Schedule RES-4

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the 2017 Integrated Resource Plan Annual Update for KCP&L Greater Missouri Operations Company	)))	**File No. EO-2017-0230**

COMMENTS OF THE OFFICE OF THE PUBLIC COUNSEL

COMES NOW the Office of the Public Counsel ("OPC" or "Public Counsel") and, pursuant to Commission Rule 4 CSR 240-22.080(3)(D), offers the following comments on KCP&L Greater Missouri Operations Company's ("GMO") Integrated Resource Plan 2017 Annual Update.

1. As described in the Commission's regulations, the fundamental objective of the Commission's Electric Utility Resource Planning process for electric utilities is to provide the public with "energy services that are safe, reliable, efficient, at just and reasonable rates, in compliance with all legal mandates, and in a manner that serves the public interest and is consistent with state energy and environmental policies." Commission Rule 4 CSR 240-22.010(2).

2. In addition to requiring Missouri electric utilities to document compliance with the objectives of the resource planning rules in triennial filings, the rules require each utility to host an annual update workshop and to file an annual update in each year for which it is not required to submit a new triennial compliance filing. Commission Rule 4 CSR 240-22.080(3). Thereafter, stakeholders are permitted to offer comments on the company's annual update report.

3. Importantly, "[t]he depth and detail of the annual update report shall generally be commensurate with the magnitude and significance of the changing conditions since the last triennial compliance filing or annual update filing." Commission Rule 4 CSR 240-22.080(3)(B).

4. GMO's 2017 update deviates from its previous triennial filing to a significant degree with the announced plan to accelerate retirement of approximately 900 MW of base-load generation capacity. As described in the attached *Memorandum*, OPC is concerned the premature retirements, especially of the Sibley 3[1] generating unit, creates significant risk by not fully accounting for the highly uncertain, interdependent energy market and policy arena in which the utility now operates. More specifically, the premature closure of base load-serving generation in favor of unknown capacity contracts through the SPP energy market raises prudency concerns moving forward by potentially producing significant stranded costs, increased risk exposure from market volatility and future reliability concerns. With this preferred plan, GMO would increasingly rely on the capacity and energy of other utilities.

5. In light of the magnitude and significance of the changing conditions contained within GMO's update and the potential impact of these changes on the fundamental objectives of resource planning, Public Counsel has identified several areas where further modeling analysis and narrative explanation of the company's plan would better inform both the Commission and the public. Further detailed in OPC's memorandum, these topics requiring additional attention include (1) the impact of mergers and consolidations, (2) evaluation of the dynamic SPP Market, (3) examination of fuel costs, (4) estimated "stranded costs" and proposed treatment by GMO, (5) the impact of changes to environmental and reliability compliance regulation, (6) energy efficiency and demand-side rates, and (7) evaluation of changes to employment levels and economic impacts under the company's updated plan.

[1] Sibley 3's 364MW previously scheduled to be retired in 2040 would be retired in 2018 under the new plan.

6. In at least one prior annual update case, the Commission has ordered an electric utility to "address all issues and criticisms identified in the comments filed in response to its … annual update report" in its next annual update. *See In the Matter of the 2013 Kansas City Power & Light Company Annual IRP Update Report,* File No. EO-2013-0537, Order Regarding Motion for Reconsideration and Rehearing, *Iss'd* Nov. 26, 2013. Due to the magnitude and significance of the changes to the company's preferred resource plan and the potential impacts on the public, OPC encourages the Commission to order GMO to provide further modeling analysis with a narrative explanation in either a supplemental filing in this docket or in its upcoming triennial update to address the foregoing topics.

WHEREFORE Public Counsel submits these Comments included in the attached *Memorandum* and asks the Commission to order GMO to address the issues described therein in either a supplemental filing in this docket or in its upcoming triennial update.

Respectfully,

OFFICE OF THE PUBLIC COUNSEL

/s/ Tim Opitz
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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, emailed or hand-delivered to all counsel of record this 28th day of July 2017.

/s/ Tim Opitz

MEMORANDUM

To: Missouri Public Service Commission Official Case File, Case No. EO-2017-0230

From: Geoff Marke, Chief Economist
John Robinett, Engineering Specialist
Office of the Public Counsel

Subject: OPC response to the KCP&L-Greater Missouri Operations Integrated Resource Plan preferred plan update

Date: July 30, 2017

Overview:

KCP&L Greater Missouri Operation's Company's ("GMO" or "the Company") 2017 Integrated Resource Plan ("IRP") Annual Update Preferred Plan analysis has resulted in material changes to its Preferred Plan since its 2015 Triennial IRP. Most notably, the updated preferred plan includes both earlier retirement dates for some generation plants and the additional retirement of Sibley 3 (364 MW). A breakdown of last year's preferred plan retirements compared to the 2017 updated preferred plan can be seen in Table 1 below.

Table 1: 2016 and 2017 IRP preferred plan generation plant retirements

Generation Plant	MW	Retirement Date		
		2016 IRP	2017 IRP	Diff
Sibley 1	50	2019	2017	-2
Sibley 2	47	2019	2018	-1
Sibley 3	364	2040	2018	-22
Lake Road 4/6	96	2021	2019	-2

The Company states the capacity void from retirement of these units over the next 20 years would be filled through unknown capacity contracts and the energy currently generated by these plants would be purchased on the SPP integrated market.

The Company cites reductions in wholesale electricity market prices, near-term capacity needs, plant age, associated environmental compliance costs, long-term forecasts of low natural gas prices and changes to SPP's reserve margins as the primary drivers for early retirement.

GMO's updated preferred plan also includes updated assumptions regarding the Company's demand-side management programs and demand-side rates based on the Company's market potential study currently modeled to commence in 2019.

OPC's Recommendation:

Based on OPC's review of the annual update, the Company has met the minimum filing requirements for the plan and is in compliance with 4 CSR 240-22. ("IRP Rule"). OPC is concerned, however, with the significant degree to which GMO's preferred plan deviates from its previous Triennial filing. OPC is also apprehensive that the premature retirement of approximately 900 MW of capacity (GMO and KCPL combined) creates significant risk by not fully accounting for the highly uncertain, interdependent energy market and policy arena the revised "preferred" plan would operate in. More specifically, the premature forced closure of large amounts of dispatchable base load-serving generation[1] in favor of unknown capacity contracts through the SPP energy market raises prudency concerns moving forward by potentially producing significant stranded costs, increased risk exposure from market volatility and future reliability concerns. To be clear, OPC's primary concern centers on the early retirement of Sibley 3's 364MW of energy in 2018 where it was previously scheduled to be retired in 2040. (see GM-1) The accelerated retirement dates for the other five units are a secondary concern. With this preferred plan, it seems GMO is moving from a vertically integrated electric utility to a utility that relies on the capacity and energy of other utilities.

In light of these risks associated with GMO's new preferred plan, OPC encourages the Commission to order the Company to provide further modeling analysis with a narrative explanation in either a supplemental filing or in its forthcoming Triennial update to address the following considerations:

Merger & Consolidation(s)

On April 19th, the Kansas Corporation Commission ("KCC") denied the Joint Application of Great Plains Energy Inc. ("GPE") and Westar Energy, Inc. ("Westar") for approval of the acquisition of Westar by GPE. Under the terms of the acquisition deal, GPE would be required to pay Westar $380 million if regulatory approval was not secured. Additionally, GPE management has publically stated that "about $100 million in costs and fees associated with pursuing the transaction" have been incurred.[2]

On June 1st, GMO filed its annual IRP with an updated preferred plan that included the accelerated retirement date of the previously expected generation units (Sibley 1, 2, and Lakewood 4/6) and the addition of Sibley 3.

On June 10th, GPE and Westar publicly announced a "merger of equals" proposal as an alternative to the Application rejected by the KCC. This merger filing includes plans to form a new holding company, which will operate regulated electric utilities in Kansas and Missouri.

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[1] There are 891 MW of "base load" generation planned for retirement between the GMO and KCPL-MO's preferred plans.

[2] Hrenchir, T. (2017) KCC short-circuits proposed Westar sale. http://cjonline.com/news/business/westar/2017-04-19/kcc-short-circuits-proposed-westar-sale

On June 16th, OPC submitted DR-2011 which stated:

> *Are the Company's planned retirements in any way dependent on successful acquisition of Westar Energy? If yes, please explain.*

The Company responded on July 3rd stating:

> *The Company's plan in its 2017 IRP filing to retire older, uneconomic generation has no relation to and is not contingent upon any possible future acquisition of Westar Energy.*

Notably, on July 13th, Westar announced plans to retire 777MW of generation capacity contingent on approval of the merger with GPE.[3]

On July 14th, in File No. EM-2018-0012 GPE gave notice to the Missouri Public Service Commission of its intended case filing regarding its merger with Westar Energy.

As of today, the terms and conditions of the merger remain unknown. It is unclear if GPE's position has changed since its response to OPC DR-2011 and if not, why Westar's planned retirement is contingent on successful merger with GPE but GPE's retirements are not. Furthermore, it is unclear whether or not there will be further consolidation between companies (e.g., Kansas City Power & Light Company and GMO as a single Missouri entity) which could have a material impact on resource plans moving forward.

Until this Commission and the KCC act on the merger applications it remains uncertain how a successful or failed merger will impact GMO's preferred plan.

Dynamic SPP Market

In 2016, SPP approved the reduction of its planning reserve margin from 13.6% to 12%, which lowered capacity requirements in SPP by about 900 MW. Currently, SPP serves a higher percentage of its load from wind than any other U.S. market; SPP set a North American record for wind power of 52.1 percent. However, this record occurred at 4:30 a.m., Feb. 12, 2017 when most of the customers served by SPP were sleeping, not on a hot summer afternoon when peak load is the greatest. As the Renewable Electricity Production Tax Credit (PTC) phase down continues it is likely even more wind generation will come on line in the near-term (assuming additional transmission lines and upgrades to existing infrastructure are approved). The inundation of inexpensive wind and SPP's lowering of its planning reserve margin, combined with flat load growth have created an opportunity to strongly consider accelerating and expanding the retirement of inexpensive, inefficient generating units. If the SPP continues to expand its membership with the Mountain West Transmission Group this argument could

[3] Westar/ Great Plains merger will modernize the Kansas and Missouri power supply. Westar Energy, Inc. Employee Newsletter. July 13, 2017 http://investors.westarenergy.com/phoenix.zhtml?c=89455&p=irol-SECText&TEXT=aHR0cDovL2FwaS50ZW5rd2l6YXJkLmNvbS9maWxpbmcueG1sP2lwYWdlPTExNjk2OTE0JkRTRVE9MSZTRVE9MSZTUURFU0M9U0VDVElPTl9QQUdFJmV4cD0%3D

conceivably be even stronger.[4] GMO's preferred plan rests, in part, on these conditions. OPC's concern regarding the preferred plan and the dynamic SPP market centers on the likely reactions from other market participants from these very same price signals.

In short, if GMO's IRP modeling suggests retiring significant amounts of base load generation prematurely is prudent; won't other SPP member's modeling show similar results? Under that scenario, a near-term future where excess SPP reserve margins are erased entirely appears plausible. In an attempt to check these assumptions OPC submitted DR-2022 which states:

> *Did KCPL and GMO include its preferred plan coal retirement closures in the SPP 2017 ITP10 unit retirements modeling report?*

The Company responded:

> *The KCPL and GMO 2017 Integrated Resource Plan preferred plans did not include the same coal plant retirements the SPP 2017 ITP10 report. The main reason for this was that SPP requested generator unit updates for the 2017 ITP10 report be submitted by mid-year 2015, at which time it was assumed that the Montrose Units 1,2,3 and Sibley Unites 1,2 would be retired. The new IRP preferred plans are based upon updated assumptions, and the next SPP ITP report process will allow KCPL and GMO to update coal retirements and reflect the most recent IRP preferred plans.*

A further review of the SPP June 2017 *Resource Adequacy Report* also does not list any of GPE's or Westar's publically announced plant retirements. (see GM-2) The Company cites reductions in wholesale electricity market prices and near-term capacity needs as justification for accelerated and additional base load retirement, but these assertions appear to be dependent, at least in part, on operating in a static future. Further explanation and/or feedback from the Company and/or SPP would be welcomed in providing a macro-market perspective of all of these interdependent actions. Although each regional transmission organization is acutely different in operation and resource mix/availability, it is worth noting that the PJM, New England and New York ISO's are currently struggling with similar valuation[5] which makes a further analysis of the future adequacy of generation and transmission resources imperative.

Finally, it is important to note that the SPP reserve margin requirements are going to be based on projected normal weather peak load rather than actual peak load moving forward. Per OPC DR-2002 the Company explained:

> *Utilizing projected normal weather peak load has the effect of reducing the amount of MW required to meet the SPP-mandated reserve margin requirement.*

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[4] Mullin, R. (2017) Mountain West to explore joining SPP. *RTO Insider* https://www.rtoinsider.com/spp-mountain-west-36468/

[5] AD17-11-000. State policies and wholesale markets operated by ISO New England Inc., New York Independent System Operator, Inc., and PJM Interconnection , L.L.C. Federal Energy Regulatory Commission. https://www.ferc.gov/CalendarFiles/20170303172159-AD17-11-000TC.pdf

Regardless of SPP's new reserve margin requirements, OPC would strongly recommend that the Company's future resource planning efforts consider more volatile peaking scenarios where there is an increase in the frequency and intensity of peak electricity demand. Because electricity cannot currently be cost-effectively stored at scale, hour-to-hour variability in demand significantly impacts production costs.[6] A heat wave that hits GMO will undoubtedly impact the other utility members of SPP at nearly the same time resulting in less energy being available and excess energy commanding a high price. Utilities might also experience higher costs operating their transmission and distribution systems as both heat and increased demand strain the networks.[7,8] In the long run, an energy market experiencing higher and more frequent peaks will require more investment in new capacity. Such a future scenario should be considered if large amounts of dispatchable generation are retired in the SPP.

Fuel Costs

According to EIA's short-term energy outlook, the average natural gas price to generators was \$2.88/MMBtu in 2016, compared with \$3.58/MMBtu in the first half of 2017 (+24%).[9] The higher cost of fuel this summer will have a negative impact on electric ratepayers. Moving forward (e.g., more than five-years out), there is concern that the vast expansion of the US natural gas export market[10] and increased consumption from gas generators (as a result of coal and nuclear closures) could create intense price spikes, especially if winters deviate from average to more extreme temperatures. To be clear, OPC believes that natural gas is abundant and expects it to remain a dominant source for the nation's supply for years to come. We are however, nonetheless cognizant of the risk involved in increasingly becoming more path dependent on a single fossil fuel type and intermittent resources. Additional analysis examining extreme "outlier" natural gas price fluctuations as scenarios may be warranted (see also the polar vortex).[11]

Stranded Costs

OPC issued several data requests seeking a better understanding of the potential stranded costs associated with the GMO's preferred plan. OPC DR 2036 states:

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[6] Auffhammer. M., et al (2017) Climate change is projected to have severe impacts on the frequency and intensity of peak electricity demand across the United States. *National Academy of Sciences*. Vol. 144, 8. 1186-1891. http://www.pnas.org/content/114/8/1886.full

[7] NOAA (2017) Global Climate Report June 2017. Year-to-date temperatures versus previous years. https://www.ncdc.noaa.gov/sotc/global/2017/06/supplemental/page-1

[8] Cronkleton, R.A (2017) Kansas City flirts with triple-digit temperatures this week. *Kansas City Star*. http://www.kansascity.com/weather/article161712673.html

[9] EIA (2017) Short-Term Energy Outlook July 11, https://www.eia.gov/outlooks/steo/report/electricity.cfm

[10] Clemente, J. (2017) U.S. Liquefied Natural gas to China is a game-changer. *Forbes*. https://www.forbes.com/sites/judeclemente/2017/05/25/u-s-liquefied-natural-gas-to-china-is-a-game-changer/#635d304e671a

[11] Nicks. D. (2014) Polar vortex sends natural gas prices on rollercoaster. *Time* http://science.time.com/2014/01/07/polar-vortex-sends-natural-gas-prices-on-rollercoaster/

Please provide pro-forma plant in-service and reserve totals by generating plant for date of projected retirement by FERC USoA account or subaccount for each of the units to be retired in 2018 and 2019.

The Company responded:

The attached file "Q2036_GMO Sibley and Lake Road Unit 4 Generating Unit Plant and Reserve" presents the latest available plant in service and estimated allocated reserve by FERC plant account for the GMO generating units to be retired. Because of plant activity assumptions that are not known at this time, GMO cannot provide pro-forma plant in service and reserve totals for the date of projected retirement.

OPC DR-2037 states:

Please provide by generating plant announced to be retired in 2018 and 2019 the total amount projected to be recovered at time of retirement.

Company responded:

Because of plant activity assumptions that are not known at this time, GMO cannot provide the projected amount to be recovered at the time of retirement.

Based on the limited available information, OPC provides the following estimates in Table 2.

Table 2: Estimated total stranded assets of GMO's preferred plan[12]

Unit to be Retired	GMO Plant in Service - Reserve + Cost of Removal at Retirement Date
Lake Road 4/6	$34,400,426
Sibley 1	$30,122,110
Sibley 2	$23,464,174
Sibley 3	$280,036,531
Sibley Common	$75,406,032
Total Stranded Asset	**$443,429,273**

[12] To arrive at the estimated stranded asset values for each unit, OPC relied upon the plant in service and reserve balances provided in response to OPC DR-2036. OPC assumed for purposes of estimating stranded assets that no plant additions would occur prior to retirement. OPC calculated the depreciation expense that would be collected over the remaining life of the asset. Next, OPC calculated the cost of the removal component that needed to be collected over the life of the asset. The cost of removal component plus the original cost/ plant in service is the total value needed to be recovered over the life of the plant. To reach stranded asset value OPC subtracted the projected depreciation reserves from the plant in service and cost of removal projects.

It is important to note that: *"KCPL maintains its depreciation reserve by utility account and by type of plant (Steam Production, Nuclear Production, Other Production, Transmission, Distribution,.and General Plant)."* as was indicated in OPC DR-8518 response in Case No. ER-2016-0285. KCPL may have the reserve to absorb these retirements at the time of each retirement; however, OPC did not analyze all of the Steam Production facilities reserve projects for 2018 and 2019. Further feedback from the Company may be warranted.

It is important to note that the "cost of removal" consideration may or may not cover the ultimate costs of dismantle/demolition of the plant and reclamation of the site. OPC is awaiting response from the Company on several data requests on this topic and reserves the right to modify these estimates based on the answers.

Environmental and Reliability Compliance

Both environmental and reliability compliance regulation appear is in a state of flux. Less than a year ago increased regulations from the Clean Power Plan was a likely scenario. Today, that outcome appears remote as the Trump administration begins rolling back Obama-era climate initiatives.[13] Questions regarding the impact of increased variable generation on grid reliability have also been a topic of considerable dialogue in the past few months. For example, the US Department of Energy's ("DOE") Secretary of Energy, Rick Perry, directed a study to explore critical issues central to protecting the long-term reliability of the electric grid. Perry's memo states the following sub-points of investigation:

- *The evolution of wholesale electricity markets, including the extent to which federal policy interventions and the changing nature of the electricity fuel mix are challenging the original policy assumptions that shaped the creation of those markets.*

- *Whether wholesale energy and capacity markets are adequately compensating attributes such as on-site fuel supply and other factors that strengthen grid resilience and, if not, the extent to which this could affect grid reliability and resilience in the future; and*

- *The extent to which continued regulatory burdens, as well as mandates and tax and subsidy policies, are responsible for forcing the premature retirement of baseload power plants.*[14]

As of this writing, the DOE has not released the final results of its "grid study." Release of the study may alter the assumptions and inputs used to formulate the Company's preferred plan. Regardless of the outcome of the DOE study, it bears noting that the Company's preferred plan is based on an "updated" modeling effort from its 2015 Triennial filing. As such, an IRP update does not provide the same level of detail or analysis as an IRP Triennial filing as noted in the response to OPC DR-2017 below:

[13] Popovich, N. & T. Schlossberg (2017) 23 Environmental rules rolled back in Trump's first 100 days. *The New York Times*. https://www.nytimes.com/interactive/2017/05/02/climate/environmental-rules-reversed-trump-100-days.html?mcubz=0

[14] Perry, R. (2017) Memorandum to the Chief of Staff. US Department of Energy. https://s3.amazonaws.com/dive_static/paychek/energy_memo.pdf

Does GMO/KCPL plan on including each alternative resource plan's probable environmental costs net present value revenue requirement? If no, please explain why?

Company response:

> ***<u>GMO has not included the calculation of probable environmental costs net present value of revenue requirements in the annual update filings, but has done so for triennial compliance filings</u>***. *KCP&L believes this is meets the purpose and scope identified in 4 CSR 240-080(3)(A) and (B), which specifically address the annual update workshop requirements.* (emphasis added)
>
> *Probable environmental costs are included in the utility costs of the integrated analysis of each alternative resource plan for all triennial and annual update filings, but that component has not been specifically identified in annual updates.*

It is worth noting that there is now an additional layer of uncertainty surrounding reliability compliance enforcement as it was announced on July 25th that the SPP Regional Entity ("SPP RE") will dissolve by the end of 2018 and disperse its reliability duties performed by that unit to "other regional entities."[15]

As a regional entity, the SPP RE, a NERC-designated reliability compliance enforcement authority, has the responsibility to monitor and enforce compliance with reliability standards of its 120 registered entities, which are bulk power system owners, operators and users of sufficient size as to be required to register with NERC. The registered entities subject to SPP RE monitoring are in an eight-state area including all or part of Arkansas, Kansas, Louisiana, Mississippi, Missouri, New Mexico, Oklahoma and Texas.

In contrast, the SPP manages the grid and wholesale power markets for a larger territory that also includes substantial areas of Iowa, Montana, Nebraska, North Dakota, South Dakota and Wyoming, following an expansion in 2015.

Whether this change will have any material impact on the GMO's preferred plan is not known at this time as additional dialogue may be warranted.

<u>Energy Efficiency and Demand Side Rates</u>

The Company's Demand-Side Resource Analysis has met the Commission's minimum filing requirements for the plan and is in compliance with 4 CSR 240-22.050 (Demand-Side Resource Analysis). However, the Company's investigation into implementation of demand-side rates is on-going and subject to considerable change, as shown by the Company's response to OPC DR-2028 which states:

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[15]Southwest Power Pool (2017) Southwest Power Pool to dissolve regional entity, focus on regional transmission organization functions. https://www.spp.org/about-us/newsroom/southwest-power-pool-to-dissolve-regional-entity-focus-on-regional-transmission-organization-functions/

Please list each study currently underway within the KCP&L and GMO companies to explore TOU and other dynamic rates and evaluate their demand side management ("DSM") potential.

The Company responded:

1. *Resulting from Case ER-2016-0156, GMO is studying TOU rates including TOU residential and SGS rates, critical peak rates, Electric Vehicle TOU rates for stand-alone charging stations, TOU rates applicable to Electric Vehicle charging associated with an existing account, Real Time Pricing, Peak Time Rebates, and other rate types which could encourage load shifting/efficiency. GMO will propose rates based on this study no later than its next rate case or rate design case.*

2. *Resulting from Case ER-2014-0370, KCP&L is completing a study of TOD and RTP rates. Due to potential overlapping efforts, this study may be transitioned and combined with the aforementioned GMO study.*

None of the current studies are evaluating demand-side management potential.

OPC takes issue with much of the modeling efforts contained in Appendix 5C, chapter 2 "Demand Response and Demand Side Rates Potential." To illustrate just one example, in modeling the impact of deploying a mandatory inclining block rate ("IBR") design the Company assumed that a $21.88 customer charge would be in place. No other amounts were considered and thus no real insight is gained from this exercise. OPC believes it would be infinitely more productive to look at a range of rate design inputs and assumptions to help inform future DSM activity moving forward.

Unfortunately, to date, the Company has not specified the inputs, parameters, and assumptions it has used in its current TOU rate study. It should also be noted that the Company has not begun designing the marketing or implementation necessary for successful rate adoption based on its response to OPC DR-2031:

Does the Company anticipate utilizing a marketing and/or education rollout for ratepayers regarding deployment of demand-side rates? If yes, does the Company plan on meeting with Staff and OPC regarding this rollout?

The Company responded:

While the Company does not currently have a specific marketing and/or education plan for future demand-side rates, as with any change to customer rates, KCP&L would work through the formal rate case process with stakeholders including PSC staff and OPC. During those discussions, the Company would expect to meet with stakeholders to detail the different facets of the rates including possible implementation with marketing/education plans.

This response is not surprising given the relatively brief amount of time since the GMO and KCPL rate cases; however, rolling out aggressive demand side rates will require a significant amount of time, consumer education and Company preparation. GMO's updated preferred plan includes both earlier than expected and additional retirement of base load generation. These premature retirements would place an enhanced emphasis on DSM moving forward. Based on the lack of dialogue surrounding demand side rates to date, OPC is reluctant to accept the conclusions surrounding the Company's 4 CSR 240-22.050 section and accompanying market potential study and believes that the savings expectations are inaccurate as presently drafted.

Employment

The subject of energy-related employment has also been at the forefront of many conversations and has driven policy formation at both the federal and state level. [16,17,18,19] As such, OPC submitted DR-2009 which asks:

How many employees in Missouri will be laid off in total due to these retirements?

The Company responded:

Our leadership team is very mindful of the impact unit retirements will have on plant employees. We've had an open dialogue with plant employees over the past several years and will continue working together as we manage through this transition. Our commitment is to make every reasonable effort to find job opportunities for all employees impacted by unit retirements.

Based on this initial response it is unclear if any positions will be eliminated, or replaced with lower paying jobs; therefore, it is difficult to predict the economic impact this would have on communities that rely on generation units for employment and revenue.

[16] Shah, J. (2017) Solar suit pits Trump's job promises against trade realities. *Utility Dive* http://www.utilitydive.com/news/solar-suit-pits-trumps-job-promises-against-trade-realities/441998/
[17] Vockrodt, S. (2017) Job losses, plant closings both possibilities in KCP&L-Westar merger. *Kansas City Star.* http://www.kansascity.com/news/business/article130207044.html
[18] Bade, G. (2017) West Virginia court orders EPA to track coal job losses from pollution regulations. *Utility Dive* http://www.utilitydive.com/news/west-virginia-court-orders-epa-to-track-coal-job-losses-from-pollution-regu/428526/
[19] Walton, R. (2017) Missouri Senate to consider bill proposing lower rates for aluminum smelter. *Utility Dive* http://www.utilitydive.com/news/missouri-senate-to-consider-bill-proposing-lower-rates-for-aluminum-smelter/443647/

OPC is currently awaiting the responses to a number of data requests related to GMO's preferred plan including DR-2044 which states:

> *What are the number of full, part-time and contractual jobs currently at the following generating units.*
>
> - *Sibley 1*
> - *Sibley 2*
> - *Sibley 3*
> - *Sibley Common*
> - *Lake Road 4/6*
> - *Montrose 2*
> - *Montrose 3*
> - *Montrose Common*

And OPC DR-2055 which states:

> *Regarding OPC DR-2044, if the response to any of the sub-questions related to employment is "it depends" and is void a numerical value please provide its best estimate of the annual (2017 year) full, part-time and contractual jobs.*

OPC is also cognizant that the issue of securing jobs is at the forefront of the most recent GPE proposed merger with Westar and will examine the link (if any) between these premature plant retirements and the Company's claims for job security stemming from the application.[20]

[20] Davis, M. & Vockrodt, S. (2017) KCP&L parent strikes a new Westar Energy merger deal, promising jobs. *Kansas City Star*. http://www.kansascity.com/news/business/article160469659.html

energizing *life*

GREATER MISSOURI OPERATIONS - ECORP, MPS AND SJLP JURISDICTIONS

2014 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2014

Prepared by:

Gannett Fleming

Excellence Delivered As Promised

KANSAS CITY POWER AND LIGHT COMPANY

Kansas City, Missouri

GREATER MISSOURI OPERATIONS
ECORP, MPS AND SJLP JURISDICTIONS

2014 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2014

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Camp Hill, Pennsylvania

Gannett Fleming

Excellence Delivered As Promised

February 16, 2016

Greater Missouri Operations
One Kansas City Place
1200 Main
Kansas City, MO 64105

Attention Mr. Tim M. Rush
Director, Regulatory Affairs

Ladies and Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to all electric plant of Greater Missouri Operations as of December 31, 2014. The attached report presents a description of the methods used in the estimation of depreciation, the summary of annual depreciation accrual rates, the statistical support for the life and net salvage estimates and the detailed tabulations of annual depreciation.

We gratefully acknowledge the assistance of Greater Missouri Operations personnel in the conduct of this study.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

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Account 364.00, Poles, Towers and Fixtures, is used to illustrate the manner in which the study was conducted for the groups in the preceding list. Aged plant accounting data have been compiled for the years 1960 through 2014. These data have been coded in the course of the Company's normal record keeping according to account or property group, type of transaction, year in which the transaction took place, and year in which the electric plant was placed in service. The retirements, other plant transactions, and plant additions were analyzed by the retirement rate method.

The survivor curve estimate is based on the statistical indications for the periods 1960-2014, and 1979-2014. The Iowa 54-S2.5 is a reasonable fit of the stub original survivor curve for Distribution Poles. The 54-year service life is within the typical service life range of 40 to 60 years for poles. The 54-year life reflects the Company's plans to replace poles and fixtures due to voltage upgrades, relocation and condition.

Life Span Estimates

The life span technique was used for the Company's Power Production accounts in conjunction with the use of interim survivor curves which reflect interim retirements that occur prior to the ultimate retirement of the major unit. The life span procedure is appropriate for these accounts since all of the assets within the plant will be retired concurrently. Probable retirement dates were estimated for each power plant. Life spans for each unit were estimated based on discussions with management regarding future outlook, age and condition of the plant, life spans typically experienced and estimated for similar plants. The life span and probable retirement dates used for production plants are as follows:

Depreciable Group	Major Year in Service	Probable Retirement Year	Life Span
Steam Production Plant			
Jeffrey Energy Center Unit 1	1978	2040	62
Jeffrey Energy Center Unit 2	1980	2040	60
Jeffrey Energy Center Unit 3	1983	2040	57
Sibley Unit 1	1960	2019	59
Sibley Unit 2	1962	2019	57
Sibley Unit 3	1969	2040	71
Iatan Unit 1	1980	2040	60
Iatan Unit 2	2010	2070	60
Lake Road Boiler 1	1950	2035	85
Lake Road Boiler 2	1958	2035	77
Lake Road Boiler 3	1962	2035	73
Lake Road Boiler 4	1966	2035	69
Lake Road Boiler 5	1974	2035	61
Lake Road Boiler 8	2006	2035	29
Lake Road Unit 1	1950	2035	85
Lake Road Unit 2	1958	2035	77
Lake Road Unit 3	1962	2035	73
Lake Road Unit 4	1966	2020	54
Other Production Plant			
Greenwood Unit 1	1975,2000	2035	60,35
Greenwood Unit 2	1975,2000	2035	60,35
Greenwood Unit 3	1977,2001	2035	58,34
Greenwood Unit 4	1979,2000	2035	56,35
Nevada	1974,1998	2035	61,37
South Harbor Unit 1	2005	2050	45
South Harbor Unit 2	2005	2050	45
South Harbor Unit 3	2005	2050	45
Crossroads Unit 1	2002	2048	46
Crossroads Unit 2	2002	2048	46
Crossroads Unit 3	2002	2048	46
Crossroads Unit 4	2002	2048	46

Depreciable Group	Major Year in Service	Probable Retirement Year	Life Span
Lake Road Unit 5	1974	2035	61
Lake Road Unit 6	1989	2035	46
Lake Road Unit 7	1989	2035	46
Ralph Green	1981,1994	2035	54,41
Landfill Gas Turbine	2012	2042	30

Power plants typically are retired when there are other units that can generate electricity at a lower cost. Typical life spans for base load, coal-fired power plants are 50 to 65 years. For example, Units 1 & 2 at latan Generating facility were completed in 1980 and 2010, respectively. The estimated probable retirement date for latan Unit 1 is 2040 and latan Unit 2 is 2070. Thus, the life spans estimated for the latan power plant is 60 years for both Unit 1 and Unit 2, which is within the typical range. The estimated retirement dates should not be interpreted as commitments to retire these plants on these dates, but rather, as reasonable estimates subject to modification in the future as circumstances dictate.

Similar studies were performed for the remaining plant accounts. Each of the judgments represented a consideration of statistical analyses of aged plant activity, management's outlook for the future, and the typical range of lives used by other electric companies.

The selected amortization periods for other General Plant accounts are described in the section "Calculated Annual and Accrued Amortization."

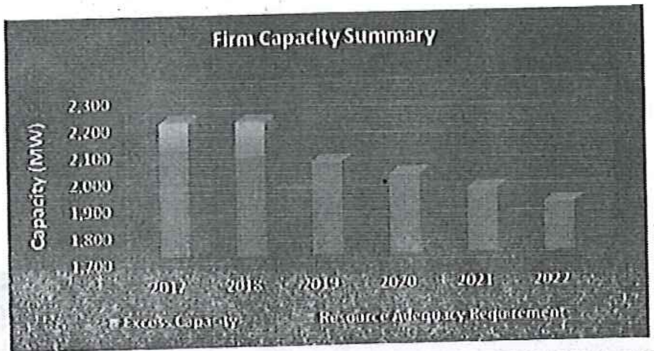
Southwest Power Pool

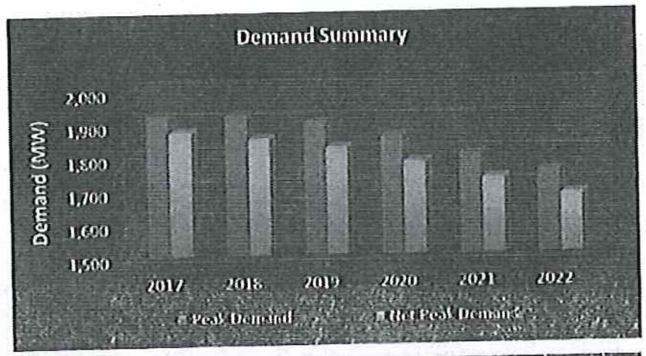
SPP 2017 RESOURCE ADEQUACY REPORT

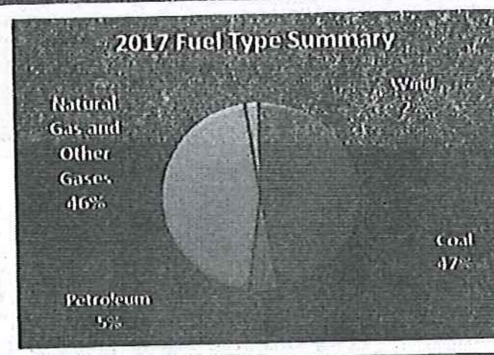
Published on June 19th, 2017

By Resource Adequacy Coordination

GREATER MISSOURI OPERATIONS COMPANY (KCP&L)

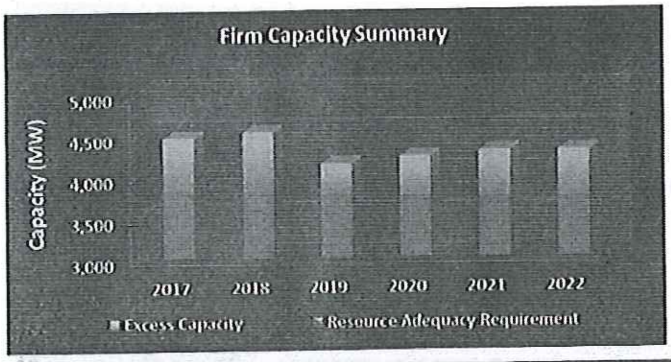


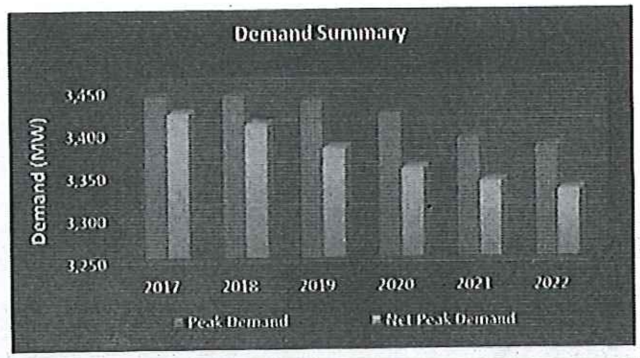


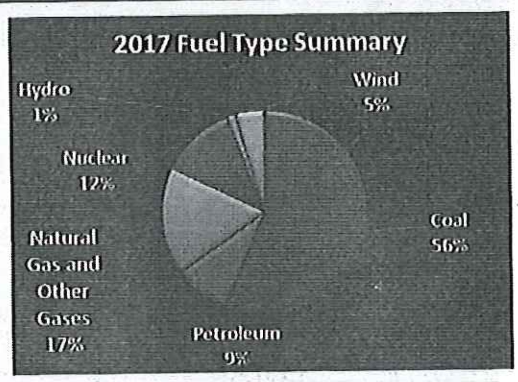


	Unit	2017	2018	2019	2020	2021	2022
Firm Capacity Summary							
Firm Capacity Resources	MW	2,076	2,076	1,628	1,531	1,531	1,565
Firm Capacity Resources (Other)	MW	0	0	0	0	0	0
Firm Capacity Purchases	MW	131	130	195	105	70	70
Firm Capacity Sales	MW	0	0	0	0	0	0
Confirmed Retirements	MW	0	0	448	546	546	546
Scheduled Outages	MW	0	0	0	0	0	0
Transmission Limitations	MW	0	0	0	0	0	0
Other Capacity Adjustments - Additions	MW	0	0	0	0	0	0
Other Capacity Adjustments - Reductions	MW	5	5	5	5	5	5
Firm Capacity	MW	2,202	2,201	1,818	1,631	1,596	1,630
Demand Summary							
Peak Demand (Forecasted)	MW	1,926	1,925	1,902	1,858	1,805	1,756
Firm Power Purchases	MW	0	0	0	0	0	0
Firm Power Sales	MW	0	0	0	0	0	0
Controllable and Dispatchable DR - Available	MW	51	73	78	78	78	78
Other Controllable and Dispatchable DEG - Available	MW	0	0	0	0	0	0
Net Peak Demand (Forecasted)	MW	1,875	1,851	1,824	1,781	1,727	1,679
Energy Efficiency and Conservation (Included in Peak Demand)	MW	16	27	56	106	162	220
Standby Load Under Contract (Included in Peak Demand)	MW	0	0	0	0	0	0
Requirements Summary							
Resource Adequacy Requirement	MW	2,099	2,074	2,043	1,994	1,935	1,880
Excess Capacity	MW	103	128	0	0	0	0
Deficient Capacity	MW	0	0	225	364	339	250
Planning Reserve Margin	%	17.5%	18.9%	-0.3%	-8.4%	-7.6%	-2.9%
SPP Target Planning Reserve Margin	%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%

KANSAS CITY POWER & LIGHT

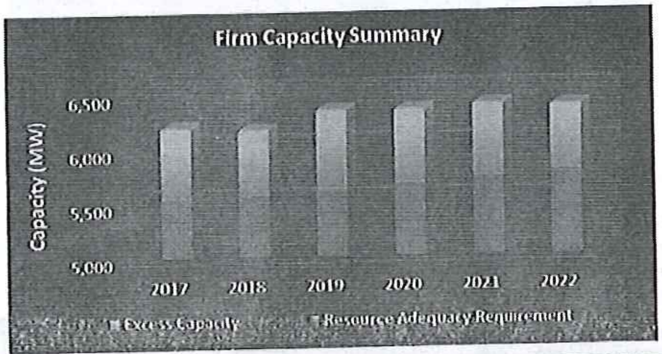


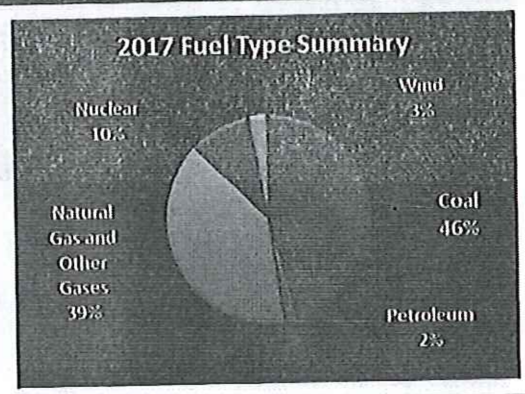




Firm Capacity Summary	Unit	2017	2018	2019	2020	2021	2022
Firm Capacity Resources	MW	4,344	4,344	4,010	4,010	4,010	4,010
Firm Capacity Resources (Other)	MW	0	0	0	0	0	0
Firm Capacity Purchases	MW	256	292	292	292	292	292
Firm Capacity Sales	MW	137	112	167	77	15	15
Confirmed Retirements	MW	0	0	334	334	334	334
Scheduled Outages	MW	0	0	0	0	0	0
Transmission Limitations	MW	0	0	0	0	0	0
Other Capacity Adjustments - Additions	MW	0	0	0	0	0	0
Other Capacity Adjustments - Reductions	MW	0	0	0	0	0	0
Firm Capacity	MW	4,463	4,524	4,135	4,225	4,287	4,287
Demand Summary							
Peak Demand (Forecasted)	MW	3,440	3,441	3,434	3,419	3,390	3,380
Firm Power Purchases	MW	0	0	0	0	0	0
Firm Power Sales	MW	0	0	0	0	0	0
Controllable and Dispatchable DR - Available	MW	20	34	55	64	51	51
Other Controllable and Dispatchable DEG - Available	MW	0	0	0	0	0	0
Net Peak Demand (Forecasted)	MW	3,420	3,407	3,379	3,355	3,339	3,329
Energy Efficiency and Conservation (Included In Peak Demand)	MW	18	35	54	75	112	141
Standby Load Under Contract (Included In Peak Demand)	MW	0	0	0	0	0	0
Requirements Summary							
Resource Adequacy Requirement	MW	3,831	3,816	3,784	3,757	3,740	3,729
Excess Capacity	MW	633	708	351	467	547	558
Deficient Capacity	MW	0	0	0	0	0	0
Planning Reserve Margin	%	30.5%	32.8%	22.4%	25.9%	28.4%	28.8%
SPP Target Planning Reserve Margin	%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%

WESTAR ENERGY





Firm Capacity Summary	Unit	2017	2018	2019	2020	2021	2022
Firm Capacity Resources	MW	6,527	6,527	6,527	6,527	6,527	6,527
Firm Capacity Resources (Other)	MW	0	0	0	0	0	0
Firm Capacity Purchases	MW	433	383	420	355	275	209
Firm Capacity Sales	MW	766	741	604	539	414	364
Confirmed Retirements	MW	0	0	0	0	0	0
Scheduled Outages	MW	0	0	0	0	0	0
Transmission Limitations	MW	0	0	0	0	0	0
Other Capacity Adjustments - Additions	MW	0	0	0	0	0	0
Other Capacity Adjustments - Reductions	MW	0	0	0	0	0	0
Firm Capacity	MW	6,194	6,169	6,343	6,343	6,388	6,372
Demand Summary							
Peak Demand (Forecasted)	MW	5,307	5,323	5,360	5,396	5,441	5,492
Firm Power Purchases	MW	112	112	112	112	112	112
Firm Power Sales	MW	0	0	0	0	0	0
Controllable and Dispatchable DR - Available	MW	244	240	236	231	226	221
Other Controllable and Dispatchable DEG - Available	MW	0	0	0	0	0	0
Net Peak Demand (Forecasted)	MW	4,951	4,971	5,012	5,053	5,104	5,159
Energy Efficiency and Conservation (Included in Peak Demand)	MW	0	0	0	0	0	0
Standby Load Under Contract (Included in Peak Demand)	MW	0	0	0	0	0	0
Requirements Summary							
Resource Adequacy Requirement	MW	5,545	5,567	5,613	5,659	5,716	5,778
Excess Capacity	MW	649	602	730	684	672	594
Deficient Capacity	MW	0	0	0	0	0	0
Planning Reserve Margin	%	25.1%	24.1%	26.6%	25.5%	25.2%	23.5%
SPP Target Planning Reserve Margin	%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the 2017 Integrated Resource Plan Annual Update for KCP&L Greater Missouri Operations Company	)))	File No. EO-2017-0230

AFFIDAVIT OF JOHN A. ROBINETT

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

COMES NOW JOHN A. ROBINETT and on his oath declares that he is of sound mind and lawful age; that he contributed to OPC's foregoing Memorandum for this case; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

John A. Robinett

John A. Robinett
Utility Engineering Specialist

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 28th day of July, 2017.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

JERENE A. BUCKMAN
My Commission Expires
August 23, 2017
Cole County
Commission #13754037

Jerene A. Buckman

Jerene A. Buckman
Notary Public

My Commission expires August 23, 2017.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the 2017 Integrated Resource Plan Annual Update for KCP&L Greater Missouri Operations Company	)))	File No. EO-2017-0230

AFFIDAVIT OF GEOFF MARKE

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

COMES NOW GEOFF MARKE and on his oath declares that he is of sound mind and lawful age; that he contributed to OPC's foregoing Memorandum for this case; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Geoff Marke
Geoff Marke
Regulatory Economist

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 28th day of July, 2017.

NOTARY PUBLIC
NOTARY SEAL
STATE OF MISSOURI

JERENE A. BUCKMAN
My Commission Expires
August 23, 2017
Cole County
Commission #13754037

Jerene A. Buckman
Jerene A. Buckman
Notary Public

My Commission expires August 23, 2017.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's 2018 Triennial Compliance Filing Pursuant to 4 CSR 240-22	)))	Case No. EO-2018-0269

COMMENTS OF THE OFFICE OF THE PUBLIC COUNSEL

COMES NOW the Office of the Public Counsel and pursuant to Commission Rule 4 CSR 240-22.080(8), offers the following comments on KCP&L Greater Missouri Operations Company's ("GMO") 2018 Triennial Compliance Filing.

1. As described in the Commission's regulations, the fundamental objective of the Commission's Electric Utility Resource Planning process for electric utilities is to provide the public with "energy services that are safe, reliable, efficient, at just and reasonable rates, in compliance with all legal mandates, and in a manner that serves the public interest and is consistent with state energy and environmental policies." Commission Rule 4 CSR 240-22.010(2).

2. In their triennial filings Missouri electric utilities are required to document compliance with the objectives of the resource planning rules, and stakeholders are permitted to offer comments. Rule 4 CSR 240-22.080(8).

3. GMO's 2018 triennial report continues material changes from its last annual update, in particular the announced plan to accelerate retirement, between GMO and Kansas City Power & Light Company, of nearly 900 MW of base-load generation capacity. As described in the attached *Memorandum*, OPC is concerned the premature retirements, especially of the Sibley 3 generating unit, creates significant risk by not fully accounting for the highly uncertain, interdependent energy market and policy arena in which the utility now operates. More

specifically, the premature closure of base load-serving generation in favor of unknown capacity contracts through the SPP energy market raises prudency concerns moving forward by potentially producing significant stranded costs, increased risk exposure from market volatility and future reliability concerns. With this preferred plan, GMO would increasingly rely on the capacity and energy of other utilities.

4. OPC remains concerned with the degree in which GMO's preferred plan deviates from its previous Triennial filing and that it may not fully account for the highly uncertain, interdependent energy market and policy arena the revised "preferred" plan would operate in. As such, the early forced retirement of base load generation[1] raises prudency concerns moving forward by potentially producing significant stranded costs and future liabilities. OPC has raised these concerns in GMO's currently contested rate case (Case No: ER-2018-0146) and believes that venue is the proper forum for further dialogue at this point.

WHEREFORE, Public Counsel submits these Comments included in the attached *Memorandum*.

Respectfully,

/s/ Nathan Williams

Nathan Williams
Chief Deputy Public Counsel
Missouri Bar No. 35512

Office of the Public Counsel
Post Office Box 2230
Jefferson City, MO 65102
(573) 526-4975 (Voice)
(573) 751-5562 (FAX)
Nathan.Williams@ded.mo.gov

[1] There are 891 MW of "base load" generation planned for retirement between GMO and KCPL.

Certificate of Service

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronically mailed to all counsel of record this 30th day of August 2018.

/s/ Nathan Williams

MEMORANDUM

To: Missouri Public Service Commission Official Case File, Case No. EO-2018-0269

From: Geoff Marke, Chief Economist
Office of the Public Counsel

Subject: OPC response to triennial KCP-GMO IRP

Date: August 30, 2018

Overview:

Kansas City Power and Light Greater Missouri Operations ("GMO" or "the Company") 2018 triennial IRP filing has continued to maintain material changes carried over from its last annual update. Most notably, the preferred plan includes both earlier retirement dates and additional units, most notably the inclusion of Sibley 3 (364 MW). A breakdown of 2016's retirements compared to the preferred plan in its triennial IRP can be seen in figure 1 below.

Figure 1: 2016 and 2018 triennial IRP preferred plan generation plant retirements

2016 IRP Generation Plant	MW	Retirement Date
Sibley 1 & 2	97	2019
Lake Road 4/6	96	2021

2018 IRP Generation Plant	MW	Retirement Date
Sibley 1	50	Retired
Sibley 2 & 3	411	2018
Lake Road 4/6	96	2019

The Company cites associated environmental compliance costs, long term forecasts of low natural gas prices and changes to SPP's reserve margins as the primary drivers for early retirement.

OPC's Response:

Based on OPC's review of the triennial IRP, the Company has met the minimum filing requirements for the plan and is in compliance with 4 CSR 240-22. ("IRP Rule"). However, OPC is again concerned with the degree in which GMO's preferred plan deviates from its previous Triennial filing and may not fully account for the highly uncertain, interdependent energy market and policy arena the revised "preferred" plan would operate in. As such, the early forced retirement of base load generation[1] raises prudency concerns moving forward by potentially producing significant stranded costs and future liabilities. OPC has raised these concerns in

[1] There are 891 MW of "base load" generation planned for retirement between GMO and KCPL.

GMO's currently contested rate case (Case No: ER-2018-0146) and believes that venue is the proper forum for further dialogue at this point.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

AFFIDAVIT OF GEOFF MARKE

STATE OF MISSOURI)
) SS.
COUNTY OF COLE)

COMES NOW GEOFF MARKE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *COMMENTS;* and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Geoff Marke
Chief Economist

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 30th day August 2018.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI
JERENE A. BUCKMAN
My Commission Expires
August 23, 2021
Cole County
Commission #13754037

Jerene A. Buckman
Notary Public

My Commission expires August 23, 2021.

KCP&L energizing life

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KCPL Announces Plans to Cease Burning Coal at Three Plants

KCP&L Announces Plans to Cease Burning Coal at Three Power Plants

1/20/2015

MEDIA CONTACT:
KCP&L 24-Hour Media Hotline
(816) 392-9455

KCP&L FURTHERS SUSTAINABILITY COMMITMENT BY ANNOUNCING PLANS TO CEASE BURNING COAL AT THREE POWER PLANTS

KANSAS CITY, Mo. (January 20, 2015) — Kansas City Power & Light Company (KCP&L) announced today that in the coming years it will no longer burn coal at three of its coal-fired power plants, Montrose Station, one of its units at Lake Road Station and two of its units at Sibley Station. This announcement furthers the company's commitment to a sustainable energy future and balanced generation portfolio. Lake Road's boiler already has the ability to burn natural gas and the company plans to operate on natural gas once it ceases coal combustion. In the coming years, KCP&L will make final decisions regarding whether to retire the units at Montrose and Sibley, or convert them to an alternative fuel source.

"After evaluating options for future environmental regulation compliance, ending coal use at these plants is the most cost effective and cleanest option for our customers," said Terry Bassham, President and CEO of Great Plains Energy and KCP&L. *"By retiring or converting more than 700 megawatts of coal-fired generation, we'll take an even bigger step toward reducing emissions and improving the air quality in our region."*

The decision comes in part as a result from recent Environmental Protection Agency (EPA) regulations, which would require KCP&L to make significant environmental upgrades in the coming years in order to continue burning coal at these power plants. While retrofitting our largest, newer coal-fired power plants was the most cost-effective way to comply with environmental regulations, the same cannot be said for the older, smaller units at Montrose, Lake Road and Sibley. Retiring or converting the units at Montrose, Lake Road and Sibley will be a more cost-effective way to meet environmental regulations.

Timeline for Coal Cessation:

Generating Unit:	Capacity:	In-Service Year:	Cease Coal Burning By:
Lake Road 6	96 MW	1967	December 31, 2016
Montrose 1	170 MW	1958	December 31, 2016
Sibley 1	48 MW	1960	December 31, 2019
Sibley 2	51 MW	1962	December 31, 2019
Montrose 2	164 MW	1960	December 31, 2021
Montrose 3	176 MW	1964	December 31, 2021

While this decision will impact employees at Montrose, Lake Road and Sibley, the utility does not anticipate that any employees will lose jobs as a result. KCP&L will find job opportunities within the company for displaced employees.

"For decades, coal has been a reliable, very low cost way to provide power to our customers, and is one reason why our rates are lower than the national average," said Bassham. *"However, as our nation moves to a cleaner, more sustainable energy future, our industry is facing increasing environmental scrutiny and regulations, many of which are focused on coal-fired generation. Our commitment and focus is to move to a cleaner energy future for our region while balancing the cost impact to our customers."*

Today's announcement is part of the utility's larger plan to provide cleaner energy to the region. KCP&L has the largest renewable energy and largest per capita energy efficiency portfolios of any investor-owned utility in the region. In addition, the utility recently made a number of new environmental investments and commitments, including the announcement of up to 400 MW of additional wind power and expanded energy-efficiency programs for customers.

For more information on KCP&L's sustainability efforts, visit www.kcpl.com/environment.

About Great Plains Energy:

Headquartered in Kansas City, Mo., Great Plains Energy Incorporated (NYSE: GXP) is the holding company of Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company, two of the leading regulated providers of electricity in the Midwest. Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company use KCP&L as a brand name. More information about the companies is available on the Internet at: www.greatplainsenergy.com or www.kcpl.com.

Forward-Looking Statements:

Statements made in this release that are not based on historical facts are forward-looking, may involve risks and uncertainties, and are intended to be as of the date when made. Forward-looking statements include, but are not limited to, the outcome of regulatory proceedings, cost estimates of capital projects and other matters affecting future operations. In connection with the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, Great Plains Energy and KCP&L are providing a number of important factors that could cause actual results to differ materially from the provided forward-looking information. These important factors include: future economic conditions in regional, national and international markets and their effects on sales, prices and costs; prices and availability of electricity in regional and national wholesale markets; market perception of the energy industry, Great Plains Energy and KCP&L; changes in business strategy, operations or development plans; the outcome of contract negotiations for goods and services; effects of current or proposed state and federal legislative and regulatory actions or developments, including, but not limited to, deregulation, re-regulation and restructuring of the electric utility industry; decisions of regulators regarding rates the Companies can charge for electricity; adverse changes in applicable laws, regulations, rules, principles or practices governing tax, accounting and environmental matters including, but not limited to, air and water quality; financial market conditions and performance including, but not limited to, changes in interest rates and credit spreads and in availability and cost of capital and the effects on nuclear decommissioning trust and pension plan assets and costs; impairments of long-lived assets or goodwill; credit ratings; inflation rates; effectiveness of risk management policies and procedures and the ability of counterparties to satisfy their contractual commitments; impact of terrorist acts, including but not limited to cyber terrorism; ability to carry out marketing and sales plans; weather conditions including, but not limited to, weather-related damage and their effects on sales, prices and costs; cost, availability, quality and deliverability of fuel; the inherent uncertainties in estimating the effects of weather, economic conditions and other factors on customer consumption and financial results; ability to achieve generation goals and the occurrence and duration of planned and unplanned generation outages; delays in the anticipated in-service dates and cost increases of generation, transmission, distribution or other projects; Great Plains Energy's ability to successfully manage transmission joint venture; the inherent risks associated with the ownership and operation of a nuclear facility including, but not limited to, environmental, health, safety, regulatory and financial risks; workforce risks, including, but not limited to, increased costs of retirement, health care and other benefits; and other risks and uncertainties.

This list of factors is not all-inclusive because it is not possible to predict all factors. Other risk factors are detailed from time to time in Great Plains Energy's and KCP&L's quarterly reports on Form 10-Q and annual report on Form 10-K filed with the Securities and Exchange Commission. Each forward-looking statement speaks only as of the date of the particular statement. Great Plains Energy and KCP&L undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

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KCP&L Continues Sustainability Commitment by Announcing Retirement of Six Units at Three Power Plants

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KANSAS CITY, Mo. (June 2, 2017) — Kansas City Power & Light Company (KCP&L) announces its plans to retire six generating units at the company's Montrose, Lake Road and Sibley Stations. These actions further the company's commitment to a sustainable energy future and balanced generation portfolio.

"When these power plants started operation more than 50 years ago, coal was the primary means of producing energy. Today, as part of our diverse portfolio, we have cleaner ways to generate the energy our customers need," said Terry Bassham, President and CEO of Great Plains Energy and KCP&L. "After considering many options, it is clear that retiring units at Montrose, Lake Road and Sibley is the most cost-effective way to meet our customers' energy needs as we continue to move to a more sustainable energy future."

In 2015, KCP&L announced the company was considering retiring the coal units or converting them to an alternative fuel source at these plants. One coal-fired unit at the

Lake Road Station was converted to natural gas in 2016. Since that time, several emerging industry trends and changing circumstances led the company to announce its plans to retire the six generating units.

A number of factors contributed to the decision to retire these units, including:

- **Reduction in wholesale electricity market prices.** The value of energy produced by these plants has dropped in recent years, primarily driven by new wind generation and lower natural gas prices.
- **Near-term capacity needs.** KCP&L does not anticipate needing new capacity for many years with expected relatively flat long-term peak load growth. In addition, the amount of reserve generating capacity the company is required to carry has been reduced.
- **Plant age.** The impacted units are older, with all beginning service between 1960-1969. Making costly investments in the units does not make financial sense when compared to other generation sources.
- **Expected environmental compliance costs.** It is not economic to retrofit these plants with the controls necessary to meet expected environmental requirements.

Wind energy sources have become a much more economic generation resource for the region. According to the Southwest Power Pool, of which KCP&L is a member, energy generation from wind has increased 30 percent year-over-year in 2016. KCP&L announced plans in 2016 to purchase an additional 500 megawatts (MW) of power from two new wind facilities at Osborn and Rock Creek. In 2017, the company is set to increase its renewable portfolio to more than 1,450 MW, or greater than 20 percent of KCP&L's total generating capacity needs.

"In addition to our substantial renewable energy portfolio, KCP&L has the largest per capita energy efficiency portfolio of any investor-owned utility in the region," said Bassham. "By retiring these plants, KCP&L is taking another step forward in our plan to provide cleaner, cost effective energy to our customers."

KCP&L intends to retire all the Montrose and Sibley coal units by December 31, 2018. The Lake Road natural gas unit will be retired by December 31, 2019. Lake Road's steam operations are not impacted by today's announcement. KCP&L is committed to making every reasonable effort to find job opportunities within the company for employees currently working at these plants.

Timeline for Retirement:

Generating Unit	Capacity	In-service	Retire by
Lake Road 4/6	97 MW	1967	Dec. 31, 2019
Montrose 2	164 MW	1960	Dec. 31, 2018
Montrose 3	176 MW	1964	Dec. 31, 2018
Sibley 1	48 MW	1960	Dec. 31, 2018
Sibley 2	51 MW	1962	Dec. 31, 2018
Sibley 3	364 MW	1969	Dec. 31, 2018

For more information on KCP&L's sustainability efforts, visit www.kcpl.com/environment.

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About Great Plains Energy:
Headquartered in Kansas City, Mo., Great Plains Energy Incorporated (NYSE: GXP) is the holding company of Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company, two of the leading regulated providers of electricity in the Midwest. Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company use KCP&L as a brand name. More information about the companies is available on the Internet at: www.greatplainsenergy.com or www.kcpl.com.

Forward-Looking Statements:
Statements made in this release that are not based on historical facts are forward-looking, may involve risks and uncertainties, and are intended to be as of the date when made. Forward-looking statements include, but are not limited to, the outcome of regulatory proceedings, cost estimates of capital projects and other matters affecting future operations. In connection with the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, Great Plains Energy and KCP&L are providing a number of important factors that could cause actual results to differ materially from the provided forward-looking information. These important factors include: future economic conditions in regional, national and international markets and their effects on sales, prices and costs; prices and availability of electricity in regional and national wholesale markets; market perception of the energy industry,

Great Plains Energy and KCP&L; changes in business strategy, operations or development plans; the outcome of contract negotiations for goods and services; effects of current or proposed state and federal legislative and regulatory actions or developments, including, but not limited to, deregulation, re-regulation and restructuring of the electric utility industry; decisions of regulators regarding rates the Companies can charge for electricity; adverse changes in applicable laws, regulations, rules, principles or practices governing tax, accounting and environmental matters including, but not limited to, air and water quality; financial market conditions and performance including, but not limited to, changes in interest rates and credit spreads and in availability and cost of capital and the effects on nuclear decommissioning trust and pension plan assets and costs; impairments of long-lived assets or goodwill; credit ratings; inflation rates; effectiveness of risk management policies and procedures and the ability of counterparties to satisfy their contractual commitments; impact of terrorist acts, including but not limited to cyber terrorism; ability to carry out marketing and sales plans; weather conditions including, but not limited to, weather-related damage and their effects on sales, prices and costs; cost, availability, quality and deliverability of fuel; the inherent uncertainties in estimating the effects of weather, economic conditions and other factors on customer consumption and financial results; ability to achieve generation goals and the occurrence and duration of planned and unplanned generation outages; delays in the anticipated in-service dates and cost increases of generation, transmission, distribution or other projects; Great Plains Energy's ability to successfully manage transmission joint venture; the inherent risks associated with the ownership and operation of a nuclear facility including, but not limited to, environmental, health, safety, regulatory and financial risks; workforce risks, including, but not limited to, increased costs of retirement, health care and other benefits; and other risks and uncertainties.

This list of factors is not all-inclusive because it is not possible to predict all factors. Other risk factors are detailed from time to time in Great Plains Energy's and KCP&L's quarterly reports on Form 10-Q and annual report on Form 10-K filed with the Securities and Exchange Commission. Each forward-looking statement speaks only as of the date of the particular statement. Great Plains Energy and KCP&L undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

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