

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

In the Matter of the Resource Plan of KCP&L )      Case No. EO-2015-0252  
Greater Missouri Operations Company      )

**JOINT FILING**

Pursuant to 4 CSR 240-22.080(9), KCP&L Greater Missouri Operations Company (“GMO” or “Company”), the Staff of the Missouri Public Service Commission (“Staff”), and the Sierra Club (collectively, the “Signatories”) hereby submit to the Missouri Public Service Commission (“Commission”) this Joint Filing that includes a remedy to many alleged deficiencies and concerns expressed by the Signatories of this Joint Filing regarding the compliance filing GMO submitted in this proceeding on April 1, 2015. Additionally, this document also identifies those alleged deficiencies that could not be resolved by the Signatories. The Missouri Department of Economic Development – Division of Energy (“DE”), Missouri Industrial Energy Consumers (“MIEC”), Dogwood Energy, LLC (“Dogwood”), Brightergy, LLC (“Brightergy”), Earth Island Institute, d/b/a Renew Missouri (“Renew Missouri”), the Natural Resources Defense Council (“NRDC”) and Missouri Solar Energy Industries Associates (“MOSEIA”) intervened in this case, but they are not Signatories to this Joint Filing. The Office of the Public Counsel (“OPC”) is also a party to this case.

In support hereof, the Signatories offer as follows:

**BACKGROUND**

1. On April 1, 2015, GMO submitted its compliance filing with Chapter 22 of the Commission’s regulations concerning GMO’s Electric Utility Resource Planning. Absent any extensions approved by the Commission, GMO would submit an annual update report no less than twenty (20) days prior to the annual update workshop to be held on or about April 1, 2016,

and will complete its next Chapter 22 annual update filing on April 1, 2016 (“the next Chapter 22 compliance filing”) unless new Chapter 22 rules alter the compliance dates.

2. On August 31, 2015, Staff, Sierra Club and NRDC submitted reports identifying concerns and in some cases alleging certain deficiencies regarding GMO’s 2015 Integrated Resource Plan (“IRP”). DE, MIEC, Dogwood, Brightergy, Renew Missouri, MOSEIA and OPC did not submit a report.

3. The Commission’s Electric Utility Resource Planning regulations provide that if the Staff, the OPC or any intervenor finds deficiencies in or concerns with a triennial compliance filing, they shall work with the electric utility and the other parties in an attempt to reach a joint agreement on a plan to remedy the identified deficiencies and concerns. If full agreement cannot be reached, the joint filing should set out in a brief narrative description those areas on which agreement cannot be reached. The resolution of any deficiencies and concerns shall also be noted in the joint filing. The Signatories have worked together to develop such a Joint Filing. This Joint Filing represents the fruits of those efforts.

**MPSC STAFF:**

4. Deficiency 1 – GMO did not provide a summary table in technical Volume 4 showing each potential supply-side resource option and an assessment of whether each potential supply-side resource option qualifies as a utility renewable energy resource as required by rule 4 CSR 240-22.040(2)(C)1.

**Resolution/Response:**

*The Company held a meeting with stakeholders on October 5, 2015 to review deficiencies. At that meeting, a table showing each potential supply-side option denoting whether the option is renewable resource or not was provided to support the 2015 IRP filing.*

*For future IRP filings, the Company will provide similar summary table. This deficiency is resolved.*

5. Deficiency 2 – Staff was unable to find in technical volume 4 that GMO described and documented the costs of ancillary and/or back-up sources of supply required to achieve necessary reliability levels in connection with intermittent and/or uncontrollable sources of generation (i.e., wind and solar) as required by rule 4 CSR 240-22.040(2)(A).

**Resolution/Response:**

*At the October 5, 2015 Stakeholder meeting, the Company discussed how because GMO is a member of Southwest Power Pool's ("SPP") Integrated Marketplace, GMO is no longer the Balancing Authority for their balancing area. As such, the Company is unable to provide the information outlined in the referenced rule.*

*For future IRP filings, the Company will provide clarification and discussion regarding SPP's role. This deficiency is resolved.*

6. Deficiency 3 – Staff was unable to find that GMO described and documented the potential supply-side resource option purchased power from bi-lateral transactions and from organized capacity and energy markets required by rule 4 CSR 240-22.040(1).

**Resolution/Response:**

*A request for capacity and energy was issued in March 2015 therefore responses weren't fully vetted by the April 1, 2015 IRP filing date. The highly confidential responses received from the RFP responses as well as the contract executed has been provided for Staff's review and information. This deficiency is resolved.*

7. Deficiency 4 – GMO did not perform a comprehensive analysis to optimize investments in advanced distribution technologies pursuant to rule 4 CSR 240-22.045(4) (C).

**Resolution/Response:**

*For future IRP filings, the Company will provide a summary list of the advanced distribution technologies analyzed in Volume 4.5. This deficiency is resolved.*

8. Deficiency 5 – The only requirements of Rule 4 CSR 240-22.060 Integrated Resource Plan and Risk Analysis that are satisfied, and described, and documented for each of GMO's eight (8) combined/joint candidate resource plans are for integrated resource analysis and the calculation of PVRR for each plan.

**Resolution/Response:**

*IRP rule (4 CSR 240-22.060(1)), regarding Resource Planning Objectives, states the utility may identify additional planning objectives that alternative resource plans will be designed to meet. GMO and Kansas City Power & Light Company ("KCP&L") believe planning that includes a joint plan view is an important element of resource planning for both*

companies. *Given differences in the interpretation of the requirements outlined in the IRP rules, this issue is currently unresolved.*

9. Deficiency 6 – Compliance Benchmark Plan - GMO did not provide a compliance bench mark plan which minimally complies with legal mandates for renewable energy resources, and is therefore deficient.

**Resolution/Response:**

*In the April, 2016 Annual Update, GMO will provide Alternative Resource Plans that vary the quantity and timing of renewable resource additions. This deficiency is resolved.*

10. Deficiency 7 – Optimal Compliance Resource Plan – GMO did not supply a compliance benchmark plan which minimally complies with renewable mandates. Twenty-four of GMO’s twenty-five alternative resource plans have identical renewable resource additions. Because there is little variation in mixes and timing of renewable supply-side resource additions, Staff believes GMO has not demonstrated that the planned renewable resources optimally comply with renewable mandates.

**Resolution/Response:**

*In the April, 2016 Annual Update, GMO will provide Alternative Resource Plans that vary the quantity and timing of renewable resource additions. This deficiency is resolved.*

11. Deficiency 8 – All of the filing requirements of rules 4 CSR 240-22.070(2) and 4 CSR 240-22.070(3) were not described and documented for any of the GMO candidate resource plans.

**Resolution/Response:**

*GMO believes these filing requirements were met for GMO resource plans. Given differences in the interpretation of the requirements outlined in the IRP rules, this issue is currently unresolved.*

12. Deficiency 9 – The only requirements of rule 4 CSR 240-22.070 Resource Acquisition Strategy Selection that were satisfied and described and documented for each of the eight (8) combined/joint candidate resource plans are: 1) analysis and specification of ranges for critical uncertain factors, and 2) the expected value of better information related to the critical uncertain factors (CO2, load forecast and natural gas prices).

**Resolution/Response:**

*GMO believes the filing requirements of 4 CSR 240-22.070 were met, as these requirements apply to GMO and not a joint GMO/KCP&L analysis. Given differences in the interpretation of the requirements outlined in the IRP rules, this issue is currently unresolved.*

13. Deficiency 10 – GMO's resource acquisition strategy selection process used to select Plan GBBEG as its adopted preferred resource plan does not comply with the minimum requirements of: a) rule 4 CSR 240-22.010(2)(C), because it does not *explicitly identify and, where possible, quantitatively analyze any other considerations which are critical to meeting the fundamental objective of the resource planning process, but which may constrain or limit the minimization of the present worth of expected utility costs*, and b) rule 4 CSR 240-22.070(1), because it does not *describe and document the process used to select the preferred resource plan, including the relative weights given to the various performance measures and the rationale used by utility decision-makers to judge the appropriate tradeoffs between competing planning objectives and between expected performance and risk*. [Emphasis added]

**Resolution/Response:**

*At the October 5, 2015 stakeholder meeting, the Company provided reference to the location in the 2015 IRP filing where a description of the process for the selection of the preferred resource plan could be found that complies with the above referenced rule. Given differences in the interpretation of the requirements outlined in the IRP rules, this issue is currently unresolved.*

**Concerns:**

- a. Concern A – GMO has indicated that the wind capacity factor is 54% in several tables that include tables 13, 14 and 15. Staff believes that this value is too high. The wind capacity factor is indicated to be 32% in table 11 in technical volume 1. Staff believes that this value is more reasonable. Staff is unable to verify what capacity factor value for wind GMO utilized in its supply-side resource analysis and modeling. Staff is concerned that GMO may have used a value greater than 32%.

**Resolution/Response:**

*At the October 5, 2015 stakeholder meeting, the Company clarified the reasons for utilization of the wind capacity factor and why it was appropriate. This concern is resolved.*

- b. Concern B – Utility-scale Solar PV and distributed Solar PV - GMO did not differentiate between the cost of distributed Solar PV and utility-scale PV, and yet intends to pursue distributed Solar PV in its preferred resource plan.

**Resolution/Response:**

*In the April, 2016 Annual Update, GMO will provide updated utility-scale and distributed photovoltaic solar pricing. This concern is resolved.*

- c. Concern C – Renewable planning environment - Recent changes to GMO's planning environment, particularly the impact of the Clean Power Plan and associated incentives may alter the timing of the planned additions. The final Clean Power Plan includes incentives for wind and solar additions which occur after the State submits their final plan to EPA (or after September 6, 2018) and generate MWhs during 2020 and/or 2021.

**Resolution/Response:**

*In the April, 2016 Annual Update, GMO will provide Alternative Resource Plans that have taken into account the Clean Power Plan. This concern is resolved.*

- d. Concern D – Timing of Solar additions - As shown in Table 3 below, GMO is projected to have a surplus of solar RECs from its customer-generators through 2026. The addition of a solar resource in 2016, rather than a later date, results in expiration of solar RECs. A portion of the projected surplus of solar RECs will expire and the potential value of selling solar RECs is low. For example, GMO purchased solar RECs at \$2.10/solar REC12 for 2014 compliance.

**Resolution/Response:**

*In the April, 2016 Annual Update, GMO will alter the addition of solar resources and fully discuss the background for including solar additions in the Preferred Plan. This concern is resolved.*



- e. Concern E – Retail Rate Impact Calculation - Although Staff is aware of recent advantageous wind pricing, GMO has failed to meet the goal outlined in 4 CSR 240-22.060(3), to develop substantively different mixes of supply-side resources and variations in the timing of resource acquisitions, and Staff is therefore concerned that GMO has not fully demonstrated that there is an economic benefit to the planned wind resource additions<sup>13</sup> or fully justified its exclusion of wind resources from the retail rate impact calculation of 4 CSR 240-20.100(5).

**Resolution/Response:**

*In the April, 2016 Annual Update, GMO will analyze an Alternative Resource Plan that will include legally mandated minimal compliance of renewable energy resources. This concern is resolved.*

- f. Concern F – KCPL and GMO do not have the proper operating agreements and/or contracts in place to correctly analyze joint company planning. In the absence of proper operating agreements and/or contracts, joint company planning must be performed in the context of a comprehensive plan to merge KCPL and GMO, and no such plan to merge the two companies exists at this time.

**Resolution/Response:**

*At the October 5, 2015 stakeholder meeting, the Company explained how GMO and KCP&L share the unique status of being the only Missouri investor owned utilities held by one holding company, Great Plains Energy. The Chapter 22 rules governing resource planning in Missouri are silent as to how planning should be conducted given this unique relationship.*

*Given differences in the interpretation of the requirements outlined in the IRP rules, this issue is currently unresolved.*

## **SIERRA CLUB**

14. The IRP modeling does not ‘fairly analyze’ the supply-side resource additions of wind. In addition to selecting supply-side resources to meet *capacity* needs, the Company should evaluate whether additional cost-effective wind PPAs could meet *energy* demands at competitive prices. The cost of wind has reached an all-time low with the average price of a wind PPA falling to approximately \$23.50/MWh nationally. The Company should model resource plans that incorporate a variety of levels of renewables in addition to the existing supply-side resources that meet capacity needs. When wind is anticipated as available, the Company model should assume either a decrease in generation from other resources and/or an increase in off-system sales. The Company’s existing modeling does not appear to account for these energy benefits of wind.

### **Resolution/Response:**

*At the October 5, 2015 stakeholder meeting, the Company provided additional information concerning its reasoning for the renewable/wind additions modeled. In the April, 2016 Annual Update, KCP&L will provide Alternative Resource Plans that vary the quantity and timing of renewable resource additions and will provide information to parties concerning the outcome of its recent RFP for wind resources. This issue is resolved.*

15. The Company fails to incorporate a range of distributed generation technologies as candidate resource options in alternative resource plans. Although solar photovoltaic (PV) technology is a candidate resource option analyzed in the IRP, there is no differentiation between utility-scale and distributed solar PV in cost or availability. The additions are driven by the RPS rather than any analysis of whether additional solar PV or other distributed generation options would reduce the NPVRR for the Company’s ratepayers. In addition, it doesn’t appear that there

has been any attempt to analyze the impact that the growth of distributed generation technologies (including those not utility-owned) will have on the preferred or alternative resource plans or any analysis of programs to maximize distributed generation technologies (such as community solar programs).

**Resolution/Response:**

*At the October 5, 2015 stakeholder meeting, the Company provided additional information concerning its reasoning behind its review and analysis of DG. For the 2016 Annual Update, the Company will include additional discussion that will further detail how DG technology is incorporated and why certain levels were incorporated. This issue is resolved.*

## **NATURAL RESOURCES DEFENSE COUNCIL**

16. GMO improperly reduced cumulative savings for RAP and MAP by one-third. Part of this adjustment is due to improper adjustments to account for measure roll-off.

### **Resolution/Response:**

*At the October 5, 2015 stakeholder meeting, the Company explained why it maintains that measure roll-offs are appropriate. This issue is currently unresolved.*

17. GMO improperly further reduced the savings achieved in the RAP and MAP scenarios to arrive at its Preferred Plan.

### **Resolution/Response:**

*At the October 5, 2015 stakeholder meeting, the Company explained why the reduction for opt outs was appropriate and was based on actual opt outs received and approved and was not made twice. This issue is resolved.*

18. GMO did not optimize the scenarios to best take advantage of the benefits of DSM.

### **Resolution/Response:**

*At the October 5, 2015 stakeholder meeting, the stakeholders discussed their issue in detail. The Company believes it complied with Missouri rules in examining the RAP and MAP scenarios.*

*This issue is currently unresolved.*

19. GMO did not examine any scenarios with savings and costs between RAP and MAP, nor the actual RAP and MAP estimates made by its potential study contractor, Navigant.

**Resolution/Response:**

*The Company included two additional scenarios, Option C and Option E, as alternatives for consideration in the integrated analysis. The Company will consider additional scenarios/levels between RAP and MAP to be reviewed in the next Market Potential Study. When the Market Potential Study is final, those levels will be reviewed in the IRP filing. This issue is resolved.*

20. Though the unreasonably reduced level of RAP still resulted in the lowest PVRR, GMO arbitrarily rejected the RAP plan and chose an even further reduced DSM potential as its Preferred Plan.

**Resolution/Response:**

*At the October 5, 2015 stakeholder meeting, the Company asked for clarification on this issue. This issue is currently unresolved.*

21. Although the Preferred Plan ramps up to the inappropriately low adjusted estimate of RAP in 2019, NRDC is concerned that GMO will make the same arguments for delaying implementation of RAP in its 2019-2022 IRP, thus saddling ratepayers with a higher PVRR indefinitely.

**Resolution/Response:**

*At the October 5, 2015 stakeholder meeting, the Company asked for clarification on this issue. This issue is currently unresolved.*

22. Though RAP still resulted in the lowest PVRR, GMO arbitrarily rejected the RAP plan and chose the reduced Option E potential as its Preferred Plan, potentially denying ratepayers \$232 million in savings just in the next three years.

**Resolution/Response:**

*At the October 5, 2015 stakeholder meeting, the Company asked for clarification on this issue. This issue is currently unresolved.*

**WHEREFORE**, the Signatories submit this Joint Filing for consideration by the Commission.

Respectfully submitted,

**/s/ Robert S. Berlin**

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**CERTIFICATE OF SERVICE**

I do hereby certify that a true and correct copy of the foregoing document has been hand-delivered, transmitted by e-mail, or mailed, First Class, postage prepaid, this 30<sup>th</sup> day of October 2015, to counsel for all parties on the Commission's service list in this case.

*/s/ Roger W. Steiner* \_\_\_\_\_

Roger W. Steiner