# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI



In the Matter of the Application of The Empire District Electric Company for a Certificates of Convenience and Necessity Related to Wind Generation Facilities

File No. EA-2019-0010

# **REPORT AND ORDER**

Issue Date: June 19, 2019

Effective Date: June 29, 2019

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In the Matter of the Application of The Empire District Electric Company for a Certificates of Convenience and Necessity Related to Wind Generation Facilities

File No. EA-2019-0010

# **APPEARANCES**

# EMPIRE DISTRICT ELECTRIC COMPANY:

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## STAFF OF THE MISSOURI PUBLIC SERVICE COMMISSION:

**Nicole Mers,** Deputy Counsel, and **Casi Aslin**, Associate Counsel, PO Box 360, Governor Office Building, 200 Madison Street, Jefferson City, Missouri 65102

SENIOR REGULATORY LAW JUDGE: Nancy Dippell

# **REPORT AND ORDER**

#### I. Procedural History

On October 18, 2018, The Empire District Electric Company ("Empire") applied to the Missouri Public Service Commission ("Commission") for approval of certificates of convenience and necessity ("CCNs") for two wind facilities (each up to 150 MWs) located in Barton, Dade, Jasper, and Lawrence Counties in and near Empire's service territory in Missouri (Kings Point and North Fork Ridge).<sup>1</sup> On November 18, 2018, Empire applied to the Commission for a CCN to build a wind generation facility up to 301 MWs located in Neosho County, Kansas (Neosho Ridge).<sup>2</sup> Collectively, Kings Point, North Fork Ridge, and Neosho Ridge are referred to as the "Wind Projects." Both applications included requests for authority to construct, own, and operate the related transmission interconnection assets and approval of using federal tax incentives in conjunction with a tax equity partnership structure to finance the Wind Projects.

Empire had previously requested Commission approval of its proposed plan to achieve customer savings through the development of wind generation using federal tax incentives in conjunction with a tax equity partner and the retirement of a coal-fired unit (the "Customer Savings Plan" or "CSP").<sup>3</sup> In that case, the Commission declined to make a reasonableness determination.<sup>4</sup> After the CSP Case, Empire concluded its negotiations

<sup>&</sup>lt;sup>1</sup> File No. EA-2019-0010, Empire's Application for Certificates of Convenience and Necessity, (filed October 18, 2018), paras. 5-6.

<sup>&</sup>lt;sup>2</sup> File No. EA-2019-0118 (now consolidated in File No. EA-2019-0010), Empire's Application for a Certificate of Convenience and Necessity and Motion for Waiver, If Necessary, (filed November 18, 2018), para. 6.

<sup>&</sup>lt;sup>3</sup> File No. EO-2018-0092, In the Matter of the Application of The Empire District Electric Company for Approval of Its Customer Savings Plan, Report and Order (issued July 11, 2018) (referred to as the "CSP Case").

<sup>&</sup>lt;sup>4</sup> File No. EO-2018-0092, In the Matter of the Application of The Empire District Electric Company for Approval of Its Customer Savings Plan, Report and Order (issued July 11, 2018), p. 21.

to acquire wind generation assets and entered into the Purchase and Sale Agreements ("purchase agreements") that form the basis for the Wind Projects that are the subject of this case.

The Commission granted requests to intervene filed by the Missouri Department of Economic Development – Division of Energy ("DE"); Midwest Energy Consumers Group ("MECG"); Renew Missouri Advocates d/b/a Renew Missouri ("Renew Missouri"); Sierra Club; Natural Resources Defense Council ("NRDC"); and the Missouri Department of Conservation ("Conservation" or "MDC"). The Commission conducted a local public hearing on January 23, 2019, in Joplin, Missouri, to provide an opportunity for the general public to comment on the applications for certificates of convenience and necessity.<sup>5</sup> On April 5, 2019, Empire and Conservation filed a non-unanimous stipulation and agreement regarding the wildlife issues.<sup>6</sup> Also on April 5, 2019, Empire, MECG, the Staff of the Commission ("Staff"), Renew Missouri, and DE filed a non-unanimous stipulation and agreement regarding the non-wildlife issues<sup>7</sup> to which the Office of the Public Counsel ("Public Counsel") timely objected.

The Commission held an evidentiary hearing on April 8-9, 2019. During the evidentiary hearing, the parties presented evidence relating to the following issues previously identified by the parties:

1. Does the evidence establish that the Kings Point, Neosho Ridge, and North Fork Ridge wind projects for which The Empire District Electric Company ("Empire") is seeking certificates of convenience and necessity ("CCN") are "necessary or convenient for the public service" within the meaning of that phrase in section 393.170, RSMo.?

<sup>&</sup>lt;sup>5</sup> Transcript ("Tr."), Volume 1.

<sup>&</sup>lt;sup>6</sup> Exhibit 12, Stipulation and Agreement Concerning Wildlife Issues.

<sup>&</sup>lt;sup>7</sup> Exhibit 13, Non-Unanimous Stipulation and Agreement.

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

Initial post-hearing briefs were filed on April 29, 2019. Reply briefs were filed on May 7, 2019.

#### II. The Stipulations and Agreements

#### A. Stipulation and Agreement Concerning Wildlife

On April 5, 2019, Empire and Conservation filed a non-unanimous stipulation and agreement regarding the wildlife issues. Commission rule 4 CSR 240-2.115(2)(B) allows non-signatory parties seven days to object to a non-unanimous stipulation and agreement. That same rule allows the Commission to treat the non-unanimous stipulation as unanimous if no party timely objects. More than seven days have elapsed since the signatories filed the stipulation and agreement, and no party has objected. Thus, the Commission will treat the stipulation and agreement as unanimous.

In general, the agreement provides certain conditions relating to the protection of eagles and Gray Bats including: a limitation on cutting down nest trees; a limitation on building turbines within one mile of a nest tree; a requirement to obtain eagle and Gray Bat incidental take permits from the United States Fish and Wildlife Service ("USFWS"); limitations on times of day the turbines in riparian corridors during active season for Gray Bats may be run; limitations on constructing turbines near the boundaries of MDC Conservation Areas; a requirement that Empire fund a traffic count survey at Providence Prairie Conservation Area; a requirement that Empire conduct post-construction monitoring of eagle and bat fatality and disturbances for a minimum of three years and other surveys as required by the USFWS habitat and eagle conservation plans; and requirements to report various wildlife information to MDC.

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The Commission has reviewed the *Stipulation and Agreement Concerning Wildlife's* provisions and finds that the grant of certificates for Kings Point and North Fork Ridge should be conditioned on Empire complying with its terms, which are reasonable and necessary. The Commission incorporates the provisions of the *Stipulation and Agreement Concerning Wildlife* into this order as if fully set forth herein.

#### **B. Non-Unanimous Stipulation and Agreement**

On April 5, 2019, Empire, MECG, Staff, Renew Missouri, and DE filed a nonunanimous stipulation and agreement regarding the remaining issues. The signatories to the *Non-Unanimous Stipulation and Agreement* agreed that the CCNs should be granted with conditions. Public Counsel objected to the *Non-Unanimous Stipulation and Agreement*, therefore, it cannot be approved as an agreement. As the *Non-Unanimous Stipulation and Agreement* has been objected to, under Commission rule 4 CSR 240-2.115(2)(D) the agreement now becomes the positions of the signatory parties. With the exception of Public Counsel, the other non-signatory parties also take the position that the CCNs should be granted with the conditions set out in the *Non-Unanimous Stipulation and Agreement*. The parties' positions are further discussed below.

#### III. Findings of Fact

Any finding of fact for which it appears that the Commission has made a determination between conflicting evidence is indicative that the Commission attributed greater weight to that evidence and found the source of that evidence more credible and more persuasive than that of the conflicting evidence.

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1. Empire is an electrical corporation and public utility that provides electric service to the public in Missouri.<sup>8</sup> Empire also provides electric service to the public in the states of Kansas, Oklahoma, and Arkansas.<sup>9</sup>

2. Staff is a party in all Commission investigations, contested cases, and other proceedings, unless it files a notice of its intention not to participate in the proceeding within the intervention deadline set by the Commission.<sup>10</sup> Staff participated in this proceeding.

3. Public Counsel is a party to this case pursuant to Section 386.710(2), RSMo,<sup>11</sup> and by Commission Rule 4 CSR 240-2.010(10).

4. On October 18, 2018, Empire filed an application seeking CCNs for two wind facilities (each up to 150 MWs) located in Barton, Dade, Jasper, and Lawrence Counties in and near Empire's service territory in Missouri (Kings Point and North Fork Ridge) including related transmission interconnection using federal tax incentives in conjunction with a tax equity structure.<sup>12</sup>

5. On November 18, 2018, Empire applied to the Commission seeking a CCN for one wind generation facility up to 301 MWs located near Empire's service territory in

<sup>&</sup>lt;sup>8</sup> File No. EA-2019-0010, *Empire's Application for Certificates of Convenience and Necessity*, (filed October 18, 2018), para. 1; and File No. EA-2019-0118 (consolidated with File No. EA-2019-0010), *Empire's Application for a Certificate of Convenience and Necessity and Motion for Waiver, if Necessary*, (filed November 18, 2018), para. 1.

<sup>&</sup>lt;sup>9</sup> File No. EA-2019-0010, *Empire's Application for Certificates of Convenience and Necessity*, (filed October 18, 2018), para. 1; and File No. EA-2019-0118 (consolidated with File No. EA-2019-0010), *Empire's Application for a Certificate of Convenience and Necessity and Motion for Waiver, if Necessary*, (filed November 18, 2018), para. 1.

<sup>&</sup>lt;sup>10</sup> Commission Rules 4 CSR 240-2.010(10) and (21) and 2.040(1).

<sup>&</sup>lt;sup>11</sup> Unless otherwise stated, all statutory citations are to the Revised Statutes of Missouri (2016).

<sup>&</sup>lt;sup>12</sup> File No. EA-2019-0010, *Empire's Application for Certificates of Convenience and Necessity*, (filed October 18, 2018), paras. 5-6.

Neosho County, Kansas (Neosho Ridge), including related transmission interconnection assets using federal tax incentives in conjunction with a tax equity structure.<sup>13</sup>

6. Empire had previously requested Commission approval of its Customer Savings Plan that proposed achieving customer savings through the development of wind generation using federal tax incentives in conjunction with a tax equity partner and the retirement of a coal-fired generation unit.<sup>14</sup>

7. Empire conducted an analysis, referred to as the Generation Fleet Savings Analysis ("GFSA"), to determine whether it could provide savings to its customers through the acquisition of renewable resources and the retirement of a coal-fired power plant (the Asbury coal-fired generation plant).<sup>15</sup> As a result of the GFSA, Empire developed the plan to acquire wind generation.<sup>16</sup>

8. During the CSP Case, the Commission determined that "Empire's proposed acquisition of 600 MW of additional wind generation assets is clearly aligned with the public policy of the Commission and this state."<sup>17</sup>

9. Since the CSP Case, Empire has concluded its negotiations to acquire approximately 600 MWs of wind generation assets and entered into the purchase agreements that form the basis for the projects that are the subject of this case.<sup>18</sup>

<sup>&</sup>lt;sup>13</sup> File No. EA-2019-0118 (now consolidated in File No. EA-2019-0010), Empire's Application for a Certificate of Convenience and Necessity and Motion for Waiver, If Necessary, (filed November 18, 2018), para. 6.

<sup>&</sup>lt;sup>14</sup> File No. EO-2018-0092, In the Matter of the Application of The Empire District Electric Company for Approval of Its Customer Savings Plan, Report and Order (issued July 11, 2018).

<sup>&</sup>lt;sup>15</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 4; and Exhibit 2, Mertens Direct (File No. EA-2019-0118), pp. 4-5.

<sup>&</sup>lt;sup>16</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 4-5; and Exhibit 2, Mertens Direct (File No. EA-2019-0118), pp. 4-5.

<sup>&</sup>lt;sup>17</sup> In the Matter of the Application of The Empire District Electric Company for Approval of Its Customer Savings Plan, Case No. EO-2018-0092, Report and Order, p. 20 (issued July 11, 2018).

<sup>&</sup>lt;sup>18</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 5; Exhibit 2, Mertens Direct (File No. EA-2019-0118), p. 5.

#### The Wind Projects

10. The Kings Point and North Fork Ridge facilities and generation tie lines are located entirely within the state of Missouri, and near the city of Joplin, Missouri.<sup>19</sup> Legal descriptions of the area and the route for the Kings Point and North Fork Ridge projects were attached to Exhibits 9 and 10 as Schedules TNW-1, TNW-2A, TNW-2B, TNW-5, TNW-6A, and TNW-6B.

11. Kings Point will be constructed in southeastern Barton County, southwestern Dade County, northeastern Jasper County, and northwestern Lawrence County, Missouri. The point of interconnection for the generation tie lines will be the substation at Empire's La Russell Energy Center. Kings Point will have a capacity of approximately 150 MW.<sup>20</sup> Kings Point will consist of approximately 70 wind turbine generators and the infrastructure necessary for these generators to operate as an integrated energy production facility and deliver energy to the generation system.<sup>21</sup>

12. North Fork Ridge will be constructed in northwestern Jasper County and southwestern Barton County, Missouri. The point of interconnection for the generation tie lines will be the substation at Empire's Asbury Power Plant. North Fork Ridge will have a capacity of approximately 150 MW.<sup>22</sup> North Fork Ridge will consist of approximately 70 wind turbine generators and the infrastructure necessary for these generators to operate as an integrated energy production facility and deliver energy to the generation system.<sup>23</sup>

<sup>&</sup>lt;sup>19</sup> Exhibit 9, Wilson Corrected Direct (File No. EA-2019-0010), p. 2.

<sup>&</sup>lt;sup>20</sup> Exhibit 9, Wilson Corrected Direct (File No. EA-2019-0010), p. 4.

<sup>&</sup>lt;sup>21</sup> Exhibit 9, Wilson Corrected Direct (File No. EA-2019-0010), p. 5.

<sup>&</sup>lt;sup>22</sup> Exhibit 9, Wilson Corrected Direct (File No. EA-2019-0010), p. 5.

<sup>&</sup>lt;sup>23</sup> Exhibit 9, Wilson Corrected Direct (File No. EA-2019-0010), p. 7.

13. The Neosho Ridge facility and associated generation tie line will be located in Neosho County, Kansas, 35 miles to the west of Empire's service territory.<sup>24</sup> The point of interconnection for the generation tie line will be a new substation on Westar's Neosho-to-Caney River 345 kV transmission line. Neosho Ridge will have a capacity of approximately 300 MW.<sup>25</sup> Neosho Ridge will consist of approximately 140 wind turbine generators and the infrastructure necessary for these generators to operate as an integrated energy production facility and deliver energy to the generation system.<sup>26</sup>

14. The location of the Wind Projects will reduce the risk of transmission upgrades and congestion pricing in the Southwest Power Pool ("SPP") Integrated Marketplace.<sup>27</sup>

#### Tax Equity Partnership Structure

15. A key component of Empire's applications is achieving savings for customers through the use of production tax credits and tax equity financing. Customers would benefit from a tax equity ownership structure (whereby Empire and a tax equity partner jointly own the Wind Projects through holding companies) because a tax equity partner is willing to contribute half of the capital to acquire the Wind Projects in exchange for the federal tax benefits provided to incentivize the development of renewable generation.

16. In a tax equity structure, large, tax-paying corporations (typically large banks and insurance companies) become equity partners in projects such as the Wind

<sup>&</sup>lt;sup>24</sup> Exhibit 2, Mertens Direct (File No. EA-2019-0118), p. 8.

<sup>&</sup>lt;sup>25</sup> Exhibit 10, Wilson Direct (File No. EA-2019-0118), p. 4.

<sup>&</sup>lt;sup>26</sup> Exhibit 10, Wilson Direct (File No. EA-2019-0118), p. 4.

<sup>&</sup>lt;sup>27</sup> Exhibit 9, Wilson Corrected Direct (File No. EA-2019-0010), p. 2; Exhibit 10, Wilson Direct (File No. EA-2019-0118), pp. 2-3; and Tr. pp. 240-241 and 432.

Projects.<sup>28</sup> In exchange for providing a significant portion of the partnership's capital investment for acquisition of the Wind Projects, the tax equity partner will receive the tax incentives generated from the Wind Projects for approximately the first 10 years of the project's life.<sup>29</sup> In addition, the tax equity partner will receive cash distributions in the latter part of the first ten years (typically in years six to ten) to recover its return on and recovery of the capital it invested.<sup>30</sup> 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 Projects transfers to the non-tax equity partner.<sup>31</sup>

17. The federal government offers tax credits known as "production tax credits" at a current value of \$24 per MW-hour for wind and solar generation projects.<sup>32</sup>

18. For the Wind Projects, tax equity financing is expected to provide approximately half of the capital necessary to acquire the Wind Projects – meaning that the rate base impact of the projects on Empire's ratepayers will be approximately 50% of the total cost.<sup>33</sup>

19. To create the tax equity structure, on October 12, 2018, Empire entered into two purchase agreements with Tenaska Missouri Matrix Wind Holdings, LLC ("Tenaska") and Steelhead Missouri Matrix Wind Holdings, LLC. Pursuant to these purchase

<sup>&</sup>lt;sup>28</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 13; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 14.

<sup>&</sup>lt;sup>29</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 13; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 14.

<sup>&</sup>lt;sup>30</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 13; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 14.

<sup>&</sup>lt;sup>31</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 13; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 14.

<sup>&</sup>lt;sup>32</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), pp. 14-15; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 15.

<sup>&</sup>lt;sup>33</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 16; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 17. The estimate of 50% of the total cost comes from a range in the "Highly Confidential" version of Exhibits 5 and 6. However, Empire made this estimate public in its *Empire's Initial Brief*, (filed April 29, 2019) at page 20.

agreements, Empire will acquire an ownership interest, through tax equity financing, in two holding companies to be formed by Tenaska and Steelhead Missouri Matrix Wind Holdings, LLC. Each holding company will own, through a project company, Kings Point and North Fork Ridge.<sup>34</sup>

20. On November 16, 2018, Empire entered into a purchase agreement with Neosho Ridge Wind JV, LLC, a joint venture between a subsidiary of Apex Clean Energy, Inc. ("Apex") and a subsidiary of Steelhead Wind 2, LLC. Pursuant to the purchase agreement, Neosho Ridge JV, LLC will sell, and Empire will acquire an ownership interest, through tax equity financing, in a holding company, which will in turn own, through a project company, the Neosho Ridge wind project.<sup>35</sup>

21. Empire will finance the purchase of the Wind Projects using a combination of debt, equity, and tax equity financing.<sup>36</sup> Empire plans to finance the acquisition of the holding companies in conjunction with a tax equity partner, Wells Fargo Central Pacific Holdings, Inc. ("Wells Fargo"),<sup>37</sup> as well as through intercompany funds from Liberty Utilities Co. ("Liberty Utilities").<sup>38</sup>

22. The Wind Projects generated significant interest among potential tax equity partners and Empire selected Wells Fargo.<sup>39</sup> Final agreements with Wells Fargo had not

<sup>&</sup>lt;sup>34</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 3 and Schedule TM-IA (Highly Confidential) (Kings Point), Schedule TM-IB (Highly Confidential) (North Fork), and TM-2 (Kings Point and North Fork).

<sup>&</sup>lt;sup>35</sup> Exhibit 6, Mooney Direct (File No. EA-2019-0118), pp. 3-4 and Schedules TM-1 (Highly Confidential --Neosho Ridge) and TM-2 (Neosho Ridge).

<sup>&</sup>lt;sup>36</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 9; and Exhibit 2, Mertens Direct (File No. EA-2019-0118), p. 9.

<sup>&</sup>lt;sup>37</sup> Wells Fargo will lead the tax equity financing of the Wind Projects, either solely or with another tax equity partner. Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 4, fn. 1; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 4, fn. 1

<sup>&</sup>lt;sup>38</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), pp. 3-4; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 4.

<sup>&</sup>lt;sup>39</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 18; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 18.

yet been executed at the case submission, but a letter of interest entered into on October 10, 2018, and the other key agreements were attached to Exhibits 5 and 6, as "Highly Confidential" Schedules TM-5 HC, TM-6A HC, and TM-6B HC.<sup>40</sup>

23. Wells Fargo has experience providing tax equity to renewable energy projects in the United States, financing approximately 11,000 MW of renewable generation, representing approximately \$6 billion of investment, since 2007.<sup>41</sup>

24. Wells Fargo is leading the solicitation of additional tax equity participants, has contacted a number of tax equity partners who are very interested in the project, and has identified a short list of those potential tax equity partners.<sup>42</sup> Those tax equity partners would participate under the same terms as Wells Fargo.<sup>43</sup>

25. At the time of the closings when Empire acquires its ownership interest in the holding companies, Wells Fargo will make a capital contribution to the holding company and thereby become a joint owner with Empire. Once acquired by Empire, the holding companies will be direct subsidiaries of Empire, and the project companies, will be indirect subsidiaries of Empire.<sup>44</sup>

26. After approximately ten years of tax equity participation and Empire joint ownership of the project companies through the holding companies, Empire will have the right to purchase the tax equity partner's ownership interest in the holding companies.<sup>45</sup>

<sup>&</sup>lt;sup>40</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), pp. 17-18; Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 18; and Exhibit 7, Mooney Surrebuttal, p. 10.

<sup>&</sup>lt;sup>41</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 18; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 19.

<sup>&</sup>lt;sup>42</sup> Tr. p. 281.

<sup>&</sup>lt;sup>43</sup> Tr. p. 281.

<sup>&</sup>lt;sup>44</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 3 and Schedule TM-2; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 4 and Schedule TM-2.

<sup>&</sup>lt;sup>45</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 13; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 14. There may be multiple tax equity partners, and thus multiple holding companies and multiple project companies.

27. In order to receive the full production tax credits, which will reduce the effective capital cost of the Wind Projects by at least half,<sup>46</sup> the Wind Projects must enter service by the end of 2020.<sup>47</sup>

28. The tax equity structure 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 in the near term. This reduced capital investment will allow customers to realize the benefits of a reduced rate base for the full 10 years of the tax savings.<sup>48</sup>

29. Given the time value of money, using a tax equity structure (as compared with direct ownership of the Wind Projects by Empire without a partner) will result in between \$4 and \$7 per MW hour more savings for Empire customers.<sup>49</sup>

30. Empire, without the tax equity partnership, is not in a position to take advantage of these tax benefits in a timely manner<sup>50</sup> nor will the value of the resulting tax benefits exceed Empire's income tax liability.<sup>51</sup> By the time Empire could utilize the tax benefits, the benefits would have been reduced in value due to the time value of money.<sup>52</sup>

#### **Qualifications**

31. Empire's four-state electric utility system serves approximately 172,000 total electric customers. Empire has owned generation capacity of 1,447 MWs and

<sup>&</sup>lt;sup>46</sup> Exhibit 8, McMahon Surrebuttal, p. 7.

<sup>&</sup>lt;sup>47</sup> Exhibit 9, Wilson Corrected Direct (File No. EA-2019-0010), pp. 2-3; and Exhibit 10, Wilson Direct (File No. EA-2019-0118), pp. 2-3.

<sup>&</sup>lt;sup>48</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 17; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 18.

<sup>&</sup>lt;sup>49</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 17; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 18.

<sup>&</sup>lt;sup>50</sup> Tr. p. 244.

<sup>&</sup>lt;sup>51</sup> Tr. p. 279.

<sup>&</sup>lt;sup>52</sup> Tr. p. 245.

purchased generation capacity of 303 MWs. These generation assets include coal-fired, natural gas fired, hydroelectric and wind generators. Empire owns and operates approximately 1,208 miles of transmission lines and 6,911 miles of distribution lines.<sup>53</sup>

32. On January 1, 2017, Empire was acquired by Liberty Utilities, a subsidiary of Algonquin Power & Utilities Corp. ("APUC"). APUC consists of two primary operating units: Liberty Utilities, which provides electric, natural gas, and water services to nearly 800,000 customers across 12 states (including Empire) and includes a rate-regulated asset portfolio of 1.3 GW of generation capacity; and Liberty Power, which owns a portfolio of over 1.5 GW of hydroelectric, wind, solar, thermal, and natural gas fired generating capacity in the United States and Canada. APUC has developed renewable energy projects with tax equity partners and, as a result, has expertise in these types of transactions.<sup>54</sup>

33. Tenaska, a large private company based in Omaha, Nebraska, has experience as an independent power producer in the United States. The company has developed more than 10,000 megawatts of fossil-fueled and renewables power generation projects, both in the United States and internationally, and has experience owning, operating, and managing power generation projects.<sup>55</sup>

34. Apex is an independent renewable energy company based in Charlottesville, Virginia. Apex has completed development and construction of 12 wind and solar facilities in Illinois, Texas, and Oklahoma. These projects represent a total

<sup>&</sup>lt;sup>53</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), pp. 6-7; and Exhibit 2, Mertens Direct (File No. EA-2019-0118), pp. 6-7.

<sup>&</sup>lt;sup>54</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 7; and Exhibit 2, Mertens Direct (File No. EA-2019-0118), p. 7.

<sup>&</sup>lt;sup>55</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 7.

capital investment of approximately \$4 billion. Operating assets under Apex's management total more than 1,500 MW. Additionally, Apex has signed contracts for power and the sale of 16 projects totaling nearly 3,200 MW of capacity with utility, cooperative, government, and corporate customers.<sup>56</sup>

35. Steelhead Missouri Matrix Wind Holdings, LLC is partnering with Tenaska to jointly develop and construct Kings Point and North Fork Ridge, and Steelhead Wind 2, LLC is partnering with Apex to jointly develop and construct Neosho Ridge. As wind project developers that have incurred costs for wind turbine components in 2016, Steelhead Missouri Matrix Wind Holdings, LLC and Steelhead Wind 2, LLC partnering with Tenaska and Apex allows the Wind Projects to qualify for 100% production tax credits according to the IRS guidelines.<sup>57</sup>

36. Empire has an investment grade credit rating and is part of a corporate family that is also investment grade and has nearly \$9 billion in assets.<sup>58</sup>

#### Portfolio Analysis and Modeling

37. Empire selected the Wind Projects after conducting a detailed portfolio analysis in the CSP Case using the industry standard modeling software and detailed, wide-ranging scenarios to identify and test risk.<sup>59</sup>

38. Through that modeling and analysis, Empire evaluated alternative portfolios across wide-ranging scenarios that included different fuel and market prices, CO2 policy, nodal basis, load, and build out of wind in the SPP.<sup>60</sup>

<sup>&</sup>lt;sup>56</sup> Exhibit 6, Mooney Direct (File No. EA-2019-0118), pp. 8-9.

<sup>&</sup>lt;sup>57</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 8; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 9.

<sup>&</sup>lt;sup>58</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 7; and Exhibit 2, Mertens Direct (File No. EA-2019-0118), p. 7.

<sup>&</sup>lt;sup>59</sup> Exhibit 8, McMahon Surrebuttal, p. 17.

<sup>&</sup>lt;sup>60</sup> Exhibit 8, McMahon Surrebuttal, p. 17.

39. Empire ran 54 scenario combinations and a "high wind" scenario requested by the parties.<sup>61</sup> This modeling showed that the Wind Projects had an effective capital cost of \$711/kW, putting them in parity with a new combined cycle gas plant, but without any fuel costs.<sup>62</sup> Thus, the scenarios showed that the status quo portfolio was more costly in most of the evaluated scenarios.<sup>63</sup>

40. The modeling showed that adding wind generation to Empire's portfolio in or near its service territory was both possible and brought significant benefits to Empire's customers.<sup>64</sup>

41. The levelized cost of electricity<sup>65</sup> utilized for the 600 MW portfolio was a foundational element of the modelled \$169 million in customer savings over 20 years.<sup>66</sup> Empire has used the levelized cost of electricity as it has moved forward from the CSP Case to ensure that the three purchase agreements are within the economics modeled and thus will deliver the same level of benefits to customers as was put forward in the CSP Case.<sup>67</sup> While some of the project costs have changed during the negotiation of the purchase agreements, the overall portfolio levelized cost of electricity has decreased slightly, and as a result, the projects as contracted are consistent with the modelling performed by Empire.<sup>68</sup>

<sup>&</sup>lt;sup>61</sup> Exhibit 8, McMahon Surrebuttal, p. 17.

<sup>&</sup>lt;sup>62</sup> Exhibit 8, McMahon Surrebuttal, pp. 7-8.

<sup>&</sup>lt;sup>63</sup> Ex. 8, McMahon Surrebuttal, p. 16.

<sup>&</sup>lt;sup>64</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 4; and Exhibit 2, Mertens Direct (File No. EA-2019-0118), p. 4.

<sup>&</sup>lt;sup>65</sup> The levelized cost of electricity is calculated by adding the net present value of the total capital and operating and maintenance costs over the life of the project and dividing this sum be the megawatts of energy generated. (Exhibit 5, Mooney Direct (File No. EA-2019-0010), pp. 21-22; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 22.)

<sup>&</sup>lt;sup>66</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), pp. 21-22; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 23.

<sup>&</sup>lt;sup>67</sup> Tr. pp. 277-278.

<sup>&</sup>lt;sup>68</sup> Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 23; and Exhibit 8, McMahon Surrebuttal, p.18.

42. Empire's analysis demonstrated that the Wind Projects will reduce the present value revenue requirement of Empire's 2016 resource acquisition plan over both a 20-year and a 30-year period.<sup>69</sup> The modeling showed that the Wind Projects provided projected savings in the Base Market case of \$169 million on a net present value basis over a 20-year period.<sup>70</sup> For the High Market scenario, the Wind Projects produced \$320 million in projected savings over 20 years, and in the Low Market scenario they provided \$67 million projected savings over 20 years.<sup>71</sup>

43. The analysis also demonstrated that adding 600 MW of wind to its portfolio had significant benefits for Empire's customers, including substantially lowering the net present value revenue requirement of the generation portfolio and significantly reducing portfolio cost risk.<sup>72</sup> The analysis also demonstrated that the savings from added wind generation came with less cost risk for customers than the status quo.<sup>73</sup>

44. The SPP market prices Empire used in its modeling were the projections from ABB for Empire's 2016 triennial integrated resource plan ("IRP").<sup>74</sup>

45. Empire did not use a historical time series analysis in its modeling, but instead it used a fundamental modeling approach.<sup>75</sup> Through this approach, Empire's consultant, ABB, effectively created a simulation of the SPP market to forecast hourly electricity prices.<sup>76</sup>

<sup>&</sup>lt;sup>69</sup> Tr. pp. 329-330.

<sup>&</sup>lt;sup>70</sup> Exhibit 8, McMahon Surrebuttal, pp. 13-14.

<sup>&</sup>lt;sup>71</sup> Exhibit 8, McMahon Surrebuttal, pp. 13-14.

<sup>&</sup>lt;sup>72</sup> Exhibit 8, McMahon Surrebuttal, p. 7.

<sup>&</sup>lt;sup>73</sup> Exhibit 8, McMahon Surrebuttal, pp. 8 and 13-14.

<sup>&</sup>lt;sup>74</sup> Exhibit 205, Mantle Rebuttal, p. 5.

<sup>&</sup>lt;sup>75</sup> Exhibit 8, McMahon Surrebuttal, pp. 20-24.

<sup>&</sup>lt;sup>76</sup> Exhibit 8, McMahon Surrebuttal, p. 24.

46. Empire considered wind additions in SPP other than the Wind Projects and analyzed the historical interconnection queue, finding that a vast majority of those requests were withdrawn or terminated.<sup>77</sup>

47. Empire modeled its estimated wind additions in SPP and ran various scenarios to account for those additions.<sup>78</sup>

48. The results of the modeling showed that even with a 20% to 30% price reduction (the "low market" scenario), Empire's customers were projected to save \$67 million over 20 years based on the net present value of the revenue requirement.<sup>79</sup> For the high wind scenario, Empire's witness expected savings to be significantly higher than the "low case" because market prices were reduced by only a fraction of the amount in the low market scenario.<sup>80</sup>

49. The modeling done in conjunction with the proposed Market Price Protection Mechanism included in the *Non-Unanimous Stipulation and Agreement* was updated with regard to the capacity value of the wind projects (wind quality), operations and maintenance costs, tax equity expense, capital costs (turbines), and the P50 production values.<sup>81</sup> Empire used the fall 2017 price curves from ABB, because these prices were reviewed by Empire and found to remain reasonable in light of where the Wind Projects would be built.<sup>82</sup> Updating a wind project cost forecast with actual values is quite different than updating a complete market price forecast with another market price forecast. Since the extensive economic analysis in the CSP Case included forecasts of

<sup>&</sup>lt;sup>77</sup> Exhibit 8, McMahon Surrebuttal, p. 11.

<sup>&</sup>lt;sup>78</sup> Exhibit 8, McMahon Surrebuttal, pp. 11-13.

<sup>&</sup>lt;sup>79</sup> Exhibit 8, McMahon Surrebuttal, p. 13.

<sup>&</sup>lt;sup>80</sup> Exhibit 8, McMahon Surrebuttal, p. 13.

<sup>&</sup>lt;sup>81</sup> Tr. pp. 203-204.

<sup>&</sup>lt;sup>82</sup> Tr. p. 189.

customer costs under dozens of wide-ranging scenarios, without a significant triggering event, no further update to the modeling as a whole was needed.<sup>83</sup>

50. As an experienced electric utility partnered with experienced wind developers, Empire is aware of all the areas for which decisions must be made based on the information available. Empire has dealt with interconnections in the past and it is qualified to make these types of decisions.

51. Empire's modeling and analysis is the best information available and ultimately the decisions will be subject to a prudency review.

52. Additionally, the adoption of the Market Price Protection Mechanism in the *Non-Unanimous Stipulation and Agreement*, customers will have some protection from the risk that the Wind Projects will not produce the savings as expected.<sup>84</sup>

#### **Other Benefits**

53. Wind generation has benefits other than cost savings, including helping to diversify Missouri's energy generation mix, providing renewable energy, and providing local and state economic benefits such as property taxes, land lease payments, and jobs.<sup>85</sup>

54. Wind generation also helps corporations in Missouri to perform more competitively, as there is an emergence of corporate customer interest in renewable energy and corporations are seeking increased options for purchasing renewable power.<sup>86</sup>

<sup>&</sup>lt;sup>83</sup> Exhibit 8, McMahon Surrebuttal, p. 19.

<sup>&</sup>lt;sup>84</sup> Exhibit 8, McMahon Surrebuttal, pp. 8 and 13-14.

<sup>&</sup>lt;sup>85</sup> Exhibit 3, Mertens Surrebuttal, p. 7; Exhibit 200, Marke Rebuttal, p. 2; and Exhibit 400, Hyman Rebuttal, p. 5.

<sup>&</sup>lt;sup>86</sup> Exhibit 300, Owen Surrebuttal, p. 3; and Exhibit 400, Hyman Rebuttal, pp. 5-7.

55. An increased number of energy customers (individuals, businesses, and governments) are seeking renewable energy to meet their own sustainability goals.<sup>87</sup>

56. Production of renewable energy in the state of Missouri can lower the state's dependence on imported fuels.<sup>88</sup>

57. Empire currently has two wind purchased power agreements that will expire in January 2021 (Elk River wind farm in 2025 (150 MW)) and 2028 (Meridian Way wind farm (105 MW)). These expiring contracts represent all of Empire's current wind capacity and more than 40% of the 600 MWs proposed currently.<sup>89</sup>

58. Empire does not have an "immediate" capacity need for the power generated by the Wind Projects and would be able meet its future anticipated load without its wind contracts or the power from the Wind Projects.<sup>90</sup> All of Empire's generation is sold to the SPP market and any additional generation over its needs would be sold into the SPP market and 95% of the associated revenue would flow back to customers through Empire's fuel adjustment clause.<sup>91</sup> These sales are included in the revenue requirement calculations and will reduce the revenue requirement, thereby reducing customer rates.<sup>92</sup>

59. The Wind Projects would provide benefits to Empire's customers by providing replacement for the expiring wind generation contracts, giving Empire control over those wind generation assets, and continuing to provide value for their expected

<sup>&</sup>lt;sup>87</sup> Exhibit 300, Owen Surrebuttal, p. 3; and Exhibit 400, Hyman Rebuttal, pp. 6-7.

<sup>&</sup>lt;sup>88</sup> Exhibit 400, Hyman Rebuttal, pp. 7-8.

<sup>&</sup>lt;sup>89</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 12; Exhibit 2, Mertens Direct (File No. EA-2019-0118), p.11; and Tr. p. 150.

<sup>&</sup>lt;sup>90</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 12; Exhibit 2, Mertens Direct (File No. EA-2019-0118), p.11; and Tr. p. 150.

<sup>&</sup>lt;sup>91</sup> Tr. pp. 150 and 238-239.

<sup>&</sup>lt;sup>92</sup> Tr. p. 150.

lifetime which is longer than the 20-year term of a typical purchased power agreement.<sup>93</sup> Currently, under Empire's expiring wind generation contracts, Empire is paying more than the market rates for this wind-generated power, but has no ability to upgrade those facilities to make them more cost effective because it does not own the generation plant.<sup>94</sup>

60. The primary policy objective of Chapter 22 of the Commission's Rules on Integrated Resource Planning is the focus on net present value of the revenue requirement associated with a utility's resource plan.<sup>95</sup>.

61. All necessary land rights for the Wind Projects, including for transmission, have been acquired voluntarily.<sup>96</sup>

### **Proposed Conditions**

62. On April 5, 2019, Empire, MECG, Staff, Renew Missouri, and DE filed a non-unanimous stipulation and agreement regarding the remaining issues. Public Counsel objected to that stipulation and agreement. Empire, Staff, and the intervenors advocate granting the CCNs because the Wind Projects are projected to bring benefits to Empire's customers under the low, mid, and high price scenarios. These parties also advocate imposing as conditions on the CCNs, the provisions of the *Non-Unanimous Stipulation and Agreement*<sup>97</sup> in order to mitigate any negative impacts that could arise.

<sup>&</sup>lt;sup>93</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 12; Exhibit 2, Mertens Direct (File No. EA-2019-0118), p.11; and Tr. p. 150.

<sup>&</sup>lt;sup>94</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 12; Exhibit 2, Mertens Direct (File No. EA-2019-0118), p. 11; and Tr. p. 162.

<sup>&</sup>lt;sup>95</sup> 4 CSR 240-22.010.

<sup>&</sup>lt;sup>96</sup> Tr. p. 314.

<sup>&</sup>lt;sup>97</sup> Exhibit 13, Non-Unanimous Stipulation and Agreement.

63. The *Non-Unanimous Stipulation and Agreement* sets out the tax equity partnership ownership structure<sup>98</sup> and includes the following proposed conditions set out fully in the agreement:

a. Paragraph 12.a. specifies that the Wind Projects shall be operated in accordance with applicable SPP Integrated Marketplace rules and in a manner that is not detrimental to Empire's customers.<sup>99</sup>

b. Paragraph 12.b. requires the Wind Projects purchase agreements include a requirement that before Empire, or its designated affiliate, is obligated to purchase a Wind Holdco, an independent, third-party professional licensed engineer must confirm the Wind Project is mechanically complete, has a reasonable likelihood of timely satisfying the in-service criteria provided for in Appendix A to the *Non-Unanimous Stipulation and Agreement*, and the turbines have a reasonable likelihood of meeting or exceeding the guaranteed power curve to be included in the turbine supply agreements;

c. Paragraph 12.c. states that the Wind Project must satisfy each of the in-service criteria set out in Appendix A to the *Non-Unanimous Stipulation and Agreement*;

d. Paragraphs 12.d. and 12.e. require Empire to make specific filings and quarterly progress reports on the construction level plans and specifications, the SPP Definitive Interconnection System Impact Studies, transmission and interconnection, a discussion of any sensitivity or curtailment issues raised by SPP

<sup>&</sup>lt;sup>98</sup> Exhibit 13, Non-Unanimous Stipulation and Agreement, para. 11.

<sup>&</sup>lt;sup>99</sup> See also, Tr. pp. 263-264.

in the study, and any issues related to those changes in assumptions, costs or curtailment.

e. Paragraph 12.f. requires Empire to provide notice of closing of the transactions set forth in the Wind Project purchase agreements.

f. Paragraph 12.g.i. provides that tax equity financing will be used and that the financing be within specific parameters with regard to approximate initial capital contribution, approximate expected return, partnership taxable income allocations, production tax credit allocations, partnership cash distributions, contingent contributions, a purchase option, and creditworthiness.<sup>100</sup>

g. Paragraph 13 directs that the plant investment be recorded to plant in service;<sup>101</sup>

h. Paragraph 14 makes clear that the terms of the *Non-Unanimous Stipulation and Agreement* do not preclude the Commission or the signatories from reviewing the reasonableness and prudency of the costs of each Wind Project in a general rate proceeding;

i. Paragraph 15 sets out that Empire will use the 3.33% depreciation rate authorized in File No. EO-2018-0092 for the Wind Projects and that the Wind Projects will be incorporated in the first depreciation study completed after the Wind Projects are placed in-service, unless Empire shows the Commission that it does not have enough information at that time to include them;

<sup>100</sup> These parameters with some adjustments to the benefit of the customers, were also set out in the testimony of Empire's witness Mooney. (Exhibit 7, Mooney Surrebuttal, p. 11).

<sup>&</sup>lt;sup>101</sup> See also, File No. EO-2018-0092, In the Matter of the Application of The Empire District Electric Company for Approval of Its Customer Savings Plan, Report and Order (issued July 11, 2018), Ordered Paragraph 2.

j. Paragraph 16 provides for rate case true-up period recommendations by the signatories;

k. Paragraph 17.a. provides for employee protections under Empire's union contracts in the event of closure or retirement of the Asbury generation facility.

I. Paragraphs 17.b. and 17.c. set out an accounting authority order in the event of a retirement or sale of Asbury between general rate cases. This accounting authority order would contain two parts: a regulatory asset representing the undepreciated balance of the Asbury facility<sup>102</sup> (currently estimated to be approximately \$200 million<sup>103</sup>) and a regulatory liability account (to accrue the costs and revenues that Empire no longer incurs after retiring Asbury, includingcosts such as, but not limited to capital costs, depreciation expense, property taxes, operations and maintenance expense, fuel costs, SPP revenues and any deferred income tax effects).<sup>104</sup>

m. Paragraph 18 formalizes the process by which Missouri nonresidential customers may purchase a portion of the RECs received from the Wind Projects;

n. Paragraph 19 provides for the auditing and inspection of the books and records held by Empire, Liberty Utilities Service Corp., the wind holding companies, and the wind project companies for the purposes of ensuring

<sup>&</sup>lt;sup>102</sup> Exhibit 13, Non-Unanimous Stipulation and Agreement, para. 17.b.

<sup>&</sup>lt;sup>103</sup> Tr. p. 147.

<sup>&</sup>lt;sup>104</sup> Exhibit 13, Non-Unanimous Stipulation and Agreement, para. 17.c.

compliance with Commission rules and to make their findings and opinions available to the Commission.

o. Paragraph 20 provides that the Wind Project capital investments and costs will be allocated between Missouri and the other states in which Empire provides electric service using typical state and wholesale jurisdictional allocators for ratemaking purposes;

p. Paragraph 22 requires Empire to make a presentation to the parties regarding the costs and benefits and the impact on rates of installing battery/energy storage technology;<sup>105</sup> and,

q. Paragraph 21 sets out the details for a Market Price Protection Mechanism.<sup>106</sup> In general terms, the Market Price Protection Mechanism provides for the sharing of risk between customers and shareholders associated with the possibility that the Wind Projects do not generate enough revenue. The Market Price Protection Mechanism is designed to go into effect on the first day of the month after the effective date of rates in which a Wind Project is first placed into rates and remain 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. The Market Price Protection Mechanism operates by comparing the amount of revenue generated from sales of energy from each Wind Project into the SPP Integrated Marketplace and the capacity benefit of each Wind Project to the

<sup>&</sup>lt;sup>105</sup> See also, Tr. p. 103.

<sup>&</sup>lt;sup>106</sup> The Market Price Protection Mechanism is set out fully in Appendix B to the *Non-Unanimous Stipulation and Agreement*.

replacing the energy from the Elk River and Meridian Way purchased power agreements once they have expired).<sup>107</sup> The Market Price Protection Mechanism will factor in actual interconnection costs, tax equity cash distributions and PAYGO contributions, ongoing operation and maintenance costs, and curtailment.<sup>108</sup> If there is a harm caused, there is a sharing mechanism with a Missouri-jurisdictional cap of \$52.5 million for Empire to reduce costs to customers, while if the Wind Projects perform as projected, customers retain 100% of the upside.

64. The interests of the tax equity partners will not always align with the interests of Empire's customers because the tax equity partners will earn revenue from the sale of production tax credits and receive other tax benefits.<sup>109</sup> The production tax credits will be generated even if the Wind Projects are "selling" their produced power at a negative price.<sup>110</sup>

65. There are some situations where selling power at a negative price is also beneficial to Empire's customers.<sup>111</sup>

66. The Market Price Protection Mechanism manages the cost benefit risk associated with the Wind Project in terms of the capital costs (to include network upgrade costs<sup>112</sup>), operating costs, SPP prices, and wind production, while still providing customers all the upside benefits.<sup>113</sup>

67. All of the variables in the Market Price Protection Mechanism could change over time, but the Market Price Protection Mechanism accommodates these changes by

<sup>&</sup>lt;sup>107</sup> Exhibit 4, Holmes Surrebuttal, p. 11; and Tr. p. 168.

<sup>&</sup>lt;sup>108</sup> Exhibit 4, Holmes Surrebuttal, p. 10.

<sup>&</sup>lt;sup>109</sup> Tr. p. 150.

<sup>&</sup>lt;sup>110</sup> Tr. p. 151.

<sup>&</sup>lt;sup>111</sup> Tr. p. 135.

<sup>&</sup>lt;sup>112</sup> Tr. pp. 219 and 352-353.

<sup>&</sup>lt;sup>113</sup> Tr. p. 327.

updating these factors based on actual values, so customers do not need to lock in future conditions based on current assumptions.<sup>114</sup>

68. The cap of \$52.5 million is appropriate because it is designed such that it should cover all situations up to those having a 0.5% probability of exceeding the cap over the 10-year period.<sup>115</sup> Additionally, it is a "soft" cap, as any amounts that would be incurred above that level, would go back to the Commission in a future rate case for a decision as to how they should be treated.<sup>116</sup>

69. The Market Price Protection Mechanism appropriately balances the interests of the customers and the shareholders.<sup>117</sup>

70. Public Counsel advocated imposing "hold harmless" conditions<sup>118</sup> and in its position statement and briefs set out its own "customer protection plan."<sup>119</sup> Under this proposed plan Empire's Missouri retail customers would pay no more than \$25 million for the Wind Projects during the time when Empire is paying hedge costs (anticipated to be the first 10 years the Wind Projects are in service) to the wind project companies for the difference between a fixed hedge price and the floating SPP market price ("Hedging Period").<sup>120</sup>

71. Public Counsel's "customer protection plan" also included a method of tracking the revenues and expenses of the Wind Projects. The proposal was for "each month Empire would be required to record and accumulate on its books and records in

<sup>&</sup>lt;sup>114</sup> Exhibit 4, Holmes Surrebuttal, p. 10.

<sup>&</sup>lt;sup>115</sup> Tr. pp. 172-173 and 218.

<sup>&</sup>lt;sup>116</sup> Tr. pp. 172, 205, and 342.

<sup>&</sup>lt;sup>117</sup> Tr. pp. 334-335.

<sup>&</sup>lt;sup>118</sup> Exhibit 200, Marke Rebuttal, p. 2; and Exhibit 201, Marke Surrebuttal, p. 2.

<sup>&</sup>lt;sup>119</sup> The Office of the Public Counsel's Positions on Listed Issues, (filed March 2, 2019), pp. 3-4.

<sup>&</sup>lt;sup>120</sup> The Office of the Public Counsel's Initial Brief, (filed April 29, 2019), pp. 27-28.

separate accounts, for each wind project and for them in the aggregate, both the Wind Project Revenues and the Wind Project Expenses."<sup>121</sup>

72. Public Counsel's proposed "hold harmless" and "customer protection plan" conditions would require Empire to make the ratepayers whole through rates if the Wind Projects did not generate cash through the holding companies equal to or greater than the costs of the Wind Projects.<sup>122</sup> These proposed conditions are not reasonable because they would require Empire through rates to forgo any return on or return of its authorized capital investments.

# Conclusions of Law

A. Empire is an "electrical corporation"<sup>123</sup> and "public utility"<sup>124</sup> and, thus, subject to the supervision of the Commission.<sup>125</sup>

B. Section 393.170.1, RSMo 2000, provides, in part, that "[n]o ... electrical corporation ... shall begin construction of a ... electric plant ... without first having obtained the permission and approval of the commission."

C. Section 393.170.3, RSMo 2000 provides that:

[t]he commission shall have the power to grant the permission and approval herein specified whenever it shall after due hearing determine that such construction or such exercise of the right, privilege or franchise is necessary or convenient for the public service. The commission may by its order impose such condition or conditions as it may deem reasonable and necessary. ..."

<sup>&</sup>lt;sup>121</sup> The Office of the Public Counsel's Initial Brief, (filed April 29, 2019), p. 27.

<sup>&</sup>lt;sup>122</sup> Exhibit 200, Marke Rebuttal, p. 23; and *The Office of the Public Counsel's Initial Brief*, (filed April 29, 2019), pp. 27-28.

<sup>&</sup>lt;sup>123</sup> Section 386.020(15), RSMo.

<sup>&</sup>lt;sup>124</sup> Section 386.020(43), RSMo.

<sup>&</sup>lt;sup>125</sup> Sections 393.140(1) and 386.250(1), RSMo.

D. That statute sets the legal standard by which the Commission must determine whether to grant Empire the certificate of convenience and necessity it seeks. In interpreting the meaning of that legal standard in a 1993 decision, the Missouri Court

of Appeals said:

The PSC has authority to grant certificates of convenience and necessity when it is determined after due hearing that construction is 'necessary or convenient for the public service' (*citing* section 393.170.3). The term 'necessity' does not mean 'essential' or absolutely indispensable', but that an additional service would be an improvement justifying its cost (*citing State ex rel. Beaufort Transfer Co. v. Clark*, 504 S.W. 2<sup>nd</sup> at 219). ... Furthermore, it is within the discretion of the Public Service Commission to determine when the evidence indicates the public interest would be served in the award of the certificate. (*Citing State ex rel. Ozark Elec. Coop. v. Public Serv. Comm'n*, 527 S.W.2d 390, 392 (Mo. App. 1975).<sup>126</sup>

E. In evaluating applications for certificates of convenience and necessity,

the Commission has frequently considered five factors first described in a Commission decision regarding an application for certificate of convenience and necessity filed by Tartan Energy Company, LC, d/b/a Southern Missouri Gas Company.<sup>127</sup> The *Tartan* factors, as they have become known, are: "(1) there must be a need for the service; (2) the applicant must be qualified to provide the proposed service; (3) the applicant must have the financial ability to provide the service; (4) the applicant's proposal must be economically feasible; and (5) the service must promote the public interest."<sup>128</sup>

F. While the *Tartan* factors are frequently cited in Commission decisions regarding applications for certificates of convenience and necessity, they are merely guidelines for the Commission's decision, and are not part of the legal standard set forth

 <sup>&</sup>lt;sup>126</sup> State ex rel. Intercon Gas, Inc. v Pub. Serv. Comm'n, 848 S.W.2<sup>nd</sup> 593, 597-598 (Mo. App. W.D. 1993).
<sup>127</sup> In the Matter of the Application of Tartan Energy Company, L.C., d/b/a Southern Missouri Gas Company, 3 Mo. P.S.C. 3d, 173 (1994).

<sup>&</sup>lt;sup>128</sup> Tartan Energy, at 177.

by the controlling statute. Moreover, the *Tartan* decision concerned an application for a certificate to provide natural gas service to a particular service area. As a result, the described factors are not precisely applicable to Empire's applications to construct the Wind Projects. Nevertheless, they provide some guidance and are specifically referenced in the list of issues set forth by the parties for resolution by the Commission. Therefore, the Commission will evaluate those factors as part of its decision in this case.

G. It is the public policy of this state to diversify the energy supply through the support of renewable and alternative energy sources.<sup>129</sup> The Commission has also previously expressed its general support for renewable energy generation because it provides benefits to the public.<sup>130</sup>

H. The Commission may "prescribe uniform methods of keeping accounts, records and books to be observed by . . . electrical corporations[.]"<sup>131</sup> Additionally, the Commission may "prescribe by order the accounts in which particular outlays and receipts shall be entered, charged or credited."<sup>132</sup>

I. Commission rule 4 CSR 240-20.030 requires Missouri regulated electrical corporations to "keep all accounts in conformity with the Uniform System of Accounts

<sup>&</sup>lt;sup>129</sup> Sections 393.1025 and 393.1030 (Renewable Energy Standard); and Section 393.1075 (Missouri Energy Efficiency Investment Act).

<sup>&</sup>lt;sup>130</sup> See, In the Matter of the Application of The Empire District Electric Company for Approval of Its Customer Savings Plan, Case No. EO-2018-0092, Report and Order, p. 20 (MoPSC July 11, 2018) (citing to Report and Order, In the Matter of Union Electric Company d/b/a Ameren Missouri's Voluntary Green Program/Pure Power Program Tariff Filing, File No. EO-2013-0307, April 24, 2013, p. 14-15; Report and Order, In the Matter of the Application of KCP&L Greater Missouri Operations Company for Permission and Approval of a Certificate of Convenience and Necessity Authorizing it to Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage Solar Generation Facilities in Western Missouri, File No. EA-2015-0256, March 2, 2016, p. 15-16; Report and Order, In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Permission and Approval and a Certificate of Convenience and Necessity Authorizing it to Offer a Pilot Distributed Solar Program and File Associated Tariff, File No. EA-2016-0208, December 21, 2016, p. 19-20).

<sup>&</sup>lt;sup>131</sup> Subsection 393.140(4), RSMo.

<sup>&</sup>lt;sup>132</sup> Subsection 393.140(8), RSMo.

[("USOA")] . . . as prescribed by the Federal Energy Regulatory Commission ("FERC") and published at 18 CFR part 101 (1992) and 1 FERC Stat. & Regs. Paragraph 15,001 and following (1992), except as otherwise provided in this rule." However, after a hearing, the Commission can change the prescribed "accounts in which particular outlays and receipts shall be entered, charged, or credited."<sup>133</sup>

J. Missouri courts have recognized the Commission's regulatory authority to grant a form of relief to a utility in the form of an accounting authority order "which allows the utility to defer and capitalize certain expenses until the time it files its next rate case."<sup>134</sup>

K. The courts have stated that an accounting authority order allows the deferral of a final decision on current extraordinary costs until a rate case and therefore is not retroactive ratemaking.<sup>135</sup> When evaluating whether an event should be considered extraordinary, the Commission will look to the appropriate USOA for guidance.<sup>136</sup>

L. The Commission previously determined, and the Missouri Court of Appeals, Western District affirmed, that the use of trackers, which are similar to accounting authority orders, "should be limited because they violate the matching principle, tend to unreasonably skew ratemaking results, and dull the incentives a utility has to operate efficiently and productively under the rate regulation approach employed in Missouri."<sup>137</sup>

<sup>&</sup>lt;sup>133</sup> Section 393.140(8), RSMo.

<sup>&</sup>lt;sup>134</sup> State ex rel. Aquila, Inc. v. Missouri Public Service Comm'n of State, 326 S.W.3d 20, 27 (Mo. App. 2010). See also, Section 393.140, RSMo.

<sup>&</sup>lt;sup>135</sup> State ex rel Office of Pub. Counsel v. Missouri Pub. Serv. Comm'n, 301 S.W.3d 556 at 569-570 (Mo.App.2009).

 <sup>&</sup>lt;sup>136</sup> In the Matter of Kansas City Power & Light Co.'s Request for Auth. To Implement a General Rate Increase for Elec. Serv. v. Missouri Pub. Serv. Comm'n, 509, S.W.3d 757, 769-770 (Mo.App. W.D. 2016).
<sup>137</sup> In Matter of Kansas City Power & Light Co.'s Request for Auth. to Implement a Gen. Rate Increase for Elec. Serv. v. Missouri Pub. Serv. Comm'n, 509 S.W.3d 757, 769 (Mo. Ct. App. 2016), quoting File No. ER-2014-0370, In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service, Report and Order (issued September 2, 2015).

M. The USOA, allows for deferral for "extraordinary items." General Instruction

No. 7, states:

Extraordinary items. It is the intent that net income shall reflect all items of profit and loss during the period with the exception of prior period adjustments . . . . Those items related to the effects of events and transactions which have occurred during the current period and which are of unusual nature and infrequent occurrence shall be extraordinary items. Accordingly, they will be events and transactions of significant effect which are abnormal and significantly different from the ordinary and typical activities of the company, and which would not reasonably be expected to recur in the foreseeable future. (In determining significance, items should be considered individually and not in the aggregate. However, the effects of a series of related transactions arising from a single specific and identifiable event or plan of action should be considered in the aggregate.) To be considered as extraordinary under the above guidelines, an item should be more than approximately 5 percent of income, computed before extraordinary items. Commission approval must be obtained to treat an item of less than 5 percent, as extraordinary.<sup>138</sup>

N. Section 393.135, RSMo. states that:

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

# Decision

In this certificate case, the Commission is faced with two main issues: 1) Is a grant

of these certificates necessary or convenient for the public service; and 2) If certificates

are granted, what conditions, if any, are reasonable and necessary?

<sup>&</sup>lt;sup>138</sup> 18 C.F.R. § Pt. 101, General Instruction No. 7.

#### Necessary or Convenient for the Public Service

Traditionally, in determining whether a certificate is "necessary or convenient for the public service," the Commission looks to five criteria referred to as the *Tartan* factors.<sup>139</sup> Empire, Staff, and the intervenors all argue that the Wind Projects meet the *Tartan* factors and the CCNs should be granted. The Commission agrees that the *Tartan* factors are met as further discussed below.

#### 1. Need for the Service –

The evidence established there is a need for this service. The Wind Projects will add renewable generation capacity at reduced costs to customers because they take advantage of tax benefits through tax equity partnerships.<sup>140</sup> Empire's portfolio analysis showed that adding 600 MW of wind to its portfolio would benefit customers by substantially lowering the net present value revenue requirement of Empire's generation portfolio and reducing portfolio cost risk.<sup>141</sup>

While the timing of the acquisition of the Wind Projects may not match up perfectly with the timing of the expiration of the Elk River and Meridian Farm wind purchased power agreements, this is an appropriate time for Empire to replace these renewable resources and transition its fleet to a greater percentage of renewable resources. This timing allows Empire the ability to acquire significant renewable energy resources at a 50% savings due to the availability of production tax credits in a way that is projected to deliver significant savings to its customers. Thus, Empire showed that the proposed Wind Projects not only have the benefit of rebalancing its portfolio with more wind, they

<sup>&</sup>lt;sup>139</sup> In re Tartan Energy, Report and Order, 3 Mo.P.S.C. 3d 173 (issued September 16, 1994).

<sup>&</sup>lt;sup>140</sup> Exhibit 3, Mertens Surrebuttal, pp. 4-5.

<sup>&</sup>lt;sup>141</sup> Exhibit 8, McMahon Surrebuttal, pp. 7 and 14.

represent a low-cost opportunity to replace the existing wind purchased power agreements that will expire.<sup>142</sup> Adding wind to Empire's portfolio reduces risk and decreases costs because wind performs better than the status quo resource acquisition plan under almost all the market scenarios evaluated.

Additionally, Empire's focus on the cost of its generation fleet is consistent with the generation acquisition policy set out in Chapter 22 of the Commission's rules and with the public policy of the state of Missouri to diversify the energy supply through the support of renewable and alternative energy.

The evidence also showed that the Wind Projects are important to Empire's customer demand for renewable energy. Empire points out that its current wind purchased power agreements, representing all of Empire's current wind capacity, will expire in January 2021 (150MWs) and 2028 (105 MWs).<sup>143</sup> Further, the REC program, set out as one of the conditions in the *Non-Unanimous Stipulation and Agreement*, would formalize the process for selling RECs to nonresidential customers meeting a need expressed by Empire's larger customers, commercial customers, and industrial customers with sustainability programs.<sup>144</sup> Thus, the Wind Projects are in line with the public policy objective of conserving natural resources and pursuing renewable energy sources. Even though Empire does not have an immediate need for more generation capacity to meet its load, the evidence showed that the Wind Projects would provide benefits to Empire's customers by giving Empire control over those wind generation assets and continuing to provide value beyond the 20-year term of a typical purchased

<sup>&</sup>lt;sup>142</sup> Exhibit 8, McMahon Surrebuttal, p. 8.

 <sup>&</sup>lt;sup>143</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 12; and Exhibit 2, Mertens Direct (File No. EA-2019-0118), p. 11.
<sup>144</sup> Tr. p. 55.

power agreement.<sup>145</sup> Empire sells all of its generated power on the SPP market, thus, the sales of 60% additional capacity over what is expiring in the current wind generation contracts would flow back to customers through Empire's fuel adjustment clause.<sup>146</sup> These sales are included in the revenue requirement calculations and will reduce the revenue requirement, thereby reducing customer rates.<sup>147</sup> The evidence shows that the benefits of the Wind Projects, including the likely reduction in revenue requirement of \$169 million over 20 years, diversifying Empire's energy supply, replacing the wind generation purchase agreements that will expire, and providing in-demand renewable energy, outweigh the costs and risks of the projects. Therefore, the Commission finds that there is a need for the Wind Projects.

#### 2. <u>Qualified to Provide Service</u> –

Empire has shown that it is qualified to provide this service and there is no dispute as to Empire's qualifications. Empire is experienced in the generation, transmission, and distribution of electricity. Empire's parent company, APUC, is also an experienced utility service provider, with experience in developing renewable generation, including renewable energy projects with tax equity partners.<sup>148</sup> Further, the partners that Empire proposes to do business with are all experienced in the provision of these kinds of projects or experienced financers and familiar with production tax credits. Thus, the Commission finds that Empire is qualified to provide this service.

<sup>&</sup>lt;sup>145</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 12; Exhibit 2, Mertens Direct (File No. EA-2019-0118), p.11; and Tr. p. 150.

<sup>&</sup>lt;sup>146</sup> Tr. p. 150.

<sup>&</sup>lt;sup>147</sup> Tr. p. 150.

<sup>&</sup>lt;sup>148</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 7; and Exhibit 2, Mertens Direct (File No. EA-2019-0118), p. 7.

#### Financial Ability to Provide the Proposed Service –

There is no dispute that Empire has the financial ability to provide the proposed service. Empire and its corporate family have investment grade credit ratings and a total of nearly \$9 billion in assets.<sup>149</sup> Additionally, the production tax credits and the MACRS reduce the capital investment needs to construct the Wind Projects.<sup>150</sup> Further, Empire's financing partnership with Wells Fargo and APUC show that it is well equipped to finance the proposed Wind Projects. The Commission finds that Empire has the financial ability to provide the proposed service.

#### 4. <u>Economically Feasible</u> –

The Commission determines that the Wind Projects are economically feasible. Tax equity financing is expected to provide approximately half of the capital necessary to acquire the Wind Projects.<sup>151</sup> By utilizing a tax equity partnership, Empire has the opportunity to bring \$169 million of savings to customers over the 20-year IRP period, and up to \$295 million in customer savings over a 30-year period.<sup>152</sup>

Empire ran 54 scenario combinations in the CSP Case and a "high wind" scenario requested by the parties.<sup>153</sup> This modeling showed that the Wind Projects had an effective capital cost of \$711/kW, putting them in parity with a new combined cycle gas plant, but without any fuel costs.<sup>154</sup> Thus, the scenarios showed that the status quo

<sup>&</sup>lt;sup>149</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 7; and Exhibit 2, Mertens Direct (File No. EA-2019-0118), p. 7.

<sup>&</sup>lt;sup>150</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 17; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), p.18.

<sup>&</sup>lt;sup>151</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 16; Exhibit 6, Mooney Direct (File No. EA-2019-0118), p. 17.

<sup>&</sup>lt;sup>152</sup> Exhibit 5, Mooney Direct (File No. EA-2019-0010), p. 4; and Exhibit 6, Mooney Direct (File No. EA-2019-0118), pp. 4-5.

<sup>&</sup>lt;sup>153</sup> Exhibit 8, McMahon Surrebuttal, p. 17.

<sup>&</sup>lt;sup>154</sup> Exhibit 8, McMahon Surrebuttal, pp. 7-8.

portfolio was more costly in most of the evaluated scenarios.<sup>155</sup> Those scenarios also showed adding 600 MW of wind generation to Empire's portfolio will reduce portfolio cost risk.<sup>156</sup> The lack of fuel costs, coupled with the tax equity financing and tax credits make the Wind Projects economically feasible.

Public Counsel questioned the economic feasibility due to customer risk, stale information, inaccurate 30-year revenue forecasts, SPP wind additions, and unknowns. With regard to customer risk, Public Counsel suggests that if the Wind Projects are such a certain success, then Empire's parent company, APUC, would seek to invest in the projects as an unregulated enterprise and enjoy all the profits instead of sharing those profits.<sup>157</sup> Public Counsel argues that these Wind Projects will increase Empire's rate base by about 38%, from \$1.6 billion to approximately \$2.2 billion,<sup>158</sup> while only increasing Empire's SPP-accredited capacity by about 6.1% from 1,477 megawatts<sup>159</sup> to 1,567 megawatts.<sup>160</sup> Public Counsel further argues that because the capacity is not needed, requiring customers to pay for the Wind Projects is too risky.

The idea that these investments are too risky is refuted by Empire's portfolio analysis using industry standard modeling software and detailed wide-ranging scenarios to test risk. These scenarios showed that the investments were sound and brought significant benefits to Empire's customers.<sup>161</sup> The Commission also previously determined that the addition of wind generation to Empire's portfolio significantly reduces

<sup>&</sup>lt;sup>155</sup> Ex. 8, McMahon Surrebuttal, p. 16.

<sup>&</sup>lt;sup>156</sup> Exhibit 8, McMahon Surrebuttal, p. 3.

<sup>&</sup>lt;sup>157</sup> The Office of the Public Counsel's Initial Brief, (filed April 29, 2019), pp. 15-16.

<sup>&</sup>lt;sup>158</sup> Tr. p. 107.

<sup>&</sup>lt;sup>159</sup> Tr. p. 115.

<sup>&</sup>lt;sup>160</sup> Tr. p. 154.

<sup>&</sup>lt;sup>161</sup> Exhibit 1, Mertens Direct (File No. EA-2019-0010), p. 4; Exhibit 2, Mertens Direct (File No. EA-2019-0118), p. 4.

financial risk for ratepayers.<sup>162</sup> The Commission rejects Public Counsel's argument that these investments are too risky.

Public Counsel also argued that the modeling Empire did is based on stale data (the SPP market prices from Empire's 2016 triennial IRP) and is not reliable.<sup>163</sup> The Commission does not find Public Counsel's arguments persuasive. The modeling done in conjunction with its proposed Market Price Protection Mechanism in the *Non-Unanimous Stipulation and Agreement* was updated with regard to capacity value of the wind projects (wind quality), operations and maintenance costs, tax equity expense, capital costs (turbines), and the P50 production values.<sup>164</sup> Although, Empire used the ABB fall 2017 price curves, Empire's witness credibly testified that these prices were reviewed and remain reasonable in light of where the Wind Projects will be built.<sup>165</sup> Empire also explained why no further update was required, stressing the difference between a wind project cost forecast and a market price forecast, and that no significant event had triggered the need for more updating.<sup>166</sup> The Commission finds Empire's modeling reliable.

Public Counsel additionally had concerns with using 30-year revenue forecasts, though it did not object to the source of the forecasts used by Empire.<sup>167</sup> Public Counsel believes that historical SPP pricing is not reliable for developing price forecasts.<sup>168</sup> However, Empire did not use a historical time series analysis. Instead, it used a

<sup>&</sup>lt;sup>162</sup> In the Matter of the Application of The Empire District Electric Company for Approval of Its Customer Savings Plan, Case No. EO-2018-0092, Report and Order, (issued July 11, 2018), p. 14

<sup>&</sup>lt;sup>163</sup> The Office of the Public Counsel's Initial Brief, (filed April 29, 2019), pp. 17-23.

<sup>&</sup>lt;sup>164</sup> Tr. pp. 203-204.

<sup>&</sup>lt;sup>165</sup> Tr. p. 189.

<sup>&</sup>lt;sup>166</sup> Exhibit 8, McMahon Surrebuttal, p. 19.

<sup>&</sup>lt;sup>167</sup> Tr. p. 411.

<sup>&</sup>lt;sup>168</sup> Exhibit 8, McMahon Surrebuttal, p. 20.

"fundamental" modeling approach.<sup>169</sup> Through this approach, Empire's consultant, ABB, effectively created a simulation of the SPP market to forecast hourly electricity prices.<sup>170</sup> Thus, the Commission finds the 30-year revenue forecasts reasonable.

Public Counsel also argues that selling the output from the Wind Projects into the SPP market at the same time other wind resources are also selling their output into the SPP market will depress prices. In its analysis, Empire considered other wind additions in SPP and analyzed the historical interconnection queue, finding that a vast majority of those requests were withdrawn or terminated.<sup>171</sup> Further, Empire modeled significant wind additions in SPP and ran various scenarios to account for those additions.<sup>172</sup> Empire's evidence showed that given the results of the modeling, the net present value revenue requirement savings were expected to be significantly higher than the "low case" for the high wind scenario because market prices were reduced by only a fraction of the amount in the low market scenario.<sup>173</sup> Thus, the Commission finds that Empire's modeling and analysis appropriately factored in the effects of wind additions to the market.

Lastly, Public Counsel suggested a list of unknowns that make the Wind Projects speculative and too risky for Empire's customers.<sup>174</sup> As an experienced electric utility partnered with experienced wind developers, Empire is aware of all the areas for which decisions must be made based on the information available. Empire has dealt with interconnections in the past and it is qualified to make these types of decisions. Empire's

<sup>&</sup>lt;sup>169</sup> Exhibit 8, McMahon Surrebuttal, pp. 20-24.

<sup>&</sup>lt;sup>170</sup> Exhibit 8, McMahon Surrebuttal, p. 24.

<sup>&</sup>lt;sup>171</sup> Exhibit 8, McMahon Surrebuttal, p. 11.

<sup>&</sup>lt;sup>172</sup> Exhibit 8, McMahon Surrebuttal, pp. 11-13.

<sup>&</sup>lt;sup>173</sup> Exhibit 8, McMahon Surrebuttal, p. 13.

<sup>&</sup>lt;sup>174</sup> The Office of the Public Counsel's Initial Brief, (filed April 29, 2019), pp. 25-26.

modeling and analysis is the best information available and ultimately the decisions will be subject to a prudency review by the Commission before being added to rate base in a future rate case. Additionally, as set out below, the Commission will adopt the Market Price Protection Mechanism from the *Non-Unanimous Stipulation and Agreement*, thus affording ratepayers additional protection from harm.

## 5. <u>Promote the Public Interest</u> –

The Commission finds that the Wind Projects will promote the public interest. In addition to the low cost generation that the Wind Projects will provide, these projects meet the policy goals, as identified by the Commission in the *Grain Belt Express Clean Line LLC* case,<sup>175</sup> to diversify energy resources and develop "economical renewable energy sources". Additionally, the Wind Projects are also important to satisfy the public interest in regard to the use of renewables, especially through the sale of RECs to non-residential customers as set out as a condition in the *Non-Unanimous Stipulation and Agreement*<sup>176</sup> and adopted in this order as a condition of the certificates. Finally, the evidence showed that the Wind Projects will promote the public interest through the local and state economic benefits such as additional property taxes, land lease payments, and job creation.<sup>177</sup>

Thus, the Commission determines that with the conditions set out below, the requested certificates are necessary or convenient for the public service and should be granted.

<sup>&</sup>lt;sup>175</sup> *In the Matter of the Application of Grain Belt Express Clean Line LLC*, Report and Order on Remand (issued March 20, 2019), File No. EA-2016-0358, pp. 45-46 (citations omitted). <sup>176</sup> Tr. p. 102.

<sup>&</sup>lt;sup>177</sup> Exhibit 3, Mertens Surrebuttal, p. 7; Exhibit 200, Marke Rebuttal, p. 2; and Exhibit 400, Hyman Rebuttal, p. 5.

#### **Reasonable and Necessary Conditions**

In granting a certificate of convenience and necessity, the "commission may by its order impose such condition or conditions as it may deem reasonable and necessary."<sup>178</sup> The second main issue before the Commission is, what conditions should be imposed on the certificates?

### Stipulation and Agreement Concerning Wildlife

On April 5, 2019, Empire and Conservation filed a non-unanimous stipulation and agreement regarding the protection of wildlife.<sup>179</sup> In general, the agreement provides certain conditions relating to the protection of eagles and Gray Bats including: limitations on cutting down nest trees; limitations on building turbines within one mile of a nest tree; requirements to obtain eagle and Gray Bat incidental take permits from the USFWS; limitations on the times of day turbines may run in riparian corridors during the active season for Gray Bats; limitations on constructing turbines near the boundaries of MDC Conservation Areas; a requirement that Empire will fund a traffic count survey at the Providence Prairie Conservation Area; a requirement that Empire will conduct post-construction monitoring of eagle and bat fatalities and disturbances for a minimum of three years and other surveys as required by the USFWS habitat and eagle conservation plans; and requirements to report various wildlife information to MDC.

No party objected to the wildlife agreement and the Commission treats it as a unanimous agreement. The Commission determines that the provisions of the *Stipulation and Agreement Concerning Wildlife* are reasonable and necessary conditions to the grant of certificates of convenience and necessity for the Kings Point and North Fork Ridge

<sup>&</sup>lt;sup>178</sup> Section 393.170.3, RSMo.

<sup>&</sup>lt;sup>179</sup> Exhibit 12, Non-Unanimous Stipulation and Agreement Concerning Wildlife.

wind projects. Therefore, the Commission will approve the agreement and make the grant of certificates of convenience and necessity for the Kings Point and North Fork Ridge wind projects conditioned on the agreement's provisions.

#### Non-Unanimous Stipulation and Agreement

On April 5, 2019, Empire, MECG, Staff, Renew Missouri, and DE filed the *Non-Unanimous Stipulation and Agreement* in which those signatories recommend the grant of the certificates of convenience and necessity with numerous conditions. No other parties, with the exception of Public Counsel, objected to the agreement. The Commission has determined above, that certificates for the Wind Projects should be granted. However, in order to address any concerns about potential harm to customers and to mitigate any negative impacts that could arise, the Commission will adopt the conditions as proposed in the *Non-Unanimous Stipulation and Agreement* with the exception of the conditions related to Asbury.

The Commission will address the requirement to operate in accordance with the applicable SPP Integrated Marketplace rules and in a manner not detrimental to Empire's customers (Paragraph 12.a.), the tax equity parameters (Paragraph 12.g.), the sale of RECs (Paragraph 18), the potential Asbury closure (Paragraph 17), and the Market Price Protection Mechanism (Paragraph 21) separately. The remaining proposed conditions in the *Non-Unanimous Stipulation and Agreement* would protect ratepayers through the provision of information and procedures that will allow Staff, Public Counsel, the intervenors, and the Commission to review and identify issues as soon as possible,

assuring that ratepayers ultimately end up paying only just and reasonable rates.<sup>180</sup> These provisions also give Empire advanced notice of the information and procedures that it will be required to follow in the implementation of the Wind Projects, thus, providing it the opportunity to better plan how to conduct its business. Therefore, the Commission determines that these provisions in the *Non-Unanimous Stipulation and Agreement* are reasonable and necessary conditions to impose on the grant of the Wind Project certificates.

Also included in the *Non-Unanimous Stipulation and Agreement* at Paragraph 12 was the provision that tax equity financing be used and that the financing be within specific parameters with regard to approximate initial capital contribution, approximate expected return, partnership taxable income allocations, production tax credit allocations, partnership cash distributions, contingent contributions, a purchase option, and creditworthiness.<sup>181</sup> As explained elsewhere in this order, it is the tax equity financing that makes the Wind Projects more economically feasible than they would be if Empire set out to do them on its own. By taking advantage of the tax benefits, that will not otherwise be available to Empire on its own, Empire need not provide as much capital up front to finance the projects, providing a net present value savings of an estimated \$169 million to customers over a 20-year period. Thus, the Commission finds that requiring the tax equity parameters as set out in the *Non-Unanimous Stipulation and Agreement* at

<sup>&</sup>lt;sup>180</sup> Exhibit 13, Non-Unanimous Stipulation and Agreement, paras. 12-16, 19, 20, and 22. (This list is a summary and not meant to exclude any provision not specifically set out in the Ordered Paragraphs of this Report and Order.)

<sup>&</sup>lt;sup>181</sup> Exhibit 13, Non-Unanimous Stipulation and Agreement, para. 12.g.i. These parameters, with some adjustments to the benefit of the customers, were also set out in the testimony of Empire's witness Mooney. (Exhibit 7, Mooney Surrebuttal, p. 11).

Paragraph 12, is a reasonable and necessary condition to granting the Wind Project certificates.

Paragraph 12.a. of the *Non-Unanimous Stipulation and Agreement* requires that the Wind Projects be operated in accordance with SPP rules and "in a manner that is not detrimental to [Empire's] customers."<sup>182</sup> The interests of the tax equity partners will not always align with the interests of Empire's customers because the tax equity partners will earn revenue from the sale of production tax credits.<sup>183</sup> These production tax credits will be generated even if the Wind Projects are "selling" their produced power at a negative price.<sup>184</sup> Even so, there are also situations where selling power at a negative price is beneficial to Empire's customers.<sup>185</sup> The addition of Paragraph 12.a. will protect Empire's customers from having the Wind Projects operate in a manner to the detriment of the customers merely so that the tax equity partner can receive a benefit. The Commission finds Paragraph 12.a. is, therefore, a reasonable and necessary condition on the grant of certificates for the Wind Projects to guard against possible detriments to Empire's customers from these divergent interests.

At Paragraph 18 of the *Non-Unanimous Stipulation and Agreement*, there is a proposal for the sale of RECs from the Wind Projects to non-residential customers. The evidence showed that Empire has large customers that would like to purchase some of the RECs that will be created as part of the Wind Projects. This provision will formalize the process for selling RECs to those customers, in order to allow the customers to meet

<sup>&</sup>lt;sup>182</sup> Exhibit 13, Non-Unanimous Stipulation and Agreement, para. 12.a.

<sup>&</sup>lt;sup>183</sup> Tr. p. 150.

<sup>&</sup>lt;sup>184</sup> Tr. p. 151.

<sup>&</sup>lt;sup>185</sup> Tr. p. 135.

their sustainability goals.<sup>186</sup> Thus, the Commission finds that formalizing the process for the sale of RECs from the Wind Projects to non-residential customers is a reasonable and necessary condition to the granting of the certificates.

Paragraph 17 of the *Non-Unanimous Stipulation and Agreement* contained three provisions related to the potential closure of the coal-fired Asbury generation plant that the signatories recommended be conditions on the grant of any certificates for the Wind Projects. It is generally recognized and understood that the Asbury coal-fired generation facility would be more likely to be sold or retired if the Wind Projects were built because it would not need the additional capacity.<sup>187</sup> Paragraph 17 provides for employee protections under Empire's union contracts and an accounting authority order in the event of a retirement or sale of Asbury between general rate cases. This proposed accounting authority order would contain two parts: a regulatory asset representing the undepreciated balance of the Asbury facility, currently estimated to be approximately \$200 million; and a regulatory liability account to accrue the costs and revenues that Empire no longer incurs after retiring Asbury, including costs such as, but not limited to, capital costs, GPP revenues and any deferred income tax effects.

The Commission does not find these proposed conditions reasonable and necessary to the grant of the certificates.

Under its statutory authority, the Commission prescribes that electrical corporations keep their accounts, records, and books in conformity with the USOA as

<sup>&</sup>lt;sup>186</sup> Exhibit 13, Non-Unanimous Stipulation and Agreement, para. 18; and Tr. p. 102.

<sup>&</sup>lt;sup>187</sup> Tr. pp. 50, 103-104, 147-148, 213, and 273-274.

prescribed by FERC.<sup>188</sup> The USOA, in turn, provides for deferral accounting for "extraordinary items."<sup>189</sup> The Commission has previously found (and the Court of Appeals has agreed) that the use of these deferral accounting mechanisms "should be limited because they violate the matching principle, tend to unreasonably skew ratemaking results, and dull the incentives a utility has to operate efficiently and productively under the rate regulation approach employed in Missouri."<sup>190</sup>

In this case, the sale or retirement of Asbury is not certain. In fact, from the evidence presented, it is not known whether the removal of Asbury from Empire's generation fleet, if it occurs, will be accomplished through a sale or a closure. Thus, the effect on rates from the undepreciated plant value, the capital costs, depreciation expense, property taxes, operations and maintenance expense, fuel costs, SPP revenues and any deferred income tax effects are completely unknown. Further, there has not been sufficient evidence provided to show that this sale or retirement would be "extraordinary" under the definition as set out in the USOA. Further, because these events have not yet occurred, when they do occur, the signatories could present this to the Commission as a formal request for an accounting authority order where the facts can be reviewed with more certainty, less speculation, and under the appropriate burden of proof.

Empire and the other signatories to the *Non-Unanimous Stipulation and Agreement* have not shown that conditions related to possible Asbury closure or sale are reasonable or necessary. The Commission finds it would be premature to set out any conditions related to the possible sale or closure of Asbury. Additionally, the parties have

<sup>&</sup>lt;sup>188</sup> Section 393.140(4), RSMo.; and 4 CSR 240-20.030.

<sup>&</sup>lt;sup>189</sup> 18 C.F.R. § Pt. 101, General Instruction No. 7.

<sup>&</sup>lt;sup>190</sup> In Matter of Kansas City Power & Light Co.'s Request for Auth. to Implement a Gen. Rate Increase for Elec. Serv. v. Missouri Pub. Serv. Comm'n, 509 S.W.3d 757, 769 (Mo. Ct. App. 2016).

not proven that this possible sale or closure will produce an extraordinary circumstance such that the Commission should take the unusual step of conditioning the grant of a certificate of convenience and necessity on this particular accounting treatment. The Commission will not impose the conditions set out in Paragraph 17 of the *Non-Unanimous Stipulation and Agreement.* 

Paragraph 21 of the Non-Unanimous Stipulation and Agreement includes a Market Price Protection Mechanism with, among other terms, a \$52.5 million cap on customer losses over the first 10 years of the Wind Projects (the time it is expected to take for the tax equity partners to recoup their investments). The Market Price Protection Mechanism is designed to mitigate risks to the customers of the revenues from the Wind Projects not being as expected and adds a layer of protection for the low probability events related to supply side generation.<sup>191</sup> The Market Price Protection Mechanism balances the interests of the customers and the shareholders appropriately.<sup>192</sup> The Market Price Protection Mechanism is a compromise between the two proposals made by Empire and Staff in their testimony, is supported by the evidence before the Commission, and is a reasonable balance of the interests of the ratepayers and the shareholders.<sup>193</sup> When considered as a whole with the other conditions placed on the certificates, the Commission determines that the imposition of the Market Price Protection Mechanism is a reasonable and necessary condition to granting the certificates for the Wind Projects. The Commission finds that, with the exception of the provisions related to the Asbury

<sup>&</sup>lt;sup>191</sup> Tr. pp. 172-173, 370-371, and 372.

<sup>&</sup>lt;sup>192</sup> Tr. p. 334-335.

<sup>&</sup>lt;sup>193</sup> Tr. p. 334-335.

plant, the provisions of the *Non-Unanimous Stipulation and Agreement* should be made conditions to the grant of the certificates for the Wind Projects.

Public Counsel objected to the grant of the certificates and to the terms of the *Non-Unanimous Stipulation and Agreement*. Public Counsel argued that Empire has excess generation capacity and, therefore, does not need the additional generation of the Wind Projects. According to Public Counsel, because the power from those projects is not needed, the Wind Projects will never be considered "used and useful" in providing electric service to its customers. Thus, Public Counsel argued that because the Wind Projects will not be "used and useful," the anti-construction work in progress ("CWIP") statute, Section 393.135, RSMo, will prevent Empire from recovering the costs of the Wind Projects in rates. Public Counsel suggests that this makes Empire's customers investors because the only benefit they receive from the Wind Projects are the SPP revenues generated. Public Counsel proposed that if Empire's shareholders wanted to invest in these resources to make money, rather than providing electric service to its customers, Empire should do it outside the regulated entity as an independent power producer.

The Commission disagrees with the Public Counsel's premise that the Wind Projects only have benefits if they are necessary to meet capacity. Empire has shown many benefits to customers and the state of Missouri in general as a result of the Wind Projects. Further, the Commission disagrees with Public Counsel's interpretation of the CWIP statute. The CWIP statute is not applicable to the grant of a certificate to own and operate the Wind Projects, but rather is applicable upon request for recovery of those costs to build the Wind Projects and put them in service.

Public Counsel also objected that the *Non-Unanimous Stipulation and Agreement* does not provide sufficient protections for Empire's customers of increasing rate base so significantly. Public Counsel's position is that the *Non-Unanimous Stipulation and Agreement* provides for sharing only the downside market risk 50/50 between customers and shareholders up to \$105 million, but leaves any other risks unresolved until the end of the 10-year period when Empire would purchase the assets. Public Counsel, although opposed to granting the certificates, proposed that if granted, the CCNs should be conditioned on its "customer protection plan" which lowers the loss-sharing cap to \$25 million and adds a hold harmless provision so that customers are not liable for any potential losses on these Wind Projects.

Public Counsel's "customer protection plan" provides that the Wind Projects investments would be included in rate base, but that Empire's Missouri retail customers would not pay "a return of nor a return on" that investment during the Hedging Period of the plan. The Commission finds it inappropriate to make ratemaking decisions, such as whether Empire should be allowed to earn a return on the investments, during these certificate of convenience and necessity proceedings. Rather, all ratemaking determinations will be made in a rate case where all factors can be considered to determine "just and reasonable" rates.<sup>194</sup>

Public Counsel did not present sufficient evidence to support the need for or the reasonableness of imposing the provisions of either its "customer protection plan" or "hold harmless" conditions to impose on the CCNs. Further, the Commission finds that the conditions the Commission is placing on the certificates, including the Market Price

<sup>&</sup>lt;sup>194</sup> Bluefield Waterworks and Improve. Co., 262 U.S. 679, 692-93 (1923); Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591, 603 (1944).

Protection Mechanism coupled with the prudency review in the course of a rate case, are sufficient and makes the majority of Public Counsel's proposed conditions unnecessary.

The Commission does find it appropriate to adopt the proposed condition from Public Counsel's "customer protection plan" in Paragraph 3. The proposed condition is that Empire be required to record and accumulate on its books in separate accounts, for each wind project and for them in the aggregate, both the Wind Project revenues and the Wind Project expenses. The Commission finds that this information will be useful in determining whether the Wind Projects have performed as expected and should be captured upfront. Only to the extent these expenses and revenues are tracked in a similar manner for Empire's other generating units, the Commission finds it reasonable and necessary to impose this revenue and expense tracking as a condition on the certificates.

Therefore, having considered all the evidence, the Commission determines that the certificates of convenience and necessity for the Wind Projects should be granted with conditions. Given the need to begin construction on the projects before the end of 2019 in order to qualify for production tax credits, the Commission will make this order effective in ten days.

#### THE COMMISSION ORDERS THAT:

1. The Empire District Electric Company is authorized to acquire an interest in the holding companies that will own the project companies that will be constructing and installing the Kings Point Wind Project, and is granted a certificate of convenience and necessity to own, operate, maintain, and otherwise control and manage the Kings Point Wind Project to be constructed in Barton, Dade, Jasper, and Lawrence Counties in

Missouri, including the infrastructure necessary for the generators to operate as an integrated energy production facility and deliver energy to the system.

2. The Empire District Electric Company is authorized to acquire an interest in the holding companies that will own the project companies that will be constructing and installing the North Fork Ridge Wind Project, and is granted a certificate of convenience and necessity to own, operate, maintain, and otherwise control and manage the North Fork Wind Project to be constructed in Barton and Jasper Counties in Missouri, including the infrastructure necessary for the generators to operate as an integrated energy production facility and deliver energy to the system.

3. The Empire District Electric Company is authorized to acquire an interest in the holding companies that will own the project companies that will be constructing and installing the Neosho Ridge Wind Project, and is granted a certificate of convenience and necessity to own, operate, maintain, and otherwise control and manage the Neosho Ridge Wind Project to be constructed in Neosho County, Kansas, including the infrastructure necessary for the generators to operate as an integrated energy production facility and deliver energy to the system.

4. The *Stipulation and Agreement Concerning Wildlife* is approved and incorporated into this order by reference as if fully set forth herein. The Empire District Electric Company and the Department of Conservation are ordered to comply with the provisions of the *Stipulation and Agreement Concerning Wildlife*.

5. The certificates of convenience and necessity for the Kings Point and North Fork Ridge wind projects are conditioned on the conditions contained in Appendix A of the *Stipulation and Agreement Concerning Wildlife.* 

6. The certificates of convenience and necessity for the Kings Point, North Fork Ridge, and Neosho Ridge wind projects are conditioned on the following from the *Non-Unanimous Stipulation and Agreement*:

a. Planned Ownership Structure. The Kings Point, North Fork Ridge, and Neosho Ridge wind projects shall be accomplished using federal tax incentives in conjunction with a tax equity structure. To create the tax equity structure, Empire and a tax equity partner will own a holding company for each Wind Project, each of which will be a direct subsidiary of Empire (the "Wind Holdco"). Empire, via the Wind Holdco, will acquire a wind project company ("Wind Project Co.") that owns a specific Wind Project. After approximately ten years of tax equity participation and Empire joint ownership of the Wind Project Co. (through the Wind Holdco), Empire will have 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.<sup>195</sup>

b. The Wind Project(s) shall be operated in accordance with applicable
SPP Integrated Marketplace rules and in a manner that is not detrimental to
Empire's customers;

c. The Wind Project purchase agreement(s) shall include a requirement that before Empire, or its designated affiliate, is obligated to purchase a Wind Holdco, an independent, third-party professional engineer licensed must confirm in a written report, to be provided to Empire, that the Wind Project owned by the Wind Holdco has achieved mechanical completion, and there is a reasonable

<sup>&</sup>lt;sup>195</sup> There may be multiple tax equity partners, and thus multiple Wind Holdco(s), as well as multiple Wind Project Co(s).

likelihood the Wind Project will satisfy the in-service criteria provided for in attached Appendix A from the *Non-Unanimous Stipulation and Agreement*, and be timely placed in-service, including a reasonable likelihood that the turbines will meet or exceed the guaranteed power curve for such turbines to be included in the turbine supply agreement(s) with Wind Project Co(s);

d. The Wind Project must satisfy each of the in-service criteria set out in attached Appendix A from the *Non-Unanimous Stipulation and Agreement*,

e. Plans and Specifications: Empire shall file with the Commission quarterly progress reports on the construction level plans and specifications for the Project, and the first report shall be due on the earlier of the first day of the first calendar quarter beginning after the issuance of this order. Empire shall also include an update on all permits obtained as part of its quarterly progress reports, and shall file complete plans and specifications prior to commencement of construction. Empire shall also include documentation regarding transmission and interconnection progress, including supporting documentation of cost increases or changes in assumptions. In its subsequent quarterly report, Empire shall address any results of the study that are material changes in assumptions or costs related to the Wind Projects;

f. Empire shall file a copy of the SPP Definitive Interconnection System Impact Studies within 30 days of receipt. In its subsequent quarterly report, Empire shall address any results of the study that are material changes in assumptions or costs related to the Wind Projects. Empire shall also include a discussion of any sensitivity or curtailment issues raised by SPP in the study. Empire shall also

include a proposed plan to address any issues related to those changes in assumptions, costs or curtailment;

g. Within 30 days of the closing of the transactions set forth in the Wind Project purchase agreements, Empire shall file in File No. EA-2019-0010 a notice of each such closing and, upon request, shall provide a copy of such documents to the signatories of the *Non-Unanimous Stipulation and Agreement*; and,

h. The following conditions shall apply to the transactions with the Tax Equity Partner(s):

i. Empire, through its ownership in Wind Holdco(s), shall contract with tax equity partner(s) ("TEPs") for financing of the Wind Projects (a tax equity agreement), which contracts shall include terms for the approximate initial capital contribution, approximate expected return, partnership taxable income allocations for Years 1 to 10 (flip date<sup>196</sup>) and thereafter, contingent contributions Years 1 to 10, purchase option, and creditworthiness, consistent with the parameters set out in the confidential table found in Paragraph 12.g.i. of the *Non-Unanimous Stipulation and Agreement*.

ii. Empire, through its ownership in the Wind Holdcos, shall enter into any such tax equity agreements with a TEP, as evidenced by an executed Term Sheet with one or more TEPs before issuing the Notice to Proceed with Construction of that project;

<sup>&</sup>lt;sup>196</sup> The "flip date" is the date at which the tax equity partner(s) has achieved its expected return, scheduled to be approximately 10 years from the commencement of commercial operations.

iii. Within 30 days of when it executes a tax equity agreement Empire shall file in File No. EA-2019-0010 a notice it has executed the agreement and provide to each of the other signatories a copy of that tax equity agreement; and

iv. The tax equity agreement that Empire executes for a Wind Project must satisfy each and every one of the parameters in the table above.

i. Rate Basing Wind Projects. So long as Empire's Wind Projects acquisitions comply with the conditions set out herein, and subject to any prudency review, Empire is authorized 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 consistent with the Commission's Report and Order in File No. EO-2018-0092.

j. Prudency not waived. Nothing in this Report and Order precludes the Commission, the signatories to the *Non-Unanimous Stipulation and Agreement*, or the other parties from reviewing the reasonableness and prudency of the costs of each Wind Project in a general rate proceeding following the date when that/those Wind Project(s) is/are fully operational and used for service.

k. Depreciation Rate Study. Upon placing the Wind Projects in-service, Empire shall utilize the 3.33% depreciation rate authorized in File No. EO-2018-0092. In the first depreciation study completed after the Wind Projects are placed in-service, Empire shall incorporate the Wind Projects in that depreciation study, unless it shows the Commission that it does not have enough

information concerning the Wind Projects to include them in that depreciation study.

I. Rate Case Recommendations. In any Empire general rate case(s) where a Wind Project is first included in Empire's rate base for setting rates, the signatories to the *Non-Unanimous Stipulation and Agreement* shall recommend a true-up period that ends no later than five months prior to the operation of law date. A Wind Project will be excluded from Empire's rate base used for setting Empire general distribution rates if the Wind Project does not satisfy the in-service criteria for that Wind Project before the end of the true-up period.

m. Non-Residential Access to Renewable Energy and Credits. In the first general rate case to include a Wind Project, Empire shall propose a tariff to implement a program by which Missouri retail non-residential customers may purchase a portion of renewable energy credits received from the Wind Project.

n. Auditing, Inspection of Books and Records. Staff, Public Counsel, and the signatories to the *Non-Unanimous Stipulation and Agreement* each shall have the authority to review, inspect and audit books, accounts, and other records held by Empire, Liberty Utilities Service Corp., Wind Holdco(s), and Wind Project Co(s), for the purposes of ensuring compliance with Commission Rule 4 CSR 240-20.015 (include successor rules with substantially the same content and language, however renumbered or reorganized) and this order, and to make their findings and opinions available to the Commission. Empire shall make all such books, accounts, and other records available for inspection at one or more locations in Missouri. This provision is not intended to restrict or limit the existing

powers of the Staff, Public Counsel, or any other party to review, inspect and audit those books, accounts and other records.

o. State and wholesale jurisdictional cost allocation for Missouri ratemaking. For Missouri ratemaking purposes, the Wind Project capital investments and costs will be allocated between Missouri and the other states in which Empire provides electric service using typical state and wholesale jurisdictional allocators. Only the Wind Project capital investments and expenses allocated to the Missouri state jurisdiction may be included in Empire's cost of service for setting rates in Missouri.

p. Market Price Protection Mechanism. The market price protection mechanism, as described more fully in Appendix B to the *Non-Unanimous Stipulation and Agreement*, and attached hereto, shall be implemented. In general terms, that mechanism seeks to provide for the sharing of risk between customers and shareholders associated with the possibility of reduced market prices and wind production associated with the Wind Projects. Such mechanism reflects the possibility that all Wind Projects may not be included in Empire rates in the same rate case. As such, the mechanism shall go into effect on the first day of the month after the effective date of rates in which a Wind Project is first placed into rates and shall remain in effect for 10 years following the effective date of rates.

q. Future Battery/Energy Storage Technology. In the event that it is determined that a certificate of convenience and necessity from the Commission is not required, Empire shall, three months prior to installing any battery or energy

storage device, make a presentation to the parties, regarding the costs and benefits and the impact on rates of installing such battery/energy storage technology. Such presentation shall include, but is not limited to, a discussion of the retirement of current generating units or the postponement of future generation additions resulting from the installation of the battery/energy storage technology. Further, such presentation will provide a discussion of how Empire's battery/energy storage technology is incorporated into and dispatched within the SPP. In the event that the battery/energy storage is on the customer side of the meter, Empire shall discuss rate design changes, if any, necessary to maximize the benefits of the battery/energy storage technology. Empire shall allow for reasonable discovery from the Signatories and OPC regarding the costs and benefits of the battery/energy storage technology.

7. The certificates of convenience and necessity for the Kings Point, North Fork Ridge, and Neosho Ridge wind projects are conditioned on Empire recording and accumulating on its books in separate accounts, for each wind project and for them in the aggregate, both the Wind Project revenues and the Wind Project expenses, to the extent these expenses and revenues are tracked in a similar manner for Empire's other generating units.

8. This report and order shall become effective on June 29, 2019.



BY THE COMMISSION

2 Woodraff

Morris Woodruff Secretary

Silvey, Chm., Kenney, Hall, Rupp, and Coleman, CC., concur.

Dippell, Senior Regulatory Law Judge

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

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In the Matter of the Application of The Empire District Electric Company for Certificates of Convenience and Necessity Related to Wind Generation Facilities

Case No. EA-2019-0010 As consolidated with Case No. EA-2019-0118

#### STIPULATION AND AGREEMENT CONCERNING WILDLIFE ISSUES

COME NOW The Empire District Electric Company ("EDE" or "Empire"), and the Missouri Department of Conservation ("MDC") (collectively, the "Signatories")<sup>1</sup>, by and through their respective counsel, and, for their Stipulation and Agreement Concerning Wildlife Issues (this "Stipulation"), respectfully state as follows to the Missouri Public Service Commission

("Commission"):

1. The Signatories are entering into this Stipulation to settle all contested issues related to the matters raised by MDC. Unless otherwise explicitly provided herein, by executing this Stipulation none of the Signatories has approved or acquiesced in any ratemaking or procedural principle, including, without limitation, any method of cost of service or valuation determination or cost allocation, rate design, revenue recovery, or revenue-related methodology. Except as explicitly provided herein, none of the Signatories shall be prejudiced or bound in any manner by the terms of this Stipulation in this or any other proceeding.

2. 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

<sup>&</sup>lt;sup>1</sup> Counsel for Renew Missouri Advocates, Midwest Energy Consumers Group, Office of the Public Counsel, Missouri Department of Economic Development – Division of Energy, National Resources Defense Council, Sierra Club, and the Staff of the Commission have all indicated that they have no objection to this Stipulation and do not request a hearing.

none of the Signatories shall be bound by any of the agreements or provisions hereof.

3. This Stipulation (once approved by the Commission) will constitute an Order of the Commission as to each term thereof. The Signatories agree that disputes related to the implementation and operation of this Stipulation (to include any alleged breach of the terms of this Stipulation) may be taken to the Commission for resolution.

4. This Stipulation is based on the unique circumstances Empire presented to the nonutility Signatories. Except to the extent necessary to implement the terms of this Stipulation, this Stipulation shall not be construed to have precedential impact in any other Commission proceeding.

5. The non-utility Signatories have entered into this Stipulation in reliance upon information and representations Empire provided them, and this Stipulation is predicated explicitly upon that information and those representations.

6. When approved by the Commission, this Stipulation shall constitute a binding agreement among the Signatories hereto. The Signatories shall cooperate in defending the validity and enforceability of this Stipulation and the operation of this agreement according to its terms.

7. The Signatories waive the right to cross examination and stipulate and agree to the admission of all testimony concerning the issues raised by MDC pre-filed herein, without the need for witnesses to take the stand. If the Commission accepts the specific terms of this Stipulation without condition or modification, the Signatories waive their respective rights to seek rehearing pursuant to \$536.500, RSMo., and their respective rights to judicial review pursuant to \$386.510, RSMo. These waivers apply only to a Commission order approving this Stipulation without condition or modification issued in this proceeding, and only to the issues that are resolved hereby. These waivers do not apply to any issues explicitly not resolved by this Stipulation.

8. This Stipulation contains the entire agreement of the Signatories concerning the issues addressed herein.

9. This Stipulation does not constitute a contract with the Commission. Commission acceptance of this Stipulation shall not be deemed to constitute an agreement on the part of the Commission to forego the use of any discovery, investigatory powers or other statutory powers which the Commission has. Thus, nothing in this Stipulation is intended to impinge or restrict in any manner Commission's exercise of any its statutory powers, including the power to access information.

10. When a Commission order approving this Stipulation becomes effective this Stipulation will become effective.

11. Wind Projects. EDE is seeking Commission-issued certificates of convenience and necessity (CCNs) for two wind generation resources each up to 150 MW and located in Barton, Dade, Jasper and Lawrence Counties in and near EDE's service territory in Missouri (Kings Point and North Fork Ridge) and one wind generation resource up to 301 MW located in Neosho County, Kansas (Neosho Ridge), including related transmission interconnection assets using federal tax incentives in conjunction with a tax equity structure.

12. **Wildlife**. Any Commission Order that grants Empire a CCN for the Kings Point or North Fork Ridge Wind Project must include the conditions found in Appendix A hereto.

WHEREFORE, the Signatories respectfully request the Commission to issue an order approving this Stipulation and Agreement Concerning Wildlife Issues and authorizing the Company

to take such other actions as are necessary to implement the terms hereof.

Q1.Com	ELLINGER AND ASSOCIATES, LLC
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 (573) 635-7166 dcarter@brydonlaw.com dcooper@brydonlaw.com ATTORNEYS FOR THE EMPIRE DISTRICT ELECTRIC COMPANY	By: <u>/s/ Stephanie S. Bell</u> Marc H. Ellinger, #40828 Stephanie S. Bell, #61855 308 East High Street, Suite 300 Jefferson City, MO 65101 Telephone No.: (573)750-4100 E-mail: mellinger@ellingerlaw.com E-mail: <u>sbell@ellingerlaw.com</u> ATTORNEYS FOR MISSOURI DEPARTMENT OFCONSERVATION

# **CERTIFICATE OF SERVICE**

The undersigned certifies that a true and correct copy of the foregoing document was sent by electronic mail, on April 5, 2019, to the following:

Nicole Mers	Nathan Williams
Office of the General Counsel	Office of the Public Counsel
staffcounselservice@psc.mo.gov	opcservice@ded.mo.gov
nicole.mers@psc.mo.gov	nathan.williams@ded.mo.gov
David L. Woodsmall	Tim Opitz
Woodsmall Law Office	Renew Missouri Advocates
david.woodsmall@woodsmalllaw.com	Tim@renewmo.org
Rochelle Reeves	Stephanie Bell
Missouri Division of Energy	Ellinger Law
Rochelle.Reeves@ded.mo.gov	sbell@ellingerlaw.com
	Jennifer.frazier@mdc.mo.gov
Henry Robertson	
hrobertson@greatriverslaw.org	

Q1.Com

# APPENDIX A TO THE STIPULATION AND AGREEMENT CONCERNING WILDLIFE ISSUES FILE NO. EA-2019-0010 Wildlife Conditions

- 1. The Company will not cut down or destroy known active (in-use) or inactive (alternate) eagle nest trees.
- 2. The Company will not construct a turbine within one mile of currently known active (in-use) or inactive (alternate) eagle nests.
- 3. The Company will use best efforts to obtain an Eagle Incidental Take Permit (pursuant to an approved Eagle Conservation Plan (ECP) from the United States Fish and Wildlife Service (USFWS). For purposes of this paragraph, "best efforts" means diligent pursuit of an Eagle Incidental Take Permit but not an absolute obligation to obtain the same if the terms required by USFWS are such that operation without such permit would be in the interest of the Company's customers.
- 4. The Company will comply with operational restrictions, if any, identified by the USFWS as necessary for protection of the eagles.
- 5. Unless otherwise provided in the Habitat Conservation Plan for gray bats issued by the U.S Fish & Wildlife Service in coordination with MDC, any turbines within 1,000 feet of the designated riparian corridor (as generally reflected in Attachments A-HC and B-HC and specifically defined in Shapefiles provided by MDC to Company on April 4, 2019) will not operate from 30 minutes before dusk until 30 minutes after dawn during the active season for the gray bat when: a) temperatures are above 50 degrees Fahrenheit; and b) wind speeds are less than 8.0 meters per second. The "active season" will be determined by the first and last recorded presence of gray bat on the Kings Point and Norfolk Ridge wind farm, based on acoustic data collected by Empire's consultant during the 2019 monitoring season.
- 6. The Company will use best efforts to obtain an Incidental Take Permit (ITP) covering the Gray Bat, (pursuant to an approved Habitat Conservation Plan (HCP)) from the USFWS. For purposes of this paragraph "best efforts" means diligent pursuit of an Incidental Take Permit but not an absolute obligation to obtain the same if the terms required by USFWS are such that operation without such permit would be in the interest of the Company's customers.
- 7. The Company will comply with operational restrictions, if any, identified by the USFWS as necessary for protection of the Gray Bat and any other species covered by the HCP.
- 8. The Company will not construct a turbine within one mile of the boundary of any MDC Conservation Areas. The Company will not construct a turbine within three miles of the boundary of any MDC Conservation Areas, except as generally depicted on Attachments C-HC and B-HC.

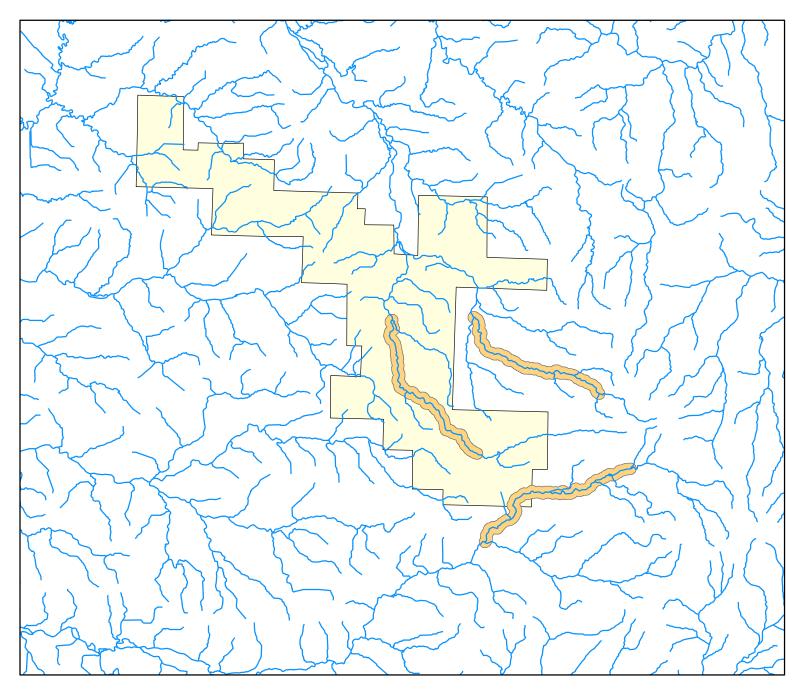
- 9. The Company will fund a traffic count survey at Providence Prairie Conservation Area to be conducted by MDC in an amount not exceeding <u>\*\*\$10,000.00\*\*</u>.<sup>2</sup>
- 10. The Company will conduct post-construction monitoring of eagle fatality and disturbances and bat fatalities in accordance in USFWS Guidance, for a minimum of three years, and conduct additional surveys as required by the HCP/ECP. Fatality monitoring efforts involve searching for eagle and bat carcasses beneath turbines and other facilities to estimate the number of fatalities.
- 11. Reporting of any mortality will be conducted in accordance with the ECP, HCP and the accompanying ITP. Monitoring results will be provided to the MDC and other parties as required in these documents.
- 12. If an Incidental Take Permit covering bald eagles and gray bats is not received for the Projects, the Company will report to MDC observed mortalities of all bird and bat "Species of Conservation Concern" by December 31 each year, identifying the date, turbine location (UTM), species, and reproductive status (if available), and sex of each individual animal.
- 13. In order to afford MDC the opportunity to audit post-construction monitoring requirements of any take permit or associated conservation plan approved by the Fish & Wildlife Service, MDC will be allowed (upon completion of the Company's standard requirements for third parties to access Company property) to accompany Company or contracted monitoring personnel for sampling events annually when those personnel conduct post-construction monitoring for eagles and/or bats.
- 14. The Company will provide MDC a copy of all documents and/or reports related to the Project that it provides to the USFWS at the same time as they are provided to the USFWS.
- 15. Copies of reports sent to USFWS and MDC shall be submitted as business confidential information to MDC. MDC may include information from such submittals in MDC's Natural Heritage Database.
- 16. The Company will provide reasonable advanced notice to MDC of all scheduled meetings and conference calls (related to the Project) with the USFWS.

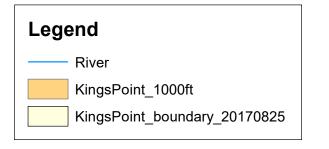
<sup>&</sup>lt;sup>2</sup> This item has been marked as Confidential pursuant to 4 CSR 240-2.135(2)(A) 4 and 6.

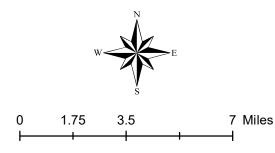
# ATTACHMENTS A-D

# HAVE BEEN MARKED HIGHLY CONFIDENTIAL

# Wind turbines located near gray bat capture areas Kings Point Wind Farm Barton/Dade/Jasper/Lawerence Counties

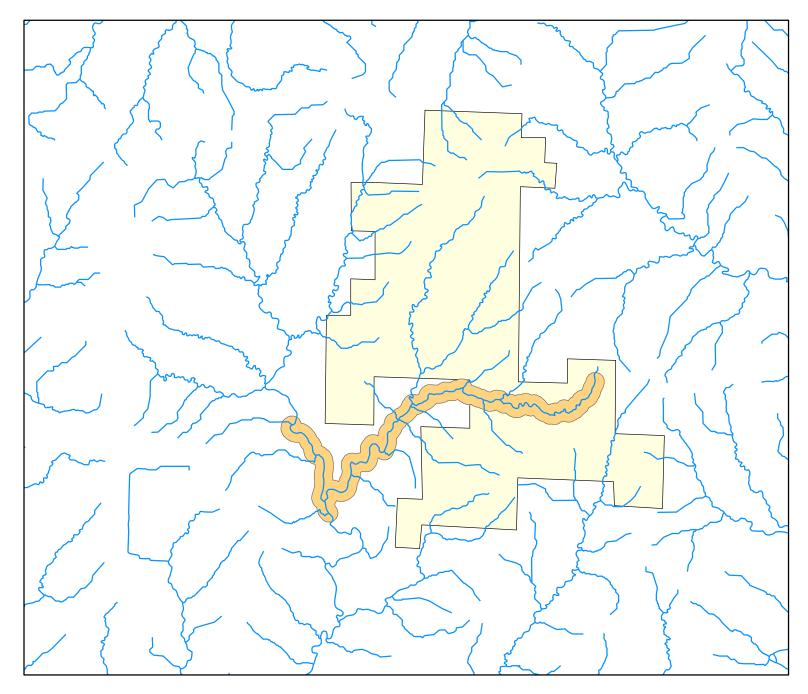






Map Prepared by: Kathryn Bulliner; 4/3/2019

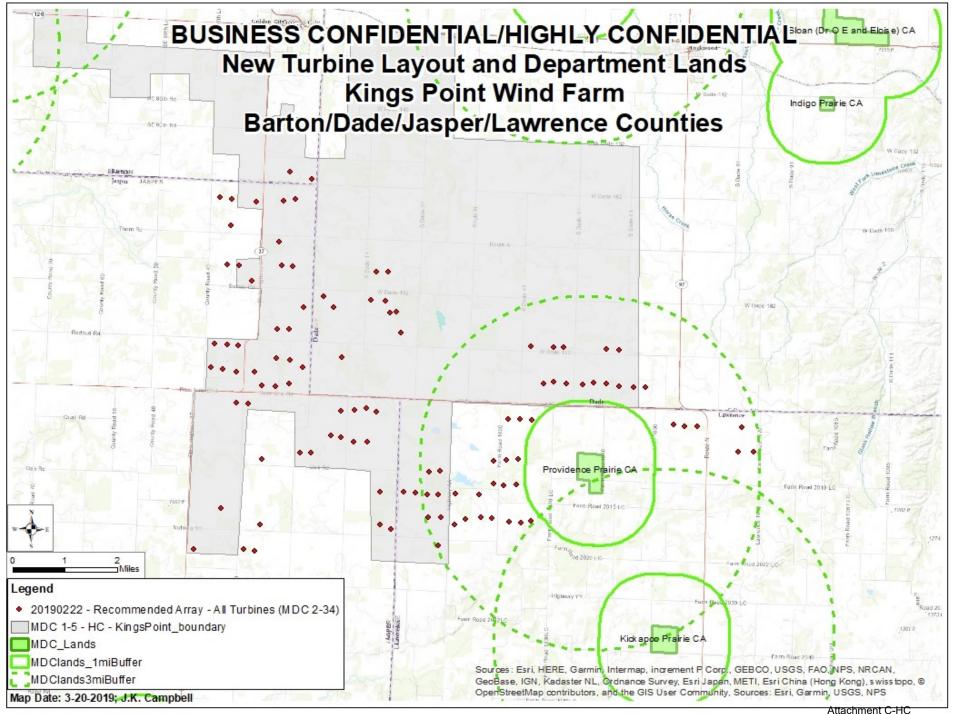
# Wind turbines located near gray bat acoustic detections North Fork Ridge Wind Farm Barton County



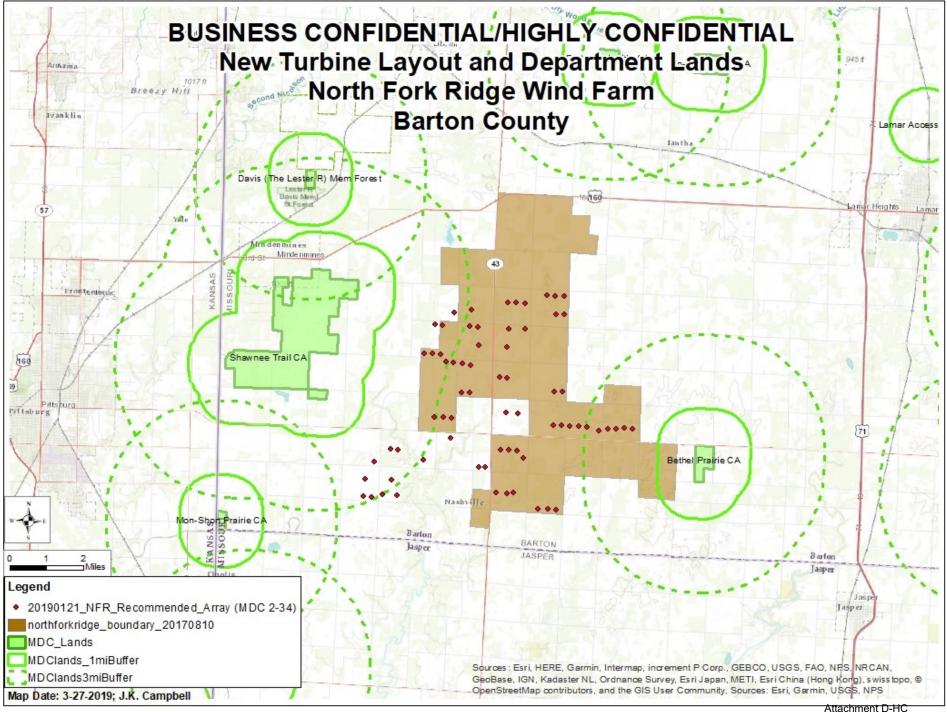


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Map Prepared by: Kathryn Bulliner; 4/3/2019



HIGHLY CONFIDENTIAL



HIGHLY CONFIDENTIAL

## APPENDIX A TO THE STIPULATION AND AGREEMENT CONCERNING WILDLIFE ISSUES FILE NO. EA-2019-0010 Wildlife Conditions

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2. The Company will not construct a turbine within one mile of currently known active (in-use) or inactive (alternate) eagle nests.

3. The Company will use best efforts to obtain an Eagle Incidental Take Permit (pursuant to an approved Eagle Conservation Plan (ECP) from the United States Fish and Wildlife Service (USFWS). For purposes of this paragraph, "best efforts" means diligent pursuit of an Eagle Incidental Take Permit but not an absolute obligation to obtain the same if the terms required by USFWS are such that operation without such permit would be in the interest of the Company's customers.

4. The Company will comply with operational restrictions, if any, identified by the USFWS as necessary for protection of the eagles.

5. Unless otherwise provided in the Habitat Conservation Plan for gray bats issued by the U.S Fish & Wildlife Service in coordination with MDC, any turbines within 1,000 feet of the designated riparian corridor (as generally reflected in Attachments A-HC and B-HC and specifically defined in Shapefiles provided by MDC to Company on April 4, 2019) will not operate from 30 minutes before dusk until 30 minutes after dawn during the active season for the gray bat when: a) temperatures are above 50 degrees Fahrenheit; and b) wind speeds are less than 8.0 meters per second. The "active season" will be determined by the first and last recorded presence of gray bat on the Kings Point and Norfolk Ridge wind farm, based on acoustic data collected by Empire's consultant during the 2019

monitoring season.

6. The Company will use best efforts to obtain an Incidental Take Permit (ITP) covering the Gray Bat, (pursuant to an approved Habitat Conservation Plan (HCP)) from the USFWS. For purposes of this paragraph "best efforts" means diligent pursuit of an Incidental Take Permit but not an absolute obligation to obtain the same if the terms required by USFWS are such that operation without such permit would be in the interest of the Company's customers.

7. The Company will comply with operational restrictions, if any, identified by the USFWS as necessary for protection of the Gray Bat and any other species covered by the HCP.

8. The Company will not construct a turbine within one mile of the boundary of any MDC Conservation Areas. The Company will not construct a turbine within three miles of the boundary of any MDC Conservation Areas, except as generally depicted on Attachments C- HC and B-HC.

9. The Company will fund a traffic count survey at Providence Prairie Conservation Area to be conducted by MDC in an amount not exceeding \*\*\_\_\_\_\_\*.<sup>1</sup>

10. The Company will conduct post-construction monitoring of eagle fatality and disturbances and bat fatalities in accordance in USFWS Guidance, for a minimum of three years, and conduct additional surveys as required by the HCP/ECP. Fatality monitoring efforts involve searching for eagle and bat carcasses beneath turbines and other facilities to estimate the number of fatalities.

11. Reporting of any mortality will be conducted in accordance with the ECP,

<sup>&</sup>lt;sup>1</sup> This item has been marked as Confidential pursuant to 4 CSR 240-2.135(2)(A) 4 and 6.

HCP and the accompanying ITP. Monitoring results will be provided to the MDC and other parties as required in these documents.

12. If an Incidental Take Permit covering bald eagles and gray bats is not received for the Projects, the Company will report to MDC observed mortalities of all bird and bat "Species of Conservation Concern" by December 31 each year, identifying the date, turbine location (UTM), species, and reproductive status (if available), and sex of each individual animal.

13. In order to afford MDC the opportunity to audit post-construction monitoring requirements of any take permit or associated conservation plan approved by the Fish & Wildlife Service, MDC will be allowed (upon completion of the Company's standard requirements for third parties to access Company property) to accompany Company or contracted monitoring personnel for sampling events annually when those personnel conduct post-construction monitoring for eagles and/or bats.

14. The Company will provide MDC a copy of all documents and/or reports related to the Project that it provides to the USFWS at the same time as they are provided to the USFWS.

15. Copies of reports sent to USFWS and MDC shall be submitted as business confidential information to MDC. MDC may include information from such submittals in MDC's Natural Heritage Database.

16. The Company will provide reasonable advanced notice to MDC of all scheduled meetings and conference calls (related to the Project) with the USFWS.

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 19<sup>th</sup> day of June 2019.



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Morris L. Woodruff Secretary

### MISSOURI PUBLIC SERVICE COMMISSION

### June 19, 2019

#### File/Case No. EA-2019-0010

# Missouri Public Service

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#### **Natural Resources Defense Council**

Henry B Robertson 319 N. Fourth St., Suite 800 St. Louis, MO 63102 hrobertson@greatriverslaw.org Enclosed find a certified copy of an Order or Notice issued in the above-referenced matter(s).

Sincerely,

Jorris Z Woodruff

Morris L. Woodruff Secretary

Recipients listed above with a valid e-mail address will receive electronic service. Recipients without a valid e-mail address will receive paper service.