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.

File No. EA-2012-0281

REPORT AND ORDER

Issue Date: July 2, 2014

Effective Date: July 17, 2014

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APPEARANCES

James B. Lowery and Michael R. Tripp, Attorneys at Law, Smith Lewis, LLP, 111 S. 9th Street, Ste. 200, Columbia, Missouri 65205.

For Union Electric Company, d/b/a Ameren Missouri.

<u>Nathan Williams</u>, Deputy Staff Counsel, 200 Madison Street, Ste. 800, Jefferson City, Missouri 65102-0360.

For the Staff of the Missouri Public Service Commission.

Lewis R. Mills, Public Counsel, 200 Madison Street, Suite 650, Jefferson City, Missouri 65102-2230.

For the Office of the Public Counsel and the Public.

<u>Elizabeth J. Hubertz</u>, Attorney at Law, <u>Maxine I. Lipeles</u>, Attorney at Law, <u>Giles Howard</u>, <u>Sydney Tonsfeldt</u>, and <u>Tamara Slater</u>, Rule 13 Certified Law Students, Interdisciplinary Environmental Law Clinic at Washington University School of Law, 1 Brookings Drive, Campus Box 1120, St. Louis, Missouri 63130.

For Labadie Environmental Organization and Sierra Club.

CHIEF REGULATORY LAW JUDGE: Morris L. Woodruff

REPORT AND ORDER

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The Missouri Public Service Commission, having considered all the competent and substantial evidence upon the whole record, makes the following findings of fact and conclusions of law. The positions and arguments of all of the parties have been considered by the Commission in making this decision. Failure to specifically address a piece of evidence, position, or argument of any party does not indicate that the Commission has failed to consider relevant evidence, but indicates rather that the omitted material was not dispositive of this decision.

Summary

This order grants Union Electric Company, d/b/a Ameren Missouri's application for a certificate of convenience and necessity to expand the boundaries of its Labadie Energy Center so that it can construct and operate a utility waste landfill at that location.

Procedural History

On January 24, 2013, Ameren Missouri applied for a certificate of convenience and necessity seeking authority to expand the boundaries of its Labadie Energy Center so that it can construct and operate a utility waste landfill and conduct other plant-related operations at the site. The Commission directed that notice of Ameren Missouri's filing be sent to potentially interested parties and directed that the public be notified of the filing. The Commission established February 22, 2013, as the deadline for the filing of applications to intervene.

Labadie Environmental Organization (LEO) and Sierra Club filed a joint application to intervene on February 22, 2013. The Commission granted that application to intervene on March 6, 2013, over the objection of Ameren Missouri.

In compliance with the established procedural schedule, the parties prefiled multiple rounds of testimony. In addition, the Commission held two local public hearings to collect testimony from interested members of the public. The first local public hearing was held in Union, Missouri, on June 25, 2013. Because of the large public response at the first local public hearing, the Commission held a second local public hearing in Washington, Missouri, on July 10, 2013. An evidentiary hearing was held on March 31, April 1, and April 2, 2014. The parties filed initial post-hearing briefs on April 30, 2014, with reply briefs filed on May 21, 2014.

Findings of Fact

The following facts (Numbers 1-17) are taken from the unanimous stipulation of facts filed by the parties on March 25, 2014.

1. Union Electric Company is a Missouri corporation registered with the Missouri Secretary of State and is in good standing to do business in Missouri as Ameren Missouri.

Ameren Missouri is a public utility, subject to the jurisdiction of the Missouri
Public Service Commission, which provides electric service in portions of the state of
Missouri.

 About 1.2 million Missourians obtain their retail electric service from Ameren Missouri.

4. Ameren Missouri is seeking Commission permission and approval, and a certificate of convenience and necessity to expand the boundaries of its existing Labadie Energy Center, which will allow it to construct, install, own, operate, maintain, and otherwise control and manage a utility waste landfill and related facilities on approximately 813 acres of land adjoining its previously certificated Labadie Energy Center site in Franklin County, Missouri

5. Ameren Missouri owns the approximately 813 acres of land that is described by metes and bounds in Exhibit A attached to Ameren Missouri's application in this case.

6. Ameren paid about \$6.9 million to acquire the approximately 813 acres of land.

7. As a public electric utility, Ameren Missouri has a duty to provide safe and adequate electric service to those to whom it provides electric service.

8. Among the generating plants Ameren Missouri owns is the Labadie Energy Center, which can generate up to approximately 2.4 gigawatts (or 2,400 megawatts) of electricity.

9. Ameren Missouri's Labadie Energy Center is Ameren Missouri's largest generating plant.

10. To generate electricity at its Labadie Energy Center, Ameren Missouri converts energy in coal into electricity. To do that, Ameren Missouri burns the coal to generate heat, which is used to create steam that powers steam turbines that spin generators to produce electricity.

11. Coal combustion residuals, commonly known as coal ash, are byproducts of the combustion of coal at power plants.

12. Ameren Missouri uses its Labadie Energy Center to generate electricity, except when operational issues occur.

13. On average, Ameren Missouri's Labadie Energy Center generates approximately 460,000 cubic yards (550,000 tons) of coal combustion residuals per year.

14. The estimated cost of the initial construction of the utility waste landfill, including the first of four cells and monitoring wells, is \$27 million.

15. As designed, Ameren Missouri's estimated useful life of the four-cell utility waste landfill is approximately 24 years.

16. All costs associated with the utility waste landfill and related facilities adjoining its Labadie Energy Center that Ameren Missouri seeks to recover in rates will be subject to review by the Commission and parties in the rate case where Ameren Missouri seeks to begin recovery of them.

17. Ameren Missouri agrees with the Commission explicitly stating in any order granting to it a certificate of convenience and necessity for a utility waste landfill and related facilities adjoining its Labadie Energy Center that the grant of the certificate does not predetermine ratemaking treatment of the costs associated with the utility waste landfill and related facilities.

The Tartan Energy Standards

In evaluating applications for a certificate of convenience and necessity, the Commission usually examines five criteria known as the Tartan Energy Standards, named

after the Commission case in which they were first listed.¹ Those criteria are: (1) there must be a need for the service; (2) the applicant must be qualified to provide the proposed service; (3) the applicant must have the financial ability to provide the service; (4) the applicant's proposal must be economically feasible; and (5) the service must promote the public interest. The Tartan case involved an application to provide natural gas service to the public so the criteria refer to services. But the Commission has applied the same criteria in evaluating applications for certificates to construct and operate facilities. The Commission will use those criteria to organize this report and order.

Is there a need for the proposed facility?

18. The Labadie Energy Center first began generating electricity in 1970. At that time, the coal combustion byproducts, referred to as coal ash, were stored in an impoundment, referred to as an ash pond, located near the generating facility. Additional ash ponds were constructed as older ponds filled to capacity.²

19. Coal ash comes in two types. Bottom ash is heavy material that collects at the bottom of the boiler, much as ash collects at the bottom of a fireplace. Fly ash is lighter material that is collected as it is going up the smokestack. Currently the coal ash that is produced by burning coal is collected, mixed with a large amount of water and sluiced into

¹ In the Matter of the Application of Tartan Energy Company, L.C., *d/b/a* Southern Missouri Gas Company, Report and Order, 3 Mo P.S.C. 3d 173, 177 (September 16, 1994). The Tartan Energy decision cites an earlier Commission decision, *In the Matter of the Application of Intercon Gas, Inc.*, Report and Order, 30 Mo. P.S.C. (N.S.) 554 (June 28, 1991). For that reason, the criteria are sometimes referred to as the Intercon Gas standards. The Commission's *Intercon Gas* decision was upheld by the Court of Appeals, but the court did not address the appropriateness of the standards. *State ex rel. Intercon Gas, Inc. v. Pub. Serv. Comm'n*, 848 S.W.2d 593 (Mo. App. W.D. 1993).

² Giesmann Direct, Ex. 1, Page 2, Lines 15-20.

the ash ponds.³

20. Ameren Missouri's Labadie Energy Center currently produces approximately 460,000 cubic yards (550,000 tons) of coal ash per year. If, as anticipated, the company installs a wet flue gas desulphurization system – commonly called a "scrubber" - at the Labadie plant, the amount of coal ash produced each year will increase by 140,000 tons.⁴

21. Ameren Missouri determined that the existing coal ash ponds will soon be filled to capacity and that a new coal ash storage facility will be needed by approximately 2016.⁵ The proposed new coal ash landfill will have sufficient capacity to store the coal ash produced during the approximately 24 year remaining life of the Labadie Energy Center.⁶

22. All parties agree that if Ameren Missouri is to continue to produce electricity at its Labadie Energy Center, it must put the coal ash somewhere. Sierra Club and LEO's witness conceded that point at the hearing.⁷

23. While Sierra Club and LEO agree that the company "needs to do *something* with the large amount of coal waste its Labadie plant will generate over the next 24 years,"⁸ they disagree with Ameren Missouri's plan to build the coal ash landfill next to the Labadie Energy Center because the proposed landfill would be in a flood plain and in a seismic impact zone. In addition, they are concerned that the high groundwater table under the proposed coal ash landfill could lead to contamination of the groundwater.

24. The Labadie Energy Center and the proposed coal ash landfill are located in

³ Transcript, Page 204, Lines 12-24.

⁴ Transcript, Page 102, Lines 7-15.

⁵ Giesmann Direct, Ex. 1, Page 3, Lines 1-4.

⁶ Transcript, Page 215, Lines 19-23.

⁷ Transcript, Page 517, Lines 13-19.

⁸ Intervenors' Post-Hearing Reply Brief, Page 5.

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the valley of the Missouri river. The power plant and the existing ash ponds are built high enough to be outside the 100-year flood plain of the river.⁹ The proposed coal ash landfill is within the 100-year flood plain,¹⁰ and is within a seismic impact zone, meaning the area could be impacted by an earthquake.¹¹

25. The proposed coal ash landfill has been designed to handle both potential problems. The landfill will be protected from flooding by a berm to an elevation of 488 feet, which is four feet higher than the 100-year flood plain and 0.4 feet above the 500-year flood plain.¹² The berm will be further protected by a fabric-formed concrete mat designed to protect the berm and thus the coal ash landfill against flood erosion.¹³ Finally, the coal ash disposed in the landfill sets into a form that is essentially a large block of concrete that would be impervious to flood erosion.¹⁴

26. The fact that the coal ash landfill will harden into what is essentially a large block of concrete also means that it is not susceptible to earthquake damage. Such an earthquake might at most crack the block of concrete.¹⁵

27. The coal ash landfill is designed to keep the coal ash away from contact with groundwater. The planned landfill includes a two-foot thick clay liner, which is then overlain by a HDPE (high-density polyethylene) geomembrane liner. The liner is designed to be two feet above the natural maximum groundwater level, except where there are leachate

⁹ Transcript, Page 156, Lines 12-14.

¹⁰ Putrich Surrebuttal, Ex. 5, Pages 5-7.

¹¹ Putrich Surrebuttal, Ex. 5, Pages 8-9.

¹² Putrich Surrebuttal, Ex. 5, Page 7, Lines 10-17.

¹³ Putrich Surrebuttal, Ex. 5, Page 7, Lines 20-23.

¹⁴ Giesmann Surrebuttal, Ex. 2, Page 7, Lines 3-10.

¹⁵ Transcript, Page 236, Lines 10-19.

collection sumps, which are designed to be lower than the overall landfill, so that any water running off the waste will gravitate into the sumps.¹⁶ This design complies with Missouri Department of Natural Resources (MDNR) and proposed federal environmental regulations.¹⁷

28. Most significantly, MDNR has already determined that the proposed site is suitable for construction of a coal ash landfill. As required by MDNR's regulations, Ameren Missouri submitted a Preliminary Site Investigation to MDNR in December 2008.¹⁸ MDNR approved that Preliminary Site Investigation in February 2009.¹⁹ After obtaining approval of the Preliminary Site Investigation, Ameren Missouri submitted a Detailed Site Investigation to MDNR in May 2009.²⁰ MDNR completed its review of the Detailed Site Investigation and approved it in April 2011.²¹

29. Sierra Club and LEO assert that Ameren Missouri has not met its burden to prove that the coal ash landfill is needed at this site because it failed to adequately evaluate other potential sites that would be outside the flood plain and outside a seismic zone. Ameren Missouri evaluated other potential sites sufficiently to determine that the cost to transport the coal ash made them a more expensive alternative for disposal of the coal ash produced at its Labadie Energy Center. No party has pointed to anything in any statute, MDNR's regulations, or in the Commission's regulations that would require Ameren Missouri to conduct a more detailed evaluation of other potential disposal sites.

¹⁶ Putrich Surrebuttal, Ex. 5, Page 11, Lines 5-19.

¹⁷ Putrich Sur-Surrebuttal, Ex. 6, Page 2, Lines 3-7.

¹⁸ Giesmann Surrebuttal, Ex. 2, Page 5, Lines 15-19, and Schedule CJG-S8.

¹⁹ Giesmann Surrebuttal, Ex. 2, Page 5, Lines 19-20, and Schedule CJG-S9.

²⁰ Giesmann Surrebuttal, Ex. 2, Page 5, Lines 20-22, and Schedule CJG-S10.

²¹ Giesmann Surrebuttal, Ex. 2, Page 5, Lines 22-24, and Schedule CJG-S11.

30. In 2004, Ameren Missouri commissioned a Utility Waste Landfill Feasibility Study from Rietz and Jens, Inc., an engineering firm. That report, in describing general siting alternatives, advised that any landfill site would need to be approved by MDNR and local zoning authorities. It also warns that a utility waste landfill would likely be perceived as a public nuisance and would likely draw public opposition. The report concludes:

Often the best location to site a new public nuisance is next to an existing nuisance. In the case of a UWL (Utility Waste Landfill), the best siting location is probably adjacent to the power plant that is generating the waste (ash) that will be disposed of in the landfill. Siting the UWLs near the plants will also minimize the transportation costs which is typically the single most expensive aspect of ash disposal.²²

Ameren Missouri chose to take that advice and focused on siting the new coal ash landfill next to the existing Labadie plant.

31. Ameren Missouri's decision to focus its efforts on evaluating a site next to the Labadie Energy Center is also reasonable from an economic perspective. As the Reitz and Jens report indicated, it is expensive to transport ash off-site. The cost of disposing ash in an off-site landfill would be nearly \$100 million greater than disposal at an on-site landfill, costs that may eventually be passed to ratepayers.²³

32. Transporting the massive amount of coal ash generated at the Labadie Energy Center to an off-site landfill would also create non-economic hazards. Transporting the ash off-site would require that each day between 160 and 200 enclosed tanker trucks be driven on the roads through the Labadie community, exposing local residents to the hazards of such heavy truck traffic.²⁴

²² Giesmann Surrebuttal, Ex. 2, Schedule CJG-S19, Pages 3 and 4.

²³ Giesmann Surrebuttal, Ex. 2, Pages 17 and 18.

²⁴ Giesmann Sur-Surrebuttal, Ex. 3, Page 16, Lines 4-8.

33. Because the existing coal ash ponds and the proposed coal ash landfill are located in the Missouri River Valley, they are in close contact with the river's alluvial aquifer. Sierra Club and LEO are concerned that contamination from the coal ash ponds or the coal ash landfill could contaminate the drinking water wells of residents near the site.

34. There is no system of groundwater monitoring wells surrounding the existing coal ash ponds at Labadie,²⁵ and current regulations do not require the presence of such a monitoring system.²⁶ MDNR regulations do require a system of groundwater monitoring wells to monitor the groundwater around the proposed coal ash landfill. The groundwater monitoring network that Ameren Missouri proposed as part of its construction permit application to MDNR meets or exceeds all MDNR regulatory requirements, and has enough wells to detect any contamination on-site before such contamination could move off-site.²⁷

35. Franklin County's Independent Registered Professional Engineer reviewed Ameren Missouri's groundwater monitoring plan and recommended placement of additional monitoring wells around the proposed coal ash landfill. Ameren Missouri responded by adding seven additional wells to the monitoring network,²⁸ and resubmitted the plan to MDNR for approval.²⁹ Franklin County and its engineer have now approved the revised groundwater monitoring plan.³⁰

36. The source of the groundwater immediately under the proposed coal ash

²⁵ Transcript, Page 594, Lines 4-14.

²⁶ Transcript, Page 628, Lines 10-16.

²⁷ Gass Surrebuttal, Ex. 10, Page 6, Lines 10-14.

²⁸ Gass Supplemental, Ex. 12, Pages 3-4.

²⁹ Giesmann Supplemental, Ex. 4, Page 2, Lines 3-10.

³⁰ Giesmann Supplemental, Ex. 4, Page 4, Lines 7-11.

landfill is the Missouri River's alluvial aquifer.³¹ The groundwater in the alluvial aquifer flows primarily horizontally along with the flow of the river, rather than down into a lower strata.³² There are no nearby drinking water wells that draw water from the alluvial aquifer. Indeed, MDNR would not permit a well that drew drinking water from the alluvial aquifer.³³

37. Drinking water wells in the area are located on the bluffs that overlook the river valley and draw their water from the underlying bedrock aquifer, known as the Ozark Aquifer. Groundwater from the Ozark Aquifer flows down from the bluffs, toward the river and up into the alluvial aquifer and into the river itself.³⁴

38. If any contaminants from the coal ash landfill were to enter the alluvial aquifer, they would be unlikely to migrate vertically down into the underlying Ozark Aquifer.³⁵ If contaminants did enter the Ozark Aquifer, they would be pushed toward the river and away from the drinking water wells on the bluffs.³⁶

Is Ameren Missouri qualified to operate the proposed facility?

39. Ameren Missouri is a long-established public utility that provides electricity to approximately 1.2 million Missourians. It has experience operating a vast network of electric generating and transmission facilities. It currently operates a similar dry coal ash landfill at its Sioux generating plant.³⁷

40. Before it can operate the proposed coal ash landfill, Ameren Missouri must

³¹ Transcript, Pages 182-183, Lines 24-25,1

³² Gass Sur-Surrebuttal, Ex. 11, Page 4, Lines 1-18.

³³ Transcript, Page 183, Lines 11-15. *See also*, Gass Sur-Surrebuttal, Ex. 11, Pages 5-6, Lines 16-21, 1-5.

³⁴ Transcript, Pages 612-613, Lines 24-25, 1-7.

³⁵ Transcript, Page 601, Lines 20-25.

³⁶ Ex. 1000.

³⁷ Transcript, Pages 206-207, Lines 23-25, 1-3.

obtain an operating permit from MDNR. MDNR has the technical expertise to determine whether Ameren Missouri qualifies for such a permit.

41. Sierra Club and LEO challenge Ameren Missouri's qualification to operate the proposed coal ash landfill on three bases. First, they contend that Ameren Missouri has failed to ensure that its existing coal ash ponds at Labadie are not contaminating the environment. Second, they point to Ameren's handling of coal ash ponds at generating facilities in Illinois. Third, they contend that Ameren Missouri has almost no experience in operating a dry coal ash landfill of the type they propose to build at Labadie.

42. Sierra Club and LEO point to past seeps from the original unlined coal ash pond to show that Ameren Missouri is not qualified to operate the proposed coal ash landfill. Indeed, such seeps did exist as described in Ameren Missouri's December 20, 2011 Labadie NPDES (National Pollutant Discharge Elimination System) permit reapplication, which is the company's application for a water pollution discharge permit. However, that application also explains that Ameren Missouri has taken action to eliminate the seeps.³⁸ Specifically, Ameren Missouri eliminated the seeps in 2010 by installing a 600 foot long and 10 foot deep slurry wall.³⁹

43. Sierra Club and LEO also complain that Ameren Missouri has failed to voluntarily monitor groundwater in the area of the existing coal ash ponds to check for contamination.⁴⁰ In the future, MDNR may require Ameren Missouri to monitor groundwater around the existing coal ash ponds, but there is no such requirement at this

³⁸ Exhibit 13.

³⁹ Transcript, Page 164, Lines 3-5.

⁴⁰ Transcript, Page 159, Lines 14-16.

time.41

44. Ameren Missouri's corporate parent, Ameren Corp., owns an affiliate, Ameren Energy Resources (AER), that operates in Illinois and is responsible for coal ash ponds at several coal-fired generating facilities in that state. In 2010, AER complied with the Illinois Environmental Protection Agency's (IEPA) request⁴² to install groundwater monitoring systems at coal ash ponds at its power generating facilities in Illinois. As a result of data revealed by that groundwater monitoring, the IEPA issued Violation Notices to AER for four of its facilities. To date, no enforcement actions have been taken by the IEPA.⁴³ Sierra Club and LEO argue that these actions in Illinois demonstrate that Ameren Missouri is not qualified to operate a coal ash landfill at Labadie.

45. In response to the actions taken by the IEPA, AER filed a petition with the Illinois Pollution Control Board asking the board to promulgate site-specific rules to establish enforceable deadlines, requirements and procedures to correct problems and close the sixteen ash ponds at AER's facilities in Illinois. The Illinois authorities are currently considering those rules.⁴⁴

46. Sierra Club and LEO also contend that because Ameren Missouri has little experience in operating a coal ash landfill, it has not shown that it is qualified to operate such a facility at Labadie. Ameren Missouri recently put the same type of coal ash landfill into operation at its Sioux electric generating plant.⁴⁵

Does Ameren Missouri have the financial ability to construct and operate the facility?

⁴¹ Transcript, Pages 161-162, Lines 17-25, 1-13.

⁴² Transcript, Pages 390-393.

⁴³ King Surrebuttal, Ex. 9, Pages 6-7, Lines 6-16, 1-11.

⁴⁴ King Surrebuttal, Ex. 9, Pages 8-11.

⁴⁵ Transcript, Pages 206-207, Lines 23-25, 1-3.

47. Ameren Missouri has already purchased the land needed to construct the facility and anticipates it will cost about \$27 million to build the first cell of the landfill.⁴⁶ Ameren Missouri had approximately \$3.5 billion in operating revenues in calendar year 2013. It had approximately \$803 million in operating income and \$395 million in net income during the same period. The company plans to fund construction of the landfill out of its existing treasury, which has approximately \$800 million available in a revolving credit arrangement.⁴⁷

Is the proposed facility economically feasible?

48. Because the cost of transporting coal ash increases with the distance that the ash must be transported for disposal,⁴⁸ there is really no question that, at least in the short-term, siting the coal ash landfill next to the generating plant is the cheapest option.⁴⁹ But Sierra Club and LEO assert that Ameren Missouri's economic evaluation of the relative cost of disposing of the coal ash at the on-site landfill or transporting it to some other site is incomplete because Ameren Missouri does not account for the possible cost to remediate environmental damage that may result from the existing coal ash ponds and the proposed landfill.⁵⁰ Sierra Club and LEO's witness testified that it is possible to quantify such potential costs, but, as a non-engineer, he did not attempt to do so.⁵¹

49. Most of Sierra Club and LEO's contamination concerns are centered on the existing coal ash ponds, one of which is unlined. Their witness conceded that a dry landfill

⁴⁶ Giesmann Direct, Ex. 1, Page 7, Lines 13-15.

⁴⁷ Transcript, Page 103, Lines 8-25.

⁴⁸ Transcript, Page 102, Lines 3-6.

⁴⁹ See, Giesmann Surrebuttal, Ex. 2, Pages 17-19.

⁵⁰ Norris Cross-Surrebuttal, Ex. 300, Page 6, Lines 11-20.

⁵¹ Transcript, Pages 579-581.

of the sort Ameren Missouri wants to build is preferable to a coal ash pond and would likely defer contamination from the dry landfill for "generations", although he believes such contamination would eventually occur.⁵² He is concerned that because the proposed dry landfill is located close to the existing ash ponds, it might be difficult to determine whether contamination is coming from the ponds, or from the landfill. As a result, remediation costs might be higher than they would otherwise be.⁵³ The witness does not offer an opinion about how much those costs might be increased.

50. The existence or non-existence of environmental contamination emanating from the existing coal ash ponds at the Labadie Energy Center is not before the Commission in this proceeding. If Ameren Missouri faces remediation costs resulting from such contamination, it will face those costs regardless of whether the new coal ash landfill is built at Labadie, or at some other location. Any extra remediation costs that might result from locating the landfill near to the existing coal ash ponds are likely to be dwarfed by the extra costs resulting from locating the landfill at a distance from the Labadie Energy Center.

51. Ameren Missouri is self-insured and has supplementary insurance against specific risks associated with its different types of plants, including those with a coal ash landfill.⁵⁴

Does construction and operation of the proposed facility promote the public interest?

52. MDNR has already determined that the proposed site is suitable for construction of a coal ash landfill. As required by MDNR's regulations, Ameren Missouri

⁵² Transcript, Pages 577-579.

⁵³ Norris Cross-Surrebuttal, Ex. 300, Pages 7-8, Lines 9-23, 1-4.

⁵⁴ Transcript, Page 198, Lines 15-24, Page 199, Lines 12-21.

submitted a Preliminary Site Investigation to MDNR in December 2008.⁵⁵ MDNR approved that Preliminary Site Investigation in February 2009.⁵⁶ After obtaining approval of the Preliminary Site Investigation, Ameren Missouri submitted a Detailed Site Investigation to MDNR in May 2009.⁵⁷ MDNR completed its review of the Detailed Site Investigation and approved it in April 2011.⁵⁸

Conclusions of Law:

A. Ameren Missouri has applied for a certificate of convenience and necessity to expand the boundaries of the Labadie Energy Center to provide enough room to construct and operate a utility waste landfill. It makes that application pursuant to section 393.170, RSMo 2000.

B. Subsection 393.170.1, RSMo 2000 states "[n]o gas corporation, electrical corporation, water corporation or sewer corporation shall begin construction of a gas plant, *electric plant*, water system or sewer system without first having obtained the permission and approval of the commission." (emphasis added)

C. The utility waste landfill that Ameren Missouri proposes to build meets the definition of electric plant found in subsection 386.020(14), RSMo (Supp. 2013), in that it will be "real estate, fixtures and personal property operated, controlled, owned, used, or to be used for or in connection with or to facilitate the generation, transmission, distribution, sale or furnishing of electricity for light, heat or power". Therefore, Ameren Missouri must obtain the permission and approval of the commission before expanding the boundary of

⁵⁵ Giesmann Surrebuttal, Ex. 2, Page 5, Lines 15-19, and Schedule CJG-S8.

⁵⁶ Giesmann Surrebuttal, Ex. 2, Page 5, Lines 19-20, and Schedule CJG-S9.

⁵⁷ Giesmann Surrebuttal, Ex. 2, Page 5, Lines 20-22, and Schedule CJG-S10.

⁵⁸ Giesmann Surrebuttal, Ex. 2, Page 5, Lines 22-24, and Schedule CJG-S11.

the Labadie Energy Center to accommodate the construction of the landfill.

D. Subsection 393.170.3, RSMo 2000 gives the Commission power to grant authority to construct electric plant "whenever it shall after due hearing determine that such construction or such exercise of the right, privilege or franchise is necessary or convenient for the public service." That subsection also states "[t]he commission may by its order impose such condition or conditions as it may deem reasonable and necessary."

E. The phrase "necessary or convenient" does not require the new electric plant to be "essential" or "absolutely indispensable." Rather it is sufficient if the new plant would be an improvement justifying its cost.⁵⁹

F. As the applicant, Ameren Missouri has the burden of proving the convenience or necessity of the certificate by a preponderance of the evidence.⁶⁰

G. Ameren Missouri is required to dispose of coal ash in compliance with the requirements of Chapter 260, RSMo 2000 and the implementing regulations promulgated by MDNR. In particular, section 260.205, RSMo (Supp. 2013) requires Ameren Missouri to obtain an operating permit from MDNR before it may operate a solid waste disposal area.

Decision:

Should the Commission grant Ameren Missouri the certificate it requests?

The Commission must grant Ameren Missouri's application for a certificate of convenience and necessity if Ameren Missouri proves by a preponderance of the evidence that the authority it seeks is "necessary or convenient for the public service." In determining whether Ameren Missouri has met its burden, the Commission will consider the previously

⁵⁹ State ex rel. Intercon Gas, Inc. v. Pub. Serv. Comm'n, 848 S.W.2d 593, 597 (Mo. App. W.D. 1993).

⁶⁰ In the Matter of the Application of KCP&L Greater Missouri Operations Company, Report and Order, 18 Mo. P.S.C. 3d 469 ,494 (March 18, 2009)

described "Tartan Energy" standards.

First, is there a need for the proposed facility? The Labadie Energy Center will continue to burn coal and it will continue to produce massive amounts of coal ash. The need to dispose of that ash is undisputed, as is the eventual exhaustion of capacity in the existing ash ponds by approximately 2016. Storing the ash in a landfill located close to the power plant where it is produced will sharply reduce transportation costs and therefore is economically beneficial for Ameren Missouri and its ratepayers who would ultimately pay such transportation costs.

Despite the economic advantage of locating the landfill next to the power plant, storing coal ash in a landfill located in the Missouri River's flood plain, in a seismic hazard zone, with a high groundwater table, creates problems that might be avoided if the landfill were developed at some other location. However, the landfill that Ameren Missouri proposes to build is designed to address the problems that go along with the location. The landfill is protected from flooding to the 500 year flood level by a reinforced berm. The coal ash will be stored in a dry form that is not subject to significant earthquake damage. Finally, the dry coal ash will be separated from contact with groundwater by a liner and an impermeable layer of clay. The Commission concludes there is a need to construct the coal ash landfill.

Second, is Ameren Missouri qualified to operate the proposed coal ash landfill? Ameren Missouri is a long-established electric utility with vast experience in operating an electric generation, transmission and distribution system. It currently operates a similar coal ash landfill at one of its other generating facilities. The criticisms that Sierra Club and LEO offer about Ameren Missouri's ability to operate the proposed coal ash landfill are

unfounded. The Commission concludes Ameren Missouri is qualified to operate the proposed coal ash landfill.

Third, does Ameren Missouri have the financial ability to construct and operate the proposed coal ash landfill? Ameren Missouri has already purchased the land needed to construct the coal ash landfill, and it has the financial resources needed to construct and operate the landfill out of its existing treasury and income. The Commission concludes Ameren Missouri has the financial ability to construct and operate the proposed coal ash landfill.

Fourth, is the proposed facility economically feasible? Because the cost of transporting the coal ash to any other location is significant, storing the ash next to the generating facility is less expensive than transporting it to some other location. Sierra Club and LEO argue that the long-term costs resulting from the risk of storing the coal ash in the flood plain outweigh those short-term cost savings. However, their long-term cost concerns are aimed at remediation costs that might be associated with the existing coal ash ponds. If Ameren Missouri does incur any remediation costs resulting from contamination emanating from those existing coal ash ponds, it will incur those costs regardless of whether the new coal ash landfill is built on-site or at some other location. In contrast to the existing coal ash ponds, one of which is unlined, the coal ash landfill is designed to store the ash in a form, and in a manner, that will mitigate any concerns about contamination of the river and groundwater. The Commission concludes the proposed coal ash landfill is economically feasible.

Fifth and finally, does the construction and operation of the proposed coal ash landfill promote the public interest? It is clear that the coal ash generated by burning coal

at the Labadie Energy Center must be stored somewhere. From the regulatory economic standpoint most often addressed by this Commission, the best location to construct the coal ash landfill is next to the generating facility, thereby avoiding the extra costs needed to transport the ash to some other location. However, Sierra Club and LEO's criticisms of the proposed location are ultimately founded on environmental rather than economic concerns.

Missouri state law does not give this Commission primary responsibility to address environmental concerns or to enforce environmental laws. Instead, the General Assembly has assigned that duty to MDNR. That department has reviewed the site Ameren Missouri has chosen for its proposed landfill and has approved that site for the construction of the landfill despite its location in a floodplain, in a seismic zone, with a high groundwater table.

The Commission has a responsibility to consider the public interest when deciding whether an application for a certificate of public convenience and necessity should be granted. The public interest includes concerns about the impact of the coal ash landfill on the environment and on public health. However, the Commission recognizes that MDNR has the technical expertise needed to fully evaluate the environmental and public health impacts of the coal ash landfill. For that reason, the Commission will respect MDNR's conclusion that the proposed landfill, as designed, may be built without significant danger to the environment or public health in the location Ameren Missouri has chosen.

After considering all the evidence offered in this case, including that the Labadie Energy Center is Ameren Missouri's largest generator of electricity, that the existing coal ash ponds will be at capacity by approximately 2016, that the coal ash must be deposited somewhere, that Ameren Missouri already owns the land on which it proposes to build a landfill, and that MDNR and local zoning authorities have approved the location and design

of the proposed coal ash landfill, the Commission concludes that approving Ameren Missouri's application for a certificate of convenience and necessity to expand the boundaries of its Labadie Energy Center to allow room to construct and operate a coal ash landfill will promote the public interest.

Should the Commission impose any conditions on the granting of that certificate

of convenience and necessity?

Having determined that Ameren Missouri's application for a certificate of convenience and necessity should be granted, the Commission must determine whether any conditions should be imposed on the granting of that certificate, as allowed by Subsection 393.170.3, RSMo 2000.

Sierra Club and LEO urge the Commission to impose five conditions on its approval

of the certificate of convenience and necessity. The first condition they propose is:

Before commencing construction of the landfill, Ameren must conduct comprehensive groundwater monitoring at its existing coal ash ponds, with monitoring wells both upgradient and downgradient from the ponds, and with both shallow and deep wells pursuant to a monitoring plan approved by the Missouri Department of Natural Resources (DNR), and submit a report containing all monitoring data and analyses to the DNR and the Commission.

This proposed condition asks the Commission to compel MDNR's participation in a

groundwater monitoring plan that MDNR has not required. The Commission does not have

the statutory authority to require MDNR's engagement in this process. Therefore, the

Commission cannot and will not impose the proposed condition.

The second condition proposed by Sierra Club and LEO is:

Ameren should not be able to charge, include in its rate, or in any other way recover from ratepayers and members of the public costs attributable to environmental damage caused by the landfill, including damage to the landfill, river and surrounding area associated with flood events, damage to the landfill, river and surrounding area associated with seismic action, and contamination of groundwater resources associated with the existing ponds and/or landfill.

The Commission recognizes that coal ash is a by-product of coal generation, and storage of the coal ash is part of that process. There are potential risks associated with any coal ash landfill. In fact, there are potential risks associated with transporting coal ash to another facility via truck, barge, or rail. It is inappropriate to make any determination regarding how to address those risks in future rates at this time. Simply put, this Commission cannot bind future Commissions. Even if the Commission were to impose such a condition in this order, a future Commission, looking at the issue many years from now, or even next week, would be free to decide for itself whether Ameren Missouri should be allowed to recover such costs. The Commission will not impose the proposed condition. However, the Commission notes that throughout this case, Ameren Missouri has assured the Commission that the proposed coal ash landfill does not pose a threat to the environment and that environmental concerns are beyond the Commission's purview, despite the potential for financial impact on the utility in the event of an environmental disaster at the proposed landfill. Thus, the Commission suspects it would closely scrutinize any future request that remediation costs be included in rates.

The third condition proposed by Sierra Club and LEO is:

Ameren shall be responsible for all costs in excess of its current estimate of costs to construct and operate the proposed landfill and shall not be able to charge, include in its rate, or in any other way recover any excess costs from ratepayers and members of the public.

This proposed condition is inconsistent with Commission practice. Whether Ameren Missouri will be allowed to recover the cost of constructing the coal ash landfill, as well as any determination of the reasonableness of its cost to construct and operate the landfill, will

be determined in a future rate case in which the Commission will consider all relevant factors. The Commission will not impose the proposed condition.

The fourth condition proposed by Sierra Club and LEO is:

Ameren must provide evidence of financial responsibility to remediate damage to, and contamination caused by, the landfill after the formal post-closure period addressed by DNR regulations.

The Commission believes this is a legitimate concern that directly implicates one of the

Commission's key responsibilities: protecting Missouri ratepayers from excessive costs.

While the Commission recognizes the potential risk of storing coal ash in a coal ash landfill

or by transporting it via truck, barge, or rail, Ameren Missouri states that it is self-insured

and carries supplemental insurance specifically designed to protect against the potential

risks associated with coal ash landfills. Thus, imposition of this condition is not necessary.

The fifth and final condition proposed by Sierra Club and LEO is:

Ameren must comply with all applicable zoning, construction, operating, safety, and environmental requirements, and all other applicable laws and regulations, including filing with the Commission the following permits and licenses: (a) a Utility Waste Landfill construction permit issued by the DNR; (b) compliance with all Franklin County construction and zoning-related rules and regulations and the issuance of a zoning permit by Franklin County allowing for the construction of the landfill at the proposed location; (c) any required transportation and/or road permits; (d) and floodplain development permits; and (e) any land disturbance or stormwater permits.⁶¹

This proposed condition is unnecessary. Ameren Missouri will be required to comply with all applicable requirements, laws, and regulations whether or not the Commission makes that compliance a condition for granting the certificate of convenience and necessity. Furthermore, there is no need for the utility to file the otherwise required permits and licenses with the Commission. The Commission will not impose the proposed condition.

⁶¹ The five proposed conditions are quoted from Intervenors' Post-Hearing Reply Brief, Pages 18-19.

Staff proposes to condition the Commission's approval of the certificate on Ameren Missouri having obtained the necessary permits from MDNR for the landfill construction and land disturbance. This condition is reasonable. Such permits are required before construction can start on the coal ash landfill and Staff has an interest in knowing when those permits are obtained. The Commission will include the condition recommended by Staff.

Staff also advises the Commission to add a statement that the granting of the certificate is not a determination of the ratemaking treatment of the costs associated with the landfill. Ameren Missouri accepts Staff's recommendations and the Commission routinely includes the statement recommended by Staff in orders granting certificates to remind all parties that ratemaking decisions will be made in appropriate ratemaking cases. That statement will be included in this order as well.

Commission orders are effective 30 days after issuance unless the Commission establishes some other effective date for the order. Any requests for rehearing must be filed before the effective date of the order, or no appeal is possible. Ameren Missouri has indicated it would like to begin construction of the landfill as soon as it obtains the necessary permission from the Commission and from MDNR. For that reason, the Commission will make this order effective in fifteen days. That may allow Ameren Missouri to begin construction expeditiously, while affording the other parties more than sufficient time to seek rehearing.

THE COMMISSION ORDERS THAT:

1. Union Electric Company, d/b/a Ameren Missouri is granted a certificate of public convenience and necessity to expand the boundaries of its existing Labadie Energy

Center to allow it to construct and operate a utility waste landfill and related facilities and to conduct other plant-related operations at the site.

2. The granting of this application is conditioned upon Union Electric Company, d/b/a Ameren Missouri having obtained all necessary construction and land disturbance permits from the Missouri Department of Natural Resources. Union Electric Company, d/b/a Ameren Missouri shall notify the Commission when it has obtained the necessary construction and land disturbance permits from the Missouri Department of Natural Resources by filing copies of those permits in this file.

3. The granting of the certificate of convenience and necessity by this order is not a determination of the ratemaking treatment of the costs associated with the coal ash landfill.

4. This report and order shall become effective on July 17, 2014.



BY THE COMMISSION

/ / lovis I Woodrugh

Morris L. Woodruff Secretary

R. Kenney, Chm., concurs with separate concurring opinion attached, Stoll, W. Kenney, and Rupp, CC., concur, Hall, C., concurs with separate concurring opinion to follow. and certify compliance with the provision of Section 536.080, RSMo

Dated at Jefferson City, Missouri, on this 2nd day of July, 2014.