BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of The Empire	)	
District Electric Company for Approval of	)	**Case No. EO-2018-0092**
Its Customer Savings Plan	)	

REPLY BRIEF OF THE OFFICE OF THE PUBLIC COUNSEL

Respectfully submitted,

Hampton Williams,

Public Counsel
Mo. Bar No. 65633

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Executive Summary

The initial briefs of the other parties do not raise any arguments that cause the Office of the Public Counsel to revise its position on any issue. It is still the Office of the Public Counsel's position that the Commission does not have jurisdiction to find that Empire acquiring up to 600 MW of wind farms or investing in Asbury to comply with the EPA CCR rules are reasonable for the reasons briefed on pages 11-30 and 33-35 of its initial brief and, therefore, the Commission must dismiss this case. In this brief, the Office of the Public Counsel:

(1) Responds to the incorrect arguments of other parties that the Commission has jurisdiction to grant Empire relief in this case;

(2) Points to additional support in the record for why, even if this Commission reaches the merits, there is not sufficient reliable evidence in the record to support the request that the Commission find it reasonable for Empire to build 600 MW of wind farms; and

(3) Explains that the enactment of SB 564 into law on June 1, 2018, as the Office of the Public Counsel argued in its initial brief, means that the resolution of the impacts of the Tax Cuts and Jobs Act of 2017 ("TCJA 2017") proposed in the settlement is unlawful.

Argument

No Commission jurisdiction

To determine reasonableness is to determine prudency

By seeking for Commission findings that building up to 600 MW of wind farms and incurring costs at Asbury to comply with the EPA's coal combustion rule are both reasonable, the settling parties are seeking preapproval and implicating the prudency of Empire actions. With regard to prudency, the Commission has said the following:

In determining whether a utility's conduct was prudent, the Commission will judge that conduct by:

> asking whether the conduct was reasonable at the time, under all the circumstances, considering that the company had to solve its problem prospectively rather than in reliance on hindsight. In effect, our responsibility is to determine how reasonable people would have performed the tasks that confronted the company.[1]

Thus, an examination for prudency is an examination for reasonableness. Despite the settling parties' attempts to distinguish reasonableness from prudency, prudency is at the heart of this case.

No statutory authority

Notably, none of the parties are able to cite to any specific statutory authority for the Commission to approve Empire's requests for reasonableness determinations in this case. That is because there is none.

State ex rel. AG Processing Inc. v. Public Serv. Comm'n, 120 S.W.3d 732 (Mo. banc 2003), does, as Staff suggests at pages 5-6 of its initial brief, "stand for the proposition that the Commission cannot punt reviewing the reasonableness of issues that impact the public interest to future cases." However, Staff should include the following language at the end of its sentence, "where those issues are properly before the Commission." In *State ex rel. AG Processing Inc.* UtiliCorp United, Inc. and St. Joseph Light & Power Company sought the Commission authorization required by § 393.190.1, RSMo., to merge. On appeal the Missouri Supreme held:

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[1] *In the Matter of the Sixth Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of The Empire District Electric Company*, Case No. EO-2017-0065, February 28, 2018, Report and Order, pp. 15-16 (quoting from *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* and *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*, Report and Order, 27 Mo. P.S.C. (N.S.) 183, 194 (March 29, 1985). Quoting a decision of the New York Public Service Commission*, Re. Consolidated Edison Co. of New York, Inc. 45 P.U.R., 4th 331, 1982.* The Commission's use of this standard was cited approvingly by the Missouri Court of Appeals in *State ex rel. Associated Natural Gas Co. v. Pub. Serv. Comm'n*, 954 S.W.2d 520, 529 (Mo. App. W.D. 1997)).

> The fact that the acquisition premium recoupment issue could be addressed in a subsequent ratemaking case did not relieve the PSC of the duty of deciding it as a relevant and critical issue when ruling on the proposed merger. While PSC may be unable to speculate about future merger-related rate increases, it can determine whether the acquisition premium was reasonable, and it should have considered it as part of the cost analysis when evaluating whether the proposed merger would be detrimental to the public.[15] The PSC's refusal to consider this issue in conjunction with the other issues raised by the PSC staff may have substantially impacted the weight of the evidence evaluated to approve the merger.[16] The PSC erred when determining whether to approve the merger because it failed to consider and decide all the necessary and essential issues, primarily the issue of UtiliCorp's being allowed to recoup the acquisition premium.[2]

The case stands only for the proposition that when raised in a case where parties are seeking Commission authorization to merge, § 393.190.1, RSMo., requires the Commission to consider acquisition premiums when determining whether the proposed merger would be detrimental to the public. The case before the Commission does not seek a merger, and does not substantiate the assertions by Staff Counsel.

Missouri-American Water Company and Iatan 2 regulatory plan cases are not authority

In their initial briefs, not only Staff, but the other parties rely on Commission orders in the cases *In the Matter of the Application of Missouri American Water Company for a Certificate of*

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[15] See *State ex rel. Martigney Creek Sewer Co. v. Pub. Serv. Comm'n, 537 S.W.2d 388, 399* (Mo. banc 1976) (stating that, for ratemaking purposes, recovery of the cost of an asset acquired from another utility depends on the reasonableness of the acquisition, considering the factors of whether the transaction was at arm's length, if it resulted in operating efficiencies, and if it made possible a desirable integration of facilities).

[16] PSC staff had also testified that their analysis of the merger demonstrated that the expected rate impact on SJLP and MPS customers would be negative. Merger costs potentially assignable to the ratepayers included transaction costs, transition costs and administrative costs. Ninety-three percent of the projected merger savings could have been achieved on a "stand alone" basis without the merger, and there was no plan to assign these savings to the customers. Projected merger savings were, in fact, illusory and PSC staff calculated costs exceeding savings by $ 68.9 million during the ten-year period following the merger.

[2] *State ex rel. AG Processing Inc. v. Public Serv. Comm'n*, 120 S.W.3d 732, 736 (Mo. banc 2003) (original footnotes included).

*Convenience and Necessity to Lease, Operate, Control, Manage and Maintain a New Source of Supply in Andrew County, Missouri***,** Case No. WA-97-46, *In the Matter of The Empire District Electric Company`s Application for Certificate of Public Convenience and Necessity and Approval of an Experimental Regulatory Plan Related to Generation Plant*, Case No. EO-2005-0263, and *In the Matter of a Proposed Experimental Regulatory Plan of Kansas City Power and Light Company,* Case No. EO-2005-0329 as supporting their position that the Commission has authority to approve their settlement and find that Empire acquiring up to 600 MW of wind farms or investing in Asbury to comply with the EPA CCR rules are reasonable. As their captions indicate, both the foregoing Missouri American Water Company and Empire cases are cases where the utilities were seeking certificates of convenience and necessity to build utility plant; certificates the Commission has explicit jurisdiction by statute to grant. § 393.170, RSMo. As Staff notes at page seven of its initial brief, Missouri American Water Company also sought financing approval. The Commission had express statutory jurisdiction over that request. § 393.200, RSMo.

Despite characterizations to the contrary,[3] the Commission was careful to explain in its October 9, 1997, Report and Order in Case No. WA-97-46 that, although Missouri American Water Company, supported by the Commission's Staff, was "request[ing] that the Commission make a finding that there is a need for the proposed project and that the alternative selected by MAWC is the most appropriate and cost effective method of addressing this need," which the Commission accurately characterized as a request for "a finding of prudence or project pre-

[3] See Staff's initial brief at page 7, "The Commission was hesitant to explicitly pre-approve the treatment facility, . . ."

approval." In its Report and Order,[4] the Commission described the Office of the Public Counsel's position in opposition as follows:

> The OPC maintains that pre-approval, or prudence review, of the proposed project is neither in the public interest nor legally authorized. The OPC points out that the bifurcation of prudency review is not a viable alternative as, from a practical standpoint, the cost-effectiveness of a project would be, of necessity, an integral part of any finding regarding the prudency of the project. The OPC adds that review of the technical management decisions of a utility would amount to the Commission taking on a management and planning role. The OPC maintains that it is not the responsibility of the Commission to control management decisions of the utilities it regulates. The OPC prefers the Commission retain the traditional method of examining utility practices, management decisions, and expenditures after the project has been placed in service and as a part of a general rate proceeding.[5]

Ultimately, the Commission explained itself as follows:

> In the regulation of monopoly providers, one of the basic functions of this Commission is to stand in the stead of competition. The Commission performs this function principally in the context of a rate proceeding, authorizing recovery through rates of only those costs which were prudently incurred, that is to say spent as if the utility were operating in a competitive environment. This places a proper amount of risk on the regulated utility to manage its decisions and funds as if it were in a competitive environment. The Commission finds that pre-approval of the actual costs incurred and the management of construction of the proposed project would upset this balance.
>
> The Commission is reluctant to assume the role of utility management in the decision- making process. This is true for large projects such as this one and for decisions made on a day- to-day basis. The Commission stated in order of rulemaking, December 4, 1992, Case No. EX-92- 299, as follows:
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> In reviewing this matter, the Commission has considered numerous factors and arguments, both in favor and against initiation of plan pre-approval, and has substantial concerns regarding several key issues. First, serious statutory and precedential issues exist as to the Commission's authority to engage in what may be termed single-issue ratemaking, the preallocation of costs, and the granting of a presumption of prudent action by utility management. Secondly, the Commission

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[4] A copy of the Report and Order is attached to this brief as Attachment 1.

[5] *In the Matter of the Application of Missouri-American Water Company for a Certificate of Convenience and Necessity to Lease, Operate, Control, Manage and Maintain a New Source of Supply in Andrew County, Missouri*, Case No. WA-97-46, October 9, 1997, Report and Order, pp. 8-9.

> is wary of assuming, either directly or in ~ de facto fashion, the management prerogatives and responsibilities associated with strategic decision making, preferring to allow utility management the flexibility to make both overall strategic planning decisions and more routine management decisions in a relatively unencumbered framework.
>
> Therefore, the Commission will make no finding regarding the prudence of the actual costs incurred and the management of construction of the proposed project. However, based on the extensive evidence presented, the Commission finds that the proposed project, consisting of the facilities for a new groundwater source of supply and treatment at a remote site, is a reasonable alternative.[6]

Because the case before the Commission here is not a certificate case and, therefore, the Commission is without jurisdiction, the Commission should not reach the point of deciding whether to make a similar finding of "reasonable alternative" in this case.

Staff and the other parties cite to the two Iatan 2 regulatory plan cases of Empire and KCPL, Case Nos. EO-2005-0263 and EO-2005-0329, respectively. Both were primarily driven by concerns with the financing costs of building Iatan 2 being driven up by losing investment grade debt rating status due to the construction of Iatan 2 to and investment recovery concerns. In addition to KCPL and Empire filing regulatory plans concerning the costs of building Iatan 2, Aquila did as well. First, it sought a plan similar to that of KCPL, but since Aquila did not have an investment grade debt rating, Aquila dismissed that application. Case No. EO-2005-0257. Later Aquila filed another application seeking, among other things, Commission authority to encumber assets for financing its participation in the construction of Iatan 2. Case No. EO-2005-0293. The Commission had express jurisdiction over that request. § 393.200, RSMo.

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[6] *In the Matter of the Application of Missouri-American Water Company for a Certificate of Convenience and Necessity to Lease, Operate, Control, Manage and Maintain a New Source of Supply in Andrew County, Missouri*, Case No. WA-97-46, October 9, 1997, Report and Order, 10-11.

The appellate court decision in *StopAquila.Org v. Aquila, Inc.*, 180 S.W.3d 24 (Mo. App. 2005), and the later decision in *State ex rel. Cass Cty. v. PSC*, 259 S.W.3d 544 (Mo. App. 2008), both preceding when KCPL obtained a regulatory plan for Iatan 2. After StopAquila.Org a prudent electrical corporation would obtain a certificate from the Commission to build a generating plant in Missouri before building that plant.

The general understanding of the law at the time KCPL initiated the workshop that preceded Case No. EO-2005-0329, and during the KCPL regulatory plan case, was that because it was building the unit in an area for which the Commission had already approved a certificate many years before and had constructed one coal-fired unit, KCPL did not need another certificate to build Iatan 2. Unlike Aquila's South Harper generating station no one challenged KCPL's authority to build Iatan 2 without an additional Commission certificate for that unit at that location, except the Sierra Club and the Concerned Citizens of Platte County. There was no serious dispute that KCPL needed more generation sources, but there was disagreement by certain parties about how to fulfill that need. Since KCPL already held a certificate to construct a plant, the Iatan 2 case serves as an exception, not a rule. In this case Empire has no such pre-existing certificate to construct the wind farms at issue. The circumstances surrounding the Iatan 2 regulatory plans are not similar to those in this case, either factually or legally.

The Office of the Public Counsel was able to find only one case where the Commission's authority to regulate a utility under an alternative regulation plan was brought before a Missouri appellate court. That case is *State ex rel. Mo. Cable TV Ass'n v. Mo. Pub. Serv. Comm'n,* 917 S.W.2d 650 (Mo. App. 1996). Unlike Empire's request here, which is for preapproval to build wind farms, the plan there explicitly involved ratemaking. The Court described the plan as follows:

> The plan offered SWBT, by the Commission, would have operated during a five-year period of time, ending in 1998, in which SWBT would have agreed to forgo any general rate increase or specific increases to basic local service rates. During this time SWBT's return on equity would be calculated each year and compared to a grid set forth in the PSC order to determine if SWBT's customers were entitled to share the company's earnings. If entitled, customers would receive a credit on their bills.[7]

The Court did not reach the issue of Commission jurisdiction holding that because Southwestern Bell Telephone Company did not accept the Commission-offered alternative regulation plan the challenge to the Commission's jurisdiction to use an alternative regulation plan was moot so that any opinion would only be advisory and unlawful.

Staff asserts Inadmissible Evidence to Support its Argument

In support of its reliance on Empire's modeling to substantiate its position, Staff makes the following statement: "KCPL would then own 500 MWs of the 800, which, according to modeling that is similar to the modeling performed in the instant case, resulted in the lowest Present Value Revenue Requirement ("PVRR")," and cites to cites to the direct testimony of KCPL witness Susan Nathan in Case No. EO-2005-0329 (Ex. 44). In addition to being extra-record evidence in this case, Ms. Nathan did not even testify on the topic for which Staff cites her testimony in Case No.EO-2005-0329. Ms. Nathan described the purpose of her testimony (Exhibit 44) as follows: "The purpose of my testimony is to discuss the proposed Demand Response, Efficiency, and Affordability Programs."

The Office of the Public Counsel is consistent

In its initial brief on page 20 Staff states,

> OPC is free to argue that the facts and policy surrounding the decisions sought in this case should lead to different outcome than the approval OPC supported in the regulatory plans, however, OPC cannot in good faith argue the

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[7] *State ex rel. Mo. Cable TV Ass'n v. Mo. Pub. Serv. Comm'n*, 917 S.W.2d 650, 651 (Mo. App. 1996).

> Commission's statutory authority or the application of the law regarding a finding of reasonableness or decisional pre-approval should differ between the current case and the regulatory plans. OPC may have policy reasons to agree not to challenge the decision to invest in a coal plant over a wind farm, however, the Commission's authority to find those decisions reasonable does not change based on generation type.

First, as set out above, the KCPL and Empire regulatory plan cases were designed to keep the utilities investment grade while they incurred debt to build Iatan 2 and to assure some customer benefits for doing so by explicitly using an alternative approach to traditional cost of service ratemaking. That is not the circumstance of this case where Empire expressly states on page 12 of its initial brief, "Nothing requested would commit the Commission, a non-signatory party, or even a Signatory Party, to a preapproval of rates." In fact, the applicants, in a feat of semantic gymnastic, have made it explicit that they are *not* seeking pre-approval.[8] Once again, we see that the signatories to the agreement do not even have a shared understanding of the *request* the applicant has made.

Second, as quoted above, Staff Counsel's mischaracterization of the KCPL and MAWC cases makes its assertion false. The Office of the Public Counsel has been consist in its positon; where the Commission has the authority to consider an application, such as a certificate case, it has the jurisdiction to issue an order. In the MAWC case, the company sought a certificate of convenience and necessity. In KCPL, the proceeding operated under the effect of a previously issued certification of convenience and necessity. In this case, Empire has made no such request

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[8] See opening statement of MECG, Tr. 3: 91. "Prudency, decisional pre-approval slams the door. You have made a decision. No one can come back later and challenge it. That is what pre-approval does. That is what your finding of prudency does. It basically says no one can come along later and do anything on this. That's not what we're doing here. I could not agree to that. That is not the law as I view it. What we're asking for is reasonableness. An important part of that, the distinction is Public Counsel, Joplin, other parties can come forward later and challenge the prudency. You haven't slammed the door shut on that."

for a certificate of convenience and necessity. It is premature for the Commission to make any determination as to the reasonableness of the application until Empire makes the appropriate filing.

Third, perspectives on the meaning of laws related to the Public Service Commission can change over time. One need only look at the recent differing views on whether a county franchise is a prerequisite to a Commission certificate for a transmission line. The attached order and letters from Case No. 357 (Attachment 2) demonstrate the Commission's understanding in 1914 that county franchises are prerequisites to Commission certificates of convenience and necessity for transmission lines.[9] However, over one hundred years later, the issue of whether a county franchise is a prerequisite to such a Commission certificate now is pending for decision before the Missouri Supreme Court in Case No. SC96993. Despite the obvious nuance that different public counsels may apply their authorities in different fashions over time, in this case the Office of the Public Counsel has been clear and consistent throughout this proceeding about the dubious legal authority this application is submitted under and the apparent risk to the public should it be approved.

Empire's plan is hypothetical

The posture of this case is no less hypothetical than that of Ameren Transmission Company of Illinois when it sought a court declaration that the Commission has no jurisdiction over it. *Ameren Transmission Co. v. PSC of Mo.*, 467 S.W.3d 875 (Mo. App. 2015). There the court held

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[9] *In the matter of the Application of North Missouri Light and Power Company for a certificate of convenience and necessity authorizing the construction of an electric transmission line in the counties of Balls and Pike, State of Missouri*, p. 63, Report of Miscellaneous Orders, Authorities, Accidents, Inspections, and Conference Rulings, Volume I, April 15, 1913, to December 31, 1914. *Order*, July 20, 1914, Case No. 357; https://books.google.com/books?id=hZ06AQAAMAAJ&pg=PR1&lpg=PR1&dq=Report+of+Miscellaneous+Orders,+Authorities,+Accidents,+Inspections,+and+Conference+Rulings&source=bl&ots=YtIcCkCsLB&sig=jhPrayvl4s8GrdR5SM8DJ8TUtEE&hl=en&sa=X&ved=0ahUKEwihx4vCpcrbAhWbn4MKHejzBaMQ6AEIJzAA#v=onepage&q=Report%20of%20Miscellaneous%20Orders%2C%20Authorities%2C%20Accidents%2C%20Inspections%2C%20and%20Conference%20Rulings&f=false.

that there was no controversy ripe for judicial determination because it was uncontroverted that the Commission had not taken any steps to assert jurisdiction over Ameren Transmission Company of Illinois.

The evidence is insufficient

While the Commission has no jurisdiction to decide this case, if it did have jurisdiction to reach the merits of the requests, it should deny them. Among other things explained later, the evidence shows wild swings in the results of Empire's modeling due to changes such as shifting the modeled period by three years and updating forecasted market prices, and errors such as including a reciprocating engine generator and failing to include Empire's planned wind farms on wind generation additions in the Southwest Power Pool footprint. The substantial and competent evidence in this case does not demonstrate that the revenue requirements of the power that will be generated by Empire's proposed 600 MW of wind farms will be less than the revenues they will generate from sales into the SPP markets.

The ultimate source in the evidentiary record to support Empire building 600 MW of wind farms is its witness David Holmes, who has about two years of experience with Empire[10] and only prefiled on April 24, 2018, a five-page affidavit in support of the non-unanimous stipulation and agreement that provides an overview of the terms of the customer protection provision in that agreement.[11] No data underlying the settlement agreement was introduced into evidence. In fact,

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[10] Empire witness Blake Mertens, Tr. 5:354.

[11] Ex. 1, Empire witness David Holmes, Affidavit of David Holmes in Support of Non-Unanimous Stipulation and Agreement.

the Office of the Public Counsel either did not receive the underlying data all or received it as late as May 1, 2018.[12]

Of the individuals ultimately responsible for selecting the modeling inputs and parameters of the generation fleet savings analysis and settlement apparently only Empire witness David Holmes testified, and he did not prefile any testimony until he filed an affidavit in support of the settlement on May 16, 2018. Numerous times during the evidentiary hearing Empire witnesses McMahon and Mertens deferred to Mr. Holmes to answer questions directed to them.[13] Although Mr. Holmes has only been involved with Empire for about two years and Mr. Mertens has worked at Empire for 16-17 years[14] and it was Mr. Mertens who provided responses to Office of the Public Counsel data requests asking which generating units were allowed to retire in the modeling,[15] at the evidentiary hearing Mr. Mertens deferred to Mr. Holmes for which Empire generating units were allowed to retire in Empire's modeling to support its plans.[16] According to Mr. Mertens, Mr. Holmes and Mr. McMahon controlled the modeling performed for the settlement, and ABB performed the actual model runs.[17]

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[12] MECG witness Greg Meyer, Tr. 7:723; OPC witness Lena Mantle, Tr. 7: 762-764.

[13] Some, but not necessarily all instances follow: Empire witness McMahon, Tr. 3:181 (why settlement analysis based on 20 years), 185-186 (comparison of OPC and Empire modeling of costs and revenues), 189 (rate increases), 219 (bill impacts), 221 (annual revenue requirement differences between Empire's preferred plan and settlement plan), 261 (settlement customer protection provision), and 276 (settlement modeling); Empire witness Blake Mertens, Tr. 5:325 (generation units allowed to retire in modeling), 334 (wind project ratepayer impact), 335 (ABB price forecasts), 337 (nature of capacity factor used in modeling), 341 (settlement customer protections), 353 (generation units allowed to retire in modeling), 400 (increase in MWhs sold if add 600 MW of wind farms), and 456 (settlement customer protections).

[14] Empire witness Blake Mertens, Tr. 5:354.

[15] Tr. 5: 351-353, Ex. 215.

[16] Empire witness Blake Mertens, Tr. 5:353.

[17] Empire witness Blake Mertens, Tr. 5:355-356.

Additionally, when the hearing was held Empire did not have any contracts to build wind farms[18] or with tax equity partners.[19] Empire also does not have authority from its board of directors to enter into such contracts.[20] Although it had bid responses for building wind farms,[21] they are not in the record. Further, Empire's settlement plan modeling is not in the record, although signatories received it at some point in time before the Office of the Public Counsel, who did not receive it until May 1, 2018.[22]

Empire's modeling is faulty

The Office of the Public Counsel raised deficiencies and concerns with Empire's modeling on pp. 35-47 and 59-60 of its initial brief— Empire's Modeling Shows a Net Operating Loss of $318 Million; Empire Failed to Model Net Salvage Costs for Wind Assets; Empire Failed to Model any Retirements After 2038-2048, Empire Failed to Properly Model Performance Degradation; Empire's Modeling Assumes an Annual Reduction in Revenue Requirement; Empire's Modeling Failed to Include Legally Required Solar Investment; Empire's Modeling Assumes an Unrealistically Low-threshold for Additional Wind Projects on the SPP and Assumes No Additional Construction Beyond 2020, Empire's Modeling Does Not Consider Negative Pricing; Empire's Modeling Does Not Consider Costs Related to Curtailment; Empire's modeling does not contemplate that the portion of wind farms sited in Missouri typically will be less

[18] Empire witness Blake Mertens, Tr. 5:333-334, 360; Empire witness Timothy Wilson, Tr. 5: 502.

[19] Empire witness Todd Mooney, Tr. 5:436.

[20] Empire witness Blake Mertens, Tr. 5:359-360 (wind farms); Empire witness Todd Mooney, Tr. 5:460 (tax equity partner).

[21] Empire witness Blake Mertens, Tr. 5:333-334, 359-360; OPC witness John S. Riley, Tr. 7:833-834.

[22] OPC witness John S. Riley, Tr. 7:837.

productive than potential sites in other states, negatively affecting projected revenues; and Empire's Modeling Is Insufficient to Support its Claim of Ratepayer Savings. In response to other parties' briefs, the Office of the Public Counsel challenges the sufficiency of the evidence the other parties rely on to support their request that the Commission find Empire's plan to build 600 MW of wind farms is reasonable.

Exhibit No. 212 shows that in its modeling with "Plan 4 [Empire] erroneously included approximately $65 million of additional annual costs associated with a reciprocating engine generation resource after it was added in 2035[,]" resulting in an "impact of this change [to be] a PVRR that is $49 million lower . . . on a 20-year basis."[23]

Empire failed to include either its own planned 800 MW or 600 MW of wind additions when evaluating anticipated near-term wind additions in the Southwest Power Pool footprint.[24]

By using the averaging approach,[25] Empire does not accurately capture the impact of the variability of wind energy such as that shown in the graphs attached to Exhibit 213,[26] and Exhibits 503 and 504.

Empire's modeling is not reliable

Empire's own initial post-hearing brief shows that merely updating the ABB forecasted SPP market prices and changing to the Asbury node shifts the high, mid and low cases for Empire's

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[23] Empire witness McMahon, Tr. 3: 249.

[24] Empire witness McMahon, Tr. 3: 284.

[25] Page 25 of Empire's initial post-hearing brief.

[26] Affidavit of John A. Robinett, see testimony of Blake Mertens that these are representative daily shapes of wind output; Tr. 5:362-366.

preferred plan (Plan 1) 20-year PVRRs from respectively $8,387 million, $8,113 million, and $7,815 million to, respectively, about $7,700 million, $7,440 million, and $7,180 million, the new values comparing favorably with the 800 MW customer savings plan values based on the old ABB forecast data of $7,811 million, $7,788 million, and $7,684 million.[27] Also in its initial post-hearing brief, Empire itself characterizes a change of $44 million as follows: "In regard to the initial Customer Savings Plan, in this extreme situation, PVRR savings over the twenty-year period ***fell only*** from $325 million to $281 million."[28] (Emphasis added).

A shift of three years in the start date from 2015 to 2018 for the planning period for plan 2 of the generation fleet savings analysis resulted in a $120 million change in the present value revenue requirement calculation, from $160 million to $281 million, more than a 75% increase in the $160 million ($121 million increase).[29]

Empire relied on three years of historical market data for projecting 20 and 30 years of nodal pricing differences in the Southwest Power Pool for its modeling, which its expert McMahon characterized as follows: "It's three years of historic data that I think provide some indication, provides an indication of nodal pricing differences."[30]

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[27] See charts on pages 22 and 23 of Empire's initial post-hearing brief.

[28] Empire initial post-hearing brief at page 27.

[29] Empire witness McMahon, Tr. 3: 245; Ex. 7, Empire witness McMahon surrebuttal testimony, p. 26.

[30] Empire witness McMahon, Tr. 3: 238-239.

In its generation fleet savings analysis Empire attributed the savings from retiring Asbury to be $26 million over 20 years and $9 million over 30 years, but in its settlement plan it attributes the cost of retaining Asbury to be $101 million over 30 years.[31]

It is appropriate to deny applications where the Utility has not established need

As detailed on OPC's initial brief, Empire has not submitted substantial evidence or even averred that this project is *necessary* to meet its current or projected capacity needs. Indeed, Company witness Blake Mertens admitted that Empire does not need to expand its resource capacity.[32] The Commission has been presented with an awkward case, in that even assuming the Commission had jurisdiction to consider the matter, the non-severable Stipulation and Agreement contains terms regarding the 2017 Tax Cut and Jobs Act that contravene statutes, and therefore cannot be approved. Any additional comment on the prospective recovery of expenses or setting depreciation rates for assets that may only be eligible for amortization would be purely advisory, and prohibited. The appropriate recourse in this proceeding is to deny the application outright.

Other Commissions Have Denied Similar Applications

On the merits, this case is similar to what the West Virginia Public Service Commission faced when Appalachian Power Company and Wheeling Power Company requested consent and approval to enter into certain transactions to acquire two wind farms where the parties disputed the need for them. In its Order denying their request that Commission stated:

> This data, and wide differences of opinion by expert witnesses, boil down to the troublesome essence of the issues in this case. That is, whether it is odds-on likely, even money, or odds-on unlikely that the West Virginia revenue

[31] Empire witness McMahon, Tr. 3: 236-238.

[32] Tr. 5: 373-74.

> requirements of the power that will be generated from the Wind Projects will be cheaper on a NPV basis over the twenty-five year life of the facilities than purchases of equal quantities of power from the PJM market.[33]

Among other conclusions the West Virginia Public Service Commission concluded the following:

> 4. The Companies' natural gas prices are high compared to the recent natural gas markets and are not supported by current or recent natural gas prices.
>
> 5. The Companies' fundamentals forecast is overly aggressive on PJM market prices. It is more likely than not that the energy prices will not escalate as rapidly as reflected in the Companies projections.
>
> 6. It is not reasonable to rely on speculative carbon regulations that have not been promulgated.

and denied the application.

In Virginia, the State Corporation Commission, in consideration of a separate application of Appalachian Power Company to acquire additional wind facilities, held:

> "Put simply, the capacity and energy from these generating facilities is not needed by APCo to serve its Virginia customers. Thus, we find that it is neither reasonable nor prudent for APCo to acquire the Wind Facilities and then recover the costs from Virginia customers based on the record before us."

Application of Appalachian Power Company, Commonwealth of Virginia State Corporation Commission, Final Order, Case No. PUR-2017-00031 (April 2, 2018). (Attachment 4)

Virginia's Commission has express statutory authority to consider the prudence of costs *before* they are incurred.[34] Missouri has no such statutory authority. Even so, the Virginia Commission found that the evidence did not demonstrate a current or expected need for additional

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[33] *APPALACHIAN POWER COMPANY and WHEELING POWER COMPANY, public utilities, Petition for consent and approval of acquisition of wind facilities (Hardin Wind Facility, Hardin County, Ohio; and Beech Ridge II Wind Facility, Greenbrier County, WV)*, Case No. 17-0894-E-PC, *Commission Order* dated May 30, 2018, p. 12. (Attachment 3)

[34] "The Commission may determine, during any proceeding authorized or required by this section, the reasonableness or prudence of any cost incurred or projected to be incurred, by a utility in connection with the subject of a proceeding." Va. Code Ann § 56-585.1 (2018).

capacity.[35] The Order identifies the company as only arguing the "wind facilities are needed to provide a lower cost source of energy compared to purchases from the PJM Interconnection, LLC…"[36] Like the Virginia case, Empire does not need additional capacity to meet its current or expected load. Like the Virginia case, Empire's motivation is a ratepayer-backed wager that extraneous wind projects *may* produce lower future *costs* compared to a market. Like the Virginia case, Empire has failed to identify that the excess generation is needed to address an energy deficiency or is necessary to provide safe and adequate service. And like the Virginia case, this Commission should deny the application.

Empire's TCJA of 2017 retail customer relief is inadequate

As the Office of the Public Counsel noted on pages 62 of its initial brief, § 393.137, RSMo., would take effect when approved.[37] It did so on June 1, 2018, when the Governor signed Senate Bill 564 approving it into law.[38] As the Office of the Public Counsel explained on pages 62-63 of its initial brief, the requirements of the Commission in § 393.137, RSMo., are inconsistent with the TCJA 2017 provisions of the April 24, 2018, non-unanimous stipulation and agreement as amended May 7, 2018, ¶¶ 24-26, pp. 15-16. Section 393.137.3, RSMo., requires the Commission, within "ninety days of [June 1, 2018,] to adjust [Empire's] rates prospectively so that the income tax component of the revenue requirement used to set [Empire's] rates is based upon the provisions of such federal act without considering any other factor as otherwise required by section 393.270."

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[35] *Id.* pg. 4.

[36] *Id.* pg. 4.

[37] Section B of Senate Bill 564 as truly agreed to and finally passed, pp. 25-26.
http://www.senate.mo.gov/18info/pdf-bill/tat/SB564.pdf

[38] http://www.senate.mo.gov/18info/BTS_Web/Actions.aspx?SessionType=R&BillID=69471981.

The settlement agreement does not require this. It changes rates only starting in October 1, 2018. Section 393.137.3, RSMo., also requires the Commission to require Empire "to defer to a regulatory asset the financial impact of such federal act on [Empire] for the period of January 1, 2018, through the date [Empire's] rates are adjusted on a one-time basis as provided for in the immediately preceding sentence."

Because the agreement is inconsistent with § 393.137, RSMo., the Commission must reject the non-unanimous stipulation and agreement as amended. Under the agreement, effective dates for the rate reduction for federal taxes would be October 1, 2018. Under the statute, effective dates for rate reductions for federal taxes must take effect 90 days after authorization, or August 30, 2018. Empire's plan would violate the statute and deprive ratepayers of relief. Further, the Legislature clearly articulated its intent to expedite rate relief associated with the federal tax reduction through the statutes plain language setting short timetables for compliance, and authorizing that section with an emergency clause. The Commission should not any adopt terms that would delay the intended benefit the Legislature clearly articulated. Finally, since parties made it expressly clear that the terms of the agreement are interdependent (¶ 2, pp. 1-2), rejection of any part of the non-unanimous stipulation and agreement as amended constitutes rejection of the entirety of it.

Conclusion

For all the reasons stated in its initial brief, and as expanded in this brief, the Commission should dismiss this case, and, if the Commission does not dismiss this case, then it should deny the relief requested. In addition to the arguments presented in the Office of the Public Counsel's initial brief, its argument regarding SB564 has come to fruition by the Governor signing that bill into law on June 1, 2018. As a result, the position of the signatories to the non-unanimous stipulation and agreement with regard to the federal Tax Cuts and Jobs Act of 2017 is inconsistent with the recent change in Missouri law associated with the ratemaking treatment of the impacts of that Act making it unlawful for the Commission to adopt that position. Further, if the Commission lawfully could reach the merits in this case, which it cannot, there is not sufficient reliable evidence in the record for the Commission to adopt the plan for Empire to build 600 MW of wind farms put forward by the signatories to the non-unanimous stipulation and agreement.

As the Office of the Public Counsel suggested in its initial brief, if Empire truly believes the plan is profitable, it, or an Empire affiliate, should build the 600 MW as an independent power producer using tax equity financing and reap all the profit for itself and Algonquin's shareholders.

The lawful recourse for the Commission in this proceeding is to deny the application and the *Stipulation and Agreement*.

WHEREFORE, the Office of the Public Counsel advocates that the Commission deny the application and not approve the terms of the opposed *Non-Unanimous Stipulation and Agreement*.

Respectfully submitted,

/s/ Hampton Williams

Hampton Williams
Missouri Bar No. 65633
Public Counsel

PO Box 2230
Jefferson City, MO 65102
P: (573) 751-4857
F: (573) 751-5562

ATTORNEY FOR THE OFFICE
OF THE PUBLIC COUNSEL

CERTIFICATE OF SERVICE

The undersigned certifies that a true and correct copy of the foregoing document was sent by electronic mail on June 12, 2018 to all counsel of record.

/s/ Hampton Williams

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Missouri-American Water Company for a Certificate of Convenience and Necessity to Lease, Operate, Control, Manage and Maintain a New Source of Supply in Andrew County, Missouri.	)))))	**Case No. WA-97-46**
In the Matter of the Application of Missouri-American Water Company for Authority (1) to Enter into and Perform in Accordance with the Terms of a Facility Lease Agreement for the Purpose of Financing the Construction and Operation of a Well Field, a Treatment Facility and Associated Transmission Water Pipelines in its St. Joseph, Missouri Service Area, (2) to Mortgage the Leasehold Property and (3) to Enter into and Perform in Accordance with Related Agreements.	)))))))))))	**Case No. WF-97-241**

REPORT AND ORDER

Issue Date: October 9, 1997

Effective Date: October 21, 1997

79.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Missouri-American Water Company for a Certificate of Convenience and Necessity to Lease, Operate, Control, Manage and Maintain a New Source of Supply in Andrew County, Missouri.	)	**Case No. WA-97-46**
In the Matter of the Application of Missouri-American Water Company for Authority (1) to Enter into and Perform in Accordance with the Terms of a Facility Lease Agreement for the Purpose of Financing the Construction and Operation of a Well Field, a Treatment Facility and Associated Transmission Water Pipelines in its St. Joseph, Missouri Service Area, (2) to Mortgage the Leasehold Property and (3) to Enter into and Perform in Accordance with Related Agreements.	)	**Case No. WF-97-241**

APPEARANCES

Kathy L. Pape, 1025 Laurel Oak Road, Voorhees, New Jersey 08043, for Missouri-American Water Company.

W.R. England, III and **Dean L. Cooper**, Brydon, Swearengen & England, P.C., 312 East Capitol Avenue, P.O. Box 456, Jefferson City, Missouri 65102, for Missouri-American Water Company.

Leland B. Curtis, Curtis, Oetting, Heinz, Garret & Soule, P.C., 130 South Bemiston, Suite 200, Clayton, Missouri 63105, for City of Warrensburg, Missouri.

James M. Fischer, James M. Fischer, P.C., 101 West McCarty Street, Suite 215, Jefferson City, Missouri 65101, for Public Water Supply District No. 1 of Andrew County, Public Water Supply District No. 2 of Andrew County, Public Water Supply District No. 1 of DeKalb County, and Public Water Supply District No. 1 of Buchanan County.

John B. Coffman, Senior Public Counsel, Office of the Public Counsel, Post Office Box 7800, Jefferson City, Missouri 65102, for the Office of the Public Counsel and the public.

R. Blair Hosford, Assistant General Counsel, Missouri Public Service Commission, Post Office Box 360, Jefferson City, Missouri 65102, for the Staff of the Missouri Public Service Commission.

ADMINISTRATIVE LAW JUDGE: **Joseph A. Derque III.**

REPORT AND ORDER

History of the Case

On August 2, 1996, Missouri-American Water Company (MAWC) filed an application with the Commission requesting approval to engage in a transaction for the lease of property in Andrew County, Missouri, for the purpose of providing additional water supply to its St. Joseph, Missouri service area. MAWC also proposed construction of a new treatment facility and lines to transport the raw water from the adjacent water field to the new facility. In Case No. WF-97-241, MAWC filed an application with the Commission to provide for the financing of the proposed project through arrangements with Missouri Capital Resources Company which, like MAWC, is wholly-owned by American Water Works Company.

This matter was heard on July 7, 1997. In that hearing five issues were presented to the Commission, several of which were issues of first impression, including the consideration of the prudence of the proposed project to construct the well and treatment facilities.

This matter was heard and, after briefs and reply briefs, finally submitted to the Commission for decision on September 30, 1997.

Rulings on Motions at Hearing

Immediately prior to the hearing of this matter, the Commission made on-the-record rulings on three pending motions. Attorney Kathy Lee Pape, representing American Water Works Company and the applicant, MAWC, was admitted without objection to practice before the Commission in this case as counsel *pro hac vice*.

A motion tendered by MAWC to strike the cross-surrebuttal testimony of the Office of the Public Counsel (OPC) witness Mark Burdette as being not responsive was denied. In that ruling the Commission found that, while some question existed as to the relevance and probative value of the testimony, the Commission found that the testimony was not strictly outside the scope of proper cross-surrebuttal.

A third pending matter involved a late-filed application for participation without intervention by Ag Processing. No objections to this application were tendered and Ag Processing was granted participation without intervention to the extent that Ag Processing was allowed to present an opening statement and file post-hearing briefs.

Settled Issues

In the Hearing Memorandum, filed at the evidentiary hearing as Exhibit No. 1, the parties set out various issues that have been settled. As contained in the Hearing Memorandum, those settled issues are:

1. That MAWC is financially and technically qualified to provide the proposed services.

2. That there is a need to replace and/or improve the existing source of supply and treatment facilities; and/or construct a new source of supply and treatment facilities; and/or secure a new independent source of supply in order to provide safe, adequate and reliable water service.

3. That Missouri Capital Resources Company (MCRC) is not a water corporation as defined by Section 386.020(51), RSMo, or a public utility as defined by Section 386.020(32), RSMo, and thus is not subject to regulation by the Commission.

4. That the company agrees to make available to the Commission, at reasonable times and places, all books and records and employees and officers of MCRC as provided under applicable law and Commission rules, provided that MCRC shall have the right to object to such production of records or personnel on any basis under applicable law and Commission rules.

5. That the percentage rent true-up provision of the facility lease agreement should be revised such that any adjustment in the percentage rent component of the lease payment will be forward-looking only and will not involve any adjustment for past over or under earnings experienced by MCRC.

6. That MAWC should be authorized to record on its books the facility lease agreement as an operating lease obligation of MAWC for accounting and ratemaking purposes. In that regard, MAWC should be authorized to book monthly rental payments required by the facility lease agreement to Account No. 604, Source of Supply - Rents, as an operating expense.

7. That the Commission should not make any finding in this case regarding ratemaking treatment of any costs or expenses associated with the proposed project or project financing. The Commission should reserve the right to consider the ratemaking treatment to be afforded these transactions and the resulting cost of capital in any future ratemaking proceeding.

The Commission finds the settled issues to be reasonable and will adopt those matters as they apply to the remainder of the Commission's decision in this case.

Findings of Fact

The Missouri Public Service Commission, having considered all of the competent and substantial evidence upon the whole record, makes the following findings of fact. The positions and arguments of all of the parties have been considered by the Commission in making this decision. Failure to reflect a piece of evidence, position or argument of any party in no way indicates that the Commission has failed to consider relevant evidence, but indicates only that the omitted matter was not considered relevant to the decision or outcome.

MAWC is a public utility regulated by the Commission, organized and existing under the laws of the State of Missouri, and engaged in the business of providing water service to the general public in various certified areas in the State of Missouri. The certified area in question in this matter is the MAWC service area in and around the City of St. Joseph, Missouri. That area does not include the proposed site of the MAWC water field and wells, nor does it include some of the right-of-way for the transportation pipeline proposed to be constructed and used to transport the raw water from the well fields to a treatment facility located within the current MAWC service area.

MAWC requests a certificate of convenience and necessity to lease property, construct and operate the well field and construct and operate a portion of the transmission pipeline from the well field to its proposed treatment plant. In the certificate case (WA-97-46) MAWC also asked for Commission pre-approval of the treatment plant project.

In addition, in Case No. WF-97-241, which is a request for approval of the financing for the project proposed in Case No. WA-97-46, MAWC requests approval of a financing arrangement with Missouri Capital Resources Company (MCRC), also a wholly-owned subsidiary of American Water

Works Company. It is proposed that the entire project will be financed with debt and equity issued by MCRC. MCRC will be the owner and lessor of the entire project, including the treatment facility. MAWC will construct the project through MCRC.

MCRC will purchase from MAWC the necessary real estate for the project and contract for the construction of the well field, raw and finished water lines and treatment facility. MCRC will then lease the project to MAWC under the terms of a facility lease agreement. MAWC will have complete responsibility for the operation and maintenance of the project. The facility lease agreement will be for an initial term of forty (40) years and will contain renewal and purchase options. Currently, the rental payments, among other things, are structured to generate the revenue required to amortize the project debt financing and to provide a return on the project investment over the term of the lease.

In regard to the proposed financing, MAWC seeks approval of the financing arrangements, which is referred to as "project financing," and approval of the current facility lease agreement, which provides for a 15 percent return on equity for MCRC.

The Commission will restate the issues presented to it as a result of the above proposals and determine the issues in this order:

1. Is it appropriate for the Commission to determine the prudence of the proposed project?

2. If so, is the project selected by MAWC reasonable and prudent?

3. Should the Commission approve the proposed financing arrangement?

4. Should the Commission approve a specific provision of the financing arrangement allowing a non-regulated affiliate of MAWC a 15 percent return on equity?

5. Should the Commission make a finding regarding rate design or single tariff pricing in this case?

Issues 1. and 2. Is it appropriate for the Commission to determine the prudence of this project and, if so, is the MAWC proposed project a prudent alternative?

In its testimony MAWC explains that it has determined that its existing production facilities in the St. Joseph service area are antiquated, difficult to maintain, unreliable and, therefore, in need of replacement. After study of various proposals, including the purchase of water from Kansas City, Missouri, and alternatives involving the rehabilitation and continued use of its existing facilities, MAWC chose what has been referred to as "the project." The project consists of the construction of a new groundwater site above the flood plain in Andrew County, Missouri. This site is also referred to as the well field. In addition, MAWC proposes to construct a new treatment facility above the flood plain of the Missouri River inside its service area in St. Joseph.

Finally, to connect the two facilities, MAWC proposes the construction of approximately 3 1/2 miles of transportation pipeline. Both the well field and most of the pipeline are outside the service area of MAWC, necessitating a certificate of convenience from this Commission. The parties agree that no certificate or other permission from the Commission is necessary to construct the treatment plant in MAWC's own service area.

However, the application for a certificate of convenience and necessity in Case No. WA-97-46 seeks a certificate of convenience and necessity for the entire project. Included in the application is a request that the Commission make a finding that there is a need for the proposed project and that the alternative selected by MAWC is the most appropriate and cost effective method of addressing this need. This type of finding by a regulatory commission is generally referred to as a finding of prudence or project pre-approval.

MAWC argues that it is appropriate for the Commission to make such a finding. MAWC is of the opinion that such a finding is necessarily a part of a Commission determination that a project will promote the public interest. MAWC argues that all pertinent information is currently before the Commission and, therefore, the Commission may make an informed decision regarding the prudence of the alternative selected by MAWC and its projected cost.

The Staff is in agreement with MAWC in that the Staff supports both the position that it is appropriate at this time to review the prudence of the chosen alternative and that the chosen alternative is, in fact, a prudent alternative. In its argument the Staff recognizes the fact that the Commission has not, up to this time, predetermined the prudence of a proposed project, choosing instead to review both the management decisions and costs associated with such a project during the course of a subsequent general rate case or other appropriate proceeding. The Staff argues, however, that the most appropriate time to assess the prudence of management decisions is contemporaneous with the making of those decisions. The Staff states that an added advantage to contemporaneous review is that the information at hand has not been ". . .influenced or skewed by hindsight based on intervening factors . . . ." The Staff supports what may be referred to as a limited decision of prudence in that the Staff urges the Commission to approve only the project alternative selected and not the actual costs incurred or management of the construction of the project.

The OPC maintains that pre-approval, or prudence review, of the proposed project is neither in the public interest nor legally authorized. The OPC points out that the bifurcation of prudency review is not a viable alternative as, from a practical standpoint, the cost-effectiveness of a project would be, of necessity, an integral part of any finding regarding the prudency of the project. The OPC adds that review of the technical management decisions of a utility would amount to the Commission taking on a management and planning role. The OPC maintains that it is not the responsibility of the Commission to control management decisions of the utilities it regulates. The OPC prefers the Commission retain the traditional method of examining utility practices, management decisions, and expenditures after the project has been placed in service and as a part of a general rate proceeding.

The remainder of the parties have no comments on the first two issues.

All parties agree that the Commission need only issue a certificate of convenience and necessity for that portion of the proposed project to be located outside the current MAWC service area. Authority exists supporting the position that the Commission may not legally take any further action regarding the pre-approval of the proposed project. In State ex rel. Capital City Water Co. v. Public Service Commission, 850 S.W.2d 903 (Mo.App. W.D. 1993) the Court stated:

> "The Commission's principal interest is to serve and protect ratepayers, *State ex rel. Crown Coach Co. v. Pub. Serv. Comm'n*, 238 Mo.App. 287, 179 S.W.2d 123, 126 (1944), and as a result, the Commission cannot commit itself to a position that, because of varying conditions and occurrences over time, may require adjustment to protect the ratepayers, *State ex rel. Chicago, Rock Island & Pacific Railroad Co.*, 312 S.W.2d at 796."

and in re Union Electric Company (Callaway Nuclear Plant), 27 Mo. PSC (N.S.) 183, the Commission states:

> ". . .the appropriate time for the Commission to inquire regarding the prudence of a capital improvement project is a rate case in which a utility attempts to recover the associated costs of such a project . . ."

In the regulation of monopoly providers, one of the basic functions of this Commission is to stand in the stead of competition. The Commission performs this function principally in the context of a rate proceeding, authorizing recovery through rates of only those costs which were prudently incurred, that is to say spent as if the utility were operating in a competitive environment. This places a proper amount of risk on the regulated utility to manage its decisions and funds as if it were in a competitive environment. The Commission finds that pre-approval of the actual costs incurred and the management of construction of the proposed project would upset this balance.

The Commission is reluctant to assume the role of utility management in the decision-making process. This is true for large projects such as this one and for decisions made on a day-to-day basis. The Commission stated in order of rulemaking, December 4, 1992, Case No. EX-92-299, as follows:

> In reviewing this matter, the Commission has considered numerous factors and arguments, both in favor and against initiation of plan pre-approval, and has substantial concerns regarding several key issues. First, serious statutory and precedential issues exist as to the Commission's authority to engage in what may be termed single-issue ratemaking, the preallocation of costs, and the granting of a presumption of prudent action by utility management. Secondly, the Commission is wary of assuming, either directly or in a de facto fashion, the management prerogatives and responsibilities associated with strategic decision making, preferring to allow utility management the flexibility to make both overall strategic planning decisions and more routine management decisions in a relatively unencumbered framework.

Therefore, the Commission will make no finding regarding the prudence of the actual costs incurred and the management of construction of the proposed project. However, based on the extensive evidence presented, the Commission finds that the proposed project, consisting of the facilities for a new groundwater source of supply and treatment at a remote site, is a reasonable alternative,

The Commission will limit its issuance of a certificate of convenience and necessity to that portion of the proposed project located outside the certificated area of MAWC. The Commission finds that issuance of that certificate to be in the best interest of the public.

Issues 3. and 4. Should the Commission approve the use of project financing and/or the facility lease agreement which provides for a 15 percent return on equity for MCRC?

In consolidated Case No. WR-97-241, MAWC has asked the Commission to authorize MAWC to engage in what the parties refer to as "project financing." This proposal employs a non-regulated affiliate, MCRC, as a special purpose corporation to form and own the project facilities, including the well field and treatment plant. MAWC proposes to lease the project facilities from MCRC under a facility lease agreement for a minimum term of 40 years. MAWC will have responsibility for the operation and maintenance of the facilities after the lease is executed. The facility lease includes a provision for a 15 percent guaranteed return to MCRC over the life of the lease.

MAWC explains that this type of financing permits the greater use of leverage in the capital structure of the company, producing a substantially greater amount of debt and less equity. This reduces the overall cost of capital from that which would be typical in a utility financing. Testimony shows that the resulting debt/equity ratios would be 60%/40% for traditional financing and 80%/20% for project financing, respectively. This produces an overall rate of return on capital of 8.20 percent for traditional financing and 7.80 percent for project financing. MAWC explains that it has chosen this method of financing to mitigate the rate impact for its customers from the project.

MAWC has requested the Commission approve the use of project financing and, in addition, specifically approve the provision for a 15 percent return in the lease agreement.

The Staff notes that this type of proposed financing creates a reliable cash flow to finance the construction of the project. The Staff agrees that this proposal will likely mitigate the resulting rate impact. The Staff supports Commission approval limited to the form of the financing and the general form of the lease agreement. The OPC agrees with the Staff and adds that this is all that is legally required of the Commission. The OPC thinks it inappropriate to guarantee a return to an affiliate which is substantially higher than the OPC and Staff witnesses think is reasonable. Staff and OPC urge the Commission to approve only that which is legally required and to avoid a finding that the proposed project financing is prudent and that the 15 percent return in the lease is an appropriate return for MCRC.

The Commission finds that the proposed financial transaction complies with the pertinent statutory and regulatory requirements and, in particular, the provisions of Section 393.200, RSMo 1994. The Commission determines that it is necessary only to find that the proposed financial transaction, including the form of the lease arrangement, is reasonably necessary to accomplish the construction and operation of the proposed project. Nothing more is authorized by statute. In addition, the Commission is of the opinion that the 15 percent return provision in the lease agreement, if it is appropriate at all, should properly be taken up in the context of a general rate case. This would enable the parties and the Commission to gain access to sufficient information to make a determination as to what a fair and just return might be. Regardless, the Commission would make it clear that any return paid by MAWC to MCRC will be subject to review by the Staff, OPC and any other interested party in the context of any future rate proceeding.

The Commission finds the proposed financial transaction to be reasonable and not detrimental to the public interest. The Commission will approve the financial transaction and form of the lease agreement but defer to a future rate proceeding any finding regarding the prudence of the transaction, its costs and the specific contents of the lease agreement.

Issue 5. Should the Commission approve single tariff pricing for the MAWC service area?

This issue was raised by the City of Warrensburg (City) and the water districts (water districts) intervenors. The City believes that the Commission should be made aware of the potential rate impact on all ratepayers in the MAWC Missouri service area that are projected to result from the cost of the proposed project.

In providing for the cost of the project in rates, two rate theories have been suggested, those being "single tariff pricing" in which the cost of the project is borne equally by all ratepayers in the entire Missouri service area of the company, and "stand alone pricing" in which the cost of the project is borne only by the ratepayers in the St. Joseph service area.

It is pointed out by the intervenors that only the St. Joseph area ratepayers are causing the costs associated with the project and gaining the resultant benefit from the project. The City wishes the Commission to make clear at the outset of this project that the costs will be assessed only to the St. Joseph area ratepayers.

Both MAWC and the water districts also believe it is reasonable to consider the potential rate impact of the project at this juncture. MAWC and, to a lesser extent, the water districts support the position that the rate impact of the project should be spread over the entire MAWC rate base through single tariff pricing. It is the concern of the water districts that the customers of MAWC, and particularly those in the St. Joseph area, have not been fully and properly informed of the anticipated rate impact of the project. The water districts are of the opinion that, while an anticipated 34 percent increase in rates through single tariff pricing is substantial, it would certainly be more palatable to the customers in the St. Joseph area than an anticipated 105 percent increase through stand alone pricing.

The Commission has considered the various positions of the parties on this issue and understands the various concerns regarding who might bear the ultimate cost of the proposed project and how much of it they should rightfully bear. Ultimately, however, the Commission finds that this issue is one involving rate design and should be considered in the context of a rate proceeding in which all factors which influence rates and rate design may be considered as a whole. Therefore, the Commission will make no finding in this case regarding this issue.

Conclusions of Law

The Missouri Public Service Commission has arrived at the following conclusions of law:

That Missouri American Water Company is a public utility engaged in the provision of water service in the State of Missouri and therefore subject, generally, to the jurisdiction of the Missouri Public Service Commission pursuant to Chapters 386 and 393, RSMo 1994.

The Commission has authority under Section 393.170, RSMo 1994, to grant permission and approval to construct and operate the instant pipeline and water field as part of the Missouri American Water Company's franchised service territory if, after hearing, the Commission finds that the franchise is necessary or convenient for the public service.

Authority exists supporting the position that the Commission may not legally take any further action regarding the pre-approval of the proposed project. In State ex rel. Capital City Water Co. v. Public Service Commission, 850 S.W.2d 903 (Mo.App. W.D. 1993) the Court stated:

> "The Commission's principal interest is to serve and protect ratepayers, *State ex rel. Crown Coach Co. v. Pub. Serv. Comm'n*, 238 Mo.App. 287, 179 S.W.2d 123, 126 (1944), and as a result, the Commission cannot commit itself to a position that, because of varying conditions and occurrences over time, may require adjustment to protect the ratepayers, *State ex rel. Chicago, Rock Island & Pacific Railroad Co.*, 312 S.W.2d at 796."

and in re Union Electric Company (Callaway Nuclear Plant), 27 Mo. PSC (N.S.) 183, the Commission states:

> ". . . the appropriate time for the Commission to inquire regarding the prudence of a capital improvement project is a rate case in which a utility attempts to recover the associated costs of such a project . . ."

Orders of the Commission must be based on substantial and competent evidence, taken on the record as a whole, and must be reasonable, and not arbitrary, capricious or contrary to law. In this regard, the Commission has considered all relevant substantial and competent evidence in this matter and determines that the granting of a certificate of convenience and necessity to Missouri American Water Company, as modified by the Commission in this Report and Order, is in the public interest and necessary and convenient for the public service.

That Section 393.200, RSMo 1994, provides that the Commission may approve a financial transaction upon a finding by the Commission that the purpose of the proposed indebtedness is reasonably required for the purposes as set out in this Report and Order. In addition, to grant approval, the Commission must find that the proposed transaction has no detrimental impact on the ratepayers.

The Commission finds that the proposed transaction is reasonably required for the purposes as described in this Report and Order and that the proposed transaction is not detrimental to the ratepayers. The Commission will approve the proposed financial transaction, referred to as "project financing" and the associated lease agreement with an affiliate company. In doing so, the Commission makes no finding as to the prudence of either the financial transaction or lease agreement and further makes no finding as to the value for ratemaking purposes or the ratemaking treatment to be afforded this financial transaction and lease in any later proceeding.

IT IS THEREFORE ORDERED:

1. That Missouri American Water Company is hereby granted a certificate of convenience and necessity for the purpose of constructing and operating a well field and transportation pipeline outside its current service area, as described in this Report and Order.

2. That Missouri American Water Company is hereby authorized to enter into, execute and perform a financial transaction as set out in this Report and Order and in its application in Case No. WF-97-241, and to do any and all other things as may be necessary in performance of acts in furtherance of the above financial transaction.

3. That MAWC is ordered to file tariffs reflecting its new St. Joseph service area, together with a map and metes and bounds description within 30 days of the effective date of this order.

4. That MAWC is ordered to file a copy of all documents relating to the financial transaction and lease upon completion of the financial transaction and lease.

5. That nothing in this Report and Order shall be considered a finding by the Commission of the prudence of either the proposed construction project or financial transaction, or the value of this

transaction for ratemaking purposes, and the Commission reserves the right to consider the ratemaking treatment to be afforded the proposed construction project and financial transaction and their results in cost of capital in any future proceeding.

6. That this order shall become effective on October 21, 1997.

BY THE COMMISSION

Cecil I. Wright

Cecil I. Wright
Executive Secretary

(S E A L)

Lumpe, Ch., Crumpton, Murray,
and Drainer, CC., concur.

Dated at Jefferson City, Missouri,
on this 9th day of October, 1997.

ALJ/Sec'y: Dergue/ Boyce

9-29 — Date Circulated

WA-97-46
WF-97-241 — CASE NO.

Zobrist, Chairman

Crumpton, Commissioner

cm, 2,3,5,8,9,10,13
Murray, Commissioner

Lumpe, Commissioner

Drainer, Vice-Chair

10/7
Agenda Date

Action taken: 4-0 AA

Must Vote Not Later Than ________

STATE OF MISSOURI
OFFICE OF THE PUBLIC SERVICE COMMISSION

I have compared the preceding copy with the original on file in this office and I do hereby certify the same to be a true copy therefrom and the whole thereof.

WITNESS my hand and seal of the Public Service Commission, at Jefferson City, Missouri, this 9th day of October, 1997.

Cecil I. Wright
Executive Secretary

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI.

FILED
APR 16 1914
T. M. BRADBURY, Sec.
Public Service Com.

In the matter of the Application of North Missouri Light and Power Company for permission to construct its transmission line and electric system in the Counties of Ralls and Pike, in the State of Missouri.

No. 357

The petition of North Missouri Light and Power Company respectfully shows:

I. That this applicant, North Missouri Light and Power Company, is a corporation duly organized and incorporated under the laws of the State of Missouri, as shown by a duly certified copy of its certificate of incorporation heretofore filed with the Public Service Commission of the State of Missouri, to wit, on the _____ day of __________, 1914, and on the occasion and in the matter of a former application for permission and authority to exercise the rights and privileges granted to said Company by the Cities of Perry, Center, New London and Frankford, and that the principal place of business of said North Missouri Light and Power Company is the City of New London, Ralls County, Missouri. That the said North Missouri Light and Power Company is and was formed for the following purposes and character of business in the following designated territory and has the following powers as shown by its Articles of Association, to wit, to manufacture, generate, furnish, distribute, transmit, buy and sell, at wholesale or retail, to any person, corporation or municipality, electricity, electric current, electric power and energy for light, heat and power, and to construct, own, lease and operate electrical and power plants and transmission lines for the manufacture, generation transmission, buying and selling and distributing of electricity, electric current, electric power and energy, in cities, towns and municipalities and elsewhere in the State of Missouri, and for such other acts and things in any way connected with or appertaining to the foregoing.

2. That the financial condition of this applicant is as follows;

(a) Amount and kinds of stock authorized, Sixty Thousand Dollars ($60,000), all common stock, one half of said Stock being paid in, the remainder now subject to call, Stock to be issued on payment in full.

(b) No preferred stock.

(c) No mortgages on property of applicant.

(d) No bonds authorized or issued.

(e) No other indebted ness.

(f) No interest paid during the previous fiscal year.

(g) No dividends paid during the previous five years.

(h) No earnings or expenditures and no business transacted at close of last fiscal year.

3. That this applicant has heretofore secured from private individuals and from corporations and other private owners of private property the right of way on which to erect an electric transmission line for the transmission and distribution of electric current for light, heat and power, and for the exercise of its charter rights, privileages and powers, from a point near and at the village of Ilasco in Ralls County to the City of Perry in Ralls County and by way of the City of New London in Ralls County, and with a branch of said transmission line leading from Ralls Junction in Ralls County to the City of Frankford in Pike County. That this applicant proposes to build said transmission line along said right of way in the Counties of Ralls and Pike in the State of Missouri for the purpose of transmitting, distributing and selling electric current for light, heat and power to the various cities towns and villages and to the public generally along the line of said transmission line and all in accordance with the powers granted in its charter and in franchises heretofore secured in the incorporated towns and cities to which said transmission line leads or runs. That a map showing the course, location, situation and extent of said proposed transmission line with the principal points thereon situate and the details thereof shown is herewith filed.

4. That the construction and operation of said transmission line

for the purposes hereinbefore mentioned and the exercise by this applicant of its charter privileges in the premises is required by the public convenience and necessity for the reason that said transmission line proposes to furnish to a large part of Ralls County and a large part of Pike County in the State of Missouri electric current for light, heat and power, and at the present there is in none of the territory, cities and towns covered by said proposed transmission line any plant or system furnishing the public and the said Cities and towns with electric current for any purpose, except that at the City of New London in Ralls County there is a plant for the furnishing of such current for lighting alone. That said transmission line will furnish to the three and only important cities in Ralls County and to the City of Frankford in Pike County such current for light, heat and power, as well as the public in such territory generally.

Wherefore petitioner asks that the Public Service Commission of the State of Missouri authorize and permit and issue its certificate authorizing and permitting applicant to construct and maintain its said transmission line along the route proposed and shown in said Counties of Ralls and Pike in the State of Missouri and to the places and points shown and designated in and on the map of said proposed line, to wit from a point at or near the village of Ilasco in Ralls County to the City of Perry in Ralls County and by the way of the City of New London in Ralls County, and with a branch of said line leading from Ralls Junction in Ralls County to the City of Frankford in Pike County, and for permission and authority to applicant to exercise all of the privileges and rights given and granted and authorized to it by its certificate of incorporation.

NORTH MISSOURI LIGHT AND POWER COMPANY.

By M J Jones President.

Attest J D Smith
Secretary.

J. O. Allison
New London, Mo.
E L Alford
Perry, Mo.
Attorneys for Applicant.

May 1, 1914.

In the Matter of the Application of NORTH MISSOURI LIGHT AND POWER COMPANY for a certificate of convenience and necessity to construct an electric transmission line in the counties of Ralls and Pike, State of Missouri.

Mr. E. L. Alford, Attorney at Law,

Perry, Missouri.

Dear Sir:-

The order in the above entitled matter is being held up pending the filing with this Commission of the orders of the County Courts of Ralls and Pike Counties permitting the construction of the contemplated transmission line across and along the highways of said counties. Please obtain and file these orders at your earliest convenience and the order of the Commission will be entered at once.

Yours very truly,

Chairman.

JMA*R

July 3,1914.

Case No.357*

Hon.J.O.Allison,
Attorney North Missouri L&P Co.,
New London,Missouri.

Dear sir:-

Referring to above case,you were to file copies of franchises issued to the North Missouri L&P Co. by the county courts of Pike and Ralls County;also copy of contract with Keokuk Dam Co.,and when so filed order of this Commission would issue.

Kindly arrange to make these filings without further delay,in order that the docket may be closed.

For the Commission,

Secretary.

TMB/m.

Original

STATE OF MISSOURI
PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held at its office in Jefferson City on the 20th day of July, 1914.

CASE NO. 357.

PRESENT:
JOHN M. ATKINSON, Chairman,
WM. F. WOERNER
JOHN KENNISH
HOWARD B. SHAW
FRANK A. WIGHTMAN, Commissioners.

In the Matter of the application of NORTH MISSOURI LIGHT AND POWER COMPANY for a certificate of convenience and necessity authorizing the construction of an electric transmission line in the counties of Ralls and Pike, State of Missouri.

ORDER

Application having been made to the Public Service Commission by North Missouri Light and Power Company for a certificate of public convenience and necessity authorizing the construction, maintenance and operation of a transmission line for the conveyance of electric energy for light and power purposes, said transmission line to extend from a point at or near the village of Ilasco, in Ralls County, Missouri, thence in a southwesterly direction to and through the city of New London, in said Ralls County, thereafter dividing, one branch of said transmission line proceeding southward and eastward to the city of Frankford, Pike County, Missouri, and the other proceeding in a southwesterly direction to the city of Center, in Ralls County, and onward to the city of Perry, in said Ralls County, Missouri.

And it appearing to the Commission, after hearing duly had, that the county of Ralls, by order of its County Court of date May 12, 1914, and the county of Pike, by order of its County Court of date July 9, 1914, have granted to said applicant their respective franchises or permits authorizing the use of their county highways for the construction of said transmission line as herein contemplated.

And it further appearing to the Commission that the public convenience and necessity in said counties of Ralls and Pike reasonably require the construction, maintenance and operation of the transmission line herein contemplated by said North Missouri Light and Power Company, and that the certificate herein prayed for is otherwise necessary and proper to be granted.

Now, after due deliberation, it is,

ORDERED: 1. That the Commission does hereby certify that the present and future public convenience and necessity in the counties of Ralls and Pike, State of Missouri, reasonably require the construction, maintenance and operation by North Missouri Light and Power Company of the above described electric light and power transmission line through the counties of Ralls and Pike in the State of Missouri; and that said company is hereby authorized to construct, maintain and operate said electric light and power transmission system in said counties, according to the terms and conditions prescribed in the respective franchises or orders granted to said company by the above named counties as hereinabove set forth.

ORDERED: 2. That this order shall take effect on this date.

BY THE COMMISSION.

T. M. Bradbury

Secretary.

PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON

At a session of the PUBLIC SERVICE COMMISSION OF WEST VIRGINIA in the City of Charleston on the 30th day of May 2018.

CASE NO. 17-0894-E-PC

APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY, public utilities,
Petition for consent and approval of acquisition of wind facilities (Hardin Wind Facility, Hardin County, Ohio; and Beech Ridge II Wind Facility, Greenbrier County, WV).

COMMISSION ORDER

The Commission denies the Petition for Consent and Approval filed by Appalachian Power Company and Wheeling Power Company on July 5, 2017, for the acquisition of the Hardin Wind Facility and the Beech Ridge II Wind Facility.

BACKGROUND

On July 5, 2017, Appalachian Power Company (APCo) and Wheeling Power Company (WPCo) (collectively Companies) filed a Petition for Commission consent and approval for APCo to enter into certain transactions to acquire, after completion of construction, the Hardin wind generation facility (Hardin Wind Facility), that is under development in Hardin County, Ohio, and the Beech Ridge II wind generation facility (Beech Ridge II Wind Facility) that is under development in Greenbrier County, West Virginia (collectively Wind Facilities or Projects).[1] The Beech Ridge II facility is a 50 Mw wind project and the Hardin facility is a 175 Mw wind project.

The petitions to intervene filed by the Consumer Advocate Division (CAD) of the Commission and West Virginia Energy Users Group (WVEUG) were granted. Commission Order, September 8, 2017.

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1 The Commission notes that the Virginia State Corporation Commission (VSCC) recently denied an APCo request for a rate adjustment to recover Virginia's allocated share of costs for the same wind farms at issue in this case concluding that the purchase of the wind farms was not necessary for Virginia customers. VSCC Case No. PUR-2017-00031, Order entered April 2, 2018, (Reconsideration Denied, April 20, 2018).

On March 14 and 15, 2018, the Commission held an evidentiary hearing in this case.[2] Initial Briefs from the parties were filed on April 6, 2018, and Reply Briefs were filed on April 20, 2018.

On March 29, 2018, the Companies filed a letter informing the Commission of an offer from General Electric to upgrade the wind turbine generators at the Hardin Wind Facility. CAD and WVEUG opposed the filing of the letter. CAD Motion to Strike and/or Open the Record, March 30, 2018; WVEUG letter, April 2, 2018. The Commission granted the CAD Motion to Strike on April 12, 2018, and did not consider the Companies' March 29th letter in the decision in this case.

The Ratemaking Treatment of the Wind Facilities

If acquired, the Wind Facilities will be owned by APCo. The associated investment will be part of APCo's rate base and the associated operating expenses and taxes will be part of the Companies' base rate revenue requirements. As described by APCo:

> [R]evenue requirement for the Wind Facilities includes the following types of costs:
>
> 1) a return of (through depreciation) and a return on (using the capital structure and cost of equity described by Company witness Scalzo) APCo's capital investment in the Wind Facilities net of accumulated depreciation and accumulated deferred income taxes;
>
> 2) various operational and maintenance (O&M) expenses;
>
> 3) administrative and general (A&G) costs including salaries and benefits and property insurance; and
>
> 4) real and personal property taxes and employment taxes.
>
> APCo's capital investment will consist principally of the acquisition price of the Wind Facilities but will also include any capitalizable costs incurred incidental to their acquisition.

Cos. Exh. AWA-D at 3.

APCo is requesting that cost recovery of the base rate revenue requirements of the Wind Facilities begin immediately with the closing of its purchase transaction rather than waiting for the next rate case after closing to include the revenue requirements into base

[2] In this Order, we will cite to the transcript as Tr. I (March 14th) and Tr. II (March 15th).

rates. APCo proposes that if the transaction is approved the Commission authorize a special surcharge to be included in rates upon closing of the purchase transaction. Because this surcharge will be based on projected costs, APCo is also requesting a true-up mechanism. APCo plans to practice deferral accounting by comparing the actual incurred costs associated with the Wind Facilities to the recovery of such costs through the approved surcharge. Net under-recoveries recorded as a regulatory asset or net over-recoveries recorded as a regulatory liability would, if approved by the Commission, be included for future recovery or refund, respectively, through the proposed true-up to actual costs in subsequent proceedings. Id. at 6-7.

The first-year revenue requirement of the Beech Ridge II Wind Facility is $6.1 million, or $2.5 million on a West Virginia jurisdictional basis. The first-year revenue requirement of the Hardin Wind Facility is a total of $18.2 million, or $7.6 million on a West Virginia jurisdictional basis. These revenue requirements are net of significant Federal Production Tax Credits (PTC) which are available only for the first ten years of the Wind Facilities twenty-five year life.

POSITION OF THE PARTIES

The Companies

Based on original estimates of revenue requirements of the Wind Facilities and the market cost of energy that would be purchased by the Companies without the energy from the Wind Facilities, the Companies projected that the Hardin Wind Facility had a total company positive net present value (NPV) to customers of $55.0 million and the Beech Ridge II Wind Facility had a positive NPV to customers of $21.4 million, when evaluated against the current Fundamentals Forecast before the sale of the renewable energy certificates (RECs)[3] is considered. Cos. Exh. JJS-D at 7.

The original cost estimates and comparisons to the market cost of purchased energy performed by the Companies were based on federal income tax rates in effect in 2017. The new Tax Cuts and Jobs Act of 2017 (TCJA) changed the cost analysis performed by the Companies, and ultimately the originally negotiated purchase price of the Wind Facilities. The effect of the TCJA increased the net revenue requirements on the projects because of a lower tax benefit from special wind project tax credits. To offset this increased revenue requirement, the project developer, Invenergy, offered certain price reductions that lowered the cost of the wind projects. Cos. Exh. JJS-SD at 1-2.

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[3] A renewable energy certificate, or REC (pronounced: rĕk), is a market-based instrument that represents the property rights to the environmental, social and other non-power attributes of renewable electricity generation. RECs are issued when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy resource. RECs are the accepted legal instrument through which renewable energy generation and use claims are substantiated in the U.S. renewable energy market.

The Companies presented updated testimony that, due to the adjusted purchase price and the effect of the TCJA on revenue requirements, the Hardin Wind Facility revised total company positive net NPV to customers compared to the market dropped to $42.9 million and the Beech Ridge II Wind Facility positive NPV to customers also dropped to $14.8 million. These data were based on comparisons of the Wind Facilities' revenue requirements to a 2016 PJM Market Price forecast characterized by the Companies as their Market Fundamentals Forecast, which assumed increased market prices in the future due to potential carbon costs. The values were also based on the gross revenue requirements of the Wind Facilities, including the Federal Production Tax Credits (PTC) in years one through ten, but before a potential credit from the sale of RECs was considered. Monetizing the RECs associated with the Wind Facilities at an assumed selling price of $7 each for ten years would add $16.5 and $5.2 million in total company present value for Hardin and Beech Ridge, respectively. Cos. Exh. JJS-SR corrected during Evidentiary hearing at 3.

In addition to the projected NPV benefit as compared to market purchases, the Companies described other benefits that they believed justified the acquisition of the Wind Facilities. These benefits included:

1. The Wind Projects offer an opportunity to take full advantage of the PTC.

2. The exceptionally low cost of the power produced by the Wind Projects for their first ten years of operation.

3. The step-up in the Wind Projects' power costs after the first ten years with the cessation of the PTC benefits would coincide neatly with the expiration of the bulk of APCo's existing higher priced purchased power agreements for wind.

4. The bolstering of the level of wind power in the Companies' diversified mix of generation resources at a time when the level would otherwise drop precipitously.

5. The hedge that the Wind Projects offer not only against spikes in market energy prices but also against the prospects of future carbon regulation or other environmental regulations.

<u>Staff, CAD and WVEUG</u>

Staff and CAD opposed the acquisition of the Wind Projects. Their positions were generally consistent, arguing that APCo had no need for capacity to meet PJM Interconnection LLC (PJM) capacity requirements which apply to the summer months. They also argued that to meet energy requirements in the winter, the Companies could, and should, continue to rely on the PJM energy market. Using the revised revenue requirements for the Wind Facilities, based on the new tax rates and revised purchase price presented in the Companies revised data, Staff witness Short testified that his calculations, which included his view of likely lower projected PJM market prices, demonstrated that the Wind Projects would cost customers more than the PJM market alternative. The CAD, in its initial brief, urged that the Commission conclude, as has the VSCC, that when the record, as a whole, is considered, the Companies' projection of future PJM prices appears to be inflated. CAD stated that the alternative view of the PJM market presented by Staff showed that the Wind Facilities would cost West Virginia ratepayers more than the market alternative, and, therefore, the projects should be rejected by the Commission.

WVEUG witness Baron opposed the Hardin Project and expressed reservations about the Beech Ridge II Project. He considered the No Carbon case used by the Companies to be more reasonable, and testified:

> Based on Mr. Torpey's updated [No Carbon] analyses, the NPV economic benefit for the Beech Ridge II project is $3.0 million, and it is $6.7 million for the Hardin project. The original NPV economic benefits calculated by the Companies for these two projects were $9.6 million and $18.8 million, respectively. This represents a 69% reduction in NPV economic benefits for the Beech Ridge II project and a 65% reduction in Hardin benefits due to the tax law change.

WVEUG Exh. SJB-SD at 3.

Mr. Baron testified that based on Mr. Torpey's No Carbon case the Beech Ridge II project would become uneconomic if the actual PJM market energy prices were 3.9% lower than the AEP projection. He further testified that for the Hardin project, if the actual PJM energy prices were only 2.9% lower each year, the NPV benefits would be fully eliminated, and if the market prices were any lower, the project would be harmful to the Companies' customers. Mr. Baron concluded that he did not expressly support either acquisition. He opined, however, that the smaller Beech Ridge II acquisition would be less risky for ratepayers than the Hardin project. He further stated that because Beech Ridge II is located in West Virginia, to the extent the acquisition provides other marginal economic benefits, those benefits would inure to West Virginia (as compared to the Hardin project in Ohio).

WVEUG opposed the surcharge rate recovery mechanism requested by the Companies. Mr. Baron testified that the use of a surcharge mechanism does not permit the consideration of potential offsetting revenue requirement changes. He also objected to the shift of investment risks from shareholders to ratepayers. He concluded that WVEUG continues to recommend that these types of investment costs be recovered through base rates, rather than yet another surcharge. WVEUG Exh. SJB-D at 14.

DISCUSSION

Virginia State Corporation Commission (VSCC) Denial

The VSCC found that APCo did not prove a need for the capacity. In its case before the VSCC, APCo did not assert a capacity need, but did assert that the wind facilities are needed to provide a lower cost source of energy compared to purchases from PJM. The VSCC also held that APCo failed to establish that the wind facilities are needed to address an energy deficiency or that they would likely provide energy at a lower overall cost to customers. Appalachian Power Co., Commonwealth of Virginia State Corp. Comm'n., Case No. PUR-2017-00031, Final Order, April 2, 2018, at 4-5 (Reconsideration Denied, April 20, 2018).

The VSCC shares our concerns about the highly speculative nature of the Companies market price justification for owning the Wind Facilities. In its Order Denying Reconsideration, the VSCC wrote:

> In addition, APCO's claimed benefit of the facilities – avoiding higher-priced market purchases – is speculative, dependent upon fluctuating market prices for 25 years, while the increased cost for the facilities is not speculative but, rather, locked in to customers for those 25 years. Indeed, APCo narrowly focuses on the cost of the facilities over the first ten years of their service life, while the Commission properly considers the costs to customers over the full 25-year service life. This is particularly significant because the record reflects that the cost of these facilities and, thus, costs to customers, will significantly increase after the first ten years, when the Production Tax Credit ends.

VSCC, Order Denying Reconsideration, April 20, 2018, at 3 (citations omitted).[4]

The Virginia denial is persuasive and important not only because VSCC's reasons for denial mirror our concerns as discussed later in this order, but also because the Virginia denial creates a situation where the traditional allocation of the cost of APCo

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4 In their Reply Brief, the Companies pointed out a reference in the VSCC denial Order to a new statute in Virginia, addressing wind and solar generation facilities. Specifically, the Companies noted the VSCC said: "Because this proceeding is legislative in nature and our determination is without prejudice, APCo may present new evidence in support of a new application to acquire these resources, with SB 966 applicable to any such application filed on or after July 1, 2018 [SB966] includes legislative predetermination that the construction and purchase of power generated from solar or wind generating facilities up to certain quantities is 'in the public interest' and the Commission is mandated to make such a finding in applicable cases." We note that there is no such mandate in West Virginia law and a VSCC public interest finding under such a mandate would not change the public interest test based on reasonableness, prudence and cost that is employed by this Commission and which has led to our disapproval of the transactions based on the record developed in this proceeding.

production facilities between jurisdictions cannot occur under the normal jurisdictional cost allocation model. Some alternative to the normal jurisdictional cost allocation, as yet unknown and unexplained by the Companies, would have to be considered by this Commission even if the VSCC allowed APCo to acquire the Wind Facilities as long as the Virginia ratepayers are shielded from the costs. Thus, even if this Commission found that the Companies' petition should be granted, the acquisition of the Wind Facilities could not occur without further proceedings in West Virginia to firm up cost allocation and probably in Virginia to address treating the facilities as non-jurisdictional to that state. Mr. Scalzo testified that the transactions require approval of both the Virginia and West Virginia Commissions. Cos. Exh. JJS-D at 4. The Companies have not explained how the VSCC denial would affect West Virginia ratepayers or if it is possible for the transactions to be completed.

Need

The need for capacity was a central issue in this case. The Companies admit that they have sufficient capacity to meet PJM requirements using the generation resources already under contract or owned by APCo and WPCo. Tr. II at 52-53 (Scalzo). The Companies, however, argue that they do not generate sufficient energy to serve their customers in the winter months. Id. APCo sells all of its generated energy into the PJM wholesale market and purchases all of its energy requirements from the same market. Tr. II at 32, 44 (Scalzo on cross-examination); WVEUG Exh. SJB-D at 7. There is no dispute that PJM incurs its own internal peak load in the summer months. PJM plans its supply resources to meet its summer peak demand and energy requirements and, therefore, has more than enough generating capability in the winter to make up for any shortfall between APCo's energy generation and its customer energy needs. Thus, because of the availability of an ample wholesale purchase option from the PJM energy market, the Companies do not need to own or bi-laterally contract for additional energy to meet their internal load requirements. Notwithstanding this lack of need for energy, the Companies argued that the proposed Wind Facilities transactions are a physical hedge against the purchase of energy in the winter months. All parties agreed that the Wind Facilities were a physical hedge against reliance on market purchases, but there is a dispute whether the Wind Facilities would provide the lowest priced reliable alternative for energy necessary to meet customer requirements.

Cost to Ratepayers

Mr. Scalzo testified for the Companies that the PTC would be sufficient to offset approximately forty-eight percent of the cost of the revenue requirements of the Wind Facilities for the first ten years, the time the PTC would be in effect. Cos. Exh. JJS-SD at 4. The revenue requirements of the Wind Facilities for years eleven through twenty-five are much higher because of the elimination of the PTC, and the benefit to ratepayers is less certain.

The low net cost to ratepayers in the first ten years due to the PTC creates a concern for fairness to future ratepayers who will be required to bear the higher costs in years eleven through twenty-five. We cannot close our eyes to the fact that the NPV cost benefits of these facilities, if they do exist, are heavily influenced by the low net cost in the first ten years. If lower net costs in the early years are offset by higher costs in later years, the often argued inter-generational problem raises its head.

The Commission is required by statute to appraise and balance the interest of current and future utility service customers. W. Va. Code §24-1-1(b). The benefits or costs calculated by the Companies and Staff have been presented to us as a twenty-five year Net Present Value number. To balance the interests of present customers, who receive all of the PTC benefits, against the interest of future customers who will receive no PTC benefits we should at least be aware of the NPV impacts in those two discrete periods. No party has presented evidence on those NPV values.

There may be no problem at all, or only a minor inter-generational issue, but we cannot know that, given the way the NPV data has been presented.

The Beech Ridge II Wind Facility has a West Virginia allocated (West Virginia Jurisdictional) base rate revenue requirement of approximately $2.4 million per year for the first ten years. For the following fifteen years, the Beech Ridge II West Virginia Jurisdictional base rate revenue requirement is approximately $3.9 million per year. The total West Virginia Jurisdictional base rate revenue requirement over the full twenty-five year life of Beech Ridge II is $83.2 million. The Hardin Wind Facility has a West Virginia Jurisdictional base rate revenue requirement of approximately $7.6 million per year for the first ten years and approximately $12.6 million per year for the following fifteen years, or a twenty-five total of $265.3 million. Over the entire twenty-five year life of both facilities the West Virginia Jurisdictional base rate revenue requirement of Beech Ridge II and Hardin totals $348.5 million.

If the Projects' revenue requirements are not allocated between West Virginia and Virginia, which is a possible scenario in light of the decision of the VSCC, the total revenue requirement cited above could be significantly higher for West Virginia ratepayers. The total base rate revenue requirement of the Wind Facilities over the first ten years would be $240.5 million without cost allocation between the two states. The total base rate revenue requirement for years eleven through twenty-five would be $599.1 million. Thus, the total unallocated base rate revenue requirement over the twenty-five year life of the Wind Facilities will be $839.6 million. Co. Exh. JJS-SD at JJS-S2 and JJS-S4.

All of these values are base rate revenue requirements before any offset that might be obtained from REC credits. The issue of REC credits received some attention in the record. Although all parties agreed that there was a potential for some level of REC credits, there was also some disagreement about the value of REC credits. The Companies originally presented cost data without REC credits, but did mention that the net costs of the Wind Facilities would be lower to the extent REC credits are sold. The Companies originally suggested that the value of REC credits could vary. In revised filings, the Companies assumed a $7 value for each REC credit during the first ten years of the Wind Facilites lives.

WVEUG witness Baron failed to consider REC credits in his analysis but indicated uncertainty about the value of REC credits.

> And the fact that in the Company's own analysis, it provided a range, which led me to conclude that the Company itself was not that confident in what those REC values would be over even a ten-year period . . . I would acknowledge that the RECs have value of some magnitude. I don't know what that is. I'm not sure that anybody does. It's certainly an uncertainty. But all else being equal, I certainly would agree it's greater than zero. And that it would add to the economic value of renewable resource like Beech Ridge II and Hardin.

Tr. I at 192 – 193.

Knowing that the total aggregate revenue requirement of the combined facilities is $839.6 million over twenty-five years, or even knowing the annual revenue requirement, does not provide sufficient detail to evaluate the reasonableness of the revenue requirements of the Wind Facilities. The cost per unit of output (per MWh) for direct comparisons with alternative sources of energy such as purchases from the PJM market is important. The Companies provided testimony that the average cost of the Wind Facilities, net of REC sales at $7 per REC, was $30 per MWh during the first ten years of operation. Exhibit JJS-S at 3 and 4. The Companies later refined that number to be $30.34 per MWh. Initial Brief at 24. Absent the REC credit, the average cost per MWh in the first ten years would be $37.34.

The Companies did not provide publicly the average revenue requirement per MWh for years eleven through twenty-five, but did provide the annual total revenue requirements for those years. There is no indication on the record that the output from the Wind Facilities will fluctuate from year to year, but we can derive the per MWh revenue requirements in those years using a ratio of annual revenue requirements to the first ten-year average applied to the $37.34 pre-REC-credit average revenue per MWh. The following Table shows the total annual dollar amount of revenue requirement for each facility from Co. Exh. JJS-SD at JJS-S2 and JJS-S4, the average revenue requirement over the first ten years as provided by the Companies, and the average revenue requirement in years eleven through twenty-five calculated as described above.

	Total Dollars Unallocated Revenue Requirement					Avg. Per MWh
Year	Beech Ridge II	Hardin	Total	Before $7 REC Credits		After $7 REC Credits
	Million $	Million $	Million $	Per MWh		Per MWh
1	6.0	18.2	24.2	$ 37.47	**(2) (3)**	$ 30.47
2	6.7	20.0	26.7	$ 41.34	**(2) (3)**	$ 34.34
3	6.3	18.8	25.1	$ 38.87	**(2) (3)**	$ 31.87
4	6.3	19.2	25.5	$ 39.49	**(2) (3)**	$ 32.49
5	5.8	18.1	23.9	$ 37.01	**(2) (3)**	$ 30.01
6	5.9	18.3	24.2	$ 37.47	**(2) (3)**	$ 30.47
7	5.9	18.3	24.2	$ 37.47	**(2) (3)**	$ 30.47
8	5.7	18.0	23.7	$ 36.70	**(2) (3)**	$ 29.70
9	5.3	16.8	22.1	$ 34.22	**(2) (3)**	$ 27.22
10	4.9	16.0	20.9	$ 32.36	**(2) (3)**	$ 25.36
10-Yr. Sub Total	58.8	181.7	240.5			
10-Yr. Annual Average	5.9	18.2	24.1	$ 37.24	**(1)**	$ 30.24
11	11.2	35.2	46.4	$ 71.85	**(2) (3)**	
12	11.0	34.7	45.7	$ 70.76	**(2) (3)**	
13	10.8	33.8	44.6	$ 69.06	**(2) (3)**	
14	10.5	32.5	43.0	$ 66.58	**(2) (3)**	
15	10.1	32.1	42.2	$ 65.34	**(2) (3)**	
16	9.9	31.3	41.2	$ 63.80	**(2) (3)**	
17	9.6	30.6	40.2	$ 62.25	**(2) (3)**	
18	9.3	30.2	39.5	$ 61.16	**(2) (3)**	
19	9.2	29.7	38.9	$ 60.23	**(2) (3)**	
20	9.0	29.5	38.5	$ 59.61	**(2) (3)**	
21	8.9	28.8	37.7	$ 58.38	**(2) (3)**	
22	8.6	28.1	36.7	$ 56.83	**(2) (3)**	
23	8.3	27.6	35.9	$ 55.59	**(2) (3)**	
24	8.1	27.0	35.1	$ 54.35	**(2) (3)**	
25	7.7	25.8	33.5	$ 51.87	**(2) (3)**	
15-Yr. Sub Total	142.2	456.9	599.1			
15-Yr. Annual Average	9.5	30.5	39.9	$ 61.84		

(1) From Companies' Original Brief.
(2) = (Current Year Cost ÷ 10-Year Average Cost) X $37.24
(3) This calculation does not use projected output or capacity factors of the Wind Facilities. The calculated rates per MWh may differ from the Companies' confidential projections to the extent that output and capacity factors fluctuate from year to year.

The total cost of the Wind Facilities will jump to approximately $71.85 per MWh before REC credits in the eleventh year. This number will gradually decline over the last fifteen years of the life of the Wind Facilities but will average nearly $62.00 per MWh.

These costs per MWh should be compared to reasonably projected PJM energy costs. Given the lack of need for the capacity from the Wind Facilities, it might seem an imprudent decision to place the above cited long-term base rate cost responsibility on West Virginia ratepayers. The Companies argue, however, that the Wind Facilities are a physical hedge, providing a more certain and predictable cost for the energy produced by the facilities in lieu of buying that amount of energy. Thus, according to the Companies, West Virginia customers will actually benefit from the Wind Projects because the Companies believe that a comparable amount of energy that is needed to serve West Virginia customers will cost more if acquired from the PJM market. If the Companies analyses of the cost of power from the market is correct, then it would seem prudent to acquire the Wind Facilities. And therein lies our conundrum.

The prudence and reasonableness of incurring the cost of the Wind Facilities is dependent on the reasonableness and accuracy of the Companies' PJM market price forecasts. The Staff and CAD are convinced that there are sufficient, significant questions about the reasonableness of the market price forecasts that the Commission should render a decision similar to that recently made by the Virginia State Corporate Commission. WVEUG also questions the reasonableness of taking the eggs out of the market basket and relying on rate base generation for power that can come from the Wind Facilities.

There are multiple references in the record to the Net Present Value (NPV) of the revenue requirements of the Wind Facilities over twenty-five years (under) or over the NPV of purchases from the PJM market over the same twenty-five year period. To some extent, the record can become confusing because of the multiple NPV comparisons presented by the Companies in their original filing and direct testimony that were later adjusted by multiple NPV comparisons after the TCJA and renegotiated purchase terms resulted in changes in revenue requirements. Added confusion can arise because some witnesses of the Companies redacted NPV numbers while other witnesses of the Companies did not redact NPV numbers. In addition, the Companies sometimes refer to NPV after credits from the sale of RECs and at other times do not quantify the effects of RECs on NPV. Staff, CAD and WVEUG also filed updated data in response to the changing numbers filed by the Companies, but did not provide clear side-by-side type discussions and comparisons of their NPV projections to the Companies multiple projections and multiple scenarios.

Our reference to a confused record does not mean that it is unintelligible; instead, we mean that frequent shifting between original documents, adjusted documents, public documents and confidential documents is necessary to properly compare the positions of the parties. We will not attempt to summarize all of the NPV projections, iterations, simulations, and sensitivity analyses, both public and confidential, that the parties have sprinkled throughout the record. We do summarize below some of the NPV numbers, and comments provided by witnesses.

	Hardin	Beech Ridge II
	Net Present Value of 25 Year Revenue Requirements (Negative = Benefit) i.e. Project Revenue Requirements Are Below Market Positive = Detriment i.e. Project Revenue Requirements Are Above Market	
	Million $	**Million $**
Companies		
Carbon Cost Scenario Projections Before REC Credits	$ (42.9)	$ (14.8)
Carbon Cost Scenario Projections After REC Credits @ $7 per REC (MWh)	$ (59.4)	$ (20.0)
No Carbon Cost Scenario Projections Before REC Credits	$ (6.7)	$ (3.0)
Carbon Cost Scenario Projections After REC Credits @ $7 per REC (MWh)	Greater benefit per Companies testimony, but values not provided in public exhibits.	
WVEUG - Baron		
No Carbon Cost Scenario Projections Before REC Credits	$0 – If market prices are 2.9% lower than the Companies projections	$0 – If market prices are 3.9% lower than the Companies projections
Staff - Short		
No Carbon Cost Scenario Projections – Market Price Projections Adjusted Downward by Staff	$ 43.8	$ 13.0

This data, and wide differences of opinion by expert witnesses, boil down to the troublesome essence of the issues in this case. That is, whether it is odds-on likely, even money, or odds-on unlikely that the West Virginia revenue requirements of the power that will be generated from the Wind Projects will be cheaper on a NPV basis over the twenty-five year life of the facilities than purchases of equal quantities of power from the PJM market. The Companies claim that in one of their scenarios, which they consider the most likely scenario, their Monte Carlo simulations result in a 100% certainty that there is a significant beneficial NPV for West Virginia ratepayers. Mr. Baron, testifying for WVEUG, explained why the Monte Carlo simulations might not be selecting reasonable random values within the parameters of the probability distributions defined by the Companies. WVEUG Exh. SJB-D at 8 – 10. He was also kind enough to define the Monte Carlo simulation methods for the record.[5]

[5] A "Monte Carlo" analysis is probabilistic economic analysis which is designed to produce a probability distribution of "outcomes" based on assumed probability distributions of input factors. It provides a measure of the uncertainty of the economic costs and benefits of an investment decision (for example, purchase of a wind project) based on the uncertainty of the input factors into the analysis (for example, PJM market prices, wind turbine MWh output). Through a Monte Carlo analysis, it is possible to measure the likelihood of beneficial outcomes (i.e., an economically beneficial investment for customers), given the uncertainty of the key driving factors impacting the economic results. The analysis is performed by randomly selecting input assumptions, based on a probability distribution of each key input, and then calculating the economic outcome for the project. If this process is performed 100s or 1,000s of times, the result is a probability distribution of the economic costs and benefits of the project being analyzed. WVEUG Exh. SJB-D at 8.

The reasonableness of the Companies' market price forecasts and NPV benefits to West Virginia customers of owning additional energy producing facilities rather than relying on the market depends a lot on the forecasted costs of natural gas built into the Companies models. Tr. II at 55-56 (Scalzo). The Companies' projected natural gas prices appear to be high compared to the recent natural gas markets and are not supported by current or recent natural gas prices. For example, the Companies' projected Henry Hub natural gas price of \$4.89/MMBtu for 2018 was an increase of more than fifty percent from actual gas prices for December 2017. Staff Exh. RRS-D at 16.

We are aware of the natural gas price spikes in 2005 and 2008. Those spikes may occur again, but over the last twenty years the spikes have been of relatively short duration, measured in months, and prices quickly settled back into the level or downward trends we have seen for the better part of twenty years. For example, in the last ten years, according to EIA data, Henry Hub gas prices dropped by 57%. That percentage is influenced by a very steep decline in the first two years of that period, and that steep decline has moderated. Even so, in the last eight years the Henry Hub gas prices dropped by 24%. Even if we assume a leveling off or reversal of the downward trend in natural gas prices, however, the Companies natural gas price forecasts are very aggressive on the up side.

In their Fundamentals Forecast, the Companies assume Henry Hub gas prices increasing by almost 200% in the first ten years of the forecast, going from \$2.15 in 2016 to \$6.40 in 2026. Extended to 2046, the Companies Henry Hub projected gas price is \$11.34, an increase of 427% from the 2016 price. The Companies' Fundamentals Forecast for Appalachian gas prices show even sharper increases, with the Dominion South Point Pool projected to increase 312% from 2016 to 2026 and increasing 647% to 2046, and the TCO Appalachian Pool projected to increase 300% from 2016 to 2026 and 549% from 2016 to 2046.

The United States Energy Information Administration's 2018 long-term forecast shows record high natural gas production going forward through 2050 and adjusts forecasted natural gas prices downward fourteen percent from the 2017 long-term outlook. Tr. II at 96. The Fundamentals Forecast upon which the Companies rely was issued in 2016 and has not been updated to reflect more current prices and conditions. Staff Initial Brief at 9. We are concerned that the benefit of owning the Wind Facilities is supported by PJM market price projections that are dependent on the Companies 2016 Fundamentals Forecast showing near term Henry Hub price increases of 200% and 300% increases in Appalachian gas prices. We are equally concerned by the extended projections of 427% to 650% longer term increases in natural gas prices over the period of time generally covering the life of the Wind Facilities.

We are also concerned that just as the Companies Fundamentals Forecast is overly aggressive on natural gas prices, it is also overly aggressive on PJM market prices. The Fundamentals Forecast assumes a 31% increase in PJM on peak energy prices in one year, from 2017 to 2018. The same forecast assumes that from 2017 through 2029 (approximately the end of the first ten years of the Wind Facilities) the PJM on-peak energy price will increase 146% and by the end of the following fifteen years, the PJM on-peak energy price will be 281% higher than the 2017 price. We do not dismiss these levels of PJM energy price increases as impossible, but we do consider it to be more likely than not that the energy prices will not escalate as rapidly as reflected in the Companies projections.

There was also disagreement on the Companies' reliance on future carbon-related costs impacting the PJM market price upward. Staff, CAD and WVEUG all discounted the Companies carbon-cost scenario. We share that concern. There are not now, nor have there been, carbon regulations imposing such burdens on generators. Although it may be prudent for the Companies to consider the effect of possible carbon regulation on future costs, to rely completely on possible regulations that will not occur in the near future and may not occur in the distant future is too speculative to impose on current ratepayers.

Green Power as an Economic Development Tool

The Companies suggest in their Petition that certain large commercial or industrial customers desire electric power from renewable generation. Petition at 9. The Companies, however, offered no examples for this assertion in the form of descriptions of inquiries from potential customers. Mr. Scalzo admitted on cross-examination that the Companies did not have a potential commercial or large industrial customer requesting green power at this time. Tr. I at 272. The Companies, moreover, did not explain why, if they did receive such requests in the future, they could not satisfy the requests with the purchase of green power energy for the customer. Additionally, Company witness Mr. Karrasch testified that the purchase of these two Wind Facilities will not swing rates significantly to attract industrial customers. Tr. I at 78. We are not indifferent to the increasing public concern about the relative increase in electric rates. As a consequence, we are not inclined to lock-in twenty-five years of base rate costs for power supply that is just as likely to cost more than the market alternative as it is likely to cost less than the market alternative based on speculation that some future customer might want green power that is owned, rather than purchased, by the Companies.

Conditions or alternative rate setting procedure

The Commission has occasionally considered, suggested, or required certain conditions be met before some transaction we are asked to review and approve can be considered in the public interest. We asked Mr. Scalzo if there might be an innovative cost recovery proposal that would protect current and future customers from excessive costs if the Companies' projections of PJM energy prices turned out to be overstated.

> Chairman Albert: You also said that . . . you all would accept your proposal or some other innovative proposal. I think that's what your testimony was.
>
> And the Pleasants' case, we said that the Companies will compensate customers through prospective rate credits, as determined by the Commission, for any year that market sales produce revenues that are below the full requirements imposed on the customers. Is that something you would consider doing here?
>
> A. I think we'd have to take it back to management and evaluate it.

Tr. II at 47. Notwithstanding the question and answer, the Companies did not follow up with or suggest a rate mechanism proposal that would place any of the risk that their twenty-five year market price projections were inaccurate on the Companies. We are not inclined to engage in a fishing expedition to get a proposal from the Companies on any condition, deferral or alternative rate mechanism that would result in the Companies absorbing or even sharing the burden if their proposed physical hedge to the market turned out to be a losing hedge.

Accordingly, we base our decision on the Companies' proposed rate setting request, the potential benefits and detriments that acquisition of the Wind Facilities bring to the table and the fact that the required VSCC approval has been denied. Considering the lack of need for capacity, the availability of ample energy supplies from the PJM Market, the uneven potential benefits of the Wind Facilities as compared to the market option due to the fly-up revenue requirements beginning in eleven years and continuing for fifteen years thereafter, the aggressive projections of gas price and PJM market price escalation over the next twenty-five years, the uncertainty of the timing and impact of carbon regulations and their associated impact on market prices and fossil fuel generation, the uncertainty of the per unit value of RECs that would offset the costs of the Wind Facilities, and the complete lack of any record on how we could go forward with the Wind Facilities acquisition in view of the denial by the VSCC, the proposed acquisitions, under the conditions and circumstances set forth in this record, are not in the public interest in West Virginia.

Protective Treatment

On March 8, 2018, the Companies filed their Second Addendum to First Motion for Protective Treatment requesting that the Commission grant protective treatment to the confidential information in the Companies' February 28, 2018 supplemental rebuttal filing and March 8, 2018 corrective filing. On April 13, 2018, the Companies filed their Third Addendum to First Motion for Protective Treatment requesting that the Commission grant protective treatment to the confidential information in the Companies' April 6, 2018 Initial Brief. The Companies are seeking confidential treatment of the information in both addendums for the same reasons they sought confidential treatment in the First Motion for Protective Treatment and First Addendum to that motion. No party has objected to either request for protective treatment. The Commission deferred ruling on both the original motion and the first addendum until the filing and review of a request pursuant to the West Virginia Freedom of Information Act, W.Va. Code §29B-1-1 et seq. Likewise, the Commission will defer ruling on the third and fourth addendums to the Companies' Motion for Protective Treatment.

FINDINGS OF FACT

1. The Companies have sufficient capacity. Tr. II at 52-53 (Scalzo).

2. The low net cost to ratepayers in the first ten years due to the PTC creates a concern for fairness to future ratepayers who will be required to bear the higher costs in years eleven through twenty-five.

3. The Companies do not generate sufficient energy to serve their customers in the winter months.

4. PJM plans its supply resources to meet its summer peak demand and energy requirements and, therefore, has more than enough generating capability in the winter to make up for any shortfall between APCo's energy generation and its customer energy needs.

5. The VSCC held that APCo failed to establish that the wind facilities are needed to address an energy deficiency or that they would be likely to provide energy at a lower overall cost to customers. Appalachian Power Co., Commonwealth of Virginia State Corp. Comm'n., Case No. PUR-2017-00031, Final Order, April 2, 2018, at 4-5 (Reconsideration Denied, April 20, 2018).

6. The Companies did not present any evidence of commercial or industrial businesses that requested green energy as a condition of becoming customers.

7. The Companies seek protective treatment for certain information filed under seal on February 28, 2018, March 8, 2018, and April 6, 2018.

8. No party has objected to the request for protective treatment.

CONCLUSIONS OF LAW

1. Because of the availability of an ample wholesale purchase option from the PJM energy market, the Companies do not have a need to own or bi-laterally contract for additional energy to meet their internal load requirements.

2. The Commission is required by statute to appraise and balance the interest of current and future utility service customers. W.Va. Code §24-1-1(b).

3. The base rate revenue requirement over the entire twenty-five year life of the wind facilities, without the costs being allocated between West Virginia and Virginia, would total $839.6 million.

4. The Companies' natural gas prices are high compared to the recent natural gas markets and are not supported by current or recent natural gas prices.

5. The Companies' fundamentals forecast is overly aggressive on PJM market prices. It is more likely than not that the energy prices will not escalate as rapidly as reflected in the Companies projections.

6. It is not reasonable to rely on speculative carbon regulations that have not been promulgated.

7. The Commission will not rely on the possibility of unnamed commercial or industrial customers who might require green power to become customers of the Companies if that power was more expensive than the market alternative.

8. Because no party has objected to the request for protective treatment and no request has been filed pursuant to W.Va. Code §29B-1-1 et seq., it is reasonable for the Commission to defer ruling on the Second and Third Addendums to the First Motion for Protective Treatment.

ORDER

IT IS THEREFORE ORDERED that the Petition for Consent and Approval filed by Appalachian Power Company and Wheeling Power Company on July 5, 2017, is denied and the case is removed from the Commission's docket of open cases.

IT IS FURTHER ORDERED that a ruling on the requests for permanent protective treatment filed on March 8 and April 13, 2018, is deferred until the filing and review of a request pursuant to the West Virginia Freedom of Information Act, W.Va. Code §29B-1-1 et seq. The Executive Secretary shall maintain the unredacted version of the sealed filings in their current condition, separate and apart from the rest of the file pending further order.

IT IS FURTHER ORDERED that the Executive Secretary of the Commission serve a copy of this Order by electronic service on all parties of record who have filed an e-service agreement, and by United States First Class Mail on all parties of record who have not filed an e-service agreement, and on Commission Staff by hand delivery.

A True Copy, Teste,

Ingrid Ferrell

Ingrid Ferrell
Executive Secretary

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COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

AT RICHMOND, APRIL 2, 2018

APPLICATION OF

APPALACHIAN POWER COMPANY — CASE NO. PUR-2017-00031

For a rate adjustment clause pursuant to
§ 56-585.1 A 6 of the Code of Virginia

FINAL ORDER

On July 5, 2017, Appalachian Power Company ("APCo" or "Company"), pursuant to § 56-585.1 A 6 of the Code of Virginia ("Code"), filed with the State Corporation Commission ("Commission") an application ("Application") seeking approval of a rate adjustment clause to recover costs associated with the Company's proposed acquisition of the Beech Ridge II and Hardin wind generation facilities (collectively, "Wind Facilities") being constructed in West Virginia and Ohio, respectively.

On July 27, 2017, the Commission issued an Order for Notice and Hearing in this proceeding that, among other things, docketed the Application, scheduled a public hearing on the Application, required APCo to publish notice of its Application, gave interested persons the opportunity to comment on or participate in the proceeding, and appointed a Hearing Examiner to rule on all discovery matters that arose during the course of the proceeding.

Notices of participation were filed by the VML/VACo APCo Steering Committee ("Steering Committee"),[1] the Old Dominion Committee for Fair Utility Rates ("Committee"),[2]

[1] The Steering Committee was established by the Virginia Municipal League and the Virginia Association of Counties, and it is comprised of "representatives of local governments and other political subdivisions of the Commonwealth served by the Company." Steering Committee Notice of Participation at 1.

[2] The "members of the Committee are customers of [APCo]." Committee Notice of Participation at 1.

Steel Dynamics, Inc. ("SDI"), and the Office of the Attorney General's Division of Consumer Counsel ("Consumer Counsel"). On December 5, 2017, the Committee and SDI filed the testimony of their respective witnesses. On December 19, 2017, the Staff of the Commission ("Staff") filed the testimony of its witnesses. On January 16, 2018, APCo filed its rebuttal testimony. On February 1, 2018, the Committee filed a Motion to Dismiss ("Motion") and Brief in Support of its Motion to Dismiss.

The Commission convened the public hearing on February 6, 2018, to receive public witness testimony and evidence on the Company's Application from Staff, respondents, and the Company. No public witnesses appeared.[3] The Commission received testimony from witnesses on behalf of the participants and admitted evidence on the Application. On March 9, 2018, the Company, the Steering Committee, the Committee, SDI, Consumer Counsel and Staff filed post-hearing briefs.

NOW THE COMMISSION, having considered the record, the pleadings, and the applicable law, is of the opinion and finds that the Application is denied. Put simply, the capacity and energy from these generating facilities is not needed by APCo to serve its Virginia customers. Thus, we find that it is neither reasonable nor prudent for APCo to acquire the Wind Facilities and then recover the costs from Virginia customers based on the record before us. Accordingly, we do not approve the rate adjustment clause requested in this proceeding.

Code of Virginia

Section 56-585.1 A 6 of the Code states in part as follows:

> 6. To ensure the generation and delivery of a reliable and adequate supply of electricity, to meet the utility's projected native load obligations and to promote economic development, a utility may at any time, after the expiration or termination of capped rates,

[3] Tr. 12.

> petition the Commission for approval of a rate adjustment clause for recovery on a timely and current basis from customers of the costs of . . . (ii) one or more other generation facilities . . . . A utility that constructs or makes modifications to any such facility, or purchases any facility consisting of at least one megawatt of generating capacity using energy derived from sunlight and located in the Commonwealth and that utilizes goods or services sourced, in whole or in part, from one or more Virginia businesses, shall have the right to recover the costs of the facility, as accrued against income, through its rates, including projected construction work in progress, and any associated allowance for funds used during construction, planning, development and construction or acquisition costs, life-cycle costs, costs related to assessing the feasibility of potential sites for new underground facilities, and costs of infrastructure associated therewith, plus, as an incentive to undertake such projects, an enhanced rate of return on common equity calculated as specified below . . . . A utility seeking approval to construct or purchase a generating facility described in clause (i) or (ii) shall demonstrate that it has considered and weighed alternative options, including third-party market alternatives, in its selection process.

In addition, Code § 56-585.1 A 7 provides, among other things:

> Any petition filed pursuant to subdivision 4, 5, or 6 shall be considered by the Commission on a stand-alone basis without regard to the other costs, revenues, investments, or earnings of the utility.

Finally, § 56-585.1 D provides:

> The Commission may determine, during any proceeding authorized or required by this section, the reasonableness or prudence of any cost incurred or projected to be incurred, by a utility in connection with the subject of the proceeding. A determination of the Commission regarding the reasonableness or prudence of any such cost shall be consistent with the Commission's authority to determine the reasonableness or prudence of costs in proceedings pursuant to the provisions of Chapter 10 (§ 56-232 et seq.). In determining the reasonableness or prudence of a utility providing energy and capacity to its customers from renewable energy resources, the Commission shall consider the extent to which such renewable energy resources, whether utility-owned or by contract, further the objectives of the Commonwealth Energy Policy set forth in §§ 67-101 and 67-102, and shall also consider whether the costs of such resources is likely to result in unreasonable increases in rates paid by consumers.

Need

We find that the Company has failed to establish that the Wind Facilities are needed at this time.[4] Without such a need, it is neither reasonable nor prudent for APCo to recover the costs of the Wind Facilities from its Virginia customers through a rate adjustment clause.

We agree with Consumer Counsel and the Steering Committee that the evidence demonstrates APCo does not have a current need for capacity and is expected to continue to have sufficient capacity to serve its native load until 2026.[5] Indeed, APCo does not assert a capacity need for the Wind Facilities.[6] Rather, APCo asserts that the Wind Facilities are needed to provide a lower cost source of energy compared to purchases from the PJM Interconnection, L.L.C. ("PJM"), wholesale market, particularly during the winter months when APCo traditionally experiences its peak demand.[7]

Based on the record in this case, we find that APCo has not established that the Wind Facilities are needed to address an energy deficiency. APCo does not assert, for example, that it is without access to sufficient energy to serve its native load.[8] The record shows that APCo is a winter-peaking utility with access to purchases through PJM, a summer-peaking regional transmission organization, which allows APCo access to excess energy during the winter months

[4] APCo's Application was filed pursuant to Code § 56-585.1 A 6 and we have evaluated it under that statute. APCo does not request approval to include the Wind Facilities in its Renewable Portfolio Standard ("RPS") program, *see* Ex. 3 (Castle direct) at 8, and accordingly, the Commission has not evaluated the Application under the standards set forth in Code § 56-585.2. Notwithstanding, APCo acknowledges that "the Company does not plan (or need) to incorporate the Wind Facilities into its RPS generation portfolio at this time." *See* APCo Post-hearing Brief at 7.

[5] *See, e.g.,* Ex. 24 (Samuel) at 6; Ex. 37 (Torpey rebuttal) at 5; Consumer Counsel Post-hearing Brief at 6-8; Staff Post-hearing Brief at 9-10; Steering Committee Post-hearing Brief at 6-7.

[6] *See, e.g.,* Ex. 24 (Samuel) at Attachment AFS-1 (APCo's Response to Staff Interrogatory No. 1-26); Tr. 44-45.

[7] *See, e.g.,* Ex. 2 (Application) at 2-3, 5; Ex. 3 (Castle direct) at 4-5, 7-8; Ex. 24 (Samuel) at Attachment AFS-1 (APCo's Response to Staff Interrogatory No. 1-26).

[8] *See, e.g.,* Staff Post-hearing Brief at 11.

when PJM is off-peak.[9] Nor has APCo established that the Wind Facilities are likely to provide energy at a lower overall cost to customers. The record calls into question APCo's forecasted energy and natural gas prices used to support its economic analysis of the Wind Facilities.[10] APCo's forecasted energy and natural gas prices appear to be inflated when compared to the current market and other independent forecasts.[11] For example, APCo forecasts natural gas prices (Henry Hub) at $4.89/MMBtu for 2018, compared to EIA's forecast of $2.88/MMBtu for 2018.[12] Incorporating inflated forecasts of energy and natural gas prices results in overstated customer benefits in APCo's economic analysis.[13] In addition, APCo's updated economic analysis presented in rebuttal shows a significant reduction in the level of proffered benefits as a result of the passage of the federal Tax Cuts and Jobs Act.[14] In reaching our decision, we fully considered that one of the benefits of the Wind Facilities is qualification for the Production Tax Credit, the value of which is incorporated into the Company's economic analysis.[15]

Based on the record in this case, we also find that APCo has not established the Wind Facilities are needed at this time as a hedge against market volatility. The record reflects that APCo conducted no analysis of the costs and benefits of such a hedge, and thus did not establish

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[9] *See, e.g.*, Ex. 31 (Abbott) at 8.

[10] *See, e.g.*, Ex. 25 (Johnson) at Summary Report & Findings, pp. 7-15.

[11] *See, e.g., id.*; Ex. 13.

[12] *See, e.g.*, Ex. 10 (Bletzacker direct) at Schedule 1, p. 3; Ex. 13.

[13] *See, e.g.*, Tr. 47.

[14] Pub. L. No. 115-97, 131 Stat. 2054 (2017). *See, e.g.*, Ex. 14ES (Torpey direct) at Schedules 2-5; Ex. 37ES (Torpey rebuttal) at Schedules 1-4; Staff Post-hearing Brief at 18-19.

[15] *See, e.g.*, Tr. 48.

that these Wind Facilities provide a superior hedge compared to other available alternatives.[16] Moreover, as noted above, APCo has access to the PJM market, particularly during the winter months when APCo experiences its peak, which provides a hedge against PJM peak prices occurring during the summer months.

Other Statutory Requirements, the Committee's Motion and Cost Allocation

Having found that it is neither reasonable nor prudent under Virginia law for APCo to acquire the Wind Facilities based on the record before us, we need not make findings related to the other statutory requirements attendant to this Application, including consideration of alternatives. Similarly, we do not reach the merits of the Committee's Motion, nor do we reach cost allocation issues raised by the participants.

Senate Bill 966

Finally, the Commission takes judicial notice of Senate Bill 966 ("SB 966"), which was passed by the 2018 Regular Session of the Virginia General Assembly and signed into law by the Governor.[17] SB 966 includes a legislative predetermination that the construction or purchase of power generated from solar or wind generating facilities up to certain quantities is "in the public interest," and the Commission is mandated to make such a finding in applicable cases.[18] SB 966 does not take effect until July 1, 2018, and whether SB 966 would affect the outcome of this Application was not considered herein. There are at least two issues that may be pertinent if raised in future cases in which SB 966 is applicable for the construction or purchase of wind

[16] *See, e.g.,* Tr. 243-244; Tr. 280.

[17] SB 966 was signed into law by the Governor on March 9, 2018, and is effective July 1, 2018. 2018 Va. Acts Ch. 296.

[18] *See* 2018 Va. Acts Ch. 296, Code §§ 56-585.1 A 6, 56-585.1:1 G, 56-585.1:4. *See also* Enactment Clause 14.

power such as proposed in this proceeding: first, whether SB 966's solar and wind mandate provisions require this Commission to approve wind or solar projects regardless of any finding as to need; and, second, whether the language in SB 966 restricting the benefit of the solar and wind mandate only to facilities that are "located in the Commonwealth [of Virginia]"[19] (thus denying the benefit of the solar and wind mandate to out-of-state facilities such as APCo proposes in this Application) represents a violation of the United States Constitution under the United States Supreme Court's "dormant Commerce Clause" jurisprudence.[20] Neither of these issues were litigated herein.

Accordingly, IT IS ORDERED THAT the Application is denied and this matter is dismissed.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to all persons on the official Service List in this matter. The Service List is available from the Clerk of the State Corporation Commission, c/o Document Control Center, 1300 East Main Street, First Floor, Tyler Building, Richmond, Virginia 23219. A copy also shall be sent to the Commission's Office of General Counsel and Divisions of Public Utility Regulation and Utility Accounting and Finance.

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[19] *See* 2018 Va. Acts Ch. 296, Code §§ 56-585.1 A 6, 56-585.1:1 G, 56-585.1:4.

[20] *See, e.g., Illinois Commerce Comm'n v. Federal Energy Regulatory Comm'n*, 721 F.3d 764, 776 (7th Cir. 2013) ("Michigan cannot, without violating the commerce clause of Article I of the Constitution, discriminate against out-of-state renewable energy.") (Opinion by Posner, J.,); *see also Wyoming v. Oklahoma*, 502 U.S. 437 (1992) (striking down Oklahoma law mandating that coal-fired generating plants use at least ten percent Oklahoma-mined coal). *Cf. Application of Virginia Electric and Power Company, For a certificate of public convenience and necessity to construct and operate an electric generation facility in Wise County, Virginia, and for approval of a rate adjustment clause under §§ 56-585.1, 56-580 D, and 56-46.1 of the Code of Virginia*, Case No. PUE-2007-00066, 2008 S.C.C. Ann. Rept. 385, 388, Final Order (Mar. 31, 2008) ("[T]he Virginia statute is factually distinct from the Oklahoma statute found unconstitutional in *Wyoming v. Oklahoma....*"); *Appalachian Voices, et al. v. State Corp. Comm'n*, 277 Va. 509, 519-520 (2009) (affirming SCC decision in PUE-2007-00066) ("Simply stated, the statute in question does not require – and the Commission did not order – that any amount of Virginia coal be used in the proposed coal-fired plant," and "even if the challenged provisions of [the Code] were found to violate the Commerce Clause, severance of the allegedly impermissible language would save the statute from invalidation.").