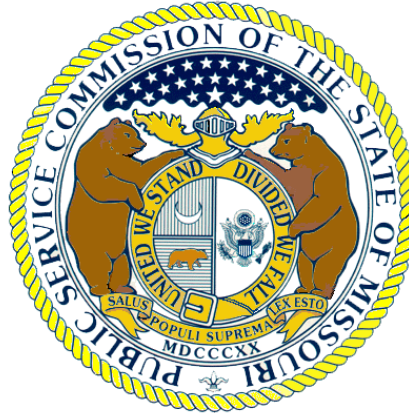


**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**



In the Matter of the Application of KCP&L Greater )  
Missouri Operations Company for Permission and )  
Approval of a Certificate of Public 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**

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**REPORT AND ORDER**

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**Issue Date: March 2, 2016**

**Effective Date: March 12, 2016**

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of KCP&L Greater Missouri Operations Company for Permission and Approval of a Certificate of Public 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  
)  
)

## APPEARANCES

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And

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For the Staff of the Missouri Public Service Commission.

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For the Office of the Public Counsel and the Public.

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For the Missouri Division of Energy.

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For Earth Island Institute d/b/a Renew Missouri.

Chief Regulatory Law Judge: **Morris L. Woodruff**

## **REPORT AND ORDER**

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The Missouri Public Service Commission, having considered all the competent and substantial evidence upon the whole record, makes the following findings of fact and conclusions of law. The positions and arguments of all of the parties have been considered by the Commission in making this decision. Failure to specifically address a piece of evidence, position, or argument of any party does not indicate that the Commission has failed to consider relevant evidence, but indicates rather that the omitted material was not dispositive of this decision.

### **Procedural History**

KCP&L Greater Missouri Operations Company (GMO) filed an Application on November 12, 2015, requesting a certificate of convenience and necessity to construct, own, and operate a solar electric generation facility in rural Jackson County, Missouri. The Commission directed that notice of GMO's filing be given to potentially interested persons and established December 7 as the deadline to file an application to intervene.

The Commission received timely applications to intervene from the Missouri Department of Economic Development, Division of Energy; United For Missouri, Inc.; Brightergy, LLC; and Earth Island Institute d/b/a Renew Missouri, and each was allowed to intervene. An evidentiary hearing was held on February 11, 2016, and the parties filed post-hearing briefs on February 18.

### **Findings of Fact**

1. GMO is a Delaware corporation with its principal office and place of business at 1200 Main Street, Kansas City, Missouri 65105. GMO is primarily engaged in providing electric and steam utility service to the public in its certificated areas in Missouri. GMO is an “electrical corporation” and a “public utility” subject to the jurisdiction, supervision and control of the Commission under Chapters 386 and 393.<sup>1</sup>

2. GMO is a subsidiary of Great Plains Energy, which also owns Kansas City Power & Light Company (KCP&L). GMO has no employees, rather all services for GMO are provided by employees of KCP&L.<sup>2</sup>

3. GMO has asked the Commission to grant it a certificate of convenience and necessity to construct, own, and operate a new solar electrical production facility to be built in an unincorporated portion of Jackson County, Missouri, near the town of Greenwood. The 300-acre Greenwood site is already owned by GMO and is located within the company’s service territory. The existing Greenwood Energy Center, which includes four combustion turbines, is also located at the site. The proposed solar plant will be located on

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<sup>1</sup> Stipulation of Agreed Upon Facts, Paragraph 3. On February 2, 2016, at the direction of the Commission, the parties filed a stipulation of agreed upon facts. United for Missouri did not sign the stipulation, but did not oppose it. As permitted by Commission Rule 4 CSR 240-2.115, the Commission will treat that stipulation of facts as unanimous and will cite to it as appropriate in the report and order.

<sup>2</sup> Transcript, Page 210, Lines 4-10.

farmland north of the combustion turbines.<sup>3</sup>

4. The proposed solar plant would cover approximately twelve acres of the Greenwood site.<sup>4</sup> There is enough room at the Greenwood site to construct additional solar plant if the company chooses to do so.<sup>5</sup>

5. The solar plant is expected to produce three megawatts of electric power when completed.<sup>6</sup> That amounts to 4,700 megawatt hours of energy per year,<sup>7</sup> enough power to serve approximately 440 customers.<sup>8</sup> The company hopes to have the solar plant completed and in operation by the end of July, 2016.<sup>9</sup>

6. The expected cost of the solar plant was disclosed in GMO's Application and at the hearing, but it is a highly confidential number and will not be included in this order.<sup>10</sup> The cost of the project is small relative to the \$1.4 billion of rate base currently owned by GMO and in relation to the \$180 million in annual capital expenditures made by the company.<sup>11</sup> Given the small size of the project, GMO views it as a pilot project, intended to try out a new technology.<sup>12</sup>

7. Because of its relatively small cost, GMO intends to pay the cost of the solar plant from its available funds.<sup>13</sup> Ultimately, it would seek to recover those costs from

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<sup>3</sup> Stipulation of Agreed Upon Facts, Paragraph 4.

<sup>4</sup> Stipulation of Agreed Upon Facts, Paragraph 5.

<sup>5</sup> Transcript, Page 228, Lines 20-25.

<sup>6</sup> Transcript, Page 73, Lines 23-24.

<sup>7</sup> Transcript, Page 92, Lines 7-13.

<sup>8</sup> Transcript, Page 74, Lines 9-12.

<sup>9</sup> Transcript, Page 168, Lines 5-14.

<sup>10</sup> The cost of the plant can be found in the Application, Page 3, and at Page 256 of the transcript, Line 16.

<sup>11</sup> Transcript, Page 193, Lines 1-5.

<sup>12</sup> Transcript, Page 75, Lines 15-24.

<sup>13</sup> Application Page 4, and Transcript, Page 270, Lines 2-6.

GMO's ratepayers.<sup>14</sup> GMO will also be able to take advantage of the federal Investment Tax Credit to offset thirty percent of the cost of the project.<sup>15</sup>

8. The solar plant will be connected to a single circuit at the distribution level of GMO's electrical system.<sup>16</sup> That makes this plant different than GMO's other generation sources, including its wind resources, which are connected at the transmission level.<sup>17</sup> Because the solar plant is not connected at the transmission level, it will not be dispatched by the Southwest Power Pool as are GMO's other generating assets.<sup>18</sup> The solar plant's connection at the distribution level also differs from existing rooftop solar generation, which is connected behind the customer's meter.<sup>19</sup> The connection at the distribution level also makes this solar plant similar to a potential community solar plant.<sup>20</sup>

9. A community solar plant is one in which members of a particular community band together to build a small solar generation facility to provide power to their community. GMO would be required to integrate that community solar plant into its distribution system.<sup>21</sup>

10. Because of its small size, the power produced by the solar plant will not allow GMO to discontinue the use of any of its non-renewable electric generation resources. It would, however, reduce the need to use coal-fired generation and would offset an estimated 5,000 tons of carbon dioxide that would otherwise be emitted if that electricity

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<sup>14</sup> Transcript, Pages 218-219, Lines 22-25, 1-2.

<sup>15</sup> Transcript, Page 237, Lines 7-13.

<sup>16</sup> Transcript, Page 74, Lines 1-8.

<sup>17</sup> Transcript, Page 74, Lines 15-21.

<sup>18</sup> Transcript, Page 241, Lines 4-11.

<sup>19</sup> Transcript, Page 243, Lines 2-6.

<sup>20</sup> Transcript, Page 85, Lines 3-12.

<sup>21</sup> Transcript, Pages 116-117, Lines 15-25, 1-15.

were generated by a coal-fired plant.<sup>22</sup> Again, because of the small size of the solar plant, that is only a small percentage of GMO's total carbon emissions.<sup>23</sup>

11. GMO's plan to build a small utility-scale solar plant at Greenwood would not be the first such solar plant in Missouri. In 2015, the Commission approved a similar solar plant in O'Fallon, Missouri to be operated by Union Electric Company, d/b/a Ameren Missouri.<sup>24</sup>

12. GMO has decided to pursue solar power as a renewable alternative to coal-based electric generation. Its strategy is to develop a utility-scale solar facility in the range of 2-5 megawatts, and to pursue rooftop solar installations owned by the utility at the commercial and industrial level.<sup>25</sup> This proposal encompasses the first goal, and the company has filed notice of its intent to pursue rooftop solar.<sup>26</sup>

13. GMO reflected the addition of a solar generation system in its most recent Integrated Resource Plan (File No. EO-2015-0252) and in its Preferred Resource Plan.<sup>27</sup>

14. GMO needs to pursue solar power to diversify its sources of electricity, as it currently does not have a utility-scale solar facility.<sup>28</sup> Kansas City Power & Light Company -GMO's corporate sister – currently operates two smaller solar facilities in Kansas City, one at Paseo School and the other at Kauffman Stadium. Those facilities are much smaller

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<sup>22</sup> Transcript, Page 142, Lines 6-9.

<sup>23</sup> Transcript, Page 141, Lines 22-24.

<sup>24</sup> Transcript Page 77, Lines 1-16. *Order Approving Amended Non-Unanimous Stipulation and Agreement*, File No. EA-2014-0136, April 8, 2015.

<sup>25</sup> Transcript, Page 173, Lines 15-24.

<sup>26</sup> Stipulation of Agreed Upon Facts, Paragraph 7. GMO's notice has been assigned File No. EA-2016-0044.

<sup>27</sup> Stipulation of Agreed Upon Facts, Paragraph 6.

<sup>28</sup> Transcript, Page 132, Lines 22-25.

than three megawatts – the facility at the stadium is 28.8 kilowatts<sup>29</sup> – and, significantly, are connected at the secondary level, so they primarily serve a single customer at those locations.<sup>30</sup>

15. GMO also needs to pursue solar power to comply with current and future environmental requirements. At the state level, GMO must comply with the requirements of Missouri's Renewable Energy Standard (RES). At a minimum, by 2021, investor-owned electric utilities, such as GMO, must obtain fifteen percent of their sales from renewable energy. Of that fifteen percent, two percent must come from solar energy.<sup>31</sup> GMO does not need to add this solar plant to meet Missouri's current RES standards.<sup>32</sup>

16. GMO must also comply with multiple environmental regulations at the federal level. Diversification into increased solar production will help GMO generate more clean energy and help it to comply with those regulations. That is why GMO included plans for a utility-scale solar plant in its Integrated Resource Plan.<sup>33</sup>

17. GMO's greatest need for additional solar production at this time may be its need to comply with the federal Environmental Protection Agency's (EPA's) Clean Power Plan regulation, which is aimed at reducing the amount of carbon injected into the atmosphere. Nearly everything about the Clean Power Plan is still uncertain.

18. The Clean Power Plan regulation has recently been finalized and is currently an effective final regulation.<sup>34</sup> The Clean Power Plan gives the separate states options for how to implement the plan set out by the EPA. Missouri does not yet have a plan in place,

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<sup>29</sup> Transcript, Page 114, Lines 5-8.

<sup>30</sup> Transcript, Page 79, Lines 11-25.

<sup>31</sup> Transcript, Page 260, Lines 8-13.

<sup>32</sup> Transcript, Page 260, Lines 14-18.

<sup>33</sup> Transcript, Pages 158-159, Lines 2-25, 1-12.

<sup>34</sup> Transcript, Page 123, Lines 23-25.



but was to have submitted an initial compliance plan by September 2016, with a final plan submitted in 2018. The regulation requires compliance with reduced carbon levels beginning in 2022.<sup>35</sup>

19. To add even more uncertainty, the United States Supreme Court recently issued an order staying enforcement of the Clean Power Plan while the merits of a challenge to the rule are argued at the D.C. Circuit Court of Appeals.<sup>36</sup> The Supreme Court's stay of the compliance portions of the Clean Power Plan is not a vacatur and the rule remains in effect.<sup>37</sup> The judicial stay does not provide additional certainty, on the contrary, the stay of the compliance portion of the rule might delay the submission of a state plan and thereby shorten the available time for GMO to plan how it will meet the requirements of the state plan. GMO reasonably believes the rule will likely remain in some form and, therefore, it is prudent for the company to continue to plan for how it will comply with that rule.<sup>38</sup>

20. The Clean Power Plan as it currently exists would require GMO to reduce its carbon production by up to 37 percent. GMO will need to diversify its generation portfolio by adding wind, energy efficiency and additional solar power to meet those requirements.<sup>39</sup>

21. Witnesses for Staff and Public Counsel meticulously established that GMO's plan to build a utility-scale solar plant is not the least-cost alternative for obtaining an additional three megawatts of energy. Wind energy and fossil fuel generation would be less costly, even when taking into account the cost to comply with environmental

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<sup>35</sup> Transcript, Page 127, Lines 13-21.

<sup>36</sup> Transcript, Page 128, Lines 22-24.

<sup>37</sup> Transcript, Page 138, Lines 9-10.

<sup>38</sup> Transcript, Page 135, Lines 6-13.

<sup>39</sup> Transcript, Page 130, Lines 4-12.

regulations.<sup>40</sup> In fact, GMO does not need an additional three megawatts of generating capacity to meet the energy requirements of its customers at this time.<sup>41</sup>

22. But GMO does not claim that its plan to build a utility-scale solar plant is the least-cost alternative for obtaining the electricity that plant will produce, or to comply with environmental regulatory requirements.<sup>42</sup> Rather GMO wants to build the solar plant to gain experience and skills in operating a utility-scale solar plant with an ultimate goal of increasing GMO's use of solar power.<sup>43</sup>

23. GMO expects to gain a great deal of knowledge and experience by constructing the solar plant as a pilot project. From an engineering standpoint, GMO expects to gain experience in designing an interconnection facility for a utility-scale solar plant.<sup>44</sup> It expects to learn whether there are advantages to locating a solar plant next to an existing generating facility, and whether the workers at the existing facility can be trained to manage and maintain the solar plant.<sup>45</sup> GMO wants to learn more about how a utility-scale solar plant would impact the company's distribution system, including voltage and system stability,<sup>46</sup> as well as possibly providing reactive power to support the system.<sup>47</sup> Further, GMO wants to examine how solar energy production occurs under weather conditions in GMO's service territory.<sup>48</sup>

24. Although solar power is not the least-cost option at this time, it is anticipated

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<sup>40</sup> Ex. 4HC, See also, Transcript, Pages 304-312.

<sup>41</sup> Transcript, Page 298, Lines 17-25.

<sup>42</sup> Transcript, Page 177, Lines 3-18.

<sup>43</sup> Transcript, Page 201, Lines 1-6.

<sup>44</sup> Transcript, Page 77, Lines 19-23.

<sup>45</sup> Transcript, Pages 77-78, Lines 23-25, 1-4.

<sup>46</sup> Transcript, Page 80, Lines 5-12.

<sup>47</sup> Transcript, Page 112, Lines 15-21.

<sup>48</sup> Transcript, Page 84, Lines 19-24.

that its costs will continue to drop in the next few years to bring it into parity with alternative sources of electricity.<sup>49</sup> Witnesses for Staff<sup>50</sup> and Public Counsel<sup>51</sup> agreed that the cost of solar power would decrease in future years.

25. Staff and Public Counsel contend the decreasing cost of solar generation makes GMO's project uneconomic at this time because the costs will be lower in a few years. Public Counsel's witness, Dr. Michael Proctor, attempted to quantify a portion of the savings that would result by waiting to build this solar plant and determined that the optimum time to build the plant would be 2020.<sup>52</sup> He warned that building the plant now would result in significantly higher costs to ratepayers.<sup>53</sup>

26. Dr. Proctor's calculation showed that the savings from waiting until 2020 to build this solar plant would appear to be significant when measured on a per megawatt hour per year basis.<sup>54</sup> However, because this solar project is quite small, the actual total cost savings resulting from the delay are not significant when compared to GMO's total annual revenues.<sup>55</sup>

27. The cost to build GMO's proposed solar plant will likely decrease in the coming years. But rather than being a cause for delay, that is a cause for GMO to act now. As the price of solar power decreases there is a possibility that third parties may construct a community solar system that will need to be incorporated into GMO's system. If that

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<sup>49</sup> Transcript, Pages 170-171, Lines 20-25, 1.

<sup>50</sup> Transcript, Page 328, Lines 11-17, Page 401, Lines 4-10, Page 418, Lines 9-19.

<sup>51</sup> Transcript, Page 459, Lines 6-11.

<sup>52</sup> Transcript, Page 489, Lines 2-5.

<sup>53</sup> Transcript, Page 511, Lines 16-20.

<sup>54</sup> Those numbers are highly confidential so they will not be stated in this order. The numbers may be found in Ex. 21 HC.

<sup>55</sup> Those numbers are highly confidential so they will not be stated in this order. The numbers may be found at Transcript, Pages 519-520, Lines 1-25, 1-15.

happens, GMO will benefit from the experience of operating its own solar plant.<sup>56</sup>

28. Aside from the fact that a community solar system might be constructed in GMO's service territory without GMO's participation, GMO would likely benefit from learning its lessons about how to integrate solar into its system now rather than a few years from now when many other individuals and utilities are taking advantage of the coming price parity.<sup>57</sup> GMO's customers have already shown their enthusiasm for solar power by collecting \$50 million in solar rebates.<sup>58</sup>

29. KCP&L also plans to pursue additional solar electric production and will benefit from the lessons learned by GMO in building the Greenwood plant. But only GMO ratepayers will be asked to pay the cost to construct that plant.<sup>59</sup>

30. Whether GMO builds this solar plant in 2016 or 2020, it will be able to take advantage of a federal tax credit which Congress extended on December 18, 2015. The Internal Revenue Code Section 48 Energy Credit applies to solar facilities and will offset 30 percent of qualifying costs through tax year 2019. GMO does not expect to utilize the tax credit until after 2021 because of existing net operating loss carryforwards that must be used first in the consolidated Great Plains Energy and subsidiaries' federal tax return.<sup>60</sup>

31. GMO's ratepayers will benefit from the tax credit when that credit is claimed in the company's tax return. The credit would reduce the company's tax liability, and the reduced tax liability reduces the revenue requirement that the company would otherwise recover from ratepayers.<sup>61</sup>

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<sup>56</sup> Transcript, Page 203, Lines 11-19.

<sup>57</sup> Transcript, Pages 86-87, Lines 20-25, 1-11.

<sup>58</sup> Transcript, Page 223, Lines 1-9.

<sup>59</sup> Transcript, Page 233, Lines 3-16.

<sup>60</sup> Stipulation of Agreed Upon Facts, Paragraph 8.

<sup>61</sup> Transcript, Page 442, Lines 8-24.

## **Conclusions of Law**

A. GMO is an electrical corporation as that term is defined at Section 386.020(15), RSMo (Supp. 2013). As an electrical corporation, GMO is subject to regulation by this Commission as described in Chapters 386 and 393, RSMo.

B. Missouri's Renewable Energy Standards are found in Sections 393.1025 and 393.1030, RSMo (Supp. 2013)

C. 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."

D. 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. ..."

E. That statute sets the legal standard by which the Commission must determine whether to grant GMO 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>62</sup>

F. In evaluating applications for certificates of convenience and necessity, the Commission has frequently considered five factors first described in a Commission decision

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<sup>62</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).

regarding an application for certificate of convenience and necessity filed by Tartan Energy Company, LC, d/b/a Southern Missouri Gas Company.<sup>63</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>64</sup>

G. 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 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 GMO’s application to construct a new electric plant. 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.

### **Decision**

In describing its decision, the Commission will respond to the list of issues set forth by the parties before the evidentiary hearing. In part, that list of issues is based on the previously described *Tartan* standards.

1. Does the evidence establish that the Solar Generation project as described in GMO’s applications in this docket and for which GMO is seeking a certificate of

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<sup>63</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>64</sup> *Tartan Energy*, at 177.

convenience and necessity (“CCN”), is “necessary or convenient for the public service” within the meaning of section 393.170, RSMo?

1a. Does the evidence establish that there is a need for the project?

The evidence establishes that there is a need for the project. While the use of solar power in Missouri is limited at this time, solar power will become more prominent in the near future when its costs decrease due to improved technology and the cost of more carbon-intensive energy sources increase due to the cost to comply with current and future environmental regulation. That decrease in relative costs will make solar power more attractive to electric utilities, and importantly, more attractive to customers who have already demonstrated a strong interest in solar power by taking advantage of solar power rebates mandated by Missouri’s RES statute.

GMO proposes to build a small, but utility-scale, solar power generating plant as a pilot program to give it “hands-on” experience in designing, constructing, and operating a solar facility with a view toward eventually building additional solar facilities. Gaining that experience now is important so that GMO can remain in front of the upcoming adoption curve. Furthermore, GMO will need to build more solar generating facilities, as well as other renewable generating resources, to comply with the federal Clean Power Plan or other regulations designed to reduce the injection of carbon dioxide and other pollutants into the atmosphere. This pilot plant represents a good first step.

1b. Is GMO qualified to provide the proposed project services?

This is one of the *Tartan* standards that, while is appropriate when considering whether a utility should be allowed to provide a new service or move into a new service territory, does not really apply to GMO’s application for authority to construct a solar power generation plant. GMO has constructed and operated electrical generation facilities of various types for many years. Its desire to gain more experience in constructing and

operating a pilot solar plant provides no reason to doubt its ability to build and operate that plant. GMO is qualified to construct and operate the proposed plant.

1c. Does GMO have the financial ability to provide the project services?

The cost to construct the proposed pilot solar plant is relatively small compared to GMO's financial resources. As a result, GMO will be able to pay those construction costs from its available funds. It clearly has the financial ability to construct the pilot solar plant.

1d. Is GMO's proposed project economically feasible?

GMO readily agrees that construction of the proposed pilot solar plant is not the least-cost alternative for obtaining an additional three megawatts of electric power it is not even the least cost alternative for obtaining that three megawatts of electric power from a renewable resource – wind power would be cheaper. But the purpose of this pilot solar plant is not solely to provide the cheapest power possible to GMO's customers. Rather, its purpose is to help GMO to develop more and cheaper solar power in the future. The benefits GMO and its ratepayers will ultimately receive from the lessons learned from this pilot project are not easily quantifiable since there is no way to measure the amounts saved by avoiding mistakes that might otherwise be made. But it is likely that future savings will be substantial. The Commission concludes that as a pilot project, GMO's solar power plant is economically feasible.

1e. Does GMO's proposed project promote the public interest?

GMO's customers and the general public have a strong interest in the development of economical renewable energy sources to provide safe, reliable, and affordable service while improving the environment and reducing the amount of carbon dioxide released into the atmosphere. It is clear, solar power will be an integral part of this development, building a bridge to our energy future. The Commission can either act to facilitate that process or temporarily hinder it. GMO's proposed pilot solar plant will do the former and, thus, it will



promote the public interest.

2. If GMO's CCN application does not meet the criteria set forth by Tartan, is there an exception that would still permit the Commission to grant the CCN?

As explained earlier, the *Tartan* standards were created by the Commission only to guide its decision making when considering an application for a certificate of convenience and necessity. They are not the legal standard by which that decision is measured. No exception is necessary, and the Commission has found that GMO's application meets the *Tartan* criteria.

3. Should the impact on ratepayers be considered by the Commission when weighing GMO's CCN application?

a. If so, does the evidence establish that the project will have an impact on ratepayers?

b. If ratepayer impact is an appropriate issue, does the effect violate the public interest?

Of course, the impact on ratepayers must be considered when weighing GMO's application to construct a pilot solar plant. The financial cost that will result from construction of this plant will be very small when compared to the amount of money GMO must spend each year to provide electric service to its customers. As a result, the impact on customer rates will be minimal. The small increase in rates that may result from this project will be amply offset by the less tangible benefits that will result from the lessons GMO will learn from the project and the benefits that will result from the increased use of solar power in the future; made possible by construction and operation of this pilot solar plant.

The Commission is concerned that only GMO ratepayers will bear the cost of the project. The Commission will not make any specific ratemaking decisions in this case.

Those will be reserved for GMO's pending rate case. However, the matter will once again come before the Commission when GMO seeks to add the plant to its rate base. At that time, the Commission will expect GMO to propose a means by which those costs will be shared with KCP&L's customers who will also benefit from the lessons learned from this pilot project.

4. Who will benefit from any tax credits extended by the U.S. government should the project be approved?

The evidence established that any tax credits made available to GMO because of the construction of this plant would off-set the company's tax liabilities and reduce the company's operating costs. Since ratepayers ultimately pay the company's taxes through their rates, those tax credits would benefit GMO's ratepayers.

5. If the Commission approves the CCN, should it impose any conditions?

In its statement of positions, Staff proposed six operational conditions designed to ensure that GMO complies with certain technical requirements. The evidence presented at the hearing demonstrated that GMO has either already complied with those conditions, or is willing to do so. The Commission will order GMO to comply with those operational conditions.

Staff also proposed economic conditions that would require GMO's shareholders to bear all or part of the cost to construct what the company concedes is not the least-cost option for obtaining three megawatts of energy. In response to Staff's proposal, GMO asks the Commission to make a finding of decisional prudence in this case to assure the company that it will be able to include the value of the solar plant in its rate base in a future rate case. The Commission will not make that rate making decision in this case. But the Commission finds that GMO has demonstrated that its solar plant is "an improvement

justifying its cost.”<sup>65</sup> GMO is free to seek to include the solar plant in its rate base in its pending rate case. There is no reason to impose any of the economic conditions proposed by Staff, and the Commission will not do so.

The Commission has found that GMO’s proposal to construct a pilot solar plant is necessary or convenient for the public service and will grant the company the certificate of convenience and necessity it seeks. Given GMO’s desire to promptly begin construction on the plant, the Commission will make this order effective in ten days.

**THE COMMISSION ORDERS THAT:**

1. KCP&L Greater Missouri Operations Company’s Application for a certificate of convenience and necessity to construct, install, own, operate, maintain and otherwise control and manage electrical solar production and related facilities near Greenwood, Missouri is granted.

2. KCP&L Greater Missouri Operations Company shall comply with the following requirements:

a) File with the Commission a list of all electric and telephone lines of regulated and nonregulated utilities, railroad tracks, or any underground facility the proposed construction will cross as required by 4 CSR 240-3.105(1)(B)1, or a statement that there are no electric and telephone lines, railroad tracks, or underground facilities on the project site.

b) File the complete plans and specifications for construction of the proposed Greenwood Solar Facility with the Commission as required by 4 CSR 240-3.105(1)(B)2.

c) File with the Commission all required approvals as required by 4 CSR 240-

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<sup>65</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).

3.105(1)(D), or seek an appropriate waiver, as provided by 4 CSR 240-3.105(2).

d) Perform and file with the Commission an Interconnection Study demonstrating the project will not cause an adverse impact to the company's distribution system before commencing construction. The major components of this study should include: an executive summary, description of the Solar PV equipment and point of interconnection, the projected distribution system conditions, load flow analysis, and fault analysis.

e) Develop and file with the Commission a plan outlining its learning objectives for the Greenwood Solar Facility and a description of how the company will evaluate those objectives before commencing construction.

f) File with the Commission an evaluation of the Plan required by e) after the Greenwood Solar Facility has operated for a period of five years before the company's application for a certificate of convenience and necessity for its next utility-scale solar facility.

2. This report and order shall become effective on March 12, 2016.

**BY THE COMMISSION**



A handwritten signature in cursive script that reads "Morris L. Woodruff".

Morris L. Woodruff  
Secretary

Hall, Chm., Stoll, Kenney, Rupp, and  
Coleman, CC., concur;  
and certify compliance with the  
provisions of Section 536.080, RSMo

Dated at Jefferson City, Missouri,  
on this 2<sup>nd</sup> day of March, 2016.