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)	

EMPIRE'S INITIAL POST-HEARING BRIEF

Public Version

Dean L. Cooper, MBE #36592 Diana C. Carter, MBE #50527 **BRYDON, SWEARENGEN & ENGLAND** P.C. P.O. Box 456

Jefferson City, MO 65012 (573) 635-7166

dcooper@brydonlaw.com

Sarah B. Knowlton, NH Bar#12891 Liberty Utilities 116 North Main Street Concord, NH, 03301 (603) 724-2123 Sarah.Knowlton@libertyutilities.com

ATTORNEYS FOR THE EMPIRE DISTRICT ELECTRIC COMPANY

TABLE OF CONTENTS

I. INTRODUCTION	2
II. COMMISSION AUTHORITY/ STANDARD TO BE APPLIED (Revised Issue	e 1)5
General Jurisdiction	
Specific Requests	
Standard to be Applied	
No Declaratory Judgment is Requested	
III. THE STIPULATION IS IN THE PUBLIC INTEREST	13
Key Terms in the Stipulation	13
Tax Equity	14
Stipulation Analysis	
IV. RESPONSE TO CHAIRMAN'S REQUESTS	19
V. OPPOSITION	21
Perceived Risk	21
Market Prices/Negative Prices	24
Impact of More Wind	26
Capacity	27
Rate Impacts	28
Savings in First Ten Years/Unknowns	
Asbury	31
VI. REVISED ISSUES 2-10	32
Issue 2 (Requests to be Granted)	32
Issue 4 (Additional Filings)	33
Issue 5 (Tax Equity Requirements)	34
Issues 3, 6, and 7 (Asbury)	34
Issue 8 (Tax Cuts)	35
Issue 9 (Wildlife)	36
Issue 10 (Affiliate Transactions)	
VII. CONCLUSION	39

COMES NOW The Empire District Electric Company ("Empire" or the "Company") and, as its Initial Post-Hearing Brief, respectfully states as follows to the Missouri Public Service Commission ("Commission"):

I. <u>INTRODUCTION</u>

This case arises out of Empire's Customer Savings Plan, an innovative proposal to use Production Tax Credits and tax equity financing to acquire wind generation at a significantly reduced cost, while simultaneously retiring a coal-fired power plant. Empire brought this proposal forward after conducting extensive resource planning analysis, referred to as the Generation Fleet Savings Analysis ("GFSA"), which investigated whether Empire's customers could achieve savings by acquiring up to 800 Megawatts ("MW") of wind generation using tax equity financing and retiring its Asbury coal-fired plant.

Based on the GFSA, Empire determined that its customers could save up to \$325 million in energy costs over the next 20 years and up to \$607 million over the next 30 years by acquiring wind generation and retiring Asbury. On average, under the Customer Savings Plan, an Empire residential customer would save \$9.33 per month, or nearly \$112 per year in energy costs for the 20 year period compared to maintaining the status quo for its generation fleet. The GFSA, which produced these savings estimates, was subject to extensive scrutiny by Charles River Associates, which tested the results against a range of market scenarios that stressed fuel prices, environmental policy, nodal basis risk, and higher than expected amounts of wind additions and coal retirements, which was requested by the Office of the Public Counsel ("OPC").

¹ Exh. 16, Swain Dir., pp. 5-6.

² Exh. 5, Macias Dir., p. 13.

³ See Exh. 6P, McMahon Dir., all; Exh. 7P, McMahon Sur., all.

After significant discovery and deliberations with the parties in this docket, a broad and diverse array of interests representing the Staff of the Commission, energy consumers (Missouri Energy Consumers Group), economic interests (Division of Energy), and environmental interests (Renew Missouri Advocates) (collectively, the "Signatories"), adopted a Non-Unanimous Stipulation and Agreement (the "Stipulation") which includes key elements of the Customer Savings Plan, along with other provisions to deliver a package of savings to Empire's customers. Based on analysis from Charles River Associates, the Stipulation will result in approximately \$169 million in savings for customers over the next twenty years.⁴ These savings are substantial, and should not be ignored, as OPC and the City of Joplin ("Joplin") suggest in opposing the Stipulation.

The Stipulation expresses the consensus position of the Signatories that Empire's plan to acquire up to 600 MW of wind generation with a tax equity partner is reasonable, while also recommending that the Commission adopt a host of provisions to provide both immediate and long term financial benefit to Empire's customers. Through the Stipulation, Empire would:

- proceed with the acquisition of up to 600 MW of wind generation "in or near its service territory" (the "Wind Projects") in order to avoid congestion and limit the risk of negative market pricing in the Southwest Power Pool Integrated Marketplace;
- finance the Wind Projects, in significant part, through a tax equity partnership, where the tax equity partner would pay for up to 60% of the cost of the Wind Projects, meaning that Empire will be able to buy wind at a substantial discount: approximately \$711/kW vs. \$1,587/kW (Exh. 8, McMahon Aff., p. 4);
- provide customers up to \$35 million in protection against market and production risk over a ten-year period;
- return to customers \$17.8 million in annual savings associated with the Tax Cuts and Jobs Act of 2017, commencing in October 2018;
- provide a rate moratorium until April 2019;
- provide non-residential customers with access to Renewable Energy Credits; and,
- continue to operate the Asbury coal-fired power plant, subject to further review and management discretion.

⁴ Exh. 8P, McMahon Aff., pp. 3-4.

As discussed in detail below, the Commission has the legal authority necessary to approve the Stipulation, including a finding as to the reasonableness of Empire's proposed acquisition of wind generation. In addition, this brief details why the Stipulation is in the public interest, including explaining the basis for the customer savings to be achieved, how the Stipulation meets the economic and environmental interests of key customer groups who seek to take advantage of environmental attributes associated with renewable generation, and creates benefits for the local Missouri economy. The Stipulation also is consistent with established guiding principles from the State Energy Plan, including the following:

Ensuring Affordability: A <u>focus on providing reliable energy at prices that are fair and reasonable for consumers and businesses</u> will support Missouri's continued economic success. It is essential that the state's energy system meet the health, welfare, and economic needs of its citizens with particular emphasis on vulnerable populations.

Diversifying and Promoting Security in Supply: Missouri must <u>identify</u> and <u>capitalize</u> on opportunities to maximize in-state clean energy resources and decrease dependence on <u>imported fossil fuel energy sources</u>.

Undertaking Regulatory Improvements: Modifications to our state's energy laws and regulations are necessary to expand opportunities, deliver enhanced benefits to Missourians, and guide Missouri into our energy future.

Comprehensive Energy Plan at 211 (Application, pp. 8-9) (emphasis added).

The Stipulation is the perfect embodiment of these principles. Acquiring new wind generation reduces the long-term cost of energy supply for the Company's customers, decreases Empire's dependence on fossil fuels that inherently are subject to price fluctuations, while capitalizing on in-state clean energy resources, all resulting in more affordable rates for the Company's customers.

II. COMMISSION AUTHORITY/STANDARD TO BE APPLIED (Revised Issue 1)

The Commission has the requisite authority to approve the Stipulation and Empire's specific requests in its Application.

a. General Jurisdiction

Under its general supervisory authority, the Commission has jurisdiction to approve the reasonableness of the framework proposed by the Signatories that Empire acquire wind generation with a tax equity partner. Fundamentally, the Commission authority in Section 386.040, RSMo.,⁵ provides that the Commission "shall be vested with and possessed of the powers and duties in this chapter specified, and also all powers necessary or proper to enable it to carry out fully and effectually all the purposes of [the Public Service Commission Law]." "Pursuant to granted authority, the Commission exercises general supervision of all electrical corporations furnishing or transmitting electricity in Missouri and all electrical plants owned, leased or operated by electrical corporations in Missouri." *State ex rel. Missouri Office of Pub. Counsel v. Public Serv. Comm'n*, 858 S.W.2d 806, 808 (Mo. App. W.D. 1993); citing RSMo. §393.140(1).

Pursuant to Section 386.250(1) and (7), the Commission's jurisdiction, supervision, powers and duties extend to "the manufacture, sale or distribution of . . . electricity for light, heat and power, within the state, and to persons or corporations owning, leasing, operating or controlling the same; . . . to . . . electric plants, and to persons or corporations owning, leasing, operating or controlling the same" and "[t]o such other and further extent, and to all such other and additional matters and things, and in such further respects as may herein appear, either expressly or impliedly."

⁵ All "Section" references are to the Revised Statutes of Missouri (RSMo.), unless otherwise identified.

The essence of the Commission's general supervisory authority is codified in Section 393.140(1) which states the Commission shall have "general supervision of all . . . electrical corporations," while subsection two of the statute authorizes the Commission to examine or investigate the operations of the utilities and "order such reasonable improvements as will promote the public interest . . ." Section 393.140(3) states, in part:

... the commission shall have power, of its own motion, to examine and investigate the plants and methods employed in manufacturing, delivering and supplying ... electricity ..., and shall have access, through its members or persons employed and authorized by it, to make such examinations and investigations to all parts of the manufacturing plants owned, used or operated for the manufacture, transmission or distribution of ... electricity by any such person or corporation

Based on its general supervisory authority, the Commission has the authority to find that Empire's proposal to acquire wind generation is in the public interest.

b. Specific Requests

The Commission has specific authority pursuant to which it can authorize particular elements of the Stipulation. For example, the Stipulation recommends that Empire be permitted to account for its investment in the proposed wind generation, establish a depreciation rate for the wind generation assets, and enter into certain affiliate transactions in order to effectuate the ownership and operation of the wind generation. The Commission has specific authority to grant each of these requests.

Section 393.140(8) provides that the Commission shall have the power "after hearing, to prescribe by order the accounts in which particular outlays and receipts shall be entered, charged or credited." The Commission previously held that "effective regulation requires commission control of accounting procedures." *In re Missouri-American Water Company*, Case No. WO-2002-273; 2004 Mo. PSC Lexis 1637, *25.

To this end, the legislature has granted the Commission broad authority over the accounting practices of regulated utilities. . . . Taken together, these statutory provisions authorize the Commission both to prescribe the basic organization of a utility's accounting records and to determine the accounting treatment of any particular transaction. These powers amount to comprehensive control over public utility accounting.

Id. at 25-27. The Commission then pointed to a holding of the Missouri Supreme Court regarding the Commission's authority over accounting procedures.

(T)he commission's express statutory power to determine and prescribe just and reasonable rates and to determine what rates will permit a fair return, includes the power to determine what items should be included in a utility's operating expense and what items should be excluded, and how excluded items, if any, should be handled and treated, in order that the commission may arrive at a reasoned determination of the issue of "just and reasonable" rates.

Id., citing State ex rel. Hotel Continental v. Burton, 334 S.W.2d 75, 79-80 (Mo. 1960).

Section 393.240.2 provides that the Commission "may, from time to time, ascertain and determine and by order fix the proper and adequate rates of depreciation of the several classes of property of such corporation, person or public utility." More specifically with regard to Empire's request for a depreciation rate for the new wind assets, the Commission may establish a depreciation rate for a new asset outside of a rate case and without the benefit for a full depreciation study. *See In the Matter of Laclede Gas Company's Application*, File No. GO-2012-0363, 2012 Mo. PSC Lexis 978.

Also, the Commission has the authority to grant the waiver/variance from its affiliate transactions rules, as requested by Empire. Commission Rule 4 CSR 240-20.015(10) provides that variances from the standards in the affiliate transaction rule may be granted by the Commission. *See In the Matter of the Application of The Empire District Electric Company*, Case No. EE-2002-120, 2002 Mo. PSC Lexis 50 (rule variance regarding transfer of an asset to an unregulated subsidiary affiliated company which had yet to be formed); *see also Midwest Energy Consumers*

Group v. Great Plains Energy Incorporated, 2017 Mo. PSC Lexis 85, *33 (February 22, 2017) (the "for good cause" showing required for a variance is lower than the public detriment standard).

c. Standard to be Applied

Given that neither Section 393.140(8), nor Section 393.240.2, contain any express standard for the exercise of this authority, the exercise of this authority by the Commission is discretionary in nature. *In the Matter of the Application of The Empire District Electric Company for the Issuance of an Accounting Authority Order*, File EU-2011-0387, 2011 Mo. PSC Lexis 1320 (November 30, 2011), citing *Missouri Gas Energy v. Public Service Comm'n*, 978 S.W.2d 434, 437 (Mo. App. 1998); *State ex rel. Office of Public Counsel v. Public Service Comm'n*, 858 S.W.2d 806, 811 (Mo. App. 1993).

In light of the discretionary nature of this authority, as well as the provision of Section 393.140(2) which authorizes the Commission to order reasonable improvements "as will promote the public interest," application of a "public interest" standard would be appropriate in this case. *See also State ex rel. Intercon Gas, Inc. v. Public Service Com.*, 848 S.W.2d 593 (Mo. App. W.D. 1993) (orders of the Commission are made on the basis of the public interest). In the context of a merger proceeding, the Commission held that it "is charged with the legal authority to determine what comprises the public interest" and that determining the public interest is a balancing process that involves consideration of the "total public interest." *In the Matter of the Joint Application of Great Plains Energy*, Case No. EM-2007-0374, 2008 Mo. PSC Lexis 820, *23. Any individual interest, including interests held by the ratepaying public or the investing public, are subservient to the rights of the public in general. *Id.* The Commission further held:

The public interest is a matter of policy to be determined by the Commission. It is within the discretion of the Public Service Commission to determine when the evidence indicates the public interest would be served. Determining what is in the interest of the public is a balancing process. In making such a determination, the

total interests of the public served must be assessed. . . . The "public interest" necessarily must include the interests of both the ratepaying public and the investing public; however, as noted, the rights of individual groups are subservient to the rights of the public in general.

Id. at 22-23.6

The Commission applied the public interest standard when it approved a Regulatory Plan for Kansas City Power & Light Company in regard to Iatan II. *In the Matter of a Proposed Regulatory Plan of Kansas City Power & Light Company*, Case No. 2005-0329 (July 28, 2005).⁷ In approving the plan, the Commission stated in part as follows:

The Commission finds and concludes that the Proposed Regulatory Plan is in the public interest and is firmly supported by the competent and substantial evidence on the whole record, and that the Stipulation embodied in that Proposed Regulatory Plan is lawful in that it promotes "safe and adequate" service and facilities, in a "just and reasonable" manner.

Id. at p. 31.

Further, while this matter is not an application for a certificate of convenience and necessity (CCN), it does have some elements that are similar, and thus the Commission may look to CCN matters for a standard. The grant of a CCN, among other things, requires that the "service must promote the public interest." *In the matter of the application of Tartan Energy Company, L.C.*, Case No. GA-94-127, 1994 Mo. PSC 26 (September 16, 1994).

⁶ See also In the Matter of the Application of Union Electric Company, 2016 Mo. PSC Lexis 548, File No. EA-2016-0208 (public interest is a matter of policy to be determined by the Commission; it is within the discretion of the Commission to determine when the evidence indicates the public interest would be served; determining what is in the interest of the public is a balancing process; the public interest determination is in essence a conclusory finding as there is no specific definition of what constitutes the public interest).

⁷ Case No. EO-2005-0329 was later the subject of a Court of Appeals case where the court ruled that the Commission lacked jurisdiction because the case was initiated with the filing of a stipulation and agreement, rather than an application. *State ex rel. Sierra Club v. Mo. PSC*, 2007 Mo. App. Lexis 333 (Mo. App. 2007). Subsequently, the Missouri Supreme Court granted an application for transfer thereby setting aside the decision of the Court of Appeals. *State ex rel. Sierra Club v. Mo. PSC*, 2007 Mo. Lexis 121 (Mo. 2007). The matter was resolved by Collaborative Agreement. The appeal was thereafter dismissed by request of the parties.

The standard for a grant of the waiver/variance in regard to the affiliate transaction rules is "good cause." Commission Rule 4 CSR 240-20.015(10)(A)1 indicates that variance applications will be made in accordance with Commission Rule 4 CSR 240-2.060. Commission Rule 4 CSR 240-2.060(4)(B) states in relevant part that applications for variances or waivers must include "justification setting out good cause for granting the variance or waiver."

d. No Declaratory Judgment is Requested

The Commission requested that the parties address whether the reasonable determinations requested in this case (for example, that the decision to acquire up to 600 MWs of Wind Projects under the terms of the Stipulation is reasonable) or any other request would constitute an inappropriate or possibly illegal advisory opinion. (Tr. 905-907)

The following paragraph describes the Commission's limitations in regard to declaratory judgments:

Missouri law is clear; the power to issue a declaratory judgment is a judicial remedy that is not available to administrative agencies. State Tax Comm'n v. Admin. Hearing Comm'n, 641 S.W. 2d 69 (Mo. banc 1982). More specifically, this Commission has "no power to declare or enforce any principle of law or equity." Lightfoot et al. v. City of Springfield, 361 Mo. 659, 669, 236 S.W. 2d 348, 352 (Mo 1951). MoGas correctly points out that although this Commission may not render declaratory judgments, it has subject matter jurisdiction to apply existing law to resolve the issues before it. Mikel v. Pott Indus./St. Louis Ship, 896 S.W. 2d 624 (Mo. banc 1995). More specifically, "executive agencies may exercise 'quasi judicial powers' that are 'incidental and necessary to the proper discharge' of their administrative functions, even though by doing so they at times determine questions of a 'purely legal nature.'" State Tax Comm'n, at 75, quoting Liechty v. Kansas City Bridge Co., 162 S.W. 2d 275, 279 (Mo. 1942). However, "[a]gency adjudicative power extends only to the ascertainment of facts and the application of existing law thereto in order to resolve issues within the given area of agency expertise." State Tax Comm'n, at 75.

In the Matter of MoGas Pipeline, LLC's Application and Complaint, Case No. GC-2011-0138, 2011 Mo. PSC Lexis 110 (January 26, 2011) (citations added).

Nothing requested in this case constitutes a "declaratory judgment" as described above. The Commission is being asked to issue certain orders (accounting, depreciation, waiver/variance) within its jurisdiction – in other words, to apply existing law to resolve the issues before it. The Commission is not being asked to declare or enforce any principle of law or equity in a manner that would constitute a prohibited declaratory judgment or advisory opinion.

In regard to the proposed findings of reasonableness, the Commission must support any decision it makes in regard to the issue before it with separately stated findings of fact in regard to the decision. Section 536.090, RSMo. Findings of fact resolve disputes of material fact – the facts that guide the Commission's conclusions of law. *State ex rel. Noranda Aluminum, Inc. v. Pub. Serv. Comm'n*, 24 S.W.3d 243, 246 (Mo. App. W.D. 2000). Thus, the Commission's finding that the proposed decision to acquire up to 600 MWs of Wind Projects is reasonable under the terms of this Stipulation is a finding that can be made based on record evidence. This finding can in turn support a grant of Empire's request for authority "to record its capital investment to acquire the Wind Projects as utility plant in service subject to audit in Empire's next general rate case."

The Commission has previously walked this line. An example of this may be found in the Report and Order in *In the Matter of the Application of Missouri-American Water Company for a Certificate of Convenience and Necessity*, Cases Nos. WA-97-46 and WF-97-241, 1997 Mo. PSC Lexis 179 (October 9, 1997). In the *Missouri-American Water Company* case, the Commission was asked to "determine the prudence" of a project within the context of a certificate of convenience and necessity application. The Commission stated its reasons why it would not determine prudence at that point, leaving such decisions for a future rate case. However, in doing so, it also found as follows in granting the requested CCN:

... the Commission will make no finding regarding the prudence of the actual costs incurred and the management of construction of the proposed project. <u>However</u>,

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.

Id. (emphasis added).

This case is no different than *Missouri-American Water Company*. Here, the Signatories recommend that the Commission make findings as to the reasonableness of Empire's decision to acquire up to 600 MWs of Wind Projects and its decision to comply with the Environmental Protection Agency's coal combustion residuals ("CCR") rules and effluent limitation guidelines for Asbury. The Signatories expressly recognize and affirmatively state that the Stipulation does not preclude the Commission and the Signatories from reviewing the reasonableness of the costs of the Wind Projects and CCR rules compliance in a general rate proceeding following the date when the Wind Projects are fully operational and used for service and any CCR rules compliance costs have been incurred.⁸ Additionally, the Stipulation makes provision for "in-service" criteria to guide future decisions as to whether the wind projects are "fully operational and used for service" (Section 393.135) before considered for any rate recovery.⁹ Thus, the prudence of Empire's execution of the Stipulation remains squarely within the Commission's jurisdiction in any future review.

Nothing requested would commit the Commission, a non-signatory party, or even a Signatory Party, to a preapproval of rates. The Commission retains the right to monitor the prudence of Empire's actions in carrying out the investments called for by the Stipulation Plan, and to challenge any conduct believed to be imprudent. Therefore, the requests in this case do not violate the prohibition against declaratory judgments, nor the Commission's general reluctance to provide a "prudence" determination prior to a general rate case.

⁸ Stip., p. 5, para. 14.e, 19.c.

⁹ Stip., para. 17.a.

III. THE STIPULATION IS IN THE PUBLIC INTEREST

a. Key Terms in the Stipulation

The Stipulation Plan calls for the construction of "up to 600 MW of Wind Projects" that "are located within the Southwest Power Pool footprint with energy and capacity deliverable to the EDE service territory;" and **

** (Stip., p. 4, para. 14.a)

**

^{**} Exh. 4C, Krygier Aff., p. 4.

The Stipulation contemplates the following benefits and protections for Empire's customers:

- Low cost renewable generation assets, that unlike other sources of generation, have no cost of fuel, and, under this plan, have a substantial portion of their cost paid for by tax equity partners;
- 2) A Market Price Protection provision that mitigates downside risk up to \$35 million and ensures that customers get 100% of all upside benefits; (Stip, para. 17.c)
- 3) A <u>rate case moratorium</u> that will insure that Empire's base rates will not have changed for a minimum of three and one-half years; (Stip., para. 17.d) and,
- 4) A known date for rate reductions related to the Federal Tax Cuts and Jobs Act that eliminates any questions about legislation, process, or legal issues and provides \$17.8 million of immediate benefits to customers. (Stip., para. 24-26)

b. Tax Equity

A significant advantage for the Wind Projects comes from the use of a tax equity financing structure. The Stipulation maintains this advantage by contemplating the use of tax equity financing within specified parameters. ¹⁰

A tax equity structure is a method of financing using federal Production Tax Credits ("PTCs") and accelerated tax depreciation using the five-year Modified Accelerated Cost Recovery System ("MACRS") schedule available to renewable energy projects. ¹¹ Qualifying wind projects generate PTCs for the first ten years of commercial operations in the amount of \$24 per MW hour. ¹² *Id.* at p. 5. The PTCs represent a dollar for dollar reduction of tax liability. *Id.* Thus,

¹¹ Exh. 11, Mooney Dir., pp. 5, 7.

¹⁰ Stip., para. 18.

¹² In order to gain the full value of the tax incentives, the wind generation must have completed construction by the end of 2020. Exh. 11, Mooney Dir., pp. 5-6.

for example, a 200 MW wind project that produced 900,000 MW-hours in a given year would generate PTCs that would be available for an owner to reduce tax liability by \$21.6 million (900,000 MW hours multiplied by \$24 per MW hour). *Id*.

Large, tax-paying corporations (typically large banks and insurance companies) become equity partners in a wind project ("Tax Equity Partners"). ¹³ Specific to this case, Empire has received letters from JP Morgan, Wells Fargo, and MUFG Union Bank indicating these entities' strong interest in participating as a Tax Equity Partner in Empire's projects. ¹⁴

In this case, a Tax Equity Partner would provide a substantial amount of the capital for Empire to acquire the wind farms and, in exchange, would receive the tax incentives (PTCs and MACRS) generated from the wind project during the first 10 years of the project's life. In addition, the Tax Equity Partner receives cash distributions in the latter years of the project (typically in years 6 to 10) as part of its return on and recovery of the capital it invested. *Id*.

This approach enables Empire to reduce the capital investment it needs to construct the wind projects by an amount that reflects the ability of a Tax Equity Partner to utilize the tax savings provided by both PTCs and MARCS in the near term. ¹⁶ This reduced capital investment, in effect, allows Empire's customers to realize the benefits of the full 10 years of PTCs and MACRS from day 1 as a result of the reduced rate base impact. *Id*.

In order to utilize the tax equity financing, the Wind Projects must be owned in a different structure than would normally be the case with Empire's generation assets.¹⁷ To create the tax equity structure, Empire and a tax equity partner will form a holding company (the "Wind

¹³ Exh. 11, Mooney Dir., p. 8.

¹⁴ Exh. 12P, Mooney Sur., p. 5.

¹⁵ Exh. 11, Mooney Dir., p. 8.

¹⁶ Exh. 11, Mooney Dir., p. 8.

¹⁷ Stip., pp. 3-4, para. 13; Exh. 11.

Holdco"), which will be a direct subsidiary of Empire. 18 Empire, via the Wind Holdco, will acquire a wind project company ("Wind Project Co.") that owns the Wind Project. *Id.* It is this structure that necessitates the accounting authority sought by Empire pursuant to Section 393.140(8).

However, this situation does not continue indefinitely. On or before the end of the first ten years when the Tax Equity Partner has received its return on and recovery of its investment, the ownership structure "flips" and the majority of the ongoing financial benefits of the wind project transfers over to Empire, with the Tax Equity Partner retaining a nominal residual stake in the partnership (typically 5%). ¹⁹ At this point, Empire has the right to purchase the tax equity partner's ownership interest in the Wind Holdco, at which point Empire would wholly own the Wind Project Co. (*Id.*) Using this partnership will result in between \$4 and \$7 per MW hour savings for Empire's customers for any generation that is acquired.²⁰ In order of magnitude as to the Stipulation Plan. this means that Empire will be able to buy wind at a *substantial* discount: approximately \$711/ kW vs. \$1,587/ kW.²¹

Empire's ultimate parent, Algonquin Power & Utilities Corp., has significant experience using this structure for wind and solar projects. ²² These experiences have provided Algonquin with existing commercial relationships with potential tax equity partners.²³ Empire's electric distribution utility affiliate in California (Liberty CalPeco) has proven that the tax equity partnership structure can provide real savings to customers, in that case \$5 per MWh compared to existing supply sources.²⁴ The Company wants to do the same here for customers in Missouri.

¹⁸ *Id.*; Mooney Dir., pp. 8-19.

¹⁹ Exh. 11, Mooney Dir., p. 9.

²⁰ Exh. 11, Mooney Dir., p. 8.

²¹ Exh. 8, McMahon Aff., p. 4.

²² Exh. 11, Mooney Dir., p. 17.

²³ *Id*. at p. 18.

²⁴ Exh. 11, Mooney Dir., p. 17.

c. Stipulation Analysis

The analysis of the Stipulation differed from the GFSA in a couple of obvious ways—adding up to 600 MWs of wind, and, retaining Asbury, with the installation of environmental controls needed for federal compliance.²⁵

It also differed from the original GFSA in that it considered the 600 MW wind portfolio based on short-listed bids received in response to Empire's Request for Proposal ("RFP").²⁶ The projects comprising the 600 MW that were modeled are located on three different sites in or near Empire's service territory. *Id.* The fuel and market prices in the Stipulation analysis were updated to ABB's latest market outlook (ABB 2017 fall market update).²⁷

Empire previously issued a Notice of Intent to potential bidders in October 2017, and thereafter issued a competitive RFP to identify potential wind projects to be constructed and sold to Empire through a build, own, and transfer transaction.²⁸ The RFP provided that this capacity could be satisfied through one project or multiple projects, with each project having a minimum nameplate capacity of 100 MW, where each project must: (a) achieve commercial operation in time to qualify for the maximum amount of the PTC's; and, (b) each Project to be located within the SPP footprint with energy and capacity deliverable to the Empire service territory.²⁹

Empire received a significant number of bids, and after evaluating them, determined that it could acquire up to the 600 MWs of wind generation called for by the Stipulation in or near its

²⁵ Exh. 8, McMahon Aff., p. 5.

²⁶ Exh. 8, McMahon Aff., pp. 3-4.

²⁷ Exh. 8, McMahon Aff., pp. 5, 8.

²⁸ Exh. 7P, McMahon Sur., pp. 6-7; Exh. 20, Wilson Sur., all.

²⁹ Exh. 19P, Wilson Dir., pp. 3-4.

service territory at prices that beat the GFSA assumptions.³⁰ That means that the actual wind projects that Empire could buy cost less than what the Company assumed in its original analysis.³¹

These actual projects (for which negotiations remain underway) were also used in the modeling of the Stipulation Plan as it appears in Mr. McMahon's Affidavit in support of the Stipulation. Exh. 8, McMahon Aff., p. 4 ("The 600 MW wind portfolio analyzed above is based on short-listed bids received to Empire's [RFP].").

Empire's analysis of the Stipulation indicates that a plan with up to 600 MW of wind will generate the following customer net present value savings relative to the 2016 IRP Preferred Plan:

\$350 \$300 \$250 \$200 \$169 \$150 \$100 \$50

20 Year Savings

Figure 1: Stipulation Customer Savings Relative to the 2016 IRP Preferred Plan (\$ millions)

Exh. 8, McMahon Aff., p. 3-4.

\$0

Thus, the Stipulation offers significant savings and risk reduction to Empire customers over the 2016 IRP Preferred Plan.³² It includes the addition of 600 MW of low cost wind to the portfolio that is able to take advantage of the federal production tax credit and tax equity financing. *Id*. Empire customers will benefit from lower rates and will be protected against unexpected high market prices. *Id*. The addition of wind also enables Empire to transform its portfolio toward a

30 Year Savings

³⁰ Exh. 20, Wilson Sur., pp. 4, 8-9; Exh. 7P, McMahon Sur., p. 10.

³¹ Exh. 7P, McMahon Sur., p. 10.

³² Exh. 8, McMahon Aff., pp. 8-9.

more sustainable, clean energy future while simultaneously focusing on the planning priorities of cost and risk. *Id*.

For these reasons, the plan called for by the Stipulation is very much in the public interest and should be approved by the Commission.

IV. RESPONSE TO CHAIRMAN'S REQUESTS

At the evidentiary hearing, Chairman Hall asked the parties to address in their briefs the following concept – a report and order that contains:

- 1) a factual finding that acquisition and operation of the additional 600 megawatts of wind energy is reasonable based upon the record in this case;
- 2) a factual finding that the financial components of the plan are reasonable based upon the record in this case;
- 3) a legal determination that it would be appropriate to book those expenses as plant in service with a 3.33 percent depreciation rate; and,
- 4) a legal determination that a variance of the affiliate transaction rule is appropriate.

Tr. 905-907, Chairman Hall.

The items identified in this concept would be the significant items from the Company's perspective, coupled with the provisions regarding Asbury found in paragraph 19 of the Stipulation, to allow Empire to move forward with the wind projects as identified in the Stipulation - the construction of up to 600 MWs of wind generation in or near the Empire service territory. The concept's silence in regard to Asbury and the Company's potential investment related to CCR issues would provide a significant challenge for the Company. As addressed in the Commission

Authority/Standard section above, Empire believes that the combination of legal findings and findings of fact identified in the concept would be lawful and reasonable.

Chairman Hall further expressed his interest in briefing as to whether or not the Commission can, or should, order Empire to abide by any of the provisions in the Stipulation, if the Commission does not adopt or approve the Stipulation in its entirety. As noted in paragraph 9 of the Stipulation, a stipulation, even if approved by the Commission, does not constitute a contract with the Commission. Nothing in the Stipulation is intended to impinge or restrict in any manner the exercise by the Commission of any statutory right. Paragraph 2 of the Stipulation does, however, provide as follows:

This Stipulation has resulted from extensive negotiations among the parties, and the terms herein are interdependent and non-severable. If the Commission does not approve this Stipulation unconditionally and without modification, or if the Commission approves the Stipulation with modifications or conditions to which a Signatory objects, then this Stipulation shall be void and none of the Signatories shall be bound by any of the agreements or provisions hereof.

The Commission may, however, as it has often done in the past, order conditions where it believes they are necessary or helpful in reaching a decision that a proposed activity is either in the public interest or not detrimental to the public interest. The fundamental questions in that situation are whether such conditions are reasonable and supported by the findings of fact.

In regard to whether or not the Commission "should" order Empire to abide by any of the provisions in the Stipulation if the Commission does not adopt or approve the entire Stipulation, it would be Empire's strong preference that the Commission adopt the Stipulation's provisions in total. In other words, the Commission *should*, based on the record evidence and the applicable law, adopt all of the Stipulation's provisions as a complete resolution of this proceeding and the issues surrounding the Tax Cuts and Jobs Act of 2017. The provisions of the Stipulation were carefully

thought out, are interrelated from various Signatories' viewpoints, and bring significant benefits to Empire's customers.

V. OPPOSITION

The opposition of the OPC and Joplin have centered on the following concerns: (a) perceived risk related to market prices/negative prices and production of the wind farms (or how often the wind blows); (b) potential rate impacts; (c) savings in the first ten years after construction; (d) reluctance to close Asbury; and, (e) reliability concerns.

The last item on the list - reliability - appears to no longer be an issue, as OPC witness Mantle agreed at the hearing that she no longer has concerns about reliability. (Tr. 780, 866-867, Mantle). Empire will address the remaining items in the following pages.

a. Perceived Risk

OPC and Joplin have described concerns about risks and unknowns associated with the project. Their preferred alternative, it appears, is for Empire to do nothing in the face of the available, low cost wind, even if that means incurring higher costs for customers. However, what these parties do not explain is that maintaining the current course without adjustment has greater risk. Empire's testimony explains that under the status quo, customers are exposed to more risk in the market over the long run than under the Customer Savings Plan or the Stipulation Plan because customers will be more exposed given the cost of buying fuel for traditional generation plants.

Wind generation adds a low-cost energy source. The vast majority of a wind project's costs are incurred during construction and are reasonably foreseeable.³³ And in the case of wind, because of federal tax policy, someone else will pay for a substantial portion of the cost to build the wind

³³ Exh. 7P, McMahon Sur., p. 5.

project. Fossil plants, on the other hand, tend to have significant fuel costs that are a major expense through the plant's life, and fossil fuel prices may shift significantly over time.³⁴

The analysis performed in this case indicates that the Customer Savings Plan, as well as the Stipulation Plan, comes with less risk than the status quo (i.e., the preferred plan under the 2016 IRP). Charles River Associates compared the 2016 preferred plan to the Customer Savings Plan under the Base Market price, Low Market price, and High Market price scenarios, all using ABB price forecasts, which are forecasts this Commission has relied upon for years.

In the below table, the figures on the left are from the 2016 preferred plan (Plan 1); and, the figures on the right are from the Customer Savings Plan (Plan 2):



Exh. 7P, McMahon Sur., p. 6.

The Customer Savings Plan actually reduces risk for customers, narrowing the range of probable outcomes, as compared with the current IRP Preferred Plan.³⁵ The high market case illustrates the benefit of a zero-fuel resource in the portfolio. Plan 2 is significantly less expensive

³⁴ Exh. 7P, McMahon Sur., p. 5.

³⁵ Exh. 7P, McMahon Sur., p. 5.

than Plan 1. *Id*. On the other hand, even where market prices fall below expected levels due to flatter natural gas costs than expected, a concern raised by some, Empire customers are hedged against this risk by cost reduction in other parts of the portfolio. *Id*.

Empire re-ran the same analysis for the Stipulation Plan (using 600 MW and leaving Asbury on) to determine how portfolio risk would change as a result of adding up to 600 MW of wind to the portfolio, relative to the 2016 IRP Preferred Plan.³⁶ The below figure shows the 20 year present value revenue requirement for the Stipulation and the 2016 IRP Preferred Plan under three market cases: Base, High Market, and Low Market. *Id.* The Base scenario includes Empire's base case forecast assumptions, updated with the latest forward price curves for fuel and electricity prices from ABB.³⁷ The High Market and Low Market cases use ABB results that include high fuel and electricity prices and low fuel and electricity prices, respectively. *Id.*

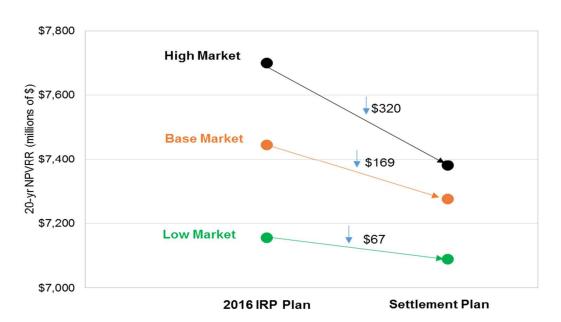


Figure 2: 20 Year Present Value Revenue Requirement Under Base, High, and Low Market

Exh. 8P, McMahon Aff., p. 5.

³⁶ Exh. 8P, McMahon Aff., pp. 4-5.

³⁷ ABB 2017 fall market update; Exh. 8P, McMahon Aff., pp. 4-5.

This shows that the 20-year savings from the Stipulation are lower in all cases relative to the 2016 IRP. *Id.* Moreover, the High Market and Low Market cases in the Stipulation form a tighter band around the base case than in the 2016 IRP, implying a portfolio that is at lower risk to market forces, therefore indicating a significant reduction of financial risk for Empire customers. *Id.* at pp. 4, 5.

Both the Customer Savings Plan and the Stipulation Plan are significantly less expensive than the status quo. On the other hand, even where market prices fall below expected levels due to flatter natural gas costs than expected, a concern raised by some, Empire customers are hedged against this risk by cost reduction in other parts of the portfolio.

This makes sense because, as stated above, almost all of the costs of wind generation are up front – to build the projects.³⁸ Once built, there are no on-going fuel costs like with coal or gas. *Id.* As both the above Customer Savings Plan and Stipulation Plan analysis illustrates, the <u>addition</u> of wind generation actually reduces risk for customers, narrowing the range of probable outcomes as compared with the current Preferred Plan. *Id.*

It is for this reason that it can be said that the Stipulation Plan does not create a greater risk for Empire's customers – the greater risk for Empire's customers comes from maintaining the status quo.³⁹

b. Market Prices/Negative Prices

Another criticism was that the GFSA failed to adequately consider the possibility of negative prices in the market. Contrary to this criticism, Empire has considered the possibility of negative pricing events, including the risk of more frequent and extreme events.

³⁸ Exh. 7P, McMahon Sur., p. 5.

³⁹ Exh. 7P, McMahon Sur., p. 5.

First, it is important to recognize that this phenomenon is highly dependent on which market in SPP is being examined and which node or sub-region within SPP is being studied.⁴⁰ Two-settlement power markets like SPP have both day-ahead and real time markets, and the pricing behavior in these two markets can be significantly different. *Id*.

The day-ahead market financially binds resources to provide a certain amount of energy the next day at a settled price. *Id.* at 32-33. Empire testified that it will optimize their participation of wind resources in the day-ahead market based on wind forecast predictions for the next day. *Id.* at 33. During real time, however, market conditions can differ from the day-ahead forecast as a result of load changes, plant outages, and weather conditions that impact wind output. *Id.* Because of this, real time prices are generally more volatile. *Id.* In fact, negative prices have been much more frequent in the real time market than in the day-ahead settlement. *Id.*; Tr. 289, McMahon. Therefore, the impacts to a resource that is likely to sell most of its energy in the day-ahead will be mitigated. *Id.* at 34. This includes Empire, as the majority of its sales and revenues are associated with day-ahead prices. Tr. 413-414, Mertens.

Empire did, however, use price forecasts that incorporate negative pricing.⁴¹ Empire's price forecast uses location-specific historical data from the day-ahead market and develops an hourly discount that encompasses all of the observed historical data.⁴² Since it uses an averaging approach, the hours will not capture extremes in either direction, but they will effectively account for all of the prices present in the broad range of historical data without dismissing or disregarding any negative pricing. *Id.* In addition, Empire also assessed a high basis risk scenario in the

⁴⁰ Exh. 7P, McMahon Sur., p. 32.

⁴¹ Tr. 289-290, McMahon.

⁴² Exh. 7P, McMahon Sur., p. 35.

stochastic analysis. In that case, the average price discount was twice the historical average, effectively developing a proxy for a higher frequency of negative prices. *Id*.

Lastly, Empire's plan has been carefully designed to minimize the risk of negative pricing. Negative pricing is more likely to occur in regions with high levels of transmission congestion, where there is more wind generation than load.⁴³ This is why negative prices have been more frequent around the Elk River node than in areas closer to Empire's load. *Id.* As discussed earlier, the RFP responses resulted in a short-list of wind projects that are all close to Empire's load, reducing the risk of negative pricing. *Id.* Thus, the risk of negative prices impacting the economic performance of these wind projects is much lower than it otherwise might be. *Id.* at 35.

c. Impact of More Wind

A subset of this concern about market prices is the idea that somehow the construction of more wind generation in SPP, combined with the closing of some amount of coal generation, will greatly impact the future prices. However, the Company had extensive modeling of these scenarios performed, including model runs that OPC requested.⁴⁴ That modeling showed that this extreme scenario will not greatly undermine the significant savings expected from the projects.

The case run for OPC included a view on wind additions that reflected the latest ABB reference case from the Fall of 2017, plus a probability weighting of the SPP wind queue to reflect the likelihood that some of the projects would be built.⁴⁵ This probability weighted modeling resulted in an additional 3.8 GW of wind added to the forecast from 2018 to 2020, for a total increase of 8.2 GW. *Id.* For context, this would represent an approximate 50% increase in the total wind capacity in SPP. *Id.* It also included coal retirements based on updated estimates from ABB

⁴³ Exh. 7P, McMahon Sur., p. 32.

⁴⁴ Exh. 7P, McMahon Sur., pp. 23-25.

⁴⁵ Exh. 7P, McMahon Sur., p. 25.

to reflect what was known and expected as of September 15, 2017, when ABB's updated forecast was developed. *Id*.

Even under these scenarios, significant savings were experienced by Empire customers. The additional wind additions and coal retirements led to an average market price reduction in SPP of 5-7%. *Id.* at 26. 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. *Id.*

d. Capacity

A related criticism is the view that with the addition of the wind generation, Empire will be long on capacity – that is, that its owned capacity will exceed the needs of its customers.

First, just because Empire has capacity, that does not mean the current capacity contains the most advantageous mix for Empire's customers. By taking advantage of highly attractive wind prices today, Empire can start to transform its portfolio to a better mix for the future. The Company will shift from a heavily fossil portfolio with emission, fuel, and capital cost risk to a portfolio with strong environmental attributes and much lower fuel and ongoing capital costs. That shift will position the Company strategically well today and into the future with a low cost, low risk, and sustainable source of energy. *Id.* Again, based on the modeling, this can be done while providing savings to its customers.

Second, it is known that two of Empire's existing PPAs, for a total of 255 MWs, will go away after the 600 MW of wind comes online in December of 2020 - expiration of Elk River wind farm in 2025 (150 MWs) and Meridian Way wind farm in 2028 (105 MWs).⁴⁷ These expiring contracts represent all of Empire's current wind capacity and more than 40% of the new capacity that will be added under the Stipulation. Additionally, while the "status quo" called for Asbury to

⁴⁶ Exh. 7P, McMahon Sur., p. 4.

⁴⁷ Tr. 374, Mertens; Exh. 6C, McMahon Dir., Dir.Att., p. 8 of 44.

potentially be in service until 2035, its future remains very much in doubt given that it gets dispatched by SPP less often today than it used to.⁴⁸

This rebalancing of the portfolio is not a knee-jerk reaction to a "one-time sale" or an attempt to buy low and sell high.⁴⁹ Rather, it is an educated decision that reflects the fundamental change that Empire is observing in the energy markets, the federal tax credits and the unique opportunity this utility has to own low cost wind in the Southwest Power Pool. *Id*.

e. Rate Impacts

There has been concern raised about "rate impacts" of the Stipulation Plan. As an initial matter, it must be remembered that this question is being posed within the context of a Stipulation Plan that is modeled to deliver \$169 million dollars in savings to Empire's customers as opposed to the status quo over a 20 year period, under the most likely scenario (Base Market); and, \$320 million and \$67 million in the less likely scenarios of High Market and Low Market, respectively. Thus, "rate impacts" are overwhelmingly favorable for the customers under the Stipulation Plan.

This being said, there is a short term 11.75% rate increase projected in the first rate case after Empire acquires the wind farms that should be viewed in the context of what is projected to happen in the absence of the Stipulation Plan.⁵¹ The figure represents a comparison to today's rates only, and does not consider the portion of the increase that would be predicted to take place in that time frame without the Stipulation Plan, or, in other words, utilizing the status quo. MECG witness Meyer performed this comparison and showed the annual revenue requirements for each year under the status quo (Current IRP) next to the revenue requirements under the Stipulation

⁴⁸ Exh. 7P, McMahon Sur., pp. 16-17.

⁴⁹ Exh. 7P, McMahon Sur., p. 4.

⁵⁰ Exh. 8P, McMahon Aff., p. 5.

⁵¹ Exh. 351, Meyer Aff., p. 7.

Plan (600 MW Wind/Asbury).⁵² This comparison clearly shows that rates would NOT be approximately 12% lower in the absence of the Stipulation Plan.⁵³ The rate increase in the absence of the Stipulation Plan is projected to be 8.42%.⁵⁴ The difference associated with the Stipulation Plan is approximately 3.33%.⁵⁵

Moreover, this situation turns around very quickly. By 2024, there is no projected difference in rates when comparing the status quo and the Stipulation Plan and by 2030, the revenue requirement from the Stipulation Plan is \$57 million less than under the status quo. *Id*.

f. Savings in First Ten Years/Unknowns

One of the issues expressed by parties in rebuttal testimony was concern about the savings during the first ten years after the wind generation was placed in service. This issue was addressed in a couple of ways by the Stipulation.

First, quite obviously, the amount of wind to be constructed was reduced from 800 MWs to 600 MWs. This has the impact of lowering the initial capital cost, while maintaining a similar net revenue requirement during the early years.⁵⁶

Second, the Signatories developed a Market Price Protection provision. This mechanism protects customers against potential risks associated with making sales of the output of the Wind Projects into the Southwest Power Pool Integrated Marketplace ("SPP IM") during the first ten years of operation.⁵⁷ Before going further, it is important to provide a reminder that the Stipulation Plan is projected to bring benefits to customers under the low, mid and high price scenarios. However, to address the possibility of less likely outcomes associated with the projected revenues,

⁵² Exh. 351, Meyer Aff., p. 7.

⁵³ *Id.*; Tr. 693-694, Meyer.

⁵⁴ Tr. 522-523, Krygier; Tr. 575-576, Holmes.

⁵⁵ *Id*.; Exh. 216.

⁵⁶ Exh. 104, Staff Aff. p. 3.

⁵⁷ Exh. 1, Holmes Aff., p. 3.

Empire and the Signatories created this mechanism to provide a buffer against this risk, while still providing the customers with an opportunity to experience the projected benefits.⁵⁸

As set forth in the flow chart included in Appendix A to the Stipulation, the market price mechanism goes into effect on the first day of the month after a Wind Project is first placed into rates and remains in effect for 10 years following the effective date of rates resulting from the first general rate case in which all Wind Projects are included in rates.⁵⁹ Described at a high level, the market price mechanism requires that each year during that period, Empire compare the amount of revenue generated from sales of energy from each Wind Project into the SPP IM to the revenue requirement associated with the Wind Projects (and to the value of replacing the energy from the Elk River and Meridian Way purchased power agreements once they have expired). *Id*.

Because the mechanism focuses on revenues in relation to the wind projects' revenue requirement, it effectively encompasses a variety of factors. On the wind project side, it greatly incentivizes Empire to drive construction costs (to include transmission) as low as possible, and to maximize the contribution of the tax equity partner.⁶⁰ Any failure on the part of Empire to accomplish these goals drives the Company's exposure under the mechanism higher, along with the revenue requirement.⁶¹ In regard to the revenue side of the equation, any variation in production (to include how the asset may be dispatched into SPP) or market prices (to include negative prices and capacity factors), will again increase Empire's exposure.⁶²

The Market Price Protection Provision effectively provides a \$35 million aggregate buffer to Missouri customers associated with these variables.⁶³ As MECG witness Meyer testified, under

⁵⁸ Exh. 1, Holmes Aff., p. 3.

⁵⁹ Exh. 1, Holmes Aff., pp. 3-4.

⁶⁰ Tr. 491-492, Mooney.

⁶¹ Tr. 734-735, Meyer.

⁶² Tr. 562-563, 573-574, Holmes; Tr. 690, 702, 725-727, Meyer.

⁶³ Exh. 1, Holmes Aff., p. 3.

the modeling conducted, if the low market price scenario and the low wind production scenario occur simultaneously, then customers may lose as much as \$22 million over the initial 10-year period.⁶⁴ The \$35 million cap provides customer protections above the worst case modeled by Empire for the addition of 600 MWs of wind. *Id.* at 5. On the other hand, the Market Price Protection provision provides customers with 100% of the upside/benefits.⁶⁵

The market price protection mechanism provides protections to customers associated with the possibility of the wind revenue requirement exceeding the amount of revenues received from the SPP IM over the relevant period. *Id*.

g. Asbury

The Company had modeled significant customer savings associated with the retirement of Asbury. Asbury, in spite of its various upgrades over the years, is still a relatively small, vintage 1970's power plant. It gets dispatched less and less into the market. Yet customers are paying for all the costs to operate it, which means maintaining and staffing the plant. It is also likely that it will need another \$20 million invested now for a new landfill and to convert existing bottom ash handling from a wet to a dry system to meet environmental regulations as of April of 2019. Additional projected future investments are identified in the GFSA.

However, Empire listened to the concerns and reasoning of the parties (which includes OPC and Joplin) and in the Stipulation Plan has agreed to not retire Asbury immediately, and will consider Asbury's status in the context of Empire's 2019 triennial IRP.

⁶⁴ Exh. 351, Meyer Aff., p. 4; Tr. 730-731, Meyer.

⁶⁵ Tr. 598, Holmes.

⁶⁶ Exh. 8P, McMahon Aff., p. 7.

⁶⁷ Exh. 9, Mertens Dir., p. 14; Exh. 10, Mertens Sur., pp. 10-11.

⁶⁸ Exh. 6C, McMahon Dir., Dir.Att. JM-2, p. 23 of 44.

VI. <u>REVISED ISSUES 2-10</u>

The following section addresses issues 2-10 identified in the *Revised Joint List of Issues*, *List and Order of Witnesses*, *Order of Parties for Cross-Examination*, and *Order of Opening Statements* filed on May 7, 2018.

Issue 2: Which of Empire's requests, if any, should the Commission grant?

The Commission should grant those requests which are addressed by the Stipulation.

Essentially, the Commission should approve the Stipulation and grant Empire the following:

- 1) In accordance with Section 393.140(8), authority "to record its capital investment to acquire the Wind Projects as utility plant in service subject to audit in Empire's next general rate case." (Stip., p. 5, para. 14.d)
- 2) In accordance with Section 393.240.2, authority to "record its depreciable wind assets in FERC Account 341 through 346 and utilize a composite 3.33% depreciation rate for all Wind Project asset accounts beginning when the assets are placed in-service and continuing until such time as depreciation rates may be changed by order of the Commission." (Stip., p. 5-6, para. 14.f)
- 3) In accordance with Commission Rule 4 CSR 240-20.015(10), a variance from Commission Rule 4 CSR 240-20.015(2)(A), and (3), as to the agreements listed in the Stipulation between Empire and affiliates necessary to own and operate the Wind Projects. (Stip., p. 13-14, para. 22)

In support of these orders, Empire asks that the Commission's findings and conclusions include the following:

1) That given the information presented in Case No. EO-2018-0092, and considering that Empire must make decisions prospectively, rather than in reliance on hindsight, the

decision to acquire up to 600 MWs of Wind Projects under the terms of this Stipulation is reasonable. (Stip., p. 5, para. 14.e)

2) That the decision to comply with the Environmental Protection Agency's coal combustion residuals rules and effluent limitation guidelines (the "CCR Investment") for Asbury, under the terms of this Stipulation, is reasonable, given the information presented in Case No. EO-2018-0092, and considering that Empire must make decisions prospectively, rather than in reliance on hindsight. (Stip., p. 12, para. 19.b)

Issue 4: Should Empire be required to make any additional filings in relation to the Customer Savings Plan? If so, what filings?

The Rebuttal Testimony of Staff witness Natelle Dietrich raised an issue as to whether Empire was seeking certificates of convenience and necessity (CCN) and/or financing approval as a part of this application.⁶⁹ Empire witness Krygier explained in his Surrebuttal Testimony that Empire was not seeking those approvals in this case and offered certain commitments in regard to future CCN and financing applications.⁷⁰

Paragraph 16 of the Stipulation further memorializes that commitment, with an additional provision that contemplates the possibility that a CCN application could also be filed for non-Missouri projects.⁷¹ The Stipulation also calls for notice to be filed with the Commission within thirty (30) days of Empire's execution of any wind project pour chase agreement (Stip, para. 14.c) and within thirty (30) days of Empire's execution of any tax equity agreement (Stip., para. 18.d).

Empire should be required to make such filings as are described in paragraphs 14.c, 16, and 18.d of the Non-Unanimous Stipulation and Agreement in association with any wind acquisitions.

⁶⁹ Exh. 100, Dietrich Reb., p. 3.

⁷⁰ Exh. 3, Krygier Sur., pp. 9-10.

⁷¹ Exh. 4P, Krygier Aff., para. 6.

Issue 5: Should the Commission impose any requirements in regard to tax equity financing? If so, what requirements?

Empire should be required to meet or exceed the tax equity financing parameters included in the Stipulation.⁷²

As discussed elsewhere in this Brief, the use of a tax equity financing structure is important to Empire's proposal. Such a structure enables Empire to reduce the capital investment it needs to construct the Wind Projects by allowing a tax equity partner to make use of the production tax credits and accelerated tax depreciation using the five-year Modified Accelerated Cost Recovery System schedule.⁷³ This partnership will result in between \$4 and \$7 per MW hour savings for Empire's customers for any generation that is acquired.⁷⁴

Empire is willing to commit to enter into only those tax equity transactions that meet the criteria identified in the table found in paragraph 18.a of the Stipulation. These parameters are largely the same as found in the Direct Testimony of Empire witness Mooney.⁷⁵

Issue 3: What requirements should be applied to the Asbury regulatory asset?

Issue 6: What conditions, if any, should be applied to the Asbury Employees?

Issue 7: Should the Commission require conditions related to any impacts on local property taxes? If so, what conditions?

Because of the parties' concerns related to the previously proposed immediate closure of Empire's Asbury coal generation facility, with the Stipulation, Empire agreed to proceed only with approval of the wind acquisition, and leave Asbury's future operations within the discretion of management to pursue in future Electric Utility Resource Planning filings. Accordingly, at this time, Empire does not believe there is a need to brief the issues of the previously requested

⁷² Stip., pp. 10-11, para. 18.a.

⁷³ Exh. 11, Mooney Dir., p. 8.

⁷⁴ Exh. 11, Mooney Dir., p. 8.

⁷⁵ Exh. 11, Mooney Dir., p. 13.

⁷⁶ Stip., p. 12-13, para. 19.d.

regulatory asset, the conditions related to the Asbury employees, or conditions related to the Asbury property taxes.

Issue 8: Should there be any requirements associated with the Tax Cuts and Jobs Act of 2017? If so, what requirements?

The Stipulation calls for Empire to make a tariff filing proposing new electric rates to be effective October 1, 2018, reflecting a reduction in base rate revenue associated with the Tax Cuts and Jobs Act of 2017.⁷⁷ The Stipulation further calls for the establishment of a regulatory liability to account for the tax savings associated with excess Accumulated Deferred Income Taxes beginning as of January 1, 2018.⁷⁸ This would leave only the issue of rate design associated with the reduction in rates for decision in Case No. ER-2018-0228.⁷⁹

This process would deliver an annual reduction of \$17.8 million to Empire's customers.⁸⁰ Empire witness North explains the calculation of the tax reduction and the proposed allocation to rate classes.⁸¹

The annual base rate revenue requirement reduction and the excess ADIT provision, taken together, will provide the full benefits of the Tax Cuts and Jobs Act to Empire's customers.⁸² Also, the provision regarding the filing of revised tariff sheets to effectuate the annual revenue requirement reduction will provide certainty to Empire's customers regarding when and how they will receive the benefit of the tax reform legislation. *Id*.

⁷⁷ Stip., p. 15, para. 24.

⁷⁸ *Id.*, p. 15-16, para. 25.

⁷⁹ *Id.*, p. 16, para. 26.

⁸⁰ Exh. 4P, Krygier Aff., para. 18; Exh. 13, North Aff., para. 5.

⁸¹ Exh. 13, North Aff., para. 6-7.

⁸² Exh. 13, North Aff., para. 9.

Issue 9: Should there be any requirements associated with potential impacts of the Wind Projects on wildlife? If so, what requirements?

The OPC has suggested that "future wind projects . . . should identify compliance with all applicable conversation requirements to insure that wind turbine placement does not impact morality rates of protected species." (OPC Pos.Stmt., p. 12) This included a series of "pre-site selection and post-construction mortality policy recommendations." (Exh. 211P, Marke Aff., p. 15-16)

Conservation impacts are certainly important. However, it is unclear what jurisdiction or expertise the Commission has to direct monitoring requirements beyond those that may be required by the U.S. Fish and Wildlife Service. As an example, the proposals raised by the OPC are proposed by OPC witness Marke, who has a Doctorate in Philosophy (public policy) and an undergraduate degree in English.⁸³ He is neither a biologist, nor an engineer. *Id.* The Commission's expertise and interest in these issues is even more tenuous in regard to any projects that might be located in other states.

In Empire's situation, impacts, if any, are taken into account during the extensive environmental and biological studies that will be completed before placement of turbines is finalized and construction is allowed to begin.⁸⁴ Empire will follow the U.S. Fish and Wildlife Service's Land-Based Wind Energy Guidelines and other siting guidelines. *Id.* Work on compliance with such guidelines has already started for the Empire sites, as well as the other sites that were the subject of the Company's Request for proposal. *Id.* No further action by this Commission is necessary in regard to conservation impacts.

⁸³ Tr. 884-885, Marke.

⁸⁴ Exh. 10, Mertens Sur., pp. 12-13.

Issue 10: Should the Commission grant waivers of its affiliate transaction rules for the affiliate agreements associated with the CSP?

In accordance with the Stipulation (Stip., p. 13-14, para. 22), Empire should be granted a variance, pursuant to Commission Rule 4 CSR 240-20.015(10), from Commission Rule 4 CSR 240-20.015(2)(A), and (3), as to the following arrangements between Empire and affiliates necessary to own and operate the Wind Projects:

Asset Management Agreement: Under this agreement, employees of Service Corp. that provide services to Empire will provide all asset management services to the Wind Project Co., including (a) management of all agreements for the Wind Project Co.; (b) management of energy/financial reporting; (c) management of all banking/financing agreements; (d) management of all landowner/local tax/municipal issues; (e) management of all government permits/regulatory issues including NERC/FERC; (f) management of all reporting for lenders/investors; (g) project management services; (h) optimization of performance of the wind farm; (i) obtaining insurance and other professional services necessary for the wind farm, and; (j) state/federal regulatory management/reporting services for the Wind Project Co.

<u>Balance of Plant Operations and Maintenance Agreement</u>: Under this agreement, employees of Service Corp. that provide services to Empire will provide the balance of plant O&M services to the Wind Project Co. including operations and maintenance services for the main substation and collection system and access for road maintenance.

<u>Energy Services Agreement</u>: Under this agreement, employees of Service Corp. that provide services to Empire will provide energy management services to the Wind Project Co. including: (a) acting as the market participant; (b) daily/periodic scheduling services for the wind farm; (c) managing all hedge agreements, and; (d) representing the wind farm in SPP activities.

The agreements are necessary for Liberty Utilities Service Corp. ("Service Corp.") personnel to operate the wind generation in the same way that they operate Empire's other generation.⁸⁵ The variance is only requested to the extent that goods and services are priced under

37

⁸⁵ Exh. 9, Mertens Dir., p. 20.

these contracts in the same manner that they are currently priced by Service Corp., to include both direct and indirect costs. *Id*.

The Stipulation further recommends that Empire be granted a variance, to the extent necessary pursuant to Commission Rule 4 CSR 240-20.015(10), from Commission Rule 4 CSR 240-20.015(2)(A), and (3), as to the fixed price hedging agreement(s) with Wind Project Co(s). The hedge agreement is a necessary component of the tax equity financing structure and the customer savings/benefits that flow from the use of that structure. The allows Empire to pay to, or receive from, the Wind Project Co. the difference between the market price and a fixed "hedge" price during the first ten years of the Wind Project's operation. *Id*.

The hedge agreement will be at a known price for a project where Empire's investment would be reflected in its utility plant in service. The costs and benefits during the first five years would flow 100% to Empire's customers.⁸⁸ During years 6-10, Empire's customers would still benefit as the recipient of 50-70% of the cash. *Id*.

There is good cause to grant a waiver or variance as to the listed agreements.

VII. CONCLUSION

Empire requests that the Commission approve the Non-Unanimous Stipulation and Agreement as proposed. The Stipulation put forth by Empire, Staff, MECG, Division of Energy, and Renew Missouri is in the public interest, in that it takes advantage of real opportunities that exist today to add generation capacity to Empire's fleet at reduced cost given the availability of Production Tax Credits, which in turn will provide low cost energy for Empire's customers for years to come.

⁸⁷ Exh. 11, Mooney Dr., p. 15.

⁸⁶ Stip., pp. 13-14, para. 22.

⁸⁸ Stip., p. 13-14, para. 22; Exh. 11, Mooney, Dir., pp. 13, 16.

Empire conducted extensive analysis of the economics of acquiring wind generation in or near its service territory through its GFSA, which utilized reasonable assumptions, studied various sensitivity scenarios, and applied stochastic analysis to show that acquiring 600 MW of Wind Projects is the best way forward for Empire's customers. ⁸⁹ The Stipulation not only provides real opportunity for significant upside benefits for customers, it provides many protections for Empire's customers to mitigate potential downside risk. Most obviously, based upon the Market Price Protection Provision, Empire is providing Missouri customers with up to \$35 million in rate protection for a period of ten years of operation of the Wind Project assets in the SPP IM. This customer protection should provide assurance to the Commission that there is an appropriate treatment of risk associated with the project. Customers are further benefitted by a rate moratorium, which gives Empire's customers rate certainty for a substantial period of time with regard to their general distribution rates. *Id*.

The Stipulation also provides immediate rate relief to customer as a result of recent tax reform legislation, flowing back \$17.8 million annually starting as of October 1, 2018. *Id*.

**

** *Id*.

Finally, the Stipulation ensures that for the near term, the Asbury plant will remain in operation. In effect, the Stipulation recognizes the value of acquiring wind generation for Empire's customers, while providing the opportunity for further consideration of the merits of Asbury's operation. Altogether, this is well-balanced settlement that provides the Company clarity for

⁸⁹ Exh. 4C, Krygier Aff., pp. 8-9.

moving forward with its plan, while implementing a series of immediate customer benefits, as well as protection well into the distant future. *Id*.

The Commission's decision should adopt the package of items presented in the Non-Unanimous Stipulation and Agreement. The primary attacks in regard to fears and unknowns will exist in any wind project (and, frankly, any generation analysis). That is why utilities model outcomes and scenarios. The Company has done extensive analysis of the proposed acquisition of wind, including running scenarios requested by several parties. That analysis provides confidence that the approach taken in the Stipulation reduces exposure to market price risk for Empire's customers.

WHEREFORE, Empire respectfully requests the Commission approve the Stipulation as proposed.

Respectfully submitted,

Dean L. Cooper MBE #36592

Diana C. Carter MBE #50527

BRYDON, SWEARENGEN & ENGLAND P.C.

312 E. Capitol Avenue

P. O. Box 456

Jefferson City, MO 65102

Phone: 573-635-7166

E-mail: dcooper@brydonlaw.com dcarter@brydonlaw.com

Sarah B. Knowlton NH Bar #12891

Liberty Utilities

116 North Main Street

Concord, NH 03301

Phone: 603-724-2123

E-mail: Sarah.Knowlton@libertyutilities.com

ATTORNEYS FOR THE EMPIRE DISTRICT ELECTRIC COMPANY

CERTIFICATE OF SERVICE

The undersigned certifies that the above and foregoing Brief was filed in EFIS on this 31st day of May, 2018, with notice of the same being sent to all counsel of record. The undersigned further certifies that a true and correct copy of the foregoing document was sent by electronic mail on said date to the following:

Office of the General Counsel	Office of the Public Counsel	
Governor Office Building	Governor Office Building	
Jefferson City, MO 65101	Jefferson City, MO 65101	
staffcounselservice@psc.mo.gov	opcservice@ded.mo.gov	
Marc Poston	Andrew Linhares	
Department of Economic Development	Renew Missouri Advocates	
Jefferson City, MO 65102	Columbia, MO 65205	
marc.poston@ded.mo.gov	Andrew@renewmo.org	
David L. Woodsmall	Marc Ellinger/Stephanie Bell	
Woodsmall Law Office	Ellinger & Associates	
Jefferson City, MO 65101	mellinger@ellingerlaw.com	
david.woodsmall@woodsmalllaw.com	sbell@ellingerlaw.com	
Henry B. Robertson	Carl J. Lumley	
Great Rivers Environmental Law	Curtis, Heinz, et al.	
Center	clumley@chgolaw.com	
hrobertson@greatriverslaw.org		
James B. Lowery		
Smith Lewis, LLP		
lowery@smithlewis.com		
AmerenMOService@ameren.com		

/s/ Diana C. Carter