

MEMORANDUM

TO: Missouri Public Service Commission Official Case File
Case No. EA-2010-0216, Application of Union Electric Company, d/b/a
AmerenUE for Certificate of Public Convenience and Necessity to
Construct, Install, Own, Operate Maintain and Otherwise Control and
Manage Electrical Production and Related Facilities In or Near the Village
of Champ and the City of Maryland Heights, Missouri

FROM: Daniel I. Beck, Energy Department – Engineering Analysis

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| <u>/s/ Daniel I. Beck 05/04/10</u> Energy Department / Date | <u>/s/ Jaime Ott 05/04/10</u> Staff Counsel's Office / Date |
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SUBJECT: Staff Recommendation to grant Certificate of Convenience and Necessity

DATE: May 4, 2010

OVERVIEW

On January 19, 2010, Union Electric Company, d/b/a AmerenUE (AmerenUE) filed an Application with the Missouri Public Service Commission (Commission) seeking a Certificate of Convenience and Necessity (CCN) to acquire, construct, install, own, operate, maintain and otherwise control and manage electrical production and related facilities in or near the Village of Champ and the City of Maryland Heights, Missouri.

On January 22, 2010, the Commission issued an *Order Directing Notice, Setting Intervention Deadline and Directing Status Update* in Case No. EA-2010-0216. No party intervened in this case. In addition, the *Order* directed Staff to file a pleading informing the Commission of the date by which the Staff would file a recommendation regarding the requested certificate. Staff filed a pleading on February 16, 2010, stating its plan to file its recommendation on March 3, 2010. The Commission subsequently approved the Staff filing its recommendation one week after certain additional information was filed by AmerenUE.

The electrical production and related facilities that are the subject of the Application include three 5 megawatt (MW) combustion turbine generator units to be

Appendix A

fueled by landfill gas and a distribution substation to tie the facility into AmerenUE's 34.5 kilovolt (kV) distribution system. These facilities will be located within AmerenUE's existing service area on an approximately 5.6 acre tract of land adjacent to the Fred Weber Landfill located at 5000 Earth City Expressway, St. Louis County, Missouri.

Commission Rule 4 CSR 240-3.105 has a list of requirements for applications for certificates of convenience and necessity such as that sought by AmerenUE with the Application. Commission Rule 4 CSR 240-3.105(2) states that "if any of the items required under this rule are unavailable at the time the application is filed, they shall be furnished prior to the granting of the authority sought." The Application explains that plans, specifications and a cost estimate for the Project, as required by 4 CSR 240-3.105(1)(B)2., would be furnished on or about March 29, 2010. AmerenUE provided plans, specifications and a cost estimate to Staff on April 9, 2010, discussed these documents with Staff on April 14, 2010, and filed the documents on April 16, 2010. The Application includes a description of the other affected utility lines that are located on the proposed construction site as required by 4 CSR 240-3.105(1)(B)1. and AmerenUE's plans for financing the project using general AmerenUE funds as required by 4 CSR 240-3.105(1)(B)3.

In the Application, AmerenUE states that "utilities are exempt from local zoning regulations if the public utility at issue holds a contemporaneous site-specific certificate of public convenience and necessity from the Commission" but also states that a conditional use permit from the City of Maryland Heights is being sought and is expected to be

granted in February, 2010.¹ Commission Rule 4 CSR 240-3.105(1)(C-D) addresses approval of affected government bodies.

Finally, the Application discusses “the facts showing that the granting of the application is required by the public convenience and necessity” pursuant to 4 CSR 240-3.105(1)(E). The Application discusses AmerenUE’s commitment to developing renewable resources and the fact that AmerenUE’s preferred resource and contingency plans included up to 30 MW of landfill gas-fired generation in its most-recently filed Resource Plan, filed in Case No. EO-2007-0409.

STAFF RECOMMENDATION

The Staff has reviewed the Application as well as the subsequently filed plans, specifications and cost estimates. The Staff has also had several discussions with AmerenUE personnel regarding this project.

The Staff notes that in Case No. EA-2006-0309² the Staff used a ten-step process to determine a reasonable site for Aquila’s natural gas-fired simple cycle electric power plant. Those steps follow:

- 1) Identification of areas within a utility’s service territory where significant energy usage is occurring and areas where energy usage is expected to increase;
- 2) Identification of areas noted in step (1) that are not in close proximity to existing generation facilities, are near an existing generation facility that will likely be retired in the near future, are near an existing generation facility that has room for additional generation units, or are near an area where required energy needs are expected to significantly exceed an existing generating facility’s capabilities;

¹ AmerenUE’s conditional use permit was approved by the Maryland Heights’ City Council on February 18, 2010.

² In the Matter of the Application of Aquila, Inc. for Permission and Approval and a Certificate of Public Convenience and Necessity Authorizing it to Acquire, Construct, Install, Own, Operate, Maintain, and otherwise Control and Manage Electrical Production and Related Facilities in Unincorporated Areas of Cass County, Missouri Near the Town of Peculiar

- 3) Identification of major natural gas transmission pipelines that have sufficient available capacity, adequate pressure and access to natural gas supplies to serve such a prospective generation facility and pass through the areas identified in step (2);
- 4) Identification of electric transmission lines that have sufficient available capacity, or can be reasonably upgraded, to serve such a prospective generation facility, provide transmission to the areas that need to be served by the planned generation facility and pass through the areas identified in step (2);
- 5) Identification of areas where the natural gas transmission pipelines in step (3) and the electric transmission lines in step (4) come within a reasonable distance of each other;
- 6) Review county plat books for the areas identified in step (5) to determine if there are properties in the areas identified in step (5) that appear suitable for such a prospective generation facility and begin visiting with landowners to determine ability to purchase potential parcels of land for such a prospective facility;
- 7) Carefully evaluate each of the potential sites identified in step (6) for line-of-site population density, natural buffers between the generation facility and nearby residents or the ability to construct buffers, natural gas pipeline extension cost, transmission line upgrade and extension costs, land acquisition cost, suitability of geology for construction of generation facility foundations, emissions compliance cost, possible air or land permitting problems, access to other needed infrastructure such as water and other potential costs to address potential concerns of the nearby communities and residents;
- 8) Communicate with any nearby communities and residents to receive feedback on concerns with construction of the planned generation facility in the area;
- 9) Address concerns of the nearby communities and residents to the greatest extent possible associated with the “optimal site”; and
- 10) If the concerns of the nearby communities and residents cannot be addressed at the “optimal site”, go back to step (6) to determine if another site is reasonable and repeat the steps after step (6), unless there are reasons why going back to step (6) is not reasonable.

While this process is reasonable when locating a natural gas-fired simple cycle electric power plant, many of the steps are not applicable to locating a landfill gas power plant. However, many of the general concepts like locating a facility near the fuel source,

determining the best way to tie into the utility's distribution/transmission system, gaining the support of the landowner, and gaining the support of the local community are applicable. The Missouri Department of Natural Resources' web site identifies twenty-two (22) potential locations of landfills that produce sufficient quantities of landfill gas to generate electricity. Several of the locations listed, such as the Jefferson City location, are no longer available and all are much smaller than the 15 MW facility that AmerenUE is proposing. The landowner of this landfill expressed interest in finding a suitable use for the gas from the landfill in Case No. GA-2007-0271.³

It is Staff's understanding that this project has the approval of the appropriate affected government bodies including local authorities. That approval includes the conditional use permit from the City of Maryland Heights granted on February 18, 2010. In obtaining the appropriate local approvals, AmerenUE has addressed issues like noise abatement to meet the concerns of local authorities. AmerenUE plans to install turbines with low NOx emissions and will install equipment that will filter certain impurities from the landfill gas to allow the landfill gas to burn properly in the turbines.

In its Application AmerenUE states its intent to begin construction on or before May 31, 2010 and AmerenUE is currently in the middle of a bidding process for that construction. Therefore, in its subsequent filing, AmerenUE provided an estimate of the cost of the facilities within a range, recognizing that the results of the bidding process will have a significant impact on the overall project cost. The Staff notes that the cost range given is significantly higher than the generic landfill gas facility cost that was used in AmerenUE's Resource Planning filing in Case No. EO-2007-0409. It is Staff's

³ In the Matter of the Application of Weber Gas Energy, LLC for a Certificate of Public Convenience and Necessity to Construct and Operate a Natural Gas Distribution System and Gas Utility; to Serve Portions of St. Louis County, Missouri and certain incorporated areas therein and Establishment of Utility Rates

understanding that part of the cost difference is due to the inherent inaccuracies that come with generic estimates, while other parts of the cost difference were caused by additional site preparation work, noise abatement equipment, low NOx burners that are required because the landfill is located in a non-attainment zone, and the equipment to filter the gas. Although these higher costs affect the cost effectiveness of this project in a negative way, the recent passage of Proposition C on November 4, 2008, which sets Renewable Energy Standards for Missouri, affects the cost effectiveness of the project in a positive way. Even so, the prudence of this project should be determined at the time the project is included in rate base like other capital projects.

Given the need for renewable energy credits due to Proposition C, the limited number of sites on which a landfill gas generating facility can be located, and the need to purchase this specific fuel from a specific landfill owner, the emphasis on this site evaluation has been on the viability of this specific site. AmerenUE has evaluated and addressed the connection of the facility to its transmission/distribution system in its plans and specifications. AmerenUE has also addressed the concerns of local community and landowners. Since this project is a relatively small generation project for a utility the size of AmerenUE, AmerenUE's plan to finance the plant by using general funds appears reasonable.

The Staff recommends the Commission approve the Application for a Certificate of Convenience and Necessity (CCN) to acquire, construct, install, own, operate, maintain and otherwise control and manage electrical production and related facilities in or near the Village of Champ and the City of Maryland Heights, Missouri. The Staff also

recommends that the Commission's Order should state that a determination as to the appropriate ratemaking treatment for this facility will not be made at this time.

The Application was filed pursuant to Section 393.170 RSMo., 4 CSR240-2.060 and 4 CSR 240-3.105. The Staff is not aware of any other matter before the Commission that affects or is affected by this filing.

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

In the Matter of the Application of Gary)
Roof for Change of Electric Supplier.)

Case No. EO-2010-0166

AFFIDAVIT OF DANIEL I. BECK

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Daniel I. Beck, of lawful age, on oath states: that he participated in the preparation of the foregoing Staff Recommendation in memorandum form, to be presented in the above case; that the information in the Staff Recommendation was given by him; that he has knowledge of the matters set forth in such Staff Recommendation; and that such matters are true to the best of his knowledge and belief.



Daniel I. Beck

Subscribed and sworn to before me this 4th day of May, 2010.



SUSAN L. SUNDERMEYER
My Commission Expires :
September 21, 2010
Callaway County
Commission #06942086


Notary Public