BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of The Empire District Electric Company for a Certificate of Convenience and Necessity Related to its Customer Savings Plan	))))	Case No. EA-2019-0010

THE OFFICE OF THE PUBLIC COUNSEL'S INITIAL BRIEF

Respectfully submitted,

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Denotes Highly Confidential Information
that has been redacted

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INTRODUCTION

Empire, with its tax equity investors, as independent power producers could invest their $1.2 billion[1] in these wind projects as unregulated assets and rely on revenues from the Southwest Power Pool ("SPP") markets for their profits. Instead, Empire is seeking certificates from this Commission to own the projects as regulated assets where this Commission determines Empire's profit and assures its investor's(s') profit.[2] It is *not* because its supply-side resources are inadequate[3] that Empire proposes to increase its rate base from $1.6 billion to $2.2 billion (38%)[4] by adding these 600 megawatts of generation.[5] It is *not* because supply-side resources in the SPP are inadequate that Empire proposes to increase its supply-side resources.[6] It *is* because Empire views that the profits on its investment the Commission will give it are more certain than the riskier profits it might get in the SPP markets that Empire seeks certificates for these projects. Empire's proposal is founded entirely upon its claims that proceeds from the SPP market over 20

[1] Empire witness David Holmes, Tr. 2:208; Ex. 5HC, Empire witness Todd Mooney direct testimony, p. 10 & Ex. 6HC, Empire witness Todd Mooney direct testimony, p. 10. **
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[2] Ex. 1, Empire witness Blake A. Mertens direct testimony, p. 3; Ex. 2, Empire witness Blake A. Mertens direct testimony, p. 3.

[3] Empire *already* has sufficient supply-side resources to generate 1,750 megawatts of electricity, which is over 500 megawatts above its all-time maximum peak load of 1,211 megawatts. According to Empire witness Blake A. Mertens, Empire presently has 1,477 of SPP-accredited capacity. Empire witness Blake A. Mertens, Tr. 2: 115, 130-31. Further, although it is losing two municipal customers—Monett and Mount Vernon, Missouri, about 78 megawatts of load, in June of 2020, Empire is selling that same amount of capacity to Missouri Public Utility Alliance, which includes generation by ** **. Ex. 200, Public Counsel witness Dr. Geoff Marke, Ph.D., p. 21; Ex. 3HC, Empire witness Blake A. Mertens, p. 9; Empire witness Blake A. Mertens, Tr. 2; 124, 129-30; Tr. 3; 126HC.

[4] Empire witness Blake A. Mertens, Tr. 2: 107.

[5] Ex. 1, Empire witness Blake A. Mertens direct testimony, p. 8 (150 MWs Kings Point and 150 MWs North Fork Ridge), p. 12 (600 MWs total); Ex. 2, Empire witness Blake A. Mertens direct testimony, p. 8 (300 MWs Neosho Ridge). (Empire estimates this will give 90 MWs SPP accredited capacity. Empire witness Blake A. Mertens, Tr. 2: 154).

[6] The SPP has about 65 gigawatts of firm capacity resources now, with a forecasted peak demand between 53 and 55 gigawatts from 2018 through 2023. Ex. 8, Empire witness James McMahon surrebuttal testimony, p. 5, fn. 5, p. 3 of SPP 2018 Resource Adequacy Report published June 29, 2018; Empire witness Blake A. Mertens, Tr. 2:119 (50-55 GW peak).

and 30 years will exceed what its retail customers will pay for this additional generation in their rates.

To treat these projects as regulated assets would put Empire's 146,000 - 147,000 Missouri retail customers[7] in the position of investors in these projects who would be forced to rely on the SPP markets for an economic benefit. No party is suggesting that Empire's customers, or the public, will not have sufficient electricity without these projects. The mere fact that it is a regulated utility—Empire—who is proposing these projects does not make the projects for the public convenience. Empire is proposing these projects as an investment for selling electricity in the SPP markets, not to provide electric utility service to its customers.

Empire has every incentive to overbuild its rate base, since this Commission allows Empire an investment return upon Empire's rate base.

In the context of a railroad rate case, the U.S. Supreme Court states a core principle of utility regulation well in *Smyth v. Ames*[8] as follows: "What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience. On the other hand, what the public is entitled to demand is that no more be exacted from it for the use of a public highway than the services rendered by it are reasonably worth."[9] In line with this principle, in 1976 voters passed Proposition 1 which prohibits rate recovery of "any . . . cost associated with owning, operating, maintaining, or financing any property before it is . . . used for service." § 393.135, RSMo.

[7] Empire witness Blake A. Mertens,Tr. 2: 110-11.
[8] *Smyth v. Ames*, 169 U.S. 466 (1898).
[9] *Id*. at 547.

Further, there is too much uncertainty regarding the costs and benefits of these wind projects for the Commission to find that Empire's customers would realize economic benefits from them. Empire's 20- and 30-year projections of SPP market prices are speculative for purposes of predicting SPP market revenues from the wind projects. The SPP market is fundamentally changing in the near future due to a massive influx of new generating resources, including wind. As the MIT Center for Energy and Environmental Policy Research warns "[S]hort run price signals do not lead to long run price expectations that adequately incent efficient investment and retirement decisions."[10] Independently, the Lawrence Berkeley National Laboratory states that "higher penetration of [wind resources] have the potential to change wholesale electricity prices in the United States so that they are meaningfully different from historical price patterns,"[11] and concludes that "average annual hourly energy prices decline in high [variable renewable energy resource] scenarios relative to low [variable renewable resources]."[12]

The identity of Empire's tax equity partner(s) is/are unknown. The terms of the tax equity partner agreement(s) are unknown. When the SPP will offer generation interconnection agreements for each wind project are unknown. The costs to interconnect each wind project to the SPP grid are unknown.

Protecting captive retail customers from utilities building excess capacity is one of the core functions of this Commission, as is insulating them from utilities' speculative business ventures. Buying additional excess capacity to speculate in the energy markets is not the investment for which the Missouri legislature or voters intended that electric utilities such as

[10] Ex. 206HC, Lena M. Mantle surrebuttal testimony, Sch. LMM-S-2, p. 5.
[11] Ex. 206HC, Lena M. Mantle surrebuttal testimony, Sch. LMM-S-1, p. 13.
[12] *Id*. at 42.

Empire recover or profit on through their captive retail customers—that investment is in plant needed to provide electricity to those customers. As explained following, utility customers paying only for the investment a utility makes to supply them with electricity is both the source of the "used and useful" concept and the source of the phrase "fully operational and used for service" found in § 393.135, RSMo.

Based on the record in this case, and the manner in which Empire intends to place all investment risks on its customers while insulating itself and its tax equity partner from such risks, this Commission should not issue Empire a certificate of convenience and necessity for any of the three wind projects as proposed in this case. Empire's certainty as to the profitability of the projects strongly suggests Algonquin Power Company, Empire's parent company, would proceed with the projects regardless of whether the Commission grants the CCNs, and denying the CCNs should have no impact on the projects moving forward. If the Commission determines that granting the CCNs is lawful and in the public interest, Public Counsel strongly urges the Commission to include conditions on the certificates that protect customers from the risk of the projects not achieving the successes Empire estimates. Such conditions should include that Empire re-run its analyses using current figures rather than the outdated 2016 data Empire used, and submit those new analyses to the Commission for review before building the projects, and that customers be protected from market risks in the same manner in which Empire seeks to shield itself and its investor from market risk.

ISSUES

Issue 1. Does the evidence establish that the King's Point, Neosho Ridge, and North Fork Ridge wind projects for which The Empire District Electric Company ("Empire") is

seeking certificates of convenience and necessity ("CCN") are "necessary or convenient for the public service" within the meaning of that phrase in section 393.170, RSMo.?

No. Empire's justification for CCNs for these $1.2 billion wind projects is its assertion that they are economic, *i.e.*, that over their lives the revenues they generate will exceed the investment, return on that investment, and operational, maintenance and managerial costs so that, economically the projects will provide a net benefit to Empire's retail customers. Because § 393.135, RSMo., and the requirement that investments be "used and useful" both independently would make it unlawful for Empire to recover any of its investment in or profit on these wind projects through its Missouri retail customer rates, they are not "necessary or convenient for the public service" within the meaning of that phrase in § 393.170, RSMo. Further, the evidence in this case to show these projects are economically feasible is speculative at best and unreliable for concluding they are "necessary or convenient for the public service."

USED AND USEFUL, AND PROPOSITION 1 (1976) BACKGROUND

In 1898, the U.S. Supreme Court said in *Smyth v. Ames*, 169 U.S. 466, 546-47 (1898),[13] "We hold, however, that the basis of all calculations as to the reasonableness of rates to be charged by a corporation maintaining a highway under legislative sanction must be the fair value of the property being used by it for the convenience of the public," and "What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience. On the other hand, what the public is entitled to demand is that no more be exacted from it for the use of a public highway than the services rendered by it are reasonably worth." These statements get at the core of public utility ratemaking, which is relevant here because. Empire is

[13] https://advance.lexis.com/document/searchwithindocument/?pdmfid=1000516&crid=ed6c19db-704f-4be4-bb46-988b45207d8f&pdsearchwithinterm=used&ecomp=73h9k&prid=134f54cf-6bf6-4ce4-b38e-a1a253684be4.

seeking these certificates to further its plan that it and its co-investor(s) get their returns of and on their speculative investments in these wind projects through a combination of tax benefits, SPP market revenues, and Empire retail customer rates. These projects will *not* provide needed generation for Empire's customers.

The fundamental concept of used and useful is an encapsulation of the concepts the U.S. Supreme Court stated in *Smyth v. Ames*, *i.e.*, that a utility's customers should not pay for the utility's investment in plant or profit on that investment unless the investment is useful for and actually used to provide utility service to them—here electrical service used by the utility's customers.[14] However, when applying that concept, the Commission, primarily based on perceived lower customer cost impacts, had expansively included construction work-in-progress[15] and investment in facilities designed for anticipated future increases in load[16] in rate base. As both the Commission and the Courts have recognized, Proposition No. 1 (§ 393.135, RSMo.), passed by voter initiative in 1976, excludes the recovery of construction work-in-progress through electric retail rates:

> Any charge made or demanded by an electrical corporation for service, or in connection therewith, which is based on the costs of construction in progress upon any existing or new facility of the electrical corporation, or any other cost associated with owning, operating, maintaining, or financing any property before

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[14] *State ex rel. Missouri Public Service Co. v. Fraas, 627 S.W.2d 882*, 889-90 (Mo. App. 1981) (Error to disallow cost recovery for investment that is being used to provide service, and is also "fully operational and used for service."); *State ex rel. Missouri Power & Light Co. v. Public Service Com., 669 S.W.2d 941*, 90 (Mo. App. 1984).

[15] See *e.g. In the matter of Union Electric Company of St. Louis, Missouri, for authority to file tariffs increasing rates for electric service to its customers in the Missouri service area of the Company.; In the matter of the complaint and application of Union Electric Company to establish new rates and charges for electric service to its customers in the Missouri service area of the Company*., 20 Mo. P.S.C. (N.S.) 395; 1975 Mo. PSC LEXIS 3, ***Report and Order***, December 22, 1975.

[16] See *e.g. In the Matter of the Tariff Filing of Algonquin Water Resources of Missouri, LLC, to Implement A General Rate Increase for Water and Sewer Service Customers in its Missouri Service Areas*, 2007 Mo. PSC LEXIS 370, ***Report and Order***, issued March 13, 2007, effective March 23, 2007, or *In the Matter of the Tariffs of Aquila, Inc., d/b/a Aquila Networks—MPS and Aquila Networks—L&P Increasing Electric Rates for the Services Provided to Customers in the Aquila Networks—MPS and Aquila Networks—L&P Service Areas*, 2007 Mo. PSC LEXIS 686; 257 P.U.R.4th 424, ***Report and Order***, issued May 17, 2007, effective May 27, 2007.

> it is fully operational and used for service, is unjust and unreasonable, and is prohibited.

While the Commission has in a number of more recent orders stated, "*Section 393.135* expressly prohibits the inclusion in electric rates of costs pertaining to property that is not 'used and useful,'"[17] it has also recognized that "fully operational and used for service" is distinct from "used and useful." That they are distinct is further supported by the criterion of "are in service and used and useful" in the definition of "eligible infrastructure system replacements" found in the natural gas and water infrastructure replacement system surcharges allowed by §§ 393.1000(3)(b) and 393.1009(3)(b), RSMo.

PROPOSITION 1 (1976)

With regard to the first generating unit built at Iatan, the Commission said the following in Kansas City Power & Light Company's first rate case seeking recovery of its investment in that unit, "The question presented to the Commission herein is one of first impression. That question is: 'Should a new plant constituting excess capacity be excluded from the Company's rate base.'"[18] The Commission's answer follows:

> The Commission finds from the substantial and competent evidence that the Company has excess capacity.
>
> The Commission finds that the Company can provide safe and adequate service to its ratepayers without Iatan in its rate base and that therefore Iatan is not needed to meet the needs of the Company's ratepayers during the period these rates will be

[17] See, e.g., *In the Matter of the Tariff Filing of The Empire District Electric Company to Implement a General Rate Increase for Retail Electric Service Provided to Customers in its Missouri Service Area*, 17 MoPSC3d 221, 233, n.25; 2008 Mo. PSC LEXIS 313, p. 9, n. 43; Case No. ER-2006-0315, ***Order Granting Reconsideration of Report and Order***, issued March 26, 2008, effective April 05, 2008; or *In the Matter of the Application of Kansas City Power & Light Company for Approval to Make Certain Changes in its Charges for Electric Service to Implement its Regulatory Plan*, 2007 Mo. PSC LEXIS 1438, Case No. ER-2007-0291, ***Report and Order***, issued December 6, 2007, effective December 16, 2007, p. 7, n. 28.

[18] *In the matter of Kansas City Power & Light Company of Kansas City, Missouri, for authority to file tariffs increasing rates for electric and steam service provided to customers in the Missouri service area of the company*, June 19, 1980, 23 Mo. P.S.C. (N.S.) 474, 484-85; 1980 Mo. PSC LEXIS 34, 65;38 P.U.R.4th 1, ***Report and Order***, June 19, 1980.

> in effect. The Commission further finds that to include Iatan in Company's rate base would be to set rates that are neither just nor reasonable to the Company's customers.[19]

Because they provide illumination on parties' and Commissioners' views regarding excess capacity and § 393.135, RSMo., discussion of and quotes from portions of Commissioner Dority's concurrence and Commissioner Fraas' dissent follow. In his concurrence, Commissioner Dority said that he agreed with the majority that Iatan should be excluded from rate base as excess capacity, but that the Commission should have addressed the two criteria of § 393.135, RSMo.: "fully operational" and "used for service." In response to the Commission's Staff's argument that "used for service" means "useful to current ratepayers," he expressed his view that because the word "useful" is not in the statute and no one seriously challenged that Iatan was being used for service when the Commission was deciding that case, he rejected the Staff's argument.[20] He also stated the following regarding excess capacity:

> The massive record on this issue clearly supports the finding that the Company has unwarranted excess capacity. My comments are not designed to point an accusatory finger, but rather acknowledge that if a unit is not needed currently to provide an adequate and reliable supply of electricity to a Company's customers, and provide a reasonable reserve margin, then the economic impact of such a mistake must not be shifted to the ratepayers.[21]

Commissioner Fraas also addressed both the meaning of the statute and how to treat excess capacity in his dissent. There he said:

> The majority does not, however, take up a threshold question that was contested among the parties as to whether or not Iatan No. 1 is "fully operational" as required by *Section 393.135, RSMo 1978*. Before proceeding it should be noted

[19] *Id*. at 486; 30-31.
[20] Id.at 84-85, 506.
[21] *Id*. at 86-87; 507.

that the foregoing section sets out two prerequisites to inclusion in rate base, ". . . fully operational *and* used for service."[1] (Emphasis supplied in quote).

* * * *

A thorough review of the evidence adduced in the course of the true-up hearing leads to the inescapable conclusion that this generating unit is in fact fully operational and was so at the time of the hearing. As noted earlier, this determination is a threshold, one which must be made before reaching the capacity issue. If a plant is not fully operational it would seem by definition that it could not constitute excess capacity.

The statute is cast as a prohibition, but it clearly states that the requirements for inclusion in rate base are limited to "fully operational and used for service". As we have seen earlier, the evidence is clear that the unit is fully operational and the evidence is also quite clear that the unit is and has been for some time used for service, not only by Kansas City Power & Light but by the other utilities entitled to portions of its capacity. The requirements of the statute thus appear to have been satisfied.

Regardless, the parties to this case other than Company assert that the plant should be excluded from rate base because it constitutes excess capacity on Company's system. This is, those parties take the position that the Company does not need this generation to serve its customers.

This specific excess capacity issue was presented to this Commission in Company's last rate case, Case No. ER-78-252, March 5, 1979. After exhaustively considering the question, (see pages 15 through 19 of the Report and Order as filed) we concluded that the Company had proceeded about its planning and forecasting in a rational manner, that there was no "conspiracy" on the part of Company management to intentionally build excess capacity as seems to be intimated by some of the parties herein and we refused to make an excess capacity adjustment. We were well aware at that time that this generating unit was nearing completion. At page 18 of that Report and Order we considered Company's decision to bring this unit on line in 1980 and to sell capacity on a year to year basis while growing into the load. That decision was characterized as the result of rational planning, and given the implicit approval of this Commission.

* * * *

This Commission has previously been faced with the dilemma of dealing with an allegation that additional plant was not presently necessary or essential for

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"Any charge made or demanded by an electrical corporation for service, or in connection therewith, which is based on the costs of construction in progress upon any existing or new facility of the electrical corporation, or any other cost associated with owning, operating, maintaining, or financing any property before it is fully operational and used for service, is unjust and unreasonable, and is prohibited." (*Section 393.135, RSMo 1978*).

> service. See *State ex rel. Valley Sewage Company vs. Public Service Commission, 515 S.W. 2d 845* (Mo. App., 1974). The Court of Appeals there sustained a Commission Order which placed the full value of an additional sewage treatment plant in company's rate base even though the Commission found, based upon substantial evidence, that the plant was not reasonably necessary nor essential to serve the company's customers.
>
> In support of its position that this unit should be excluded from rate base as excess capacity, Staff would equate the term "fully operational and used for service", as set out in *Section 393.135* above, with the more commonly used phrase in utility regulation of "used and useful". The latter phrase, which is the test applied in most jurisdictions, has been superseded in Missouri by the specific test of Section 393.135. The "useful" portion of the "used and useful" test can be held to imply an element of necessity above and beyond the bare fact of "use." The phrase is not parallel to our test, however, as "fully operational" is an entirely new requirement and "used for service" is, by the plain meaning of the words, analogous to the simple "used" portion of the other standard. *Section 393.135* provides no requirement corresponding to "useful."[22]

With regard to statutory interpretation § 1.090, RSMo., directs, "Words and phrases shall be taken in their plain or ordinary and usual sense, but technical words and phrases having a peculiar and appropriate meaning in law shall be understood according to their technical import." Given that § 393.135, RSMo., was passed by voter initiative in response to nuclear power plant construction costs, the words and phrases in that statute should be viewed for their plain meaning in that context.

The dictionary meaning of "operational" is "able to function or be used; functional."[23] The dictionary meaning of "fully" in this context is "entirely or wholly."[24] Therefore, the plain meaning of "fully operational" is "entirely functional." Because alternating current electricity must be consumed as it is created, of more than academic interest is whether a generating unit that is capable of generating its designed output, but is not connected to anything that consumes

[22] *Id*. at 88-94; 507-10.
[23] https://www.dictionary.com/browse/operational#, Dictionary.com Unabridged, accessed April 19, 2019.
[24] https://www.dictionary.com/browse/fully?s=t, Dictionary.com Unabridged, accessed April 19, 2019.

that output is "fully operational." Fortunately, the statute avoids that pitfall by the phrase "used for service."

The dictionary meaning of "used" in this context is "employed for a purpose; utilized."[25] The dictionary meaning of "for" in the context of this statute is "with the object or purpose of."[26] The dictionary meaning of "service" in this context of utility regulation is "the supplying or supplier of utilities or commodities, as water, electricity, or gas, required or demanded by the public"[27] or, more specifically, "the supplying of electricity required or demanded by the public." Therefore, the highlighted language of § 393.135, RSMo., that follows

> **Any charge made or demanded by an electrical corporation for service, or in connection therewith, which is based on** the costs of construction in progress upon any existing or new facility of the electrical corporation, or **any other cost associated with owning, operating, maintaining, or financing any property before it is fully operational and used for service, is unjust and unreasonable, and is prohibited**.

means that the electric rates of a utility rate-regulated by the Commission cannot lawfully be based on recovery of "any . . . cost associated with owning, operating, maintaining, or financing any property before it is [entirely functional] and [employed for the purpose of supplying the electricity the public requires]."

Section 393.135, RSMo., does not explicitly address the circumstance where an electric utility seeks to recover from its ratepaying customers its investment in generating plant with output devoted entirely to its wholesale activities, *i.e.*, the utility's ratepaying customers pay for the costs of a plant the output of which is used to serve the public, but not them. However, given that the focus of the voter initiative is on utility cost recovery from the utility's retail customers,

[25] https://www.dictionary.com/browse/used?s=t, Dictionary.com Unabridged, accessed April 19, 2019.
[26] https://www.dictionary.com/browse/for?s=t, Dictionary.com Unabridged, accessed April 19, 2019.
[27] https://www.dictionary.com/browse/service?s=t, Dictionary.com Unabridged, accessed April 19, 2019.

it is reasonable to interpret that "used for service" must include service to those from whom the costs are recovered, *i.e.*, the electric utility's retail customers.

The Commission should not certificate a generating plant when it cannot allow the electric utility to recover its investment and costs for that plant in its retail rates. Nothing prevents Empire from building wind farms as an independent power producer unregulated by the Commission selling energy into the SPP markets. Empire has an affiliate which does that.[28] Based on § 393.135, RSMo., alone, because Empire is not planning these projects to provide electric service to its retail customers, the Commission should determine that these wind projects are not an improvement that justifies their cost and, therefore, are not necessary or convenient.

USED AND USEFUL

Aside from § 393.135, RSMo., the Commission should not issue Empire certificates of convenience and necessity for these wind projects because the wind projects will not be "used and useful" to Empire's retail customers, and the circumstances where the Commission has expanded the "used and useful" concept to include facilities designed for anticipated future load increases does not exist. Empire is not even suggesting that the energy from or capacity of these wind projects is for providing its customers safe and adequate electric service, or that they are required by law to satisfy the Missouri renewable energy standard, or any other law. From a regulatory and economic perspective, as unneeded excess capacity, these wind projects could do nothing more than unnecessarily increase Empire's customers' rates.

[28] Ex. 205HC, Public Counsel witness Lena M. Mantle rebuttal testimony, p. 17.

Because Empire should recover nothing for these wind projects in its next future rate case after they are capable of and are generating electricity delivered to the grid as designed, the Commission should not issue Empire certificates for them now.

ANALOGOUS EXCESS CAPACITY CIRCUMSTANCES

In a 1986 Arkansas Power & Light Company rate case Report and Order the Commission describes the aftermath of a situation similar to the one Empire presents here—that the lower variable cost of wind generation will exceed the fixed cost of wind generation. In that case the Commission said, "The Company at one time had generation capacity which was substantially gas and oil fired. Company engaged in the decision to build base load capacity which was coal fired because of expected long run benefits of anticipated savings in variable cost which would exceed the fixed cost of those base load units." With the benefit of hindsight, the Commission said the following regarding Arkansas Power & Light Company's forecasting, "Some of the considerations from which this expectation was based were higher forecasted and (*sic*) actual demands for electricity, lower forecasted than actual capacity costs for coal units, higher forecasted than actual costs for oil and natural gas, and the assumed unavailability of natural gas. Most of these expectations have not materialized and the cost of operating the coal-fired units are not significantly enough lower than the operation of the gas and oil units to offset the cost of construction of the newer units."

The Commission also said the following:

> No matter what the origin of capacity the simple fact remains that the Company intentionally overbuilt its generating needs to improve its fuel diversification. The question for the Commission's resolution is whether the ratepayers suffer for the unfortunate results of increased capacity costs if the expansion was not originally imprudent. In the Commission's opinion a

substantial portion of the Company's generating plant is not used and useful for public service.

Disallowance of that portion of the generating capacity unnecessary to ensure reliability is consistent with previous decisions of this Commission as well as other Commissions. The Pennsylvania Public Utility Commission has applied a two-part test requiring (1) that the investments were prudent when made, and (2) that the property invested in will be used and useful during the time the rates will be in effect. In *Pennsylvania Public Utility Comm. v. Pennsylvania Power & Light Company, 67 P.U.R.4th 30 (1985)* that Commission stated at page 43:

> The primary meaning of *"useful"* in the present context is that the plant and its associated capacity contribute no more than necessary to system *reliability* in the accepted, technical sense. In other words, the question is whether the company's total capacity, including the plant in question, is commensurate with the requirements for peak demand plus a reasonable reserve margin relative to the company's own system and to its PJM obligation.
>
> This is the heart of any excess capacity determination. It means, among other things, that the company's alternative definitions of "reliability" as fuel diversity or available capacity are peripheral. If there is excess capacity in the primary reliability sense, then the threshold condition for an adjustment has been satisfied. (*Id. at 43)*

Public Counsel's brief cites extensive authority for the proposition that the requirement that property must be used and useful in public service to be included in rate base has been followed in a long line of cases commencing with *Smyth v. Ames, 169 U.S. 466 (1898).* ***In the instant case, the generating capacity in question simply is incapable of being used for the necessity or convenience of the ratepaying public.*** (Emphasis added).

The foregoing Commission statements are as applicable to what Empire is requesting the Commission to do here as they are to Arkansas Power & Light Company's circumstances in 1986. The Commission should not issue certificates of convenience and necessity for generating plants that will be excess capacity, as they are neither necessary nor convenient, *i.e.*, they are not improvements that justify their cost.

That this Commission still holds to its views about excess capacity is shown in a more recent natural gas general rate case for Summit Natural Gas of Missouri, Inc. In 2014, the

Commission found, "[Summit] overbuilt significantly, creating excess capacity in service areas Branson and Warsaw. On a peak day customers use 21.44 percent of the system's main capacity in Branson and 43.29 percent of the system's main capacity in service area Warsaw."[29] In its *Report and Order* in that case the Commission stated, "Just and reasonable rates do not include infrastructure that does not serve customers. Therefore, customers must be protected from rates that do not support safe and adequate service."[30] Ultimately, as to the Branson and Warsaw areas, the Commission ordered that Summit's excess capacity investment in those areas be recorded in FERC Account 105—plant held for future use, which excluded it from Summit's rate base and, therefore, from recovery through its retail customer rates.[31]

WIND PROJECTS' ECONOMIC FEASIBILITY

Customers' risk

The record in this case also shows the projects are a risky investment that may harm Empire's retail customers. Empire's choice to pursue it and its investor(s)' profit from Empire's retail customers through the Commission rather than pursuing their profit directly from sales in the SPP market as an independent power producer demonstrates that Empire views it is riskier for Empire and its investor(s) to rely on the SPP market than on the Commission for their profit. Empire's affiliate Algonquin Power Company has experience as an independent power producer, having invested as an independent power producer in 905 megawatts of wind projects.[32] One would think that if Algonquin were as certain of the success of these projects as claimed, its own

[29] *In the Matter of Summit Natural Gas of Missouri, Inc.'s Filing of Revised Tariffs to Increase Its Annual Revenues for Natural Gas Service*, Case No. GR-2014-0086, *Report and Order*, issued October 29, 2014, and effective November 28, 2014, ¶ 12, p. 19; 24 Mo. P.S.C. 3d 161, 172.
[30] *Id*. at 24; 24 Mo. P.S.C. 3d at 175.
[31] *Id*. at 25-27; 24 Mo. P.S.C. 3d at 175-76.
[32] Mantle Rebuttal p. 17.

independent power producer would seek to invest in the projects as an unregulated enterprise and enjoy all the profits for Algonquin.

As stated above, these wind projects would increase Empire's rate base by about 38%, from $1.6 billion to about $2.2 billion,[33] but they would only increase Empire's SPP-accredited capacity by about 6.1%, from 1,477 megawatts[34] to 1,567 megawatts[35] when Empire's actual annual maximum load is about 1,200 megawatts and has never exceeded 1,211 megawatts.[36] While these wind projects could have dramatic economic consequences for Empire and those in its service territory, they will have little impact on SPP market prices.[37]

Based on Empire and its investor(s) recovering their investment of $1.2 billion, and getting a 10% return on it over thirty years, Empire's own retail customers will be on the hook for $44 million per year ($1.2 billion * 1.1 / 30 = $44 million), increased by lease costs, operations and maintenance expense and other costs, and offset by realized production tax credits, accelerated depreciation, and SPP sales revenues. While the installed costs of the wind turbines are known--$1.2 billion,[38] operations and maintenance expenses, generating interconnection costs,[39] and other costs are not, nor are the value of the offsetting realized production tax credits, and SPP sales revenues.

[33] Empire witness Blake A. Mertens, Tr. 2: 107.
[34] Empire witness Blake A. Mertens, Tr. 2: 115.
[35] About 90 MWs increase, Empire witness Blake A. Mertens, Tr. 2: 154.
[36] Empire witness Blake A. Mertens, Tr. 2: 130-31.
[37] Public Counsel witness Lena M. Mantle, Tr. 4:414-15, 422-23.
[38] Empire witness David Holmes, Tr. 2:208; Ex. 5HC, Empire witness Todd Mooney direct testimony, p. 10 & Ex. 6HC, Empire witness Todd Mooney direct testimony, p. 10. **
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[39] Empire witness Blake A. Mertens, Tr. 2:108-10.

Stale Information

The SPP market prices Empire used as inputs to its modeling that it relies on in this case are projected SPP market prices that Empire obtained from ABB for Empire's 2016 triennial integrated resource plan.[40] As Public Counsel witness Lena M. Mantle testified, "Empire filed this [2016] IRP resource plan in April 2016, which means that much of the analysis was conducted in 2015 using data from prior to 2016 and likely only a portion of 2015."[41] Although Empire has new ABB projected SPP market prices for its 2019 integrated resource plan filing, it has not updated its modeling in this case with those more current projected SPP market prices.[42] Empire not updating its modeling in this case is particularly disturbing because of the recent and impending changes in the mix of the reliability of the availability and output from generating resources in the SPP (wind penetration), and how the dispatch of energy from these projects will be affected by the impending changes in SPP market rules, and the massive influx of additional new wind resources.

The MIT Center for Energy, and Environmental Policy Research Lawrence Berkeley National Laboratory research papers describe the change these prestigious research institutes foresee to energy markets from the additional high volumes of wind resources such as the SPP is currently experiencing. Yet Empire is using market forecasts that were essentially created the same way that market forecasts were done in 2005 and 2007.[43]

A prudent investor would want to know the best information available before committing to make a billion dollar investment. Here Empire is asking that its retail customers be treated as

[40] Ex. 205HC, Public Counsel witness Lena Mantle rebuttal testimony, p. 5.
[41] Ex. 205HC, Public Counsel witness Lena Mantle rebuttal testimony, p. 5.
[42] Empire witness David Holmes, Tr. 2:188-89.
[43] Public Counsel witness Lena M. Mantle, Tr. 4:422.

investors, and Empire has failed to provide to the Commission the best information that is available regarding the impacts its projects will have on those customers. Not only has Empire not updated its models to reflect changes in SPP market price forecasts, it has delayed filing its triennial integrated resource plan until after the Commission decides this case, which allows it to not show its updated resource planning models in other cases, such as this one. The obvious reason to stop analyzing whether the market has changed after you did your analysis is because you do not want to know the answer. It appears that Empire does not want the Commission to know the answer—that fundamental basis for these investments—increasing SPP market prices—is weak and eroding on a monthly basis, as increasing amounts of generation, including wind, are added to the SPP generation interconnection queue, and the SPP is changing its market rules to stabilize its markets.

It was not until Empire witness Todd Mooney filed his surrebuttal testimony that Empire provided a spreadsheet table of its projected customers' benefits from the wind projects over thirty years in his Schedule TM-S-4.[44] This schedule shows the results of the modeling Empire did for Case No. EO-2018-0092, but those results do not include updates to cost information after that case.[45] This long-term analysis is based on projected SPP market prices that Empire obtained from ABB in its 2017 forecast.[46] However, no one from ABB testified in this case. Instead, in their surrebuttal testimonies Empire witness Todd Mooney sponsored the projection, and Empire's witness James McMahon provided brief descriptions of what ABB did for Empire. Empire did not update its analysis to account for the reduction in production tax credits and SPP

[44] Ex. 7HC.
[45] The ten-year net present value shown on Schedule TM-S-4 is the same as the ten-year net present value shown in Ex. 205HC, Public Counsel witness Lena M. Mantle rebuttal testimony, p. 7.
[46] Ex. 205HC, Public Counsel witness Lena Mantle rebuttal testimony, p. 5.

market revenues that the lesser quality of wind northeast of Joplin where the Kings Point and North Fork Ridge wind projects are sited near Joplin, Missouri, will generate relative to the substantially better quality of the wind in and about the location of the Elk River wind farm in Kansas that Empire used in its rate impact analysis.

In addition, Empire did not update its analysis for the increase in turbine costs, a capital cost that includes a return, so its impact is greater than Empire' reduction in its estimated operations and maintenance costs. Empire did not update its analysis for its updated cost of equity financing. Empire did not update its analysis for its updated hedge cost. Empire did not update its analysis for its impending loss of two municipal customers—77-78 megawatts of load. All of these have impacts, most likely negatively on Empire's retail customers.

30-year revenue forecasts are inaccurate

Empire modeled SPP energy sales revenues from the wind projects over thirty years into the future. That those projections are inaccurate is certain. However, they are fundamental to Empire's assertion that these wind projects will bring in more revenues from SPP than the projects will cost its retail customers, *i.e.*, that are economic and, therefore, "necessary and convenient."

Properly viewed, Empire's plan is that it, with others, will invest some $1.2 billion in these three wind projects and those investors will get their investment plus a profit on it through a combination of federal tax benefits (production tax credits and accelerated depreciation), SPP revenues (SPP market sales revenues), and Empire retail customer rates. By this plan, Empire and its investor(s) shift from them to Empire's retail customers the risks of the actual tax credits

and SPP market revenues that will be realized from the electricity these wind projects produce. In return, Empire's retail customers are not exposed to fuel costs for these projects.

Public Counsel witness Lena M. Mantle testified that multiple utilities regulated by the Commission entered into wind purchase power agreements on the premise that they would be economical based on forecasted prices, none of which now get revenues for any given hour from the regional transmission organization, or independent system operator, in which it operates that exceed what it is paying for that purchase power agreement.[47] In particular, Empire entered into purchase power agreements in 2005 and 2007 as being economical based on increasing market price forecasts that now are costing Empire's between $12 million and $18 million a year because market prices actually went down.[48] Sometimes the SPP revenues are half of the purchase power cost.[49] Like these prior increasing market prices forecasts, ABB's 30-year price forecasts Empire is relying on in this case consistently trend upward, *i.e.*, the prices constantly increase over time.[50] During the hearing Ms. Mantle testified,

> The forecast that was used to enter into the PPA is they use -- ABB used the same models that, it was Ventrex I think back in 2005, 2007, but they used the exact same models, the exact same type of analysis to do those forecasts back in 2005 and 2007 to enter into those contracts. That's the same modeling that I see done now and those prices just as they did then show even though they have a low, medium and a high case, the low market prices still are just incrementally climbing every year and I have yet to see a market where they go up. Usually they're all over the place. The forecast used [for] . . . the low, medium and high [scenarios increase continually across time] for the modeling that was done in the 2018 case [since] . . . there was no modeling done in this case . . ..
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> * * * *
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> Q. Turning back to doing market forecasts, do you have some experience in seeing how market forecasts have changed over time?

[47] Public Counsel witness Lena M. Mantle, Tr. 4:420-21.
[48] Public Counsel witness Lena M. Mantle, Tr. 4:421-22.
[49] Public Counsel witness Lena M. Mantle, Tr. 4:422.
[50] Ex. 205HC, Public Counsel witness Lena M. Mantle rebuttal testimony, p. 6.

A. Looking at market forecasts for both Empire and recently I've been looking at KCPL and GMOs also, it seems to me what happens is they take the same market forecast that was wrong three years earlier and just move it over three years. So it's more or less the same market forecast and it's always going up, the high, medium, low. It never stays flat. It never drops. Always going up. We just take that forecast and we plop it over three years and it's basically the same forecast.

Q. When you say it's the same forecast, you're saying essentially the origin point would be the same and you're shifting it on the timeline to the right?

A. Yes.

Q. So if you were going to rely on that kind of a market forecast, you'd want to use the most currently available?

A. I'd want to go back and look and see what was wrong with that forecast three years ago and are we solving the problem that happened three years ago. To me there's a disconnect between -- obviously you need to -- a forecast is good but you've got to look at it and see if it makes any sense.

Q. Well, let's assume that there's nothing wrong with how you're doing your forecasting. Would you want to use the most currently available data for doing your forecast?

A. Definitely. Especially when you've got a changing market like we have with the SPP where things are evolving day to day.[51]

In a case the Commission decided in 1985 regarding Ameren Missouri's Callaway nuclear plant, when Public Counsel projected two required revenue streams over 30 years, one with Callaway, the other without, the Commission stated, "***In the Commission's opinion, 30-year projections are speculative even if the underlying assumptions are well reasoned***."[52] (Emphasis added). In a Kansas City Power & Light Company case the following year the Commission relied on the same rationale to reject Public Counsel's sharing proposal to exclude the amount of the losses associated with Wolf Creek from rate base, but allow full recovery of

[51] Public Counsel witness Lena M. Mantle, Tr. 4:422, 427-28.

[52] *In the matter of the determination of in-service criteria for the Union Electric Company's Callaway Nuclear Plant and Callaway rate base and related issues. *; In the matter of Union Electric Company of St. Louis, Missouri, for authority to file tariffs increasing rates for electric service provided to customers in the Missouri service area of the company*, 1985 Mo. PSC LEXIS 54, 173; 27 Mo. P.S.C. (N.S.) 183, 250, ***Report and Order***, issued March 29, 1985.

depreciation and taxes associated with Kansas City Power & Light Company's investment in the Wolf Creek nuclear plant. In that case the Commission said, "Based on the analysis and studies presented to the Commission regarding the economics of Wolf Creek, the Commission concludes that at least in the foreseeable future, Wolf Creek has the potential to represent a loss when compared to alternative expansion plans. However, the Commission still believes that 30-year projections, although appropriate for planning purposes, are speculative for purposes of calculating permanent rate base exclusions. Therefore, the Commission must reject Public Counsel's economic excess capacity proposal."[53] The same is true for market price projections. They are appropriate for planning purposes, but not for deciding whether to participate in speculative SPP market participation ventures.

Empire does not claim that it must invest in these wind projects to be able to provide its customers with safe and adequate electric service; instead, it proffers them on Empire's economic projections that Empire's captive retail customers will reap more income from sales of energy in the Southwest Power Pool energy market over 20 and 30 years than these projects will cost them under Empire's plan. By that plan Empire and its tax equity partner(s) will reap their profits through Empire's captive retail customers' rates and federal income tax benefits.[54]

Public Counsel's position on the value of market price forecasts for making a 30-year investment in wind now was well expressed by Public Counsel witness Lena M. Mantle during

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[53] *In the matter of Kansas City Power & Light Company of Kansas City, Missouri, for authority to file tariffs increasing rates for electric service provided to customers in the Missouri service area of the Company, and the determination of in-service criteria for Kansas City Power & Light Company's Wolf Creek Generating Station and Wolf Creek rate base and related issues. *; In the matter of Kansas City Power & Light Company, a Missouri corporation, for determination of certain rates of depreciation*, 1986 Mo. PSC LEXIS 33, 38-39; 28 Mo. P.S.C. (N.S.) 228, 352-53; ***Opinion***, issued April 23, 1986.

[54] Ex. 1, Empire witness Blake A. Mertens direct testimony; Ex. 2, Empire witness Blake A. Mertens direct testimony; Ex. 5HC, Empire witness Todd Mooney direct testimony; Ex. 6HC, Empire witness Todd Mooney direct testimony.

the hearing, "I don't believe that I could believe anybody's market price forecast with enough certainty to bet $1.1 billion."[55]

These wind project additions compared to SPP resource additions

These wind projects total 0.60 gigawatts of nameplate capacity, but the SPP has about 65 gigawatts of firm capacity resources now, with a forecasted peak demand between 53 and 55 gigawatts from 2018 through 2023.[56] Not only does SPP have over 64 gigawatts of firm capacity resources, of which about 2 gigawatts are from wind resources,[57] SPP anticipates it will have an additional 6.5 to 11.5 gigawatts of new wind generating resources added by 2025,[58] and, presently, over 70 gigawatts of generation interconnection requests are pending in SPP, of which over 50 gigawatts are for wind generation.[59] In May of 2018 Lawrence Berkeley National Laboratory reported that "annual average energy prices decline at the rate of anywhere from $.01/MWh to $0.9/MWh for each additional percentage increase in with variable increasing wind and solar resources" energy in a RTO market.[60] A second report, from the MIT Center for Energy and Environmental Policy Research (MIT CEEPR), from January 2019 demonstrates that:

> "[A]s the penetration of [wind energy] with zero marginal costs grows to become a large fraction of total generation, market-based energy prices during the hours it operates will fall toward zero – perhaps to zero in many hours if very aggressive wind and solar penetration goals are met."[61]

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[55] Tr. 4: 411.
[56] Ex. 8, Empire witness James McMahon surrebuttal testimony, p. 5, fn. 5, p. 3 of SPP 2018 Resource Adequacy Report published June 29, 2018; Empire witness Blake A. Mertens, Tr. 2:119 (50-55 GW peak).
[57] Ex. 8, Empire witness James McMahon surrebuttal testimony, p. 5, fn. 5, p. 4 of SPP 2018 Resource Adequacy Report published June 29, 2018 (Base on a 12% capacity factor, this corresponds to about 17 gigawatts of nameplate capacity).
[58] Ex. 8, Empire witness James McMahon surrebuttal testimony, p. 11.
[59] Ex. 200HC, Public Counsel witness Dr. Geoff Marke, Ph.D., p.14 ; Ex. 8, Empire witness James McMahon surrebuttal testimony, p. 11.
[60] *Id.*
[61] *Id.* (quoting Paul Joskow, *Challenges for Wholesale Electricity Markets with Intermittent Renewable Generation at Scale: The U.S. Experience*, MIT Ctr. For Energy and Evn'tl Pol. Res. (Jan. 2019)).

Empire would often be selling the output from these projects into the SPP market at the same time other wind resources are also selling their output into the SPP market, and depressing SPP market prices. Empire's modeling does not sufficiently account for this near-term ballooning of wind generation resources in the SPP.

Unknowns

The Non-Unanimous Stipulation and Agreement does not provide sufficient captive retail customer benefits for the many unknowns about these $1.2 billion investments that will increase Empire's rate base by about 40%. Despite Empire and Wells Fargo "advancing in discussions" in May of 2018, they still have not entered into a "definitive" agreement for Wells Fargo to be a tax equity partner in any of the wind projects.[62] This means that many of the terms and conditions of these projects are still unknown at this time. Further, based on advancing discussions, Wells Fargo **

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What the future will hold for natural gas prices is uncertain. "For [the] Winter of 2018, the SPP Market Monitoring Unit opined that the market prices over the three-month time period December 2017 through February 2018 stayed the same due to higher December gas prices in 2017 than 2016, and higher loads across all three months in the Winter 2018."[64] Whether this trend continues is unknown, but producers keep discovering more gas reserves, including ExxonMobil's discovery of the world's third biggest natural gas discovery in two years off the

[62] Empire witness Todd Mooney, Tr. 2: 251-52.
[63] Ex. 5HC, Empire witness Todd Mooney direct testimony, Sch. TM-5. **

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[64] Ex. 205HC, Public Counsel witness Lena M. Mantle rebuttal testimony, p. 13.

coast of Cyprus in the Eastern Mediterranean on February 28, 2019.[65] There is no indication that natural gas' prominence in the SPP's energy markets will dwindle. Often the marginal SPP market price driver, continued abundance of natural gas portends continued low SPP market prices.

Additional unknowns include the following:

a) How much Empire will invest in the wind projects;
b) How much Empire's tax equity partner(s) will invest in the wind projects;
c) The costs of generation interconnection;
d) The accuracy of Empire's projections of future SPP market prices;
e) When Empire will have generation interconnection agreements with SPP for any of the wind projects;
f) SPP market wind saturation;
g) SPP market rule changes;
h) The future demand/usage by Empire's customers, which recently has been leveling off or declining;
i) The potential for cost-effective energy storage;
j) The wind profiles at the Kings Point and North Fork Ridge sites;
k) Transmission congestion constraints;
l) Rate case timings and rate shock;
m) Excused events (circumstances where the costs of the projects to be borne by Empire's customers); and

[65] Ex. 201HC, Dr. Geoff Marke, Ph.D., surrebuttal testimony, p. 6.

n) The inherent variability of wind.

All of these unknowns are risks which make these projects speculative, and additionally why Empire's retail customers should not be exposed to these projects that Empire does not need to be able to provide them electric service.

RENEWABLE ENERGY STANDARD

At this time, and for at least a decade, Empire does not require additional wind renewable energy credits to satisfy Missouri's current renewable energy standard. Presently Empire has three sources that provide it with renewable energy credits– its Ozark Beach hydroelectric facility, its Elk River purchase power agreement which expires in 2025,[66] and its Meridian Way purchase power agreement which expires in 2028.[67] Based on how many renewable energy credits these three sources generate annually, and that renewable energy credits expire after three years, Empire will not need new resources for renewable energy credits for over a decade.[68]

Issue 2. For each CCN the Commission grants, what conditions, if any, should the Commission deem to be reasonable and necessary, and impose?

If the Commission concludes that Missouri law does not prohibit rate recovery of the projects, and grants any CCNs in this case, then it should deem the conditions in Exhibit 12, the unopposed *Stipulation and Agreement Concerning Wildlife Issues,* to be reasonable and necessary, and impose them, as appropriate, on each of the CCNs the Commission issues in this

[66] Public Counsel witness John A. Robinett rebuttal testimony, p. 13.
[67] Public Counsel witness John A. Robinett rebuttal testimony, p. 13.
[68] Public Counsel witness John A. Robinett rebuttal testimony, p. 15; § 393.1030.2, RSMo. ("An unused credit may exist for up to three years from the date of its creation.").

case. Further, any CCNs for the requested 600 megawatts of generation should include the following:

Missouri Empire Retail Customer Protection Plan

1. **$25 million Missouri retail customer cap**: Under this plan Empire's Missouri retail customers shall pay in their electric rates no more than $25 million for the King's Point, North Fork Ridge, and Neosho Ridge wind projects (This includes, but is not limited to the cost of the turbines, lease agreements, transmission upgrades and gen-ties.) during the time when Empire is paying hedge costs to the Wind Project Cos for the difference between a fixed hedge price and the floating SPP market price (Hedging Period) (Empire anticipates this time period to be approximately ten years).

2. **Missouri retail customer risk sharing**: Subject to the $25 million limitation, Empire's Missouri retail customers will share equally with Empire in the risk that, over the same period of time bookended by rate cases, Empire's SPP revenues plus renewable energy credits sale revenues from the King's Point, North Fork Ridge, and Neosho Ridge wind projects ("Wind Project Revenues") do not exceed the sum of the accumulated depreciation reserve for those assets plus a return on those assets based on the rate of return the Commission most recently determined for Empire's electric operations grossed up for income taxes plus Empire's share of the prudent expenses to operate and maintain the wind projects plus Empire's prudent administrative and general wind project expenses ("Wind Project Expenses"). Because Empire has so much existing generation resources, during the Hedging Period the wind projects will have no capacity value for Empire's customers and the wind projects will have no replacement value for Empire's current wind PPAs; therefore, the Office of the Public Counsel has intentionally not included capacity and PPA replacement values in this plan.

3. **Revenue and Expense Tracking**: To effectuate this plan Empire monthly shall record and accumulate on its books and records in separate accounts, for each wind project and for them in the aggregate, both the Wind Project Revenues and the Wind Project Expenses.

4. **Rate Case Implementation**: In Empire's Missouri general electric rate cases that include periods during the Hedging Period, to the extent the Wind Project Expenses accrued since the Wind Project Expenses ending balance used in Empire's immediately preceding Missouri general electric rate case exceed the Wind Project Revenues accrued since the Wind Project Revenues ending balance used in Empire's immediately preceding Missouri general electric rate case, then, subject to the $25 million limitation, one-half of that difference shall be amortized

over four years and included Empire's cost of service used for setting rates in its pending general electric rate case.

5. **Clawback**: If at the end of the Hedging Period the Wind Project Revenues balance exceeds the Wind Project Expenses balance, and any amounts for the King's Point, North Fork Ridge, and Neosho Ridge wind projects have been included in Empire's cost-of-service during the Hedging Period, then the lesser of the aggregate of those amounts or the aforesaid difference in Hedging Period accruals shall be used to reduce Empire's rate base.
6. **Ratebasing Wind Projects**: While Empire's investment in the King's Point, North Fork Ridge, and Neosho Ridge wind projects are included in Empire's rate base, Empire's Missouri retail customers shall pay in their rates neither a return of nor a return on Empire's investment in those projects during the Hedging Period of this plan, nor any amount in excess of the $25 million limitation.

CONCLUSION

As explained above, the Commission should not issue certificates of convenience and necessity for any of the King's Point, North Fork Ridge or Neosho Ridge wind projects as currently proposed for the following reasons:

1. Each of these projects is additional excess capacity that will not be "used for service" within the meaning of that phrase in § 393.135, RSMo., and, because Empire therefore cannot recover through its Missouri rates the costs Empire incurs for them, they are not "necessary or convenient" within the meaning of that phrase in § 393.170, RSMo.;
2. Each of these projects is additional excess capacity that will not be "used and useful" and, because it would be unreasonable, if not unlawful for the Commission to allow Empire to recover through its Missouri rates the costs Empire incurs for them, they are not "necessary or convenient" within the meaning of that phrase in § 393.170, RSMo.;
3. The evidence does not show that these projects are economically feasible for the following reasons:

a. Empire's plan exposes its retail customers to all of the SPP market and PTC revenues risk of these wind projects;

b. Important data, including SPP market price projections, have not been updated in the analysis of the economic feasibility of the projects;

c. Empire's 20- and 30-year projections of SPP market prices are speculative for purposes of predicting SPP market revenues from these wind projects over the next 20 to 30 years;

d. The SPP market is fundamentally changing in the near future because, SPP has about 65 gigawatts of accredited firm capacity resources now, 2 gigawatts of which are from wind; forecasted annual peak demands between 53 and 55 gigawatts from 2018 through 2023; and SPP anticipates the addition of 6.5 to 11.5 gigawatts (nameplate) of new wind resources by 2025 while is presently has 70 gigawatts of generation interconnection requests are pending in SPP, of which over 50 gigawatts are for wind generation; and

e. It is unknown, when SPP will offer generation interconnection agreements for each of the wind projects and the ultimate cost to Empire to interconnect with the SPP grid.

4. The evidence does not establish these wind projects provide a benefit for Empire to comply with Missouri's renewable energy standard since Empire's existing Elk River and Meridian Way wind purchase power agreements together with Empire's ability to "bank" renewable energy credits for up to three years means that Empire will not need any new resources to satisfy Missouri's existing renewable energy standard for a decade, i.e., until 2030.

Since Empire stands behind the reliability of its analysis and forecasts, it is reasonable to assume that an order denying the CCNs will not deter Algonquin from moving forward with these projects as an independent power producer. In other words, one should expect these projects will be built regardless of whether the Commission grants the requested CCNs because Commission approval is not needed for independent power producer generation. Therefore, the true question before the Commission is where to place the risk of failure on Missouri ratepayers, unwilling investors that do not need the generation to serve them, or the company that seeks to build these projects solely for profit purposes.

Respectfully,

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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronically mailed to all counsel of record this 29th day of April 2019.

/s/ Nathan Williams