

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,) File No. EA-2012-0281
Operate, Maintain, and Otherwise Control and Manage)
A Utility Waste Landfill and Related Facilities at its)
Labadie Energy Center.)

**Attorneys for Union Electric Company
d/b/a Ameren Missouri**

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

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INITIAL POST-HEARING BRIEF OF AMEREN MISSOURI

COMES NOW Union Electric Company, d/b/a Ameren Missouri (“Company” or “Ameren Missouri”), by and through counsel, and, for its initial post-hearing brief, states as follows:

INTRODUCTION

Because the Labadie Energy Center is rapidly reaching a point where it must construct a new facility to manage the coal combustion residuals (“CCRs”) produced as a byproduct at its plant, Ameren Missouri requests from this Commission a certificate of convenience and necessity (“CCN”), pursuant to Section 393.170.1, .3, RSMo.¹, so that it may expand the boundaries of the existing plant site to include additional land on which a utility waste landfill (“UWL”) will be constructed for disposal of CCRs that are not otherwise beneficially reused.

While the UWL proposed for Labadie is not the first one of its kind to be constructed in Missouri, this is the first time the Commission has been asked to approve the expansion of an electric plant site to allow for the construction of a UWL. As this Commission is well aware, it is not the only state agency from which approval must be obtained; in addition to the Commission's approval to expand the plant boundaries, Ameren Missouri must obtain approval

¹ All statutory references are to the Revised Statutes of Missouri (2000).

from the Missouri Department of Natural Resources (“MDNR”) for the siting,² design, construction and planned operation of the UWL. In addition, the siting, design, construction and planned operation of the proposed UWL was also subject to review by Franklin County zoning authorities. Had the proposed UWL been located within the existing plant boundaries, Ameren Missouri would need only MDNR’s approval.

The issue for this Commission, then, is whether Ameren Missouri’s request for a CCN is “necessary or convenient” for Ameren Missouri to carry out its duty to render electric service to the public. Section 393.170. The case law makes clear that term “necessity” in Section 393.170 “does not mean ‘essential’ or ‘absolutely indispensable,’” but rather, it means that “an additional service [the proposed UWL here] would be an improvement justifying its cost.” *State ex rel. Intercon Gas, Inc. v. Pub. Serv. Comm’n*, 848 S.W.2d 593 (Mo. App. W.D. 1993). As applied to the proposed landfill, the law is that “[i]f it [here, the proposed landfill] is of sufficient importance to warrant the expense of making [building] it, it is a *public necessity*” within the meaning of the Public Service Commission Law. *State ex rel. Mo., Kan. & Okla. Coach Lines*, 179 S.W.2d 132, 136 (Mo. App. W.D. 1944) (emphasis added). To obtain the requested CCN, Ameren Missouri must offer proof of the necessity of the CCN by the preponderance of the evidence standard. *In re: KCP&L Greater Missouri Operations Co.*, 2009 Mo. PSC LEXIS 200 at *56 (Case No. EA-2009-0118 March 18, 2009), citing *Bonney v. Environmental Engineering, Inc.*, 224 S.W.3d 109, 120 (Mo. App. S.D. 2007). While this would ordinarily seem to be a straightforward question, the environmental concerns of Sierra Club and Labadie Environmental

² As discussed below, MDNR has already approved the Labadie site as appropriate for construction of a UWL and, assuming that MDNR issues a Construction Permit as anticipated, will have approved the UWL design.

Organization (“Intervenors”) necessarily raised the issue of the proper scope of the Commission’s consideration in this proceeding.

Although the Commission is not required by statute or regulation to do so, it has historically considered the following five factors—commonly referred to as the *Intercon* or *Tartan* factors because of prior cases articulating them—when determining whether to grant a CCN: (1) there must be a need for the proposed service; (2) the applicant must be qualified to provide the proposed service; (3) the applicant must have the financial ability to provide the proposed service; (4) the proposed service must be economically feasible; and (5) the proposed service must promote the public interest. *In re: KCP&L Greater Missouri Operations Co.*, 2009 Mo. PSC LEXIS 200 at *60 (2009), citing *In re: Intercon Gas, Inc.*, 30 Mo. P.S.C. 554 (1991); *In re: Tartan Energy Co. LLC, d/b/a Southern Missouri Gas Co.*, 3 Mo. P.S.C. 173, 177 (1994). It is significant that these factors did not arise in the context of extending an existing CCN to add to an already certificated utility plant—as is the case here—but instead were developed and applied to determine whether a CCN should be granted to construct an entirely new plant or pipeline; in that context, the factors would seem much more relevant to the Commission’s consideration. Nonetheless, the Commission has referred in this case to its use of these factors,³ and Ameren Missouri, Staff and Intervenors provided evidence and argument relating to these factors.

Whether these factors are relevant to Ameren Missouri’s request is not as significant an issue as is the scope of the Commission’s consideration of the local interests raised by Intervenors. They argued for permission to intervene in this action by asserting that members of

³ See *Order Regarding Objections and Motion to Strike* at 5-6 (August 28, 2013) [EFIS Item No. 99].

their organizations resided in the area of the proposed landfill and that leakage or flooding of the landfill “could” contaminate drinking water in the area and “would likely” reduce home property values in the area. *Application to Intervene* at ¶¶ 5, 6 (February 12, 2013) [EFIS Item No. 14]. Allowed as parties to this action, Intervenorors did not question the need for a means of disposing of CCRs, but instead opposed the UWL by raising the same environmental concerns they had raised with Franklin County and MDNR and doing so by reframing these concerns in the context of the *Tartan* factors, apparently to make them palatable to the Commission.

Despite the responsibility of both MDNR and Franklin County to evaluate these concerns, the Commission indicated early on that it believed such issues were also appropriate in this proceeding:

The Commission does not have primary responsibility to ensure that Ameren Missouri's plans for expanding its coal ash landfill comply with environmental protection requirements. But, the Commission does have a responsibility to determine whether Ameren Missouri's proposal is "necessary or convenient for the public service." That responsibility entails a broad grant of authority to examine many issues, including environmental questions. Even if the Commission ultimately decides that it should defer to the Department of Natural Resources' expertise on environmental questions, evidence concerning such questions is relevant to this proceeding. The Commission will not strike any offered documents on that broad basis.

August 28, 2013 *Order* [EFIS Item No. 99]. As a result, much of the testimony at hearing on Ameren Missouri’s application to extend its plant boundaries related to environmental concerns that had been or were being considered by MDNR and Franklin County.

This notwithstanding, the competent and substantial evidence received by this Commission provides overwhelming support for granting to Ameren Missouri a CCN extending the plant boundaries to allow the construction of the proposed UWL, subject to only those conditions proposed by Staff.

ISSUES

I. With regard to the environmental concerns over the siting, design, construction, operation and closure of the UWL, the Commission should defer to MDNR—the agency with technical expertise and delegated authority to consider Intervenor’s environmental concerns.

As is evident from the August 28, 2013 Order quoted above, the extent to which the Commission should evaluate the environmental concerns raised by Intervenor as to the siting, design, construction, operation and closure of the proposed UWL has been an overarching issue in Ameren Missouri’s request to expand its existing CCN to construct the UWL. Indeed, this issue gave rise to lively questioning of the attorneys for the parties by the Commission at the beginning of this hearing. (Tr. Vol. 5, 60:2-68:6; 71:6-78:1; 82:12-83:1) Based upon the fact that not very many CCN requests present the Commission with a situation in which another state agency is required by statute to be extensively involved in evaluating the siting, design, construction and operation of a proposed addition to an electric plant, it is understandable that the scope of the Commission’s review of the UWL is somewhat undefined. Ameren Missouri contends (as does Staff and Office of the Public Counsel (“OPC”)) that given the authority, expertise and involvement of MDNR in reviewing the siting, design, construction, operation and closure requirements for the proposed UWL, it is appropriate that the Commission defer to MDNR’s determination of those issues.⁴

⁴ Intervenor now urge the Commission not to defer to MDNR, which is a complete reversal of their earlier position before the Commission—that it was really MDNR that is responsible for and has the expertise to decide the environmental issues they now claim are not only within the purview of the Commission, but the very reasons this Commission should deny Ameren Missouri’s request:

the Missouri legislature has expressly given the Department of Natural Resources (“DNR”) power to grant permits for the construction and operation of utility waste landfills. DNR has a comprehensive set of regulations for the construction and operation of such landfills. If the Commission were to also take on the duty of

After all, it is MDNR that is delegated the authority to permit UWLs, and Ameren Missouri has applied for and must obtain a Construction Permit from the MDNR before it can construct the proposed UWL at Labadie. (Exh. 2, Giesmann Surrebuttal, 21:21-22:17; Exh. 4, Giesmann Supplemental, Schedule CJG-ST1) Eleven pages of regulations, found at 10 CSR 80-11.010, govern all aspects of Utility Waste Landfill construction and operation, and the entire purpose of the UWL regulations is to ensure that the UWL will not adversely affect public health and have minimal impact on the environment:

(1) General Provisions. This rule is intended to provide for utility waste landfill operations that will have a minimal impact on the environment. The rule sets forth requirements and the method of satisfactory compliance to ensure that the design, construction and operation of utility waste landfills will protect the public health, prevent nuisances and meet applicable environmental standards.

10 CSR 80-11.010(1). The permitting process is a multi-year process which begins with a Preliminary Site Investigation and is followed by a Detailed Site Investigation, which are rigorous site assessment and investigation requirements; before a permit application can be submitted, MDNR technical staff—consisting of geologists, engineers and other professionals who understand geology, hydrology and engineering—must determine that the proposed site meets regulatory requirements such that the site is determined to have “suitable geologic and hydrologic characteristics for development of an environmentally sound solid waste disposal area.” (Exh. 5, Putrich Surrebuttal, 5:6-13; 23:2-24:23) The construction permit application (Exh. 4, Giesmann Supplemental, Schedule CJG-ST1), contains several thousand pages of technical data and analysis, which is then reviewed and commented upon by these MDNR professionals

regulating landfill construction and operation, the duplicative effort could lead to confusing, contradictory, and dilatory requirements.
Intervenors’ *Motion to Dismiss for Lack of Subject Matter Jurisdiction* (April 28, 2013) [EFIS Item No. 22].

before final approval is given. (Exh. 5, Putrich Surrebuttal, 23:19-21) No one can credibly deny that Ameren Missouri's request to site, construct and operate a UWL at the Labadie Energy Center has been subject to an intensive review by those with the expertise to conduct that review.

While the legal principle that the federal government had exclusive authority to regulate the construction and operation of nuclear power plants guided the appellate court in its decision in *State ex rel. Utility Consumers Council of Missouri, Inc. v. Pub. Serv. Comm'n* (where opponents to the Callaway Energy Center urged the Commission to deny a CCN request based upon their concerns about nuclear safety), the decision made clear that the "considerations of the Commission do not attempt to protect the citizens of Missouri against radiation hazards," but instead were more properly directed at serving the energy needs of the public:

The Commission must determine whether it will issue its certificate of convenience and necessity. To arrive at its determination, the Commission must find that the nuclear facility is adequate to meet the needs of the public and is economical when compared with alternative sources of energy.

562 S.W.2d 688, 698 n.18 (Mo. App. E.D. 1978). The court went on to more succinctly state that "[t]he Commission's considerations pertain to economic feasibility, need for increased power and financing." *Id.* at 698.

Moreover, the Commission's own regulations also contemplate that land use and environmental issues are to be taken up with other agencies with jurisdiction over them and not the Commission. This is evidenced by the Commission's CCN rules which require Ameren Missouri to obtain the consent or approval from the county and governmental agencies. 4 CSR 240-3.105(1)(D); *see, e.g., In re: Union Electric Co., d/b/a Ameren Missouri*, 2014 Mo. PSC LEXIS 271 at *4-*5 (Case No. EA-2014-0136 April 8, 2014) (conditioning grant of CCN for solar generating facility on "Ameren Missouri obtaining a Land Disturbance permit" from MDNR). While the Commission wants to confirm that Ameren Missouri has obtained any

required zoning approval or the necessary permits from MDNR, the substance of the land use issues involved in zoning issues or environmental issues involved at MDNR are not within the scope of the Commission's consideration of a CCN application when, as here, those other agencies have addressed or are addressing those issues, which are squarely within their expertise, jurisdiction and regulatory authority.⁵

Given the nature of the Commission's own authority and expertise, it is actually quite unfair of Intervenors to ask this Commission to undertake a comprehensive environmental review of technical issues to determine, for example, whether the groundwater monitoring network has the right number and kind of monitoring wells, or whether the slope of the berm surrounding the UWL was designed such that it will not be subject to liquefaction during seismic activity or whether the composite liner is sufficient to keep separate the CCRs within the UWL from groundwater at the site. These are not the type of issues this Commission is equipped to evaluate. Although MDNR provides a forum for Intervenors to raise these concerns, Intervenors bring them here. Why?

At the beginning of the hearing, a Commissioner posited a hypothetical scenario wherein a different utility sought to build a UWL in Labadie Bottoms but the evidence demonstrated that the utility was not using state-of-the-art technology and, as a result, the parties conceded that

⁵ The Commission, however, is delegated authority under the Gas Storage Act to grant authority for the exercise of the power of eminent domain to a natural gas storage company seeking to acquire underground storage space where the utility cannot purchase the space by private contract; in that instance, determining whether the utility is authorized to exercise condemnation power necessarily involves an evaluation of the geology of the proposed site. *See* Gas Storage Act of 1953, Sections 393.410-393.510, RSMo. (particularly Section 393.460, which sets out the particular geology that cannot be used); *Collins v. Pub. Serv. Comm'n*, 293 S.W.2d 345 (Mo. 1956) (where the Commission heard evidence from several expert geologists on the feasibility of injecting natural gas underground in the St. Louis area). It is important to note, however, that it is the specific statutory duty of the Commission to hear this evidence, and no other state agency such as MDNR exercises control or review over the site selection.

there was a high likelihood of groundwater contamination. (Tr. Vol. 5, 74:20-75:4) The Commissioner's question was whether it should defer to MDNR under these circumstances. (Tr. Vol. 5, 75:8-12) As the Commissioner pointed out, this is not the situation that the Commission has been presented with in this CCN request—there is nothing in the record to suggest that the design or operation of the proposed UWL will result in a likelihood of groundwater contamination. Instead, Intervenors have premised their entire case on the comments of lay people at public hearings who are opposed to the operation of the Labadie plant in their community and the sweeping, but entirely unsupported criticisms of Intervenors' witness Charles Norris.⁶ Perhaps the reason Intervenors are here is because they were concerned that MDNR would require them to provide actual scientific support for their claims rather than simply rest on dramatic generalizations and comparisons between two different aquifers in order to “suggest” that contamination has occurred.

⁶ The absence of any factual support for Mr. Norris' opinion is not the only problem with Mr. Norris' testimony. *See In re: Union Electric Co., d/b/a Ameren Missouri*, 2012 Mo. PSC LEXIS 1205 at *34-*35 (Case No. ER-2012-0166 December 12, 2012) (finding that witness' vague and unsupported statements did not constitute “competent or substantial evidence”). Mr. Norris was not a credible witness, and it was not just because he had originally been denied licensure by the Indiana Board of Licensure for Professional Geologists because of their belief that he had committed perjury in federal court by falsely stating that he had passed a second preliminary examination and had otherwise exaggerated his efforts to complete a Ph.D.; nor was it only because Mr. Norris misrepresented his legal consulting work as “project manager” work in his current CV; nor was it just because he had no prior knowledge regarding the Illinois Environmental Protection Agency and Ameren Energy Resource's coal ash ponds on which he testified—based upon the information fed him by his attorneys on the subject. (Tr. Vol. 6, 468:5-24; 473:11-475:18; 476:7-480:23) Mr. Norris further demonstrated an utter lack of credibility during his cross-examination when he had to be directed to his deposition 12 different times, as his testimony at the hearing was inconsistent with answers he had previously given in his deposition. (Tr. Vol. 6, 478:14-479:7; 485:23-486:13; 488:17-489:2; 493:14-494:2; 201:14-502:13; 503:11-504:21; 515:13-20; 519:5-9; 519:17-520:9; 524:20-525:20; 535:1-19; 535:25-536:9) *See In re: Great Plains Energy Inc., et al.*, 2008 Mo. PSC LEXIS 820 at *42-*44 (Case No. EM-2007-0374) (finding that a witness' contradictory statements diminished that witness' credibility).

Because there is no evidence to suggest that MDNR has not taken seriously its obligation to evaluate Ameren Missouri's proposed UWL and because Intervenors have presented no factual basis that would impeach MDNR's conclusions, this Commission should trust MDNR's expert determinations regarding the siting, design, construction, operation and closure of the proposed UWL and defer to MDNR on these issues.

II. The evidence establishes that the UWL for which Ameren Missouri is seeking a CCN is necessary and convenient for the public service.

A. There is a need for the proposed UWL.

The Labadie Energy Center is Ameren Missouri's largest power plant—providing approximately 40 percent of the energy consumed by consumers each year—and one of its most economical. (Exh. 1, Giesmann Direct, 3:9-13) The generation of electricity from coal inevitably results in the production of CCRs, and although Ameren Missouri beneficially reuses about 60% of the CCRs it produces (for example, in the manufacture of Quikrete and as road cinders), the remaining CCRs require disposal. (Exh. 1, Giesmann Direct, 2:18-19; Tr. Vol. 5, 208:19-210:7; 349:8-13) Currently, CCRs from the Labadie plant are disposed of in two ash ponds at the plant site, but those storage ponds are expected to reach their capacity by 2016, at which time a new storage facility will be required. (Exh. 1, Giesmann Direct, 2:13-3:8). The proposed UWL is anticipated to meet the needs of the Labadie plant during the remainder of its useful life. (Tr. Vol. 5, 215:11-25) Even Mr. Norris, Intervenors' only witness in this hearing, agreed that there is a need for an area to dispose of CCRs in order for the Labadie plant to continue generating electricity. (Tr. Vol. 6, 517:13-19)

Given these facts, it would seem rather obvious that the proposed UWL "is of sufficient importance to warrant the expense of making [building] it, it is a public necessity." *See State ex rel. Mo., Kan. & Okla. Coach Lines*, 179 S.W.2d at 136. Staff and OPC think so.

Intervenors, however, challenge the need for the proposed UWL because Ameren Missouri “has not proven that there is a need for the facility as proposed in the application because it never examined any alternative sites for the disposal of the coal ash from the Labadie Energy Center.” *Intervenors’ Statement of Position* at 2. Simply put, Intervenors want this Commission to look past whether there is need for a UWL to store CCRs such that it is an improvement worth the cost of making it and instead second guess the management decisions made by Ameren Missouri and the determinations made by MDNR in evaluating and approving the siting of the proposed UWL at Labadie.

As support for their opposition to the UWL, Intervenors spent much time at the hearing attempting to prove that Ameren Missouri’s decision to locate the UWL at Labadie was defective because the alternate site options evaluated by Ameren Missouri were not specific to disposal of Labadie CCRs. The cross-examination of Mr. Giesmann by Intervenors on this issue spanned approximately 38 pages of hearing transcript. (Tr. Vol. 5, 117:24-155:13) As Mr. Giesmann explained, however, Ameren Missouri had looked at the Labadie site initially as a regional storage facility and did not conduct further analysis once the site was deemed appropriate by MDNR. (Tr. Vol. 5, 192:3-193:25) As Mr. Giesmann also explained, if the adjacent land could be purchased and if further study determined that it was appropriate for construction of a UWL, the only question remaining was whether it was cost-effective to construct the UWL at the Labadie site—and the study of 22 alternate sites was relied upon to evaluate the costs of transporting CCRs off-site as opposed to constructing and operating a UWL at the facility itself. (Exh. 3, Giesmann Sur-Surrebuttal, 14:22-15:15)

Criticizing Ameren Missouri’s failure to properly evaluate other sites, Mr. Norris contended that finding an alternative site for the proposed Labadie UWL was “straightforward

and easily accomplished.” (Exh. 300, Norris Cross-Surrebuttal, 23:18-24:8) Mr. Norris, in fact, contended that he had looked at potential sites “at a qualitative level” within a 166-mile vicinity of the Labadie site that were not in a floodplain, not in a seismic impact zone, not in karst or sinkhole-prone areas⁷ and located along rail transportation. (Exh. 300, Norris Cross-Surrebuttal, 24:9-18) Despite Mr. Norris’ claim that finding alternate sites was easily accomplished, Mr. Norris admits that his “qualitative” search for potential sites did not yield one alternative site and that he had not performed a site specific study of any alternative site:⁸

Q. And even though you said Ameren Missouri could readily find an alternative site, you yourself have not identified a single, alternative site that meets those characteristics, isn’t that true?

A. No, I have not attempted to do Ameren’s work for it.

Q. I’m just asking you about the work that you should do to support your opinions, Mr. Norris. You’ve not identified a single alternative site that meets those characteristics, isn’t that true?

A. That’s true.

Q. And you’ve done no site specific study of any particular alternative site?

A. That’s correct.

(Tr. Vol. 6, 518:3-15) In fact, Mr. Norris admitted that he didn’t even look for a specific alternative site. (Tr. Vol. 6, 519:5-9) Mr. Norris’ failure to provide any factual support for his sweeping statement that finding other sites is “easily accomplished” confirms Mr. Giesmann’s point—selecting an alternative site is a much more daunting task than Mr. Norris suggests. (Exh. 3, Giesmann Sur-Surrebuttal, 15:16-17:11) And as Mr. Giesmann also points out, if the truck transport of CCRs to an off-site UWL is necessary, an additional hazard would be created by the

⁷ Despite including this particular requirement in his “qualitative” study of other sites, Mr. Norris admitted that he did not have evidence that the proposed UWL site at Labadie actually has karst geology underneath it or that sinkholes are actually present at the proposed site. (Tr. Vol. 6, 521:12-24) Indeed, studies demonstrated that there are no known springs, caves, or sinkholes within one-quarter mile of the UWL site and that there are no karst terrains in the area. (Exh. 5, Putrich Surrebuttal, 10:7-11)

⁸ The impact on cost of Mr. Norris’ proposal is discussed below at subpoint “D.”

fact that at least 160 trucks would travel from the Labadie site to the off-site UWL every working day—leaving aside for the moment any consideration of the significant costs required by this alternative. (Exh. 3, Giesmann Sur-Surrebuttal, 15:16-16:16)

Intervenors' criticism overlooks the more important fact that there is no regulatory provision in the MDNR regulations or, for that matter, in the PSC regulations that requires Ameren Missouri to evaluate all possible options for placement of the UWL. Consequently, the extent to which other sites were considered is not nearly as relevant as the answer to the following: is the proposed site at Labadie appropriate for the proposed UWL?

Given the scientific nature of this question, Ameren Missouri contends that it is entirely appropriate for the Commission to defer to MDNR's determination that the site is appropriate for the planned UWL. As previously indicated, the permitting process is a multi-year process which begins with a Preliminary Site Investigation and is followed by a Detailed Site Investigation, which are rigorous site assessment and investigation requirements. (Exh. 5, Putrich Surrebuttal at 23:10-18) Before a permit application can be submitted, MDNR technical staff who understand geology, hydrology and engineering must determine that the proposed site meets regulatory requirements such that the site is determined to have "suitable geologic and hydrologic characteristics for development of an environmentally sound solid waste disposal area." (Exh. 5, Putrich Surrebuttal at 5:6-13; 23:2-24:23) As this Commission is aware, MDNR has approved the Labadie site as suitable for the proposed UWL, and Franklin County has concurred with that decision, as evidenced by its issuance of a Floodplain Development Permit, zoning approval letter, and by the approval letter from the IRPE. (Exh. 2, Giesmann Surrebuttal, 4:18-6:8; 9:3-12 Schedules CJG-S9, CJG-S11, CJG-S14; Exh. 4, Giesmann Supplemental, Schedule CJG-ST1 at Appendix F) Because there is absolutely no evidence to suggest that MDNR failed in its duty to

properly evaluate the appropriateness of the site, this Commission should defer to the sister agency charged with protecting public health and the environment.

The primary concern voiced by Intervenor in their motion to intervene, in the testimony at the local public hearings and at the Commission hearing (though somewhat less stridently) is their assertion that the coal ash contaminants will make their way from the UWL into the groundwater from which local residents obtain their drinking water. But Intervenor presented no scientific evidence upon which to base such a claim; accordingly, the competent and substantial evidence received by this Commission affirms the propriety of MDNR's decision in approving the site location.

Ameren Missouri witness Dr. Lisa Bradley provides the framework for analysis of what risk, if any, there is to contamination of drinking water wells by coal ash contaminants. Dr. Bradley received a Ph.D. in toxicology from Massachusetts Institute of Technology and has over 25 years of experience in toxicology. (Exh. 8, Bradley Surrebuttal, Exh. A) As Dr. Bradley points out, in order for such a risk of contamination to exist, there must be sufficient toxicity in the coal ash and there must be a potential for exposure to the particular toxicity. (Exh. 8, Bradley Surrebuttal, 11:8-14) Regarding the potential for toxicity from coal ash constituents, Dr. Bradley has demonstrated that, with only a few exceptions, constituent concentrations in the coal ash generated by the particular type of coal burned at the Labadie plant are below EPA screening levels for residential soils and, in fact, are similar to the background levels found in soils in the United States. (Exh. 8, Bradley Surrebuttal, 8:7-9:21) Dr. Bradley concludes that the toxicity of coal ash has been "grossly overstated" and is not borne out by studies of the risk of harm to humans from exposure. (Exh. 8, Bradley Surrebuttal, 11:3-6)

A significant issue in this case was the potential for exposure to coal ash constituents from the proposed UWL via drinking water drawn from area wells. In order to evaluate the potential for this exposure then, it is necessary to review the evidence received by this Commission regarding the likelihood that the proposed UWL will release leachate into the groundwater in the alluvial aquifer at the proposed UWL site (which, as noted below, is not used for drinking water) and the resulting likelihood that this leachate will find its way to an entirely different aquifer and into drinking water wells. This review demonstrates quite clearly why MDNR has determined that the site is appropriate and why it has offered little criticism of the design of the proposed UWL.

Steven Putrich is a professional engineer with over 25 years of experience working on coal-fired power plant projects, with a specialty in the beneficial reuse of coal ash, as well as the siting, design, permitting and construction of CCR and industrial waste management facilities. (Exh. 5, Putrich Surrebuttal, 1:7-2:2) Mr. Putrich opined that the “predictive performance and protectiveness” of a UWL rests principally on the appropriateness of the site and the landfill design. (Exh. 5, Putrich Surrebuttal, 13:9-10) In addition to his opinion that the site was appropriate based upon his review of the Preliminary Site Investigation, Detailed Site Investigation and MDNR requirements, Mr. Putrich focused on three key design components relevant to the UWL’s potential for releasing coal ash constituents into the environment: the liner, stormwater management and the final cover. (Exh. 5, Putrich Surrebuttal, 5:1-12:23; 13:11-18)

The liner designed for the proposed UWL will prevent the release of leachate into the alluvial groundwater. As Mr. Putrich points out, the proposed UWL will have a composite bottom liner that will be comprised of two feet of compacted clay with a permeability of 1×10^{-7}

cm/sec (100 times *more* impermeable than MDNR's requirement of 1×10^{-5} cm/sec) and a 60 mil thick high density polyethylene ("HDPE") liner, which studies have shown are extremely reliable. (Exh. 5, Putrich Surrebuttal, 13:19-14:4; 19:9-20:18) Although MDNR does not have a regulatory requirement for the separation of the bottom of the liner from the groundwater but instead only requires a demonstration that the liner's contact with groundwater will not adversely impact the liner,⁹ the base of the clay liner is designed to be two feet or more above the natural groundwater table¹⁰—with only the leachate collection sumps (comprising less than 0.15% of the total UWL footprint) having less than two feet of separation from the natural groundwater table, which itself was conservatively established. (Exh. 5, Putrich Surrebuttal, 11:1-19) In terms of its reliability, Tyler Gass, a licensed geologist and hydrogeologist with more than 40 years' work experience in his field, testified at hearing that the only possible cause he could think of that would result in a five-foot tear in the clay liner and a tear in the HDPE liner at the same location would be a small meteorite penetrating both liners; he could not think of anything that would

⁹ 10 CSR 80-11.010(4)(B)6.

¹⁰ The issue of whether the composite liner was separated from the groundwater by two feet was disputed by Intervenor. The two-foot separation requirement is not a regulatory requirement at this time, but is contained in the proposed EPA rule for UWLs. (Exh. 5, Putrich Surrebuttal, 11:5-19; Tr. Vol. 6, 484:8-25) It was the opinion not only of Mr. Putrich, but also of those who designed the system and Franklin County's independent registered professional engineer, that the design met the requirements of the proposed rule. (Exh. 6, Putrich Sur-Surrebuttal, 1:12-4:9; 5:17-21; Tr. Vol. 5, 272:1-18; Exh., 4, Giesmann Supplemental, Schedule CJG-ST1 at Appendix F, December 4, 2013 Letter from Andrews Engineering, Inc.) Regardless of the dispute, Mr. Norris acknowledged that Ameren Missouri had demonstrated in its permit application that intermittent contact between the liner and the groundwater would not impact the liner's design, function or performance. (Tr. Vol. 6, 485:1-15) Even more telling is the fact that Mr. Norris offers absolutely no criticism that the composite liner is designed improperly or that it will not perform as designed. It should also be noted that the "natural groundwater table" discussed in the context of this case was established for a particular regulatory purpose (the Detailed Site Investigation) but is not necessarily indicative of the true natural groundwater table, as indicated by the fact that for this particular regulatory purpose it was very conservatively estimated.

result in such a tear under natural conditions.¹¹ (Tr. Vol. 7, 639:23-640:16) Intervenors have offered no facts or scientific analysis to support any claim that the liner will allow a release of leachate into the groundwater.

But what about rainfall creating leachate sufficient to escape the UWL and contaminate groundwater? Equally implausible. The proposed leachate collection system not only meets MDNR requirements to manage a 25-year, 24-hour storm event, it is designed to have no more than two inches of leachate on the bottom liner at any time even though MDNR regulations allow up to 12 inches of accumulation of leachate on the liner. (Exh. 5, Putrich Surrebuttal, 14:4-9; Exh. 4, Giesmann Supplemental, Schedule CJG-ST1 at Appendix O, Table O-1) The leachate collection system will not allow leachate to build up and escape from the UWL.

With regard to severe storm events and possible flooding, it is also important to remember that the perimeter berm of the UWL is designed at an elevation higher than a 500-year flood event even though MDNR regulations only require protection against a 100-year flood event. (Exh. 5, Putrich Surrebuttal, 19:1-8) Though not required by MDNR regulations, the exterior berm will be covered with a fabric formed concrete mat to protect against any flood-induced erosion. (Exh. 1, Giesmann Direct, 5:9-10; Tr. Vol. 5, 207:4-208:18) Mr. Norris offered no criticism of the design considerations of the proposed UWL based upon the risk of flooding at the site. (Tr. Vol. 6, 498:11-15) Therefore, the risk that a flood would overwhelm the UWL and allow leachate to escape from the UWL only exists if the site were to experience flood levels in excess of a 500-year flood.

¹¹ As discussed below, in the unlikely event of some kind of tear in both liners, the MDNR-approved groundwater monitoring system would detect any release before it could pose a risk to human health or the environment.

The combination of the protective berm and the composite liner, according to Mr. Putrich, will prevent interaction of the CCRs in the UWL with either surface water or surface soils at the UWL site. (Exh. 5, Putrich Surrebuttal, 21:2-18) Moreover, significant stormwater entry into the UWL will be prevented by the planned final cover of the UWL consists of a 40 mil HDPE overlain by a two-foot vegetative soil layer and also exceeds the minimum requirements set by MDNR. (Exh. 5, Putrich Surrebuttal, 14:10-14) The proposed UWL will not release leachate into the groundwater.

And though the proposed UWL is located in a seismic impact zone, the UWL is designed to meet and even exceed MDNR stability standards so as to prevent destructive liquefaction and, in fact, the stability of the UWL will be increased by the placement of CCRs in the UWL because of their cement-like properties. (Exh. 5, Putrich Surrebuttal, 17:14-18:11) As Mr. Giesmann points out, the UWL is designed to withstand seismic events at a 2,500-year recurrence interval. (Tr. Vol. 5, 235:17-20) Because of the cement-like nature of the coal ash waste to be placed in the UWL, Mr. Giesmann would anticipate only some cracking should a very severe seismic event occur, but liquefaction of the UWL is not expected to occur. (Tr. Vol. 5, 236:10-24) Mr. Norris admitted that Ameren Missouri took into account the seismic hazards at the site when it designed the proposed UWL and that he had no criticism of the seismic analysis performed by Ameren Missouri's engineers or of the corresponding design considerations for the UWL based on that seismic analysis. (Tr. Vol. 6, 497:19-498:5) At the end of the day, the question is not simply whether the UWL is located in a seismic zone; instead, the question is whether the UWL is designed to protect the environment given the particular seismic risks at the site. The competent and substantial evidence presented to this Commission demonstrates that the

seismic risk has been taken into account in the design to provide for the safe storage of CCRs at Labadie.

In addition to the very clear fact that the proposed UWL is designed to prevent the release of coal ash constituents into the adjacent soil or groundwater at the site, as noted above, the proposed UWL also has a robust groundwater monitoring system that will detect any releases should they occur. Even before the later addition of seven additional groundwater monitoring wells at the site,¹² Mr. Gass opined that the conservative nature of groundwater modeling for the site resulted in a monitoring system which would provide early detection of any constituents emanating from the UWL if all of the protection features of the UWL were to fail. (Exh. 10, Gass Surrebuttal, 6:4-7:14) Mr. Norris responded to Mr. Gass' testimony by baldly stating that the groundwater monitoring system would be unable to detect a breach or flaw in the liner system; Mr. Norris failed, however, to provide any data, scientific analysis or even the most general of explanations for his opinion. (Exh. 300, Norris Cross-Surrebuttal, 13:1-10).

It wasn't until Mr. Norris filed supplemental testimony in February 2014 that he raised several other concerns regarding the groundwater monitoring system, but he admitted that his concerns essentially set out comments made by Andrews Engineering, Franklin County's independent registered professional engineer, in correspondence provided him by the Washington University environmental law clinic. (Tr. Vol. 6, 525:21-526:23) Mr. Norris admits that none of these concerns were based upon any independent groundwater modeling he

¹² The additional seven wells were added to the proposed UWL design at the request of Franklin County; although Ameren Missouri agreed to include them, it did so to advance the permitting process for the UWL. (Exh. 4, Giesmann Supplemental, 3:3-15) As the Commission is aware, the addition of these wells required the re-submittal of the construction permit application even though MDNR had previously approved the initial groundwater monitoring plan. (Exh. 4, Giesmann Supplemental, 2:3-3:2)

performed or any groundwater study he conducted for the UWL site. (Tr. Vol. 6, 526:2-7) And even after Ameren Missouri agreed to install the additional wells requested by Andrews Engineering, Mr. Norris remained unconvinced that these wells addressed any of Andrews Engineering comments despite the fact that Andrews Engineering has in fact approved the design of the UWL, including its groundwater monitoring network—a fact Mr. Norris didn’t think was relevant to his testimony. (Tr. Vol. 6, 526:24-528:5) Moreover, Mr. Norris’ criticisms lack scientific support; the groundwater monitoring system at the site of the proposed UWL will do what it is designed to do—provide early detection of the escape of any coal ash constituents in the extremely unlikely event that they would be released from the UWL at the site.

Even in the extremely unlikely event that coal ash constituents would be released into the alluvial aquifer underlying the Labadie UWL site, a pathway of exposure to the drinking water wells in the vicinity would need to exist in order for Intervenors’ claim that these wells will be contaminated to be realized. No such pathway exists. Despite the fact that Mr. Norris was well aware that a primary concern of Labadie residents is that their drinking water wells would be contaminated by coal ash, Mr. Norris never opined that the drinking water wells drawing water from the bedrock aquifer had been or would ever be contaminated by coal ash. (Tr. Vol. 6, 547:14-548:10) Moreover, Mr. Norris cannot point to a single well—public or private—that taps the alluvial aquifer underlying the Labadie site for use as drinking water, and Mr. Norris doesn’t even know where the drinking water well closest to the Labadie plant is located or where the closest intake for public drinking water is located downstream in the Missouri River. (Tr. Vol. 6, 514:21-515:25) And though Mr. Norris asserts in this pre-filed testimony that the alluvial aquifer is a “potable water resource” upon which “the community relies,” he denied at hearing that he was, in fact, suggesting that the Labadie community or any community, for that matter, relied on

the aquifer at the Labadie site for drinking water. (Exh. 300, Norris Cross-Surrebuttal, 12:19-20; Tr. Vol. 6, 512:19-514:20) Mr. Norris had to deny the very clear implication of his testimony because there are no wells in the alluvial aquifer that supply drinking water.

As Mr. Gass points out, all drinking water wells within the area around the UWL are situated on the bedrock bluffs to the south and east of the UWL. (Exh. 10, Gass Surrebuttal, 8:5-6) According to Mr. Gass, the risk of contamination from the proposed UWL is virtually non-existent: regional groundwater flow in the bedrock aquifer is toward the Missouri River and groundwater elevations in the bedrock aquifer are above the groundwater elevations of the alluvial aquifer; as a result, the alluvial aquifer would not influence the bedrock aquifer—even when there are seasonal reversals of normal hydraulic gradients during high water levels in the alluvial aquifer because of the very slow flow of groundwater. (Exh. 10, Gass Surrebuttal, 7:15-9:18; 13:1-15)¹³ Consequently, Mr. Gass opines that there is no material risk of contamination of drinking water supplies in the area—an opinion that is supported by MDNR’s approval of the site for the proposed UWL. (Exh. 10, Gass Surrebuttal, 13:16-14:17)

In summary, Intervenors’ argument that Ameren Missouri has failed to prove that there is a need for the facility as proposed in its application because it never examined any alternative sites for coal ash disposal is disingenuous. There is no dispute that Ameren Missouri will need additional storage for CCRs produced by the Labadie plant in 2016. And the premise underlying Intervenors’ claim—that the proposed site is unequivocally inappropriate for the UWL because of its location regardless of the design of the proposed UWL—is simply not true. Even if this Commission chooses not to defer to MDNR in its determination that the Labadie site is

¹³ Mr. Norris admits that he cannot point to any data that would suggest whenever the groundwater flow in the alluvial aquifer changes direction that it impacts the bedrock aquifer. (Tr. Vol. 6, 536:25-537:6)

appropriate for a UWL, the competent and substantial evidence placed before this Commission overwhelmingly demonstrates that the proposed site is appropriate and that the design of the UWL is protective of public health and the environment.

B. Ameren Missouri is qualified to operate the proposed UWL.

Overlooking the fact that Ameren Missouri is a major supplier of electricity and natural gas in Missouri, has been doing so for many years, operates numerous complex facilities (including a nuclear power plant), and the fact that Ameren Missouri now operates a similar MDNR-approved facility at its Sioux Energy Center,¹⁴ Intervenor disagree that Ameren Missouri is qualified to operate the proposed UWL—not because the proposed UWL presents particularly complex operational challenges, but because of Ameren Missouri’s “history of problems in Missouri and Illinois.” *Intervenor’s Position Statement* at 2 [EFIS Item No. 166] Specifically, Intervenor’s witness Mr. Norris points to (1) Ameren Missouri’s failure to address “the implications of potential, and likely, groundwater contamination” from the Labadie ash ponds migrating toward the proposed UWL, (2) his criticisms of Ameren Missouri’s proposed groundwater monitoring plan at the proposed UWL site, and (3) Ameren Missouri’s “record of environmental problems operating utility waste facilities” in Illinois. (Exh. 300, Norris Cross-Surrebuttal, 9:1-10) None of these criticisms demonstrate that Ameren Missouri is unqualified to operate the proposed UWL.¹⁵

The very careful wording of Mr. Norris’ first criticism—that there is “potential” and “likely” groundwater contamination at the site—reveals the glaring defect in his opinion. Mr.

¹⁴ (Tr. Vol. 5, 206:23-207:3)

¹⁵ In the previous section of this brief, Ameren Missouri has explained why Mr. Norris’ complaints regarding the groundwater monitoring system proposed for the UWL are without any basis; accordingly, Ameren Missouri will not repeat them here.

Norris cannot point to any data to demonstrate that the ash ponds at the site have contaminated groundwater. (Tr. Vol. 6, 507:5-11). Instead, Mr. Norris can only rely on his “professional experience in comparable settings” and his allegation that Ameren Missouri did not remediate seeps from the existing unlined ash pond but instead only “buried” them. (Tr. Vol. 6, 505:22-506:4; 507:14-508:13) The first basis can hardly qualify as competent and substantial evidence that the groundwater at Labadie has been contaminated by the unlined ash pond, and the second basis for Mr. Norris’ opinion is simply not true. The very same document from which Mr. Norris obtained the information about the “buried” seep states that the seep had been eliminated by the fill placed by Ameren Missouri, in addition to construction of two slurry walls approximately 30-feet deep and nearly 600 feet long. (Tr. Vol. 6, 508:14-510:20; Exh. 3, Giesmann Sur-Surrebuttal, 11:9-19) Mr. Norris admitted that he could not tell the Commission that seep was still leaking. (Tr. Vol. 6, 512:11-18)¹⁶

In their opening statement, Intervenors also implied that data Mr. Norris reviewed suggested contamination from the ash ponds, claiming that out of 87 groundwater monitoring samples, 80 of the samples exceeded drinking water standards for coal ash constituents and among those, arsenic levels exceeded the federal standards six times over. (Tr. Vol. 5, 88:11-16) Though dramatic, this was a broad overstatement of the test results. As Dr. Bradley explained, at least 25 constituents were monitored for in each of the 29 monitoring wells during the three rounds of testing, resulting in approximately 2,100 sample results; as a result, the 87 exceedances

¹⁶ In his pre-filed testimony, Mr. Norris also incorrectly suggested that as far back as 1992, Ameren Missouri has withheld data from groundwater monitoring wells located east of the original ash pond which, surprisingly, Mr. Norris asserted showed that there was “no ambiguity” as to the direction “contamination would be flowing.” (Exh. 300, Norris Cross-Surrebuttal, 12:1-7) But as Mr. Giesmann explained, these wells were not monitoring wells, but piezometers—installed to determine groundwater elevations; as a result, there was no monitoring data to withhold. (Exh. 3, Giesmann Sur-Surrebuttal, 10:1-18)

represented only about 7 percent of the total data sets. (Tr. Vol. 5, 365:12-366:8) Furthermore, Intervenor's statement completely ignored the very relevant question of whether these exceedances represented background levels of arsenic in the rocks and other materials that make up the alluvium at the proposed UWL site. For example, Dr. Bradley testified that the arsenic levels in the monitoring results were consistent with background levels of arsenic in the area¹⁷ and if the ash ponds truly were the source of arsenic, one would expect to see the highest levels in the monitoring wells nearest the ash ponds—instead, the highest levels were found in the wells furthest from the ash ponds. (Tr. Vol. 5, 361:1-363:19) Mr. Gass agreed. (Tr. Vol. 7, 619:16-621:8) Even Mr. Norris would expect background levels of arsenic in the alluvial aquifer and even though contamination from the ash ponds would be transported toward and across the area of the planned UWL, he admitted that the highest levels of arsenic were not found in the monitoring wells closest to the ash pond and that there was no discernible pattern of arsenic levels. (Tr. Vol. 6, 537:20-23; 542:7-543:5) Moreover, Dr. Bradley explains that the two primary indicators of a potential release of coal ash are elevated levels of sulfate and boron and that the levels of these two constituents in the three rounds of data are very low and consistent with background levels. (Tr. Vol. 5, 317:19-318:8, 364:9-11)¹⁸ Mr. Norris acknowledged that these levels were not elevated. (Tr. Vol. 6, 543:12-545:24) Based upon these monitoring results, it is

¹⁷ Intervenor attempted to impeach Dr. Bradley with Exhibit 353, a computer printout of a search counsel for Intervenor performed that showed lower levels of arsenic in other wells purportedly in the Franklin County area. (Tr. Vol. 5, 319:14-322:14) The data had very little reliability—Dr. Bradley had no information about the particular wells or their locations, and the newest data was from 2000 and some of it went back to 1992 and, as a result, was not indicative of current conditions. (Tr. Vol. 5, 368:2-369:1)

¹⁸ Groundwater monitoring will continue throughout construction and during the life of the UWL. In addition, as Mr. Giesmann testified, the existing ash ponds will also be monitored as part of conditions that will be included in the Company's renewed NPDES permit at the Labadie Plant. (Tr. Vol. 5, 161:2-4)

no surprise that Mr. Norris admits that he cannot point to any data demonstrating that the ash ponds are indeed impacting the site.

That doesn't mean, of course, that Mr. Norris doesn't attempt to suggest otherwise in his testimony. In his final piece of pre-filed testimony, Mr. Norris makes the argument that the test results are "suggestive" of groundwater contamination that "might" be attributable to the ash ponds based upon a comparison of groundwater sampling results from wells in the bedrock aquifer (where there is no contamination) and the sampling results in the alluvial aquifer. (Exh. 301, Norris Supplemental, 12:6-13:3) Even though sulfate and boron levels are very low in the monitoring results that Mr. Norris claimed might suggest groundwater contamination in the alluvial aquifer, he performed a comparison showing that sulfate and boron in those results were more than 166% and 300%, respectively, that of the bedrock aquifer and that arsenic levels were more than 220% that of the bedrock aquifer. (Exh. 301, Norris Supplemental, 12:12-13:3) Absent any scrutiny, this testimony might first appear compelling.

The problem for Mr. Norris is that his comparison violates basic scientific principles and, ultimately, is meaningless. Mr. Norris admits that in order for such a comparison to point to a source of contamination—the ash ponds, for example—one would need to demonstrate that the water in the alluvial aquifer is the same water from the bedrock aquifer. (Tr. Vol. 6, 534:3-12) He admits, however, that the low permeable bedrock impedes the flow of the alluvial groundwater and, in fact, that he has absolutely no data to demonstrate what degree, if any, there is a hydraulic connection between the separate aquifers or whether the alluvial aquifer is even influenced by the bedrock aquifer. (Tr. Vol. 6, 532:10-533:8, 534:13-535:24) In addition, Mr. Norris admits that his comparison does not take into account the background levels of the various constituents which he would expect to be present in the alluvial aquifer and that he

cannot show that the ash ponds would even be the sole source of constituents in the monitoring samples from the alluvial wells (Tr. Vol. 6, 537:7-539:6) As Mr. Gass points out, there is no direct geochemical comparison between the bedrock and alluvial aquifers and comparing the water quality of the two as being equivalent under natural conditions is “just something that would ordinarily not be done by a hydrogeologist.” (Tr. Vol. 7, 641:1-20) In short, there is no evidentiary support for the claim that Ameren Missouri is unqualified to operate the proposed UWL because the existing site “might be” or has the “potential” for contamination.

Intervenors’ argument that Ameren Missouri is unqualified to operate the proposed UWL at Labadie because of “problems” with ash ponds in Illinois is similarly unconvincing. As has already been pointed out, Mr. Norris’ opinion originated with the environmental law clinic that represents Intervenors in this case—they drafted the questions and provided him with the notices of violation, which were previously unknown to him, so that he could draft an answer. (Tr. Vol. 6, 468:5-24; 473:11-475:18; 476:7-480:23) Even though he opined that Ameren Missouri was unqualified to operate the UWL because of the problems with ash ponds in Illinois, Mr. Norris had no idea what the relationship was between the operators of these ash ponds in Illinois and Ameren Missouri was, he had no information as to the specifics of the operations or circumstances at those Illinois plants, nor did he have any information about Ameren Missouri’s Illinois affiliate’s interactions with the Illinois EPA. (Tr. Vol. 6, 480:19-23) Mr. Norris’ testimony that these events—tangential at best to the operation of a UWL in Missouri—suggest that Ameren Missouri is not qualified to operate a UWL is simply not credible.

First, Mr. Norris admits that the placement of coal ash in unlined ponds—even in floodplains—was a common practice in the industry at the time the ponds were constructed. (Tr. Vol. 6, 481:22-482:5) Second, the conduct of Ameren Missouri and its Illinois affiliate was

supportive of environmental protection. As former Illinois EPA employee Gary King explained, Ameren Missouri's affiliate, as well as Ameren Missouri, conducted voluntary groundwater monitoring of the ash ponds in Illinois following a request by the Illinois EPA even though there was no regulatory authority for such a request.¹⁹ (Exh. 9, King Surrebuttal, 6:6-7:11; Tr. Vol. 6, 397:25-398:21; 400:25-401:3; 404:4-22; 407:12-408:2; 409:3-8) Even though violation notices were issued as a result of exceedances observed in the testing, none of the locations adversely affected any drinking water supplies in their respective areas. (Exh. 9, King Surrebuttal, 13:3-18; 15:1-21; 17:5-18:5; 19:3-21:13; 24:18-25:8) Finally, Mr. King documents the action taken by Ameren Energy Resources and Ameren Missouri to assist with the development of state-wide rules establishing a procedure for an orderly closure of ash impoundments based upon site-specific criteria. (Exh. 9, King Surrebuttal, 7:9-11; 8:16-11:14). Mr. King reported at hearing that the proposed rules had their first hearing in February 2014 and were scheduled for a second hearing in May 2014. (Tr. Vol. 6, 387:2-10) Ameren Missouri and its Illinois affiliate have acted responsibly to monitor their sites and to develop appropriate rules for the closure of ash ponds in Illinois; this should in no way disqualify Ameren Missouri from operating the proposed UWL.

Ameren Missouri should not be disqualified from operating the proposed UWL based upon the fact that it operated ash ponds as storage for coal ash wastes before UWLs were ever discussed or authorized. Moreover, Intervenor must not be allowed to rely on dramatic statements and broad generalizations made absent any factual support to bolster their argument

¹⁹ Intervenor's cross examination of Mr. King was designed to show that the Ameren affiliate and Ameren Missouri did not act voluntarily but only did so because they were required to do so by the Illinois EPA. (Tr. Vol. 6, 385:10-394:14) While Mr. King disagreed that the Illinois EPA had authority to require the groundwater testing and that continued to assert that the monitoring was voluntary, the worst that can be said is that Ameren Missouri and its Illinois affiliate complied with the request. Certainly, a utility's compliance with a request from a state agency charged with protecting the environment does not demonstrate poor environmental stewardship.

that Ameren Missouri is unqualified to operate the proposed UWL because there “might” be “potential” contamination from the ash ponds—especially where the hard scientific data suggests otherwise. Intervenors have provided no substantive evidence that would disqualify Ameren Missouri from operating a UWL designed in accordance with state regulation and using state-of-the art technology.

C. Ameren Missouri has the financial ability to construct and operate the proposed UWL.

No party disputed that Ameren Missouri had the financial ability to construct and operate the proposed UWL. The estimated cost of the initial construction of the UWL, including the first cells and monitoring wells, is \$27 million. (*Stipulations*, ¶ 14) [EFIS Item No. 168] Ameren Missouri had approximately \$3.5 billion in operating revenues, approximately \$803 million in operating income, and \$395 million in net income during 2013 (Tr. Vol. 5, 103:2-15) Ameren Missouri intends to fund the construction of the proposed UWL from funds in its existing treasury, which has approximately \$800 million in a revolving credit arrangement. (Tr. Vol. 5, 103:16-25) Ameren Missouri has the financial ability to construct and operate the proposed UWL.

D. Ameren Missouri’s proposed UWL is economically feasible.

The benefit of having a place to safely and economically store the necessary byproducts of electricity generation during the remainder of the useful life for Ameren Missouri’s most economical coal plant should be enough to plainly demonstrate the economic feasibility of the proposed UWL. *See In re: KCP&L Greater Missouri Operations Co.*, 2009 Mo. PSC LEXIS 200 at *67-*68 (Case No. EA-2009-0118 March 18, 2009) (“The Facilities [South Harper power plant and the Peculiar 345kV substation] provide sufficient additional service to justify their cost, and the inconvenience of GMO not having them is sufficient to arise to the level of them being

necessities.”) Intervenors, however, claim that Ameren Missouri has not met its burden because it “failed to include environmental and repair costs and liabilities attributable to groundwater contamination, flooding or earthquakes.” *Intervenors’ Statement of Position* at 2. The operating costs that Mr. Norris claims were omitted are the “risk-adjusted costs” associated with repairs to damage caused by the “known and quantifiable” hazards due to flooding and seismic activity. (Exh. 300, Norris Cross-Surrebuttal at 5:16-20; Tr. Vol. 6, 496:16-22) These are also costs that Mr. Norris admits that he has not quantified and are costs that are not required by any rule, regulation or ordinance to be included in a construction permit application or CCN request. (Tr. Vol. 6, 496:23-497:7) Even if these costs were relevant to any issue in this proceeding, it would be necessary to know what these costs are so that the Commission could actually determine whether they make a material difference to Ameren Missouri’s proposal. Mr. Norris has not provided these costs because he cannot—there is neither a basis for calculating these costs nor is there any way to calculate them.

The other huge hole in Mr. Norris’ criticism is his assumption that there will be extraordinary costs simply because of the location of the proposed UWL. That might be true if the design of the proposed UWL failed to take into account the particular hazards of the location, but that is not the case here—the environmental risks of placing the UWL in a flood plain and seismic zone were addressed in the design of the UWL and are reflected in the cost of the proposed UWL. (Tr. Vol. 5, 195:7-196:2; 197:3-198:14; 237:7-25) Even Mr. Norris admits that Ameren Missouri took into account the site-specific hazards related to flooding and seismic activity when it designed the UWL, and he offered no criticism of Ameren Missouri’s design, which, for example, included the design of a protective berm at a height exceeding the 500-year flood level and exceeding the seismic design standards set by MDNR to a 2,500-year recurrence

interval. (Tr. Vol. 5, 235:5-236:24; Tr. Vol. 6, 497:8-498:15; 520:25-521:11) Because the design of the proposed UWL specifically reflects the site-specific hazards, any claim that the proposed project is not economically feasible because of these site-specific hazards is nonsensical.

The essence of Intervenor's argument is that the proposed UWL is not economically feasible because of its location, and they imply that siting the UWL elsewhere would be cheaper. The substantial and competent evidence in this case demonstrates, however, that not only are there numerous practical problems with and risks posed by any other alternative for disposal, but also choosing another alternative would be far more (and unnecessarily) costly for ratepayers, as the table below demonstrates:²⁰

SCENARIO	SCENARIO DESCRIPTION	COST OF SCENARIO ²¹
One	On-Site Labadie UWL	\$256,878,736
Two	Transport CCPs to Off-Site UWL	\$351,198,736
Three	Transport CCPs to Commercial Landfill	\$516,402,000

As evident from the chart, disposal of the CCRs at a UWL located at the Labadie site is \$100 million less expensive than transporting the CCRs to an off-site UWL and half as expensive as disposing of the CCRs in a commercial landfill in terms of their respective revenue requirements. Although he rejects the notion that a proper cost comparison was performed as to the construction of a UWL by Ameren Missouri in another location, even Mr. Norris agrees that the

²⁰ This table appears in Exhibit 2, the Surrebuttal Testimony of Ameren Missouri witness Craig Giesmann at p. 18.

²¹ Present value of revenue requirements through 2058. Staff witness John Cassidy agrees that these estimates are reasonably accurate. (Tr. Vol. 5, 412:22-413:3)

third option—transporting the coal ash to a third-party landfill—is more costly than disposal at an onsite landfill operated by Ameren Missouri.²² (Exh. 300, Norris Cross-Surrebuttal, 20:15-21:15)

This Commission has not been presented with any evidence whatsoever to suggest that the proposed UWL is not economically feasible. The cost of the proposed UWL is the cost of a UWL designed for the particular known hazards at the site; as a result, it will not be any more vulnerable or susceptible to damage than it would be if it were located in another area. The argument that Ameren Missouri should include in the cost of the site repair costs that might be occasioned by “catastrophic” damage to the UWL is no more logical than requiring it to include costs of an airplane crashing into the UWL at this location or at any other location. (Tr. Vol. 5, 169:22-170:3) Intervenors’ argument should not be taken seriously.

E. Construction of Ameren Missouri’s proposed UWL is in the public interest.

"The requirement that an applicant's proposal promote the public interest is in essence a conclusory finding. . . . Generally speaking, positive findings with respect to the other four standards will in most instances support a finding that an application for a certificate of convenience and necessity will promote the public interest." *In re: Tartan Energy Corp.*, 3 Mo. P.S.C. 3d at 189 (*citing In re: Intercon Gas, Inc.*, 30 Mo. P.S.C. at 561). Ameren Missouri contends that consideration of the first four *Tartan* factors demonstrates that granting the requested CCN would be in the public interest. The argument made by Intervenors—that the proposed UWL is not in the public interest because it is located at a “risk-prone” location still

²² With regard to his proposal that CCRs be transported away from Labadie by rail, Mr. Norris also admits that he doesn’t address whether the same rail cars that deliver coal to the site could transport it away from the site; he agrees, however, that the costs of transporting CCRs from the site would be “substantial.” (Tr. Vol. 6, 522:6-523:6)

fails to acknowledge the fact that the hazards associated with the site have been taken into account in its design, thereby negating individual site concerns, it completely ignores the fact that MDNR has determined that the site is appropriate, and it assumes that if MDNR issues a construction permit, MDNR will have simply gotten it wrong. As demonstrated in Ameren Missouri's analysis of the first four *Tartan* factors, the proposed UWL is in the public interest.

Intervenors have been quite vocal—at the county level, during the public hearings held by the PSC and MDNR—they do not want the UWL in their backyard. However, Intervenors should be reminded that the public interest is not restricted to consideration of only those interests of affected landowners; instead, “the ‘rights of individual with respect to issuance of a certificate are subservient to the rights of the public’” *In re: Union Elec. Co.*, 2003 Mo. PSC LEXIS 1053 at *40-*41 (Case No. EO-2002-0351 August 23, 2003) (*quoting Missouri Pac. Freight Transport Co. v. Pub. Serv. Comm’n*, 288 S.W.2d 679, 682 *Mo. App. W.D. 1956). Put another way, the “‘public interest’ necessarily must include the interests of both the ratepaying public and the investing public,” and “the rights of individual groups are subservient to the rights of the public in general.” *In re: KCP&L*, 2009 Mo. PSC LEXIS 200 at *63-*64; *State ex rel. Ozark Elec. Coop. v. Pub. Serv. Comm’n*, 527 S.W.2d 390, 394 (Mo. App. W.D. 1975) (in the context of granting of a CCN, stating that “Section 393.130 contains language that gives some indicia that the General Assembly, among other things, concluded that the public interest would be served by requiring regulated electric utilities to render electric service by means of ‘adequate’ facilities.”).

The CCN requested by Ameren Missouri to allow it to expand the boundaries of the Labadie Energy Center to construct a UWL that will store CCRs during the remaining usefulness of the plant is in the public interest. Because Ameren Missouri is asking permission to make an

improvement to its utility infrastructure that not only maintains, but also improves, its ability to perform its duties, the request is for public convenience and a necessity. Ameren Missouri's request should be granted.

III. The CCN should be granted with only those conditions proposed by Staff.

A. The test for imposing conditions on the granting of a CCN.

Section 393.170.3 provides that the Commission may impose such conditions on a certificate as it deems "reasonable and necessary." Any such conditions, in addition to being reasonable and necessary, must also be allowed by law. For example, this Commission previously determined that it lacked the authority to impose a condition requiring a utility to "provide a pool of resources to be made available for residents to make claims against for alleged devaluation of their property" as a result of the granting of a CCN:

In response to a party's proposed condition that a utility be required to compensate property owners for diminution in value to their property and to fully compensate them for economic losses caused by the existence of a transmission line, this Commission previously stated that the proposed condition was clearly outside the Commission's jurisdiction. *In re Union Electric Company*, Case No. EO-2002-351, 229 P.U.R.4th 148 (Report and Order issued August 21, 2003). Decisions of the Missouri Supreme Court support this conclusion: "'The Public Service Commission is an administrative body only, and not a court, and hence the commission has no power to exercise or perform a judicial function, or to promulgate an order requiring a pecuniary reparation or refund.'" *Straube v. Bowling Green Gas Co.*, 227 S.W.2d 666, 668 (Mo. 1950) (citing *State ex rel. Laundry, Inc. v. Public Service Commission*, 34 S.W.2d 37, 46 (Mo. 1931) (remaining citations omitted)). This Commission will not require that Aquila set aside a pool of money, from any source, to compensate landowners. The Commission further concludes that such a condition would be unnecessary and unreasonable.

In re: Aquila, Inc., 2006 Mo. PSC LEXIS 614 at *61-*62 (May 23, 2006) (overturned on other grounds); see also *State ex rel. Tri-State Gas Co. v. Pub. Serv. Comm'n*, 452 S.W.2d 586, 588 (Mo. App. S.D. 1970) ("It is because of this situation that protestants urged that conditions be imposed on the certificate so as to relieve from this financial loss. It does not appear exactly how

such a condition could be enforced; and we are cited to no legal authority for such action by the commission. We think the commission properly rejected this contention.”).

In addition, the conditions sought to be imposed must be supported by evidence that would allow the Commission to make a determination as to their reasonableness. *In re: Aquila, Inc.*, 2006 Mo. PSC LEXIS 614 at *62-*63 (conditions requested to “address and fully satisfy” landowner concerns such as pollution and safety, the generalized suggestions failed to set out what “actual, tangible concerns are at issue” and provided “no means by which this Commission could make a determination as to the reasonableness of the conditions”).

B. The Proposed Conditions.

While Staff supports Ameren Missouri’s request for a CCN, it has proposed that the CCN be conditioned upon (1) Ameren Missouri obtaining from MDNR and filing with the Commission both a utility waste landfill construction permit and a land disturbance permit for the proposed UWL before it begins construction of the UWL, and (2) explicit language in the CCN that the Commission is not making any determination of the ratemaking treatment of the costs associated with the UWL by its granting of the CCN. (Tr. Vol. 5, 69:23-70:18) The OPC supports the Staff’s recommendations. *Public Counsel’s Statement of Positions* at 1 (March 21, 2014) [EFIS Item No. 167] Ameren Missouri agrees that these are appropriate conditions. (Tr. Vol. 5, 44:7-18)

In addition to requiring Ameren Missouri to obtain all applicable permits before construction, however, Intervenors propose several other conditions:

- Before commencing construction of the UWL, Ameren Missouri must conduct comprehensive groundwater monitoring at its existing coal ash ponds—using both shallow and deep wells and pursuant to a monitoring plan approved by MDNR—

and submit a report containing all monitoring data and analyses to DNR and the Commission;

- Prohibiting Ameren Missouri from recovering from ratepayers and the public any costs in excess of its current estimate of costs to construct and operate the UWL;
- Prohibiting Ameren Missouri from recovering from ratepayers and the public any costs attributable to environmental damage cause by the UWL associated with flood events, damage to the UWL and surrounding area due to seismic activity, or groundwater contamination from the existing ash ponds or UWL;
- Requiring Ameren Missouri to provide evidence of financial responsibility to remediate damage to and contamination caused by the UWL after the post-closure period; and
- Requiring Ameren Missouri to comply with applicable zoning, construction, operating, safety and environmental rules and regulations.

Intervenors Labadie Environmental Organization and The Sierra Club's Statement of Position at 2-3 (March 21, 2014) [EFIS Item No. 166] Ameren Missouri opposes the conditions proposed by Intervenors because these conditions are unreasonable and unnecessary and exceed the authority of this Commission.

- C. Intervenors' proposed condition that Ameren Missouri install additional wells and conduct groundwater monitoring at the existing plant footprint and notify regulators of these results before being allowed to construct the UWL is unreasonable, unnecessary and is outside the Commission's authority

By proposing that Ameren Missouri be required to conduct groundwater monitoring on its existing ash ponds within its existing certificated area and report the results of that monitoring before it is allowed to construct the proposed UWL, Intervenors are asking this Commission to act as environmental regulators and enact environmental rules not otherwise in effect. Ameren

Missouri has performed all of the necessary groundwater monitoring for the UWL as required by MDNR. (Tr. Vol. 5, 245:14-20). The current ash ponds, located within the existing certificated plant area and not the area that is the subject of the requested CCN, are operating under a valid extension of an NPDES permit and Ameren Missouri anticipates that MDNR will require groundwater monitoring of the ash ponds when that permit is renewed; however, there is no such requirement at this time because federal requirements are still being developed. (Exh. 2, Giesmann Surrebuttal, 12:18-13:6; Tr. Vol. 5, 244:19-245:13) Even assuming it is appropriate for the Commission to consider environmental concerns in this action, there is absolutely no statutory authority for the Commission to adopt its own environmental rules and require compliance with those environmental rules. Indeed, counsel for Intervenors can cite to no single instance where the Commission has done so. (Tr. Vol. 5, 93:1-24)

Moreover, Intervenors cannot point to any substantial evidence that there is even a need for the requested condition. As earlier noted, Mr. Norris was unable to point to any data to support his precisely-worded opinion regarding the “potential and likely groundwater contamination” from the existing ash ponds. (Tr. Vol. 6, 505:5-21; 506:14-507:11) Moreover, a comparison of monitoring data from the bedrock aquifer with that from the alluvial aquifer, which Mr. Norris claimed was “suggestive” of groundwater contamination that “might” be attributed to the ash ponds, was equally without scientific support—Mr. Norris finally admitted that he did not know if a hydraulic connection existed between the bedrock aquifer and alluvial aquifer, that even if there was a hydraulic connection between the two, whether the ash ponds would be the sole source of the constituents identified in the monitoring results, and that his comparison did not distinguish between background levels that he would expect to find in the alluvial aquifer and alleged contamination. (Tr. Vol. 6, 534:3-538:14) Even if this Commission

had the authority to require such a condition, Intervenor are unable to point to any evidence that would allow this Commission to evaluate the reasonableness of the proposed condition. In short, there is no basis for the Commission to impose this condition.

- D. Intervenor's proposed condition that Ameren Missouri be prohibited from recovering any costs in excess of its current estimate to construct and operate the UWL is unreasonable, unnecessary and is outside the Commission's authority.

The unusual condition proposed by Intervenor that Ameren Missouri be prohibited from recovering from ratepayers and the public any costs in excess of its current estimate of costs to construct and operate the UWL is not supported by any evidence received by this Commission and is directly counter to Staff's requested condition (which the Commission virtually always adopts in CCN cases) that the order in this case should not decide any future ratemaking issues arising from the UWL. Mr. Norris asserts in his cross-surrebuttal testimony that Ameren Missouri has not properly accounted for all construction and operating costs associated with the UWL, and with regard to omitted construction costs, he points to a failure to account for the cost of transporting off-site clay to the site for the liner and the berm around the UWL. (Exh. 300, Norris Cross-Surrebuttal at 4:5-5:2) Maintaining this same criticism at hearing, Mr. Norris rejected without explanation (and without any knowledge of what Ameren Missouri did or did not estimate) testimony by Mr. Giesmann that the estimated costs for the clay included the cost of transportation—all the while admitting that he had not himself estimated the cost of off-site clays, that he had no idea what a cubic yard of the appropriate clay would cost in the Labadie area, and that he had not quantified these omitted costs in any way. (Tr. Vol. 6, 482:16-483:18)

The operating costs that Mr. Norris claims were omitted are the "risk-adjusted costs" associated with repairs to damage caused by the "known and quantifiable" hazards due to flooding and seismic activity. (Exh. 300, Norris Cross-Surrebuttal at 5:16-20; Tr. Vol. 6, 496:16-

22) Again, Mr. Norris admits that he has not quantified these “omitted” costs and admits that he can point to no rule, regulation or ordinance that requires such costs even be included in a CPA or CCN request. (Tr. Vol. 6, 496:23-497:7) Finally, Mr. Norris admits that Ameren Missouri took into account the site-specific hazards related to flooding and seismic activity when it designed the UWL, and that he had offered no criticism of Ameren Missouri’s design, which, for example, included the design of a protective berm at a height exceeding the 500-year flood level and exceeding the seismic design standards set by MDNR to a 2,500-year recurrence interval. (Tr. Vol. 5, 235:5-236:24; Tr. Vol. 6, 497:8-498:15; 520:25-521:11) These “opinions” again demonstrate Mr. Norris’ consistent failure to provide any factual basis for his opinion and his consistent failure to provide a quantification of the costs of these omissions in order to allow this Commission to evaluate the significance of his criticism.

As is clear from its prior orders granting CCNs, the Commission has been careful to avoid making any ratemaking decisions as to the proposed costs of construction or operation, as demonstrated, for example, in the two most recent CCN decisions authored by this Commission. *See In re: Union Electric Co., d/b/a Ameren Missouri*, 2014 Mo. PSC LEXIS 271 at *5 (Case No. EA-2014-0136 April 8, 2014) (“Nothing in this order shall be considered a finding by the Commission of the reasonableness or prudence of the expenditures herein involved, or the value for ratemaking purposes of the properties herein involved, or as acquiescence in the value placed on said property.”); *In re: Central Rivers Wastewater Utility, Inc.*, 2013 Mo. PSC LEXIS 1009 at *9 (Case No. SA-2014-0005) (“Nothing in the Staff Recommendation or this order shall bind the Commission on any ratemaking issue in any future rate proceeding.”). Indeed, asking the Commission to exclude these supposed “omitted” costs which have not been quantified in any way falls clearly within the prohibition against single-issue ratemaking as it precludes

consideration of all relevant factors bearing on a proper determination of rates. *See, e.g., State ex. rel. Util. Consumers' Council v. Pub. Serv. Comm'n*, 585 S.W.2d 41, 56 (Mo. banc 1979); *State ex rel. Missouri Water Co. v. Pub. Serv. Comm'n*, 308 S.W.2d 704, 719 (Mo. 1957); *State ex rel. Midwest Gas Users' Ass'n v. Pub. Serv. Comm'n*, 976 S.W.2d 470, 479 (Mo. App. W.D. 1998). There is no basis for the proposed condition, and this Commission is not authorized by law to impose this condition.

- E. Intervenors' proposed condition that Ameren Missouri be prohibited from recovering any costs attributable to environmental damage associated with flooding, seismic activity and groundwater contamination is unreasonable, unnecessary and is outside the Commission's authority.

In a similar vein, Intervenors request that the CCN to expand the Labadie site be conditioned on prohibiting Ameren Missouri from recovering in the future any costs attributable to environmental damage cause by the UWL associated with flooding, seismic activity, or groundwater contamination from the existing ash ponds or UWL. Intervenors again ask this Commission to impose a condition for which there is no factual support and for which there is no authority.

The proposed condition is defective in the first instance because of the absence of any factual support for the imposition of such a condition. The rather simplistic reasoning behind the proposed condition apparently is that Ameren Missouri will store CCRs in a UWL located in a floodplain and seismic zone; it necessarily follows, then, that there is bound to be some "Taum Sauk-like" event. (Tr. Vol. 5, 85:25-86:10; 87:15-22; 88:21-89:3; 166:4-7) The problem for Intervenors is that dramatic allegations of impending disaster (such as the soil at the site of the UWL will turn to "mush" once an earthquake occurs, sending contaminants into the groundwater) actually need evidentiary support to back them up in order for them to be credible. As has already been made clear, the berm around the UWL exceeds the 500-year flood plain

level and, in fact, will be constructed to be over 4 feet above the 1993 flood level. (Exh. 5, Putrich Surrebuttal at 6:4-7:23) And though the proposed UWL is located in a seismic impact zone, the UWL is designed to prevent destructive liquefaction and, in fact, the stability of the UWL will be increased by the placement of CCRs in the UWL because of their cement-like properties. (Exh. 5, Putrich Surrebuttal at 17:14-18:11) Mr. Norris provided no data or scientific analysis to contradict this testimony and, in fact, admitted that Ameren Missouri took into account the site-specific hazards related to flooding and seismic activity when it designed the UWL, and he admitted that he had offered no criticism of Ameren Missouri's design. (Tr. Vol. 6, 497:8-498:15; 520:25-521:11) There is absolutely no evidence in the record to back up the necessity of Intervenor's requested condition. To impose it, then, would be unreasonable.

As demonstrated in the previous section, the imposition of such a condition is entirely outside this Commission's authority as it would preclude the consideration of all relevant factors in setting rates and, consequently, constitute unlawful single-issue ratemaking. As OPC suggested in opening statement, even if such an event were to occur, Ameren Missouri's recovery for repair costs is properly the subject of this Commission's ratemaking authority. (Tr. Vol. 5, 81:9-82:3) Simply put, the Commission cannot do what it cannot do.

- F. Intervenor's proposed condition that Ameren Missouri be required to provide additional post-closure financial assurance is neither reasonable nor necessary and is outside the Commission's authority.

Intervenor's request that Ameren Missouri be required to provide evidence of financial responsibility to remediate damage to and contamination caused by the UWL after the post-closure period is outside the scope of the Commission's authority. When counsel for Intervenor was asked during opening statements whether the Commission indeed had the authority to establish something similar to a nuclear decommissioning trust fund, counsel asserted (without

pointing to any support for his assertion) that the Commission “certainly” has authority to impose such a condition. (Tr. Vol. 5, 89:20-90:6) While the Commission is specifically authorized by the legislature to order funding of a nuclear power plant decommissioning trust fund under Section 393.292, there is no statutory or common law authority to suggest the Commission can require as a condition to this CCN that Ameren Missouri set up some type of fund to compensate future damages—especially where those damages are entirely speculative in nature. Indeed, as the cases above make clear, the Commission does not have the authority to impose conditions designed to compensate others for future loss.

Moreover, such a condition is unnecessary and unreasonable. Mr. Norris opines that Ameren Missouri did not include costs “likely to arise after the formal post-closure” period related to “risk-adjusted damage repair” of damage caused by flood or seismic activities that would occur after the UWL is closed and for monitoring and remediating groundwater contamination and fugitive utility waste after the post-closure period. (Exh. 300, Norris Cross-Surrebuttal at 6:11-20) Other than predicting that these scenarios are “likely,” Mr. Norris again fails to offer any data or scientific analysis to support the likelihood of these events occurring or any quantification of these costs. While Mr. Norris boldly asserts that it is possible to quantify the remediation costs for environmental hazards at the proposed Labadie UWL, Mr. Norris admits that he has never seen such an engineering analysis performed. (Tr. Vol. 6, 580:18-582:9) Finally, as Mr. Giesmann points out, Ameren Missouri’s closure plan exceeds MDNR requirements with regard to Ameren Missouri’s post-closure obligations; moreover, once the UWL is closed, MDNR does not lose its regulatory authority to require monitoring or additional remediation should it be necessary. (Tr. Vol. 5, 166:8-12)

Without any testimony whatsoever as to the likelihood of this contamination occurring, the identification of any particular defect in the UWL design that would make such contamination likely in the future, or any evidence suggesting that additional closure costs could even be quantified, this Commission would be engaging in rank speculation if it were to condition the CCN on Ameren Missouri's providing additional post-closure financial assurance.

CONCLUSION

The competent and substantial evidence in this case points to only one conclusion. Ameren Missouri's request to expand the boundaries of the Labadie Energy Center in order to allow it to construct and operate a UWL should be granted, conditioned on the Company obtaining and providing to the Commission the Construction Permit and the Land Disturbance Permit from MDNR. In addition, Ameren Missouri agrees that a condition specifying that the Commission's granting of the CCN does not predetermine ratemaking treatment of the costs associate with the UWL.²³

Respectfully submitted,

/s/ James B. Lowery

James B. Lowery MBN#40503

Michael R. Tripp MBN#41535

Smith Lewis, LLP

111 S. Ninth Street, Ste. 200

P.O. Box 918

Columbia, MO 65205

Telephone: (573) 443-3141

Fax: (573) 442-6686

Email: lowery@smithlewis.com

tripp@smithlewis.com

²³ Ameren Missouri respectfully requests that the Commission act on its CCN application by granting the CCN request before June 15, 2014. Ameren Missouri expects to have obtained the two required MDNR permits in May or early June, and would hope to start construction by mid-June. This is important, for if construction is not started by that time, placing the UWL in service by 2016, when the existing ash ponds are expected to be full, may not be possible.

Thomas M. Byrne MBN#33340
Director - Assistant General Counsel
Ameren Services Company
1901 Chouteau Ave.
P.O. Box 66149
St. Louis, MO 63166-6149
Telephone: (314) 554-2514
Facsimile: (314) 554-4014
E-Mail: AmerenMOService@ameren.com

**ATTORNEYS FOR
UNION ELECTRIC COMPANY
d/b/a AMEREN MISSOURI**

CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing was served via e-mail to the following on April 30, 2014:

Nathan Williams
Jennifer Hernandez
Missouri Public Service Commission
200 Madison Street, Suite 800
P.O. Box 360
Jefferson City, MO 65102-0360
staffcounsel@psc.mo.gov

Lewis R. Mills
Missouri Office of Public Counsel
200 Madison Street, Suite 650
P.O. Box 2230
Jefferson City, MO 65102-2230
opc@ded.mo.gov

Elizabeth J. Hubertz
Maxine I. Lipeles
Interdisciplinary Environmental Clinic at
Washington University School of Law
1 Brookings Drive, Campus Box 1120
St. Louis, MO 63130
ejhubertz@wulaw.wustl.edu
milipele@wulaw.wustl.edu

/s/ James B. Lowery
James B. Lowery