled for March 31, April 1, and April 2, 2014. Since
 Staff witness Claire Eubanks is unavailable on those dates and I am available, in addition to
 responding to the supplemental testimony of Ameren Missouri witnesses, I am also adopting
 her testimony.

Q. Have you reviewed Staff witness Clair Eubanks rebuttal testimony prefiled in
this case on May 31, 2013?

A. Yes. As witness Claire Eubanks direct supervisor I reviewed and approved her
rebuttal testimony before it was prefiled on May 31, 2013. Before reviewing and approving
her testimony, I had attended the two local public hearings that the Commission held for this
case. Further, since Ameren Missouri first filed its notice it planned to file this case on
February 17, 2012, I have followed this case, and I visited the Labadie site on several
occasions during that time.

Q. At this time, if asked the questions posed to Staff witness Claire Eubanks in her rebuttal testimony prefiled May 31, 2013, would your answers be the same as set forth in that testimony?

A. With the exception of her testimony regarding her qualifications that are on the
first page and the first three lines of the second page, my answers would be the same as set
forth in that prefiled testimony.

19 Q. What topics do Ameren Missouri's witnesses address in their supplemental20 testimonies?

A. In general, they address the changes to its original application that Ameren
Missouri made in the revised application it filed with the Missouri Department of Natural

Resources. More specifically, Ameren Missouri witness Steven F. Putrich [lines 4-9, page 2]
 describes those revisions as follows:

In general, the CPA included revisions to the Groundwater Monitoring Program (the installation of seven additional groundwater monitoring wells), some changes to the discussion of the management of leachate using tanks and regarding the liquefaction analyses, some minor modifications to slope stability analyses, some minor adjustments to the construction sequence, and some minor adjustments to the construction quality assurance procedures and erosion protection materials. There were also some additional minor revisions made to correct several clerical errors.

Company witness Craig Giesmann presents the revised DNR application in his supplemental testimony, and generally describes how and why Ameren Missouri revised the original DNR application. Ameren Missouri witness Tyler E. Gass provides more detailed testimony describing seven (7) additional monitoring wells that are part of the revisions.

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Q. What is your understanding of the function of the seven (7) additional wells?

17 A. The original DNR application included twenty-eight (28) monitoring wells that 18 would be between thirteen (13) and twenty-five (25) feet deep-typically referred to as a 19 "shallow well." Four (4) of the seven (7) additional wells are also shallow wells, and would 20 be located north of cell number 2. The remaining three (3) wells are located around cell 21 number 2 and would be at a depth of seventy-five (75) to eighty-five (85) feet, which is 22 considered deep for a project like this. One is north, one is east and one is south of cell 23 number 2. Figure 2 in Appendix O to the revised DNR application, which is attached to 24 Company witness Giesmann's supplemental testimony, shows the location of the original 25 twenty-eight (28) wells and also shows the location of the 7 additional wells.

Based on my review of the supplemental testimony and information Ameren Missouri
provided to Staff, that included communications between Ameren Missouri and Andrews
Engineering, Franklin County's independent engineer assigned to the Labadie Landfill

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Project, I believe the four (4) additional shallow wells provide additional monitoring north of
 cell number 2 and double the number of shallow wells that are located north of cell number 2.
 In addition, since none of the thirty-two (32) shallow wells can monitor a depth greater than
 twenty-five (25) feet, adding three wells that are seventy-five (75) to eighty-five (85) feet
 deep provides additional monitoring that was not part of Ameren Missouri's original DNR
 application.

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Q. Are the additional seven (7) wells necessary?

A. Yes. Regulatory approval from Franklin County is required before Ameren
Missouri may begin construction of this project, and based on a review of the testimony and
the documents, I believe that the additional seven (7) wells were necessary to get regulatory
approval from Franklin County. Staff witness John P. Cassidy discusses the cost of these
wells in his supplemental testimony.

Q. Have you reviewed the other changes in Ameren Missouri's revised DNRapplication?

A. Yes. While most of the other changes do not significantly alter the original
DNR application, the changes that better explain how the leachate will be stored in tanks adds
clarification relative to the original DNR application.

Q. In the prefiled rebuttal testimony of Staff witness Claire Eubanks that you are
adopting is the statement, "Staff recommends the Commission conditionally grant Ameren
Missouri a CCN to expand its Labadie Energy Center plant site to include 813 acres as shown
in Exhibit A of the CCN application for the purpose of constructing and operating the
proposed UWL," and recommendations that Ameren Missouri file the following in this case
prior to construction of the UWL:

- Missouri Department of Natural Resources-Solid Waste Management Program ("MDNR-SWMP") approved UWL design
 - MDNR-SWMP Construction Permit
 - Letter documenting Franklin County's approval of the UWL design
 - Permits for road alterations from Missouri Department of Transportation and Franklin County
 - Floodplain Development Permit
 - Land Disturbance Permit
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- Q. Has Ameren Missouri's supplemental testimony caused Staff to change its recommendation?
- 11 A. No. Staff continues to recommend the Commission grant Ameren Missouri a 12 conditional certificate of convenience and necessity to construct, install, own, operate, 13 maintain and otherwise control and manage a utility waste landfill and related facilities on the 14 813 acres adjoining Ameren Missouri's Labadie Energy Center site, as Ameren Missouri 15 Staff notes that Appendix F of Ameren Missouri's revised DNR application requests. 16 addresses the third and fourth bullet points in the list above with regard to Franklin County. 17 In addition, Appendix H of Ameren Missouri's revised DNR application addresses the fifth 18 bullet point but the County's approval is also contingent of approval of the Construction 19 permit from DNR. Staff maintains that all of the items should be provided to the Commission 20 before the final CNN is granted.
- 21
- Q. Does this conclude your supplemental testimony?
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- A. Yes, it does.

Daniel I. Beck, P.E.

Manager of Engineering Analysis Section Tariff, Safety, Economic and Engineering Analysis Department Regulatory Review Division

Missouri Public Service Commission P.O. Box 360 Jefferson City, MO 65102

I graduated with a Bachelor of Science Degree in Industrial Engineering from the University of Missouri at Columbia. Upon graduation, I was employed by the Navy Plant Representative Office in St. Louis, Missouri as an Industrial Engineer. I began my employment at the Commission in November, 1987, in the Research and Planning Department of the Utility Division (later renamed the Economic Analysis Department of the Policy and Planning Division) where my duties consisted of weather normalization, load forecasting, integrated resource planning, cost-of-service and rate design. In December, 1997, I was transferred to the Tariffs/Rate Design Section of the Commission's Gas Department where my duties include weather normalization, annualization, tariff review, cost-of-service and rate design. Since June 2001, I have been in the Engineering Analysis Section of the Energy Department, which was created by combining the Gas and Electric Departments. I became the Supervisor of the Engineering Analysis Section, Energy Department, Utility Operations Division in November 2005 and my current title is Manager of Engineering Analysis.

I am a Registered Professional Engineer in the State of Missouri. My registration number is E-26953.

List of Cases in which prepared testimony was presented by: DANIEL I. BECK

<u>Company Name</u>	<u>Case No.</u>
Union Electric Company	EO-87-175
The Empire District Electric Company	EO-91-74
Missouri Public Service	ER-93-37
St. Joseph Power & Light Company	ER-93-41
The Empire District Electric Company	ER-94-174
Union Electric Company	EM-96-149
Laclede Gas Company	GR-96-193
Missouri Gas Energy	GR-96-285
Kansas City Power & Light Company	ET-97-113
Associated Natural Gas Company	GR-97-272
Union Electric Company	GR-97-393
Missouri Gas Energy	GR-98-140
Missouri Gas Energy	GT-98-237
Ozark Natural Gas Company, Inc.	GA-98-227
Laclede Gas Company	GR-98-374
St. Joseph Power & Light Company	GR-99-246
Laclede Gas Company	GR-99-315
Utilicorp United Inc. & St. Joseph Light & Power Co.	EM-2000-292
Union Electric Company d/b/a AmerenUE	GR-2000-512
Missouri Gas Energy	GR-2001-292
Laclede Gas Company	GR-2001-629
Union Electric Company d/b/a AmerenUE	GT-2002-70
Laclede Gas Company	GR-2001-629
Laclede Gas Company	GR-2002-356
Union Electric Company d/b/a AmerenUE	GR-2003-0517
Missouri Gas Energy	GR-2004-0209
Atmos Energy Corporation	GR-2006-0387
Missouri Gas Energy	GR-2006-0422
Union Electric Company d/b/a AmerenUE	GR-2007-0003
The Empire District Electric Company EO-2007-002	9/EE-2007-0030
Laclede Gas Company	GR-2007-0208
The Empire District Electric Company	EO-2008-0043
Missouri Gas Utility, Inc.	GR-2008-0060

Schedule 1-2

The Empire District Electric Company	ER-2008-0093
Trigen Kansas City Energy Corporation	HR-2008-0300
Union Electric Company d/b/a AmerenUE	ER-2008-0318
Kansas City Power & Light Company	ER-2009-0089
KCP&L Greater Missouri Operations Company	ER-2009-0090
Missouri Gas Energy	GR-2009-0355
The Empire District Gas Company	GR-2009-0434
Union Electric Company d/b/a AmerenUE	ER-2010-0036
Laclede Gas Company	GR-2010-0171
Atmos Energy Corporation	GR-2010-0192
Kansas City Power & Light Company	ER-2010-0355
KCP&L Greater Missouri Operations Company	ER-2010-0356
Union Electric Company d/b/a Ameren Missouri	GR-2010-0363
Kansas City Power & Light Company	ER-2012-0174
KCP&L Greater Missouri Operations Company	ER-2012-0175
Chaney vs. Union Electric Company	EO-2011-0391
Veach vs. The Empire District Electric Company	EC-2012-0406
The Empire District Electric Company	ER-2012-0345
KCP&L Greater Missouri Operations Company	ET-2014-0059
Kansas City Power & Light Company	ET-2014-0071
Union Electric Company d/b/a Ameren Missouri	ET-2014-0385
Missouri Gas Energy	GR-2014-0007