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

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 3¹ 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

Tim Opitz
Deputy Public Counsel
Missouri Bar No. 65082
P. O. Box 2230
Jefferson City MO 65102
(573) 751-5324
(573) 751-5562 FAX
Timothy.opitz@ded.mo.gov

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

		Retirement Date						
Generation Plant	MW	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 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.

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

plans.

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=aHR0cDovL2FwaS50ZW5rd2l6YXJkLmNvbS9maWxpbmcueG1sP2lwYWdlPTExNjk2OTE0Jk RTRVE9MSZTRVE9MSZTUURFU0M9U0VDVEIPTI9QQUdFJmV4cD0%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 valuation⁵ 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.

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. 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. 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%). 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 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:

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*

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*.

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 plan¹²

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:

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. 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.

Energy Efficiency and Demand Side Rates

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:

¹⁵Southwest 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.

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

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/

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.

- o Sibley I
- o Sibley 2
- o Sibley 3
- o Sibley Common

- o Lake Road 4/6
- o Montrose 2
- o Montrose 3
- o 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



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:



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



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

JOHN J. SPANOS Sr. Vice President

JJS:krm

059135

TABLE OF CONTENTS

Executive Summary	
PART I. INTRODUCTION	
Scope	
Plan of Report	
Basis of the Study	
Depreciation	
Service Life and Net Salvage Estimates	
PART II. ESTIMATION OF SURVIVOR CURVES	
Survivor Curves	
lowa Type Curves	
Retirement Rate Method of Analysis	
Schedules of Annual Transactions in Plant Records	
Schedule of Plant Exposed to Retirement	
Original Life Table	
Smoothing the Original Survivor Curve	
PART III. SERVICE LIFE CONSIDERATIONS	
Field Trips	
Service Life Analysis	
Life Span Estimates	
PART IV. NET SALVAGE CONSIDERATIONS	
Salvage Analysis	
Net Salvage Considerations	
DADTV OALOU STOMOF ANNIAL AND ACCOURD DEPOSITION	
PART V. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION	
Group Depreciation Procedures	
Single Unit of Property	
Remaining Life Annual Accruals	
Average Service Life Procedure	
Calculation of Annual and Accrued Amortization	
PART VI. RESULTS OF STUDY	
Qualification of Results	
Description of Detailed Tabulations	

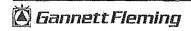


TABLE OF CONTENTS, cont

Table 1. Summary of Estimated Survivor Curves, Net Salvage, Original Cost, Book Reserve and Calculated Annual Depreciation Accruals as of December 31, 2014	VI-4
PART VII. SERVICE LIFE STATISTICS	
Electric Plant	
Industrial Steam	
General Plant	VII-221
PART VIII. NET SALVAGE STATISTICS Table 2. Calculation of Weighted Net Salvage Percent for Generation Plant as of December 31, 2014 Electric Plant Industrial Steam General Plant	VIII-2 VIII-8 VIII-63
PART IX. DETAILED DEPRECIATION CALCULATIONS	
Electric Plant	IX-2
Industrial Steam	
General Plant	

INDUSTRIAL STEAM

396.00

312.09	Boiler Plant Equipment
376.09	Mains
381.09	Meters
GENERAL PLANT	
390.00	Structures and Improvements
392.00	Transportation Equipment - Autos
392.01	Transportation Equipment - Light Trucks
392.02	Transportation Equipment - Heavy Trucks
392.04	Transportation Equipment - Trailers
392 05	Transportation Equipment - Medium Trucks

Power Operated Equipment

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 <u>Service</u>	Probable Retirement <u>Year</u>	<u>Life Span</u>
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
latan Unit 1	1980	2040	60
latan Unit 2	2010	2070	60
Lake Road Boiler 1	1950	2035	85
Lake Road Boiler 2	1958	2035	7.7
Lake Road Boiler 3	1962	2035	73
Lake Road Boiler 4	1966	2035	69
Lake Road Boller 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 <u>Service</u>	Probable Retirement <u>Year</u>	<u>Life Span</u>
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."

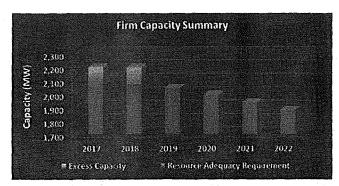


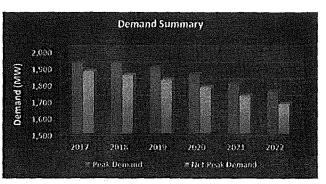
SPP 2017 RESOURCE ADEQUACY REPORT

Published on June 19th, 2017

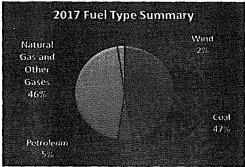
By Resource Adequacy Coordination

GREATER MISSOURI OPERATIONS COMPANY (KCP&L)



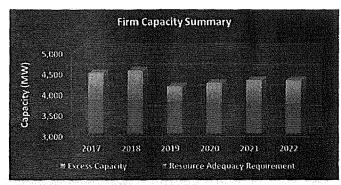


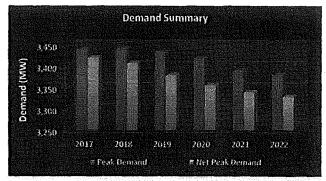




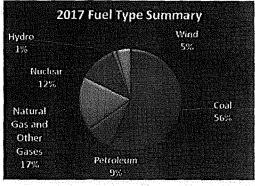
Firm Capacity Summary	Unit	2017	2018	2019	2020	2021	2022
Firm Capacity Resources	MW	2,076	2,076	1,628	1,531	1,531	1,565
Firm Capacity Resources (Other)	MW	0	0	0	0	0	0
Firm Capacity Purchases	MW	131	130	195	105	- 70	70
Firm Capacity Sales	MW	0	0	0	0	0	0
Confirmed Retirements	MW	0	0	448	546	546	546
Scheduled 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



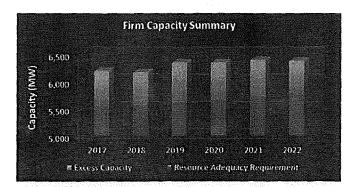


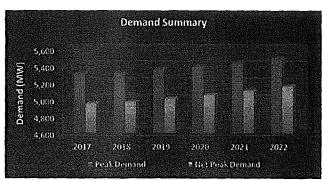




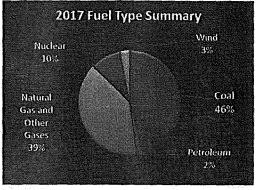
Firm Capacity Summary	Unit	2017	2018	2019	2020	2021	2022
Firm Capacity Resources	MW	4,344	4,344	4,010	4,010	4,010	4,010
Firm Capacity Resources (Other)	MW	0	Ó	. 0	0	0	. 0
Firm Capacity Purchases	MW	256	292	292	292	292	292
Firm Capacity Sales	MW	137	112	167	77	15	15
Confirmed Retirements	MW	0	0	334	334	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









그는 사람들 생각이 가장에 가장에 가는 사람들이 가장하다 가장하다면 하는 사람들이 되었다면 생각이 되었다. 사람들이 가장 가장 그는 사람들이 되었다.							
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						100	
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	Ō	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%

In the Matter of the 2017 Plan Annual Update for I Missouri Operations Com	KCP	&L Greater)	File No. EO-2017-0230
	AF	FIDAVIT OF GE	OFF M	ARKE
STATE OF MISSOURI)	cc		
COUNTY OF COLE)	SS		

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

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 SEAL S

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

Jerene A. Buckman Notary Public

My Commission expires August 23, 2017.

AFFIDAVIT OF JOHN A. ROBINETT									
Missouri Operations Company)	THE NO. EO-2017-0230							
In the Matter of the 2017 Integrated Resource Plan Annual Update for KCP&L Greater	5)	File No. EO-2017-0230							

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

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 SEAL ST

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

Jerene A. Buckman Notary Public

My Commission expires August 23, 2017.

In the Matter of the Determination of Special)
Contemporary Resource Planning Issues to be)
Addressed by KCP & L Greater Missouri Operations) Case No. EO-2018-0045
Company in its Next Triennial Compliance Filing)
or its Next Annual Update Report.)

PUBLIC COUNSEL'S AMENDED SUGGESTED SPECIAL CONTEMPORARY RESOURCE PLANNING ISSUES

COMES NOW the Office of the Public Counsel ("OPC" or "Public Counsel") and in its response to the Missouri Public Service Commission's (Commission) August 14, 2017 Order Opening a File Regarding Special Contemporary Resource Planning Issues and Offering an Opportunity to File Suggestions submits the following Updated Memorandum of Suggested Special Contemporary Topics and planning issues for KCP&L Greater Missouri Operations Company (GMO) pursuant to 4 CSR 240-22.080(4)(A).

- 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. Commission Rule 4 CSR 240-22.080(4)(A) provides that Public Counsel may file suggested special contemporary issues for the utility to consider in triennial compliance filings or annual update report of the utility's resource plan. In light of the purpose of the rule, and because of recent announcements and developments, including the Mountain West Transmission Group's announcement that it is has completed initial discussions with the Southwest Power

Pool's (SPP) about its utility members becoming part of SPP, OPC hereby submits the attached Memorandum with its Updated Suggested Special Contemporary Topics.

- 3. In the GMO FAC prudence review, Case No. EO-2017-0232 ("Prudence Case"), the Commission stated that it would welcome additional information regarding OPC's concern with regard to GMO's reliance on the SPP Integrated Market to meet its energy needs. OPC has completed its analysis, which shows GMO has relied heavily on the SPP IM since the SPP IM started. The Memorandum attached to this pleading includes a graph that shows GMO's monthly reliance on the SPP for energy. Since GMO has a Fuel Adjustment Clause, which allows it to pass costs through to customers, GMO has little cost recovery risk from its transfer of responsibility to the SPP IM.
- 4. The change to GMO's preferred plan in its most recent annual update accelerated the retirement (by 22 years) of its largest baseload coal plant, which, unlike wind generation, can be dispatched as needed. The new preferred plan adds wind capacity through purchased power contracts that require GMO to "take or pay" regardless of whether the energy is needed by its customers or the current SPP IM price. The plan also includes yet-to-be determined contracts for capacity which will not include any provision of energy, increasing GMO's reliance on energy from the SPP IM. This reliance on market purchases of energy shifts GMO's responsibility of cost-effectively providing energy to its customers to the SPP IM. This significantly increases the potential for volatility in cost to GMO's customers, and with potential retirement of baseload units by other SPP members and creates reliability concerns during times when wind energy is not available.

¹ The Mountain West Transmission Group (Mountain West) announced today that it has completed initial discussions with the Southwest Power Pool's (SPP) management team, concerning membership in the SPP regional transmission organization (RTO). Through these discussions, Mountain West has determined that membership in SPP would provide opportunities to reduce customer costs, and maximize resource and electric grid utilization. www.wapa.gov/newsroom/NewsReleases/2017/Pages/Mountain-West-SPP-negotiations.aspx

5. A recent presentation by SPP to the Commission in Agenda included a slide that showed that, beginning in 2019, GMO will not meet SPP's Resource Adequacy Requirements. Neither the SPP representatives nor the GMO representative present at Agenda could provide any explanation to Chairman Hall's questions.

6. Notably, SPP's Resource Adequacy study was based on GMO's 2016 preferred plan. GMO's 2016 preferred plan is contingent on its obtaining unknown capacity contracts beginning in 2019.

7. The attached Memorandum highlights why the Commission should consider GMO's announced premature plant retirements and the subsequent questions OPC has raised as a special contemporary topic.

WHEREFORE Public Counsel respectfully submits this Memorandum of Suggested Special Contemporary Resource Planning Topics and asks the Commission to order GMO to address these issues in its next triennial compliance filing or annual update report.

Respectfully submitted,

/s/ Lera Shemwell Lera L. Shemwell Senior Counsel (#43792) P. O. Box 2230 Jefferson City, MO 65102 (573) 751-5565 (Telephone) (573) 751-5562 (Fax) lera.shemwell@ded.mo.gov

Attorney for the Office of the Public Counsel

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, emailed or hand-delivered to all parties of record electronically on this 27th day of September 2017.

/s/ Lera Shemwell
Lera L. Shemwell

MEMORANDUM

To:

Missouri Public Service Commission Official Case File,

Case No. EO-2018-0045 (KCP&L Greater Missouri Operations)

From:

Geoff Marke, Chief Economist Lena Mantle, Senior Analyst

John Robinett, Engineering Specialist

Subject:

OPC Suggested Special Contemporary Topics (Updated)

Date:

September 27, 2017

Suggested Topics:

• Supply-Side Management Topics:

- 1. Provide an explanation for stranded costs and ratepayer impact for the premature retirement of the Sibley and Lake Road coal plants¹ including, at a minimum:
 - The total cost of all stranded assets, who will pay the stranded costs, and if Empire expects the customers to pay the stranded costs, the impact on customer rates;
 - All "cost of removal" considerations (dismantle, demolition) for plants that are retired early;
 - Costs associated with transmission upgrades or additions necessary for transmission grid reliability, stability, or voltage support affected by retirement;
 - The availability of long-term (greater than five-years) capacity contracts and the impact on customer rates if there are no long-term capacity contracts; and
 - The availability of long-term (greater than five-years) energy contracts and the impact on customer rates if there are no long-term energy contracts.
- 2. The Company should model scenarios that examine the impact of the retirement of 10% and 25% of all of the coal generation of Southwest Power Pool's (SPP) members and replacement with wind generation energy and capacity including:

¹ The change to GMO's preferred plan in its most recent annual update accelerated the retirement of its largest baseload coal plant, which can be dispatched when needed, by 22 years. The new preferred plan adds wind capacity through purchased power contracts that require GMO to "take or pay" regardless of whether the energy is needed by its customers or the current SPP IM price. The plan also includes yet-to-be determined contracts for capacity which will not include any provision of energy which will increase GMO's reliance on energy from the SPP IM. Also important in this discussion is GMO's current reliance on the Southwest Power Pool ("SPP") integrated market ("IM") for energy. This reliance on market purchases of energy shifts GMO's responsibility of cost-effectively providing energy to its customers to the SPP IM. Since GMO has an FAC, GMO has little cost recovery risk from this transfer of responsibility to the SPP IM. However there is significant increase in the potential for volatility in cost to GMO's customers, and with potential retirement of base load units by other SPP members, an increase in the risk of availability during times when wind energy is not available.

- The effect on reliability of energy availability on an hourly basis;
- The effect on SPP's monthly market prices taking into account the impact of the reliability of energy availability;
- The expected effect on the amount of energy purchased from the SPP IM;
- The effect on subsequent changes in GMO's customers' rates (including FAC rates) by season; and
- The effect of inclusion of Mountain West Transmission into the SPP.

• <u>Demand-Side Management Topics:</u>

- 1. The upcoming energy efficient potential study should include adoption (or "take") rate consideration that are modified (+/-) with the following elements:
 - Modified rate design scenarios (fluctuations in fixed charges +/- at \$2, \$5 and \$10, Inclining Block Rates, and Time of Use,); and
 - Increase in volatile weather (additional Heating Degree Days and Cooling Degree Days).

Additional Contextual Information in Support of Request

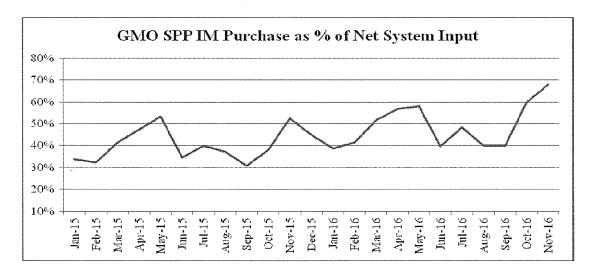
Supply-Side Management:

A recent presentation by SPP to the Commission in Agenda included a slide that showed that beginning in 2019, GMO did not meet SPP's Resource Adequacy Requirements. Neither the SPP representatives nor the GMO representative present could provide an explanation to Chairman Hall. The SPP Resource Adequacy study was based on GMO's 2016 preferred plan. GMO's 2016 preferred plan is contingent on unknown capacity contracts beginning in 2019.

Final Report – Ju	me	20	17			
boad Responsible Entity	100		800	3 6 7	THE TH	
		2017	776	7777		17,77
Carthage Water & Electric Plant	NO	NO	NO	NO	NO	NO
City of Maiden floard of Public Works	TES	YES	YES	YZS	YES	TES
City of Poplar Blaff Municipal Utilities	YES	YES	YES	YES	YES	YES
City of West Plains Board of Public Works	YES	YES	TES	TES	TES	TE8
City Dulines of Spacoatteld	YES	YES	YES	YES	YES	YES
Emplie District Electric Company	YES	YES	YES	YES	YES	YES
Greater Missouri Operations Company (RCP&L)	TES	YES	NO	NO	NO	NO
Independence Pewer & Light	YES	YES	TES	YES	YES	TES
Kansas City Power & Light	YES	YES	YES	YES	YES	YES
Kennen Buard of Public Works	YES	YES	YES	YES	YES	YES
Missouri joint Manicipal Dectric Dillly Combussion	YES	YEN	YES	YES	YES	TES
People's Electric Cooperative	YES	YES	YES	YES	YES	713
The Cherry	YES	YES	YES	YES	YES	YES

This Memorandum highlights why the Commission should consider GMO's announced premature retirements and the subsequent questions OPC has raised as a special contemporary topic.

In the time period of January 2015 through November 2016, GMO has relied on the SPP Integrated Market (SPP IM) to supply 44% of its customers' energy needs. The graph below shows GMO's monthly reliance on the SPP IM for energy:



Sibley 3 currently is GMO's largest generation unit at 364 MW. It is dispatchable, meaning that it can and does follow load. During the time period of January 2015 through November 2016, Sibley 3 supplied 35% of GMO's energy needs. According to GMO's response to Staff's data request 16 in the FAC prudence review case EO-2017-0232, Sibley 3 was to be retired in 2040. GMO's 2017 preferred plan provided 34 days later in EO-2017-0230, accelerated that retirement from 2040 to 2018.

During the time period of January 2015 through November 2016, energy from GMO's current wind purchased power contracts supplied 11% of GMO's energy needs. GMO's current wind purchased power contracts require GMO to "take or pay" at a set price regardless of GMO's customers' needs or the market price of energy at the time the wind is strong enough to generate energy. Wind power is intermittent and not dispatchable. While GMO does not have to take the wind energy generated, it does have to pay for what is generated. This results in GMO taking the energy and often "selling" it at a loss on the SPP IM.

The graph that follows shows the average monthly cost per megawatt-hour (MWh) GMO paid for energy purchased from the SPP IM, the cost wind energy from its purchased power contracts and the average production fuel cost per MWh of the Sibley site.² **

As shown by this graph, the cost of energy generated by the Sibley plants is typically lower than the price of energy purchased on the SPP IM. It also shows that the price of the "take or pay" wind contract was only lower than the cost of purchasing from the SPP IM seven out of the 23

What this graph does not show is the erratic availability of wind energy. This is shown in the following graph: **

months.

² This information is only provided for the Sibley plant site in total – 42 MW Sibley 1, 42 MW Sibley 2, and 364 Sibley 3 per GMO response to Staff data request 16 in EO-2017-0232. Graph does not include information from any month when the Sibley 3 plant was down for more than 14 days of the month.

In its Resource Plan update, GMO changed its 2016 preferred resource plan to Sibley 3 (364 MW) early. Its 2017 preferred resource plan replaces this baseload, dispatchable low cost resource with capacity from wind (30 MW accredited capacity) and unknown capacity purchased power contracts to meet its SPP capacity requirements. It is GMO's current plan to replace any energy that would have been generated by Sibley 3 that is not supplied through its new wind contracts with SPP IM energy purchases. This change in the preferred resource plan will increase GMO's reliance on the SPP IM to meet its customers' energy needs.

While all of these concerns are limited to GMO, SPP IM does not operate in isolation. The resource capacity decisions of all of its members affect the SPP IM prices. Other SPP members have announced that they are planning for early retirement of their coal plants and also replacing that capacity with wind. Many of these announcements were made after the June 2017 publication of the SPP Resource Adequacy report. These retirements have a yet-to-be determined impact on the SPP IM.

Additionally, last Friday, September 22, 2017 it was announced that negotiations had begun between the Mountain West Transmission Group and SPP. Mountain West is a coalition of ten electricity providers that, in 2016, included 10,503 MW of installed capacity that generated over 28,500 GWh of energy. It serves about 6.4 million customers and has over 16,000 miles of transmission lines. If the negotiations are successful, Mountain West's integration in the SPP could occur in late 2019. The addition of generation resources and load requirements would impact SPP market prices and thus creates an additional layer of uncertainty to the cost to serve GMO's customers since it has such great reliance on the SPP market for energy.

Demand-Side Management:

Expressed Commission interests in both recent rate cases (ER-2017-0285, ER-2016-0243, ER-2016-0156, ER-2016-0023) and regulatory workshops (EW-2017-0245) have heightened the importance of the relationship between rate design and energy efficiency adoption. The future deployment of AMI technology and exploration into value-added utility services is underscored by the need to mitigate peak energy demand. Future market potential studies (that inform future MEEIA applications) should be modeled with applicable "nudges." Simply put, a ratepayer's

decision to participate in MEEIA will be informed by the price signals they receive through rates and by changes in weather. A DSM market potential study should take rate design and possible changes in weather into account when it determines future RAP (realistic achievable potential) and MAP (maximum achievable potential) levels as these numbers form the foundation for future MEEIA targets.

AFFIDAVIT OF LENA M. MANTLE

STATEOFMISSOURI)	SS.
COUNTY OF COLE)	

COMES NOW LENA M. MANTLE and on his oath declares that she is of sound mind and lawful age; that she contributed to the foregoing ORDER OPENING A FILE REGARDING SPECIAL CONTEMPORARY RESOURCE PLANNING ISSUES AND OFFERING AN OPPORTUNITY TO FILE SUGGESTIONS; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

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 27^{th} day September,

NOTARY OF SEAL STATES

JERENE A. BUCKMAN My Commission Expires August 23, 2021 Cole County Commission #13754037

Jerene A. Buckman Notary Public

AFFIDAVIT OF GEOFF MARKE

STATEOFMISSOURI)	SS.
COUNTY OF COLE)	

COMES NOW GEOFF MARKE and on his oath declares that she is of sound mind and lawful age; that she contributed to the foregoing ORDER OPENING A FILE REGARDING SPECIAL CONTEMPORARY RESOURCE PLANNING ISSUES AND OFFERING AN OPPORTUNITY TO FILE SUGGESTIONS; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Geoff Market

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 27th day September,

NOTARY OF ME

JERENE A. BUCKMAN My Commission Expires August 23, 2021 Cole County Commission #13754037

Jerene A. Buckman Notary Public

AFFIDAVIT OF JOHN A. ROBINETT

STATEOFMISSOURI)	SS.
COUNTY OF COLE)	

COMES NOW JOHN A. ROBINETT and on his oath declares that she is of sound mind and lawful age; that she contributed to the foregoing ORDER OPENING A FILE REGARDING SPECIAL CONTEMPORARY RESOURCE PLANNING ISSUES AND OFFERING AN OPPORTUNITY TO FILE SUGGESTIONS; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

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 27th day September,

2017 NOIARY SEAL S

JERENE A. BUCKMAN My Commission Expires August 23, 2021 Cole County Commission #13754037

Jerene A. Buckman Notary Public

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

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 generation¹ 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 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.

AFFIDAVIT OF GEOFF MARKE

STATEOFMISSOURI)	
v)	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.



JERENE A. BUCKMAN My Commission Expires August 23, 2021 Cole County Commission #13754037

Jerene A. Buckman Notary Public



In the Matter of the Joint Application of Missouri-American) Water Company, St. Louis County Water Company, d/b/a) Missouri-American Water Company, and Jefferson City Water Works Company, d/b/a Missouri-American Water Company, for an Accounting Authority Order Relating to Security Costs.

Case No. WO-2002-273

REPORT AND ORDER ON REMAND

Issue Date:

November 10, 2004

Effective Date: November 20, 2004

2. The Sibley Test:

Under a long-standing test, the Commission has granted AAOs where the expenditures in question are "unusual and nonrecurring, and thus extraordinary." In the present case, the Commission's Staff has urged the Commission to adopt a new four-part test for AAOs. Staff has taken this position in other recent cases involving AAOs and the Commission has not adopted it. Missouri-American strenuously opposes Staff's proposal, while the other parties are willing to accept it.

The leading Commission decision on AAOs concerned a large construction project at Missouri Public Service's Sibley Generating Station.⁶⁰ Aquila, then known as Utilicorp United and of whom Missouri Public Service is a division, extensively rebuilt Sibley in order to both extend its life and convert it to the use of low-sulfur, western coal.⁶¹ Also involved were two purchased-power contracts. Aquila sought an AAO in order to defer both costs associated with the Sibley construction project and the purchased power contracts to its next rate case.

In Sibley, the Commission noted that it had previously granted AAOs "on a caseby-case basis."⁶² The Commission analyzed AAOs in Sibley in terms of their ratemaking effect, that is, the consideration of costs from outside the test year:

⁵⁸ E.g., St. ex rel. Missouri Office of the Public Counsel, supra, 858 S.W.2d at 811: "The Commission's decision to grant authority to defer the costs associated with the Sibley reconstruction and coal conversion projects... was the result of the Commission's determination that the construction projects were unusual and nonrecurring, and therefore, extraordinary. The Commission determined the projects to be unusual because of their size and substantial cost."

⁵⁹ E.g., In the Matter of Missouri Public Service and St. Joseph Light & Power, Divisions of UtiliCorp United, Inc., Case No. GO-2002-175, decided by the Commission on November 14, 2002.

⁶⁰ Sibley, supra.

⁶¹ "Missouri Public Service" is a registered fictitious name under which Aquila does business in Missouri.

⁶² Sibley, at 204 (punctuation corrected).

Under historical test year ratemaking, costs are rarely considered from earlier than the test year to determine what is a reasonable revenue requirement for the future. Deferral of costs from one period to a subsequent rate case causes this consideration and should be allowed only on a limited basis. This limited basis is when events occur during a period which are extraordinary, unusual and unique, and not recurring. These types of events generate costs which require special consideration. 63

Such events, the Commission explained, included extraordinary losses, construction projects of unusual size, costs incurred complying with Commission safety requirements, and such other items as nuclear fuel leases, a coal contract buy-out, pension costs, and an automated mapping system.⁶⁴ In fact, in a prior case, the Commission had already permitted the deferral of costs associated with the Sibley rebuild and coal conversion project.

In the *Sibley* decision, the Commission emphasized that it is the extraordinary event that is the "primary focus" in any request for an AAO, considered on a case-by-case basis: "The decision to defer costs associated with an event turns on whether the event is in fact extraordinary and nonrecurring." The Commission emphasized that "[e]xtraordinary means unusual and nonrecurring." Also relevant, but not dispositive, the Commission explained, is "whether the event has a material or substantial effect on a utility's earnings." Another relevant factor is the certainty of the event's occurrence. "Utilities should not seek deferral of speculative events since it is hard to determine whether an event is extraordinary

⁶³ Id., at 205 (original paragraph formatting altered).

⁶⁴ Id.

⁶⁵ Id., at 205, 206.

⁶⁶ *Id.*, at 207.

⁶⁷ Id., at 206.

⁶⁸ In Sibley, the Commission contemplated the grant of AAOs for future events.

or material unless there is a high probability of its occurring within the near future."⁶⁹ Finally, the Commission stated that a utility should be required to file a rate case within a reasonable interval after the granting of an AAO, both to preserve the Commission's practical ability to make a disallowance and because, if the event was truly extraordinary, recovery in rates ought not be delayed.⁷⁰

The *Sibley* Commission considered and rejected other factors raised by Staff and by the Company. Thus, whether or not the utility was earning at or above its authorized rate of return at the time of the deferral was not relevant.⁷¹ Also irrelevant were the prudency of the expenditures and the goals of rate stability, avoidance of rate case expense, mitigation of regulatory lag, and maintaining the financial integrity of the utility.⁷² The Commission also rejected the position taken by the Public Counsel, who urged the Commission to adopt a standard similar to that used to determine requests for interim rate relief.⁷³ "Public Counsel recommends that the Commission only allow deferral of costs associated with acts of God or when the integrity of the service to customers is threatened."⁷⁴ The Commission rejected this proposal as "too restrictive."⁷⁵

3. AAOs Since Sibley:

Since it issued the *Sibley* decision in 1991, the Commission has generally used the standard announced therein when analyzing AAO requests. For example, when two

⁶⁹ Id.

⁷⁰ ld.

⁷¹ Id.

⁷² Id., at 206-207. Notice that the Commission's rejection of these purposes is directly contrary to the weight of the academic authorities quoted earlier.

⁷³ Id., at 204.

⁷⁴ Id., at 207.

⁷⁵ Id., at 208.

divisions of Aquila, Inc., sought to defer uncollectibles associated with compliance with the Commission's Cold Weather Rule, the Commission stated:⁷⁶

The test that the Commission has used, and continues to use here, for determining whether or not to grant an AAO is whether the expense to be deferred is extraordinary and not recurring[.] * * * The Commission's initial inquiry is whether the costs sought to be deferred are indeed extraordinary. If they are not, the inquiry is at an end, and the other questions are moot.

However, the Commission's adherence to *Sibley* has not been unwavering. In several cases, particularly those resolved by stipulations and agreements, the Commission has instead resorted to a "not detrimental to the public interest" standard.⁷⁷ Thus, in approving an AAO for costs related to storm damage, the Commission stated: "Since the parties are all in agreement that KCPL should be granted an accounting authority order, and are in agreement as to the conditions that should attach to the granting of the authority, the Commission concludes that granting it will not be detrimental to the public interest."⁷⁸ In a pair of post-*Sibley* cases, the Commission granted deferral on the basis that the requests were "reasonable."⁷⁹

⁷⁶ In the Matter of Missouri Public Service and St. Joseph Light & Power, Divisions of UtiliCorp United, Inc., 11 Mo.P.S.C.3d 600, 602-3 (November 14, 2002). The requested AAO was denied on the ground that uncollectibles are a normal cost of doing business.

⁷⁷ By contrast, elsewhere the Commission has applied the *Sibley* standard in cases resolved by stipulation and agreement. See *In the Matter of Laclede Gas Co.*, 3 Mo.P.S.C.3d 135, 138 (August 22, 1994).

⁷⁸ In the Matter of Kansas City Power & Light Co., 11 Mo.P.S.C.3d 419 (July 30, 2002); and see In the Matter of Missouri Gas Energy, 11 Mo.P.S.C.3d 317 (June 13, 2002); In the Matter of UtiliCorp United, Inc., 11 Mo.P.S.C.3d 78 (January 10, 2002).

⁷⁹ In the Matter of Missouri Gas Energy, 3 Mo.P.S.C.3d 201 (September 28, 1994). The deferral requests were (1) costs and expenditures related to gas safety projects undertaken pursuant to the Commission's pipeline repair and replacement rules, and (2) to book as regulatory assets certain regulatory assets acquired from Western Resources upon purchase of its system. See also In the Matter of Missouri Gas Energy, 3 Mo.P.S.C.3d 203, 205-6 (September 28, 1994): "The Commission finds the current proposal to be a reasonable and prudent mechanism."

The cases in which the Commission has followed *Sibley* are not entirely consistent. One difficult area has involved successive deferral requests for the same project. In the *Sibley* decision, deferral was granted for costs relating to on-going construction and conversion projects, which had been previously deferred, simply because they had been previously deferred: "The Commission finds that it would be unreasonable to deny deferral of the remainder of the costs associated with this project. The Commission has already found the [life extension] project to be an extraordinary event by allowing deferral of costs associated with the project in Case No. EO-90-114."⁸⁰ Elsewhere, the Commission stated: "The Commission also found the coal conversion project to be an extraordinary event in Case No. EO-90-114. . . . Both projects were treated together and both were found to be extraordinary. The Commission is of the opinion it should not now reverse its prior decision[]"⁸¹ By contrast, when St. Louis County Water Company sought a third AAO with respect to infrastructure replacement costs, the Commission denied the request, stating:

The record makes it abundantly clear that the Commission should not grant the requested third AAO for infrastructure replacement because the circumstances are recurring, not nonrecurring. The Company has presented ample evidence as to the magnitude of the infrastructure replacement undertaking in terms of cost. However, the record also shows that infrastructure replacement will necessarily continue for years as a series of successive projects. This is not an appropriate case for an AAO.⁸²

Another difficult area has been predictability. The Commission permitted the deferral of costs related to upgrading computers for Y2K compliance, stating that "[a]Ithough a finding that an event was unpredictable might support the conclusion that the event was

^{80 1} Mo.P.S.C.3d at 209.

⁸¹ *Id.*, at 210.

⁸² In the Matter of St. Louis County Water Co., 10 Mo.P.S.C.3d 56, 68 (February 13, 2001).

extraordinary, an event can be extraordinary even though it was predictable and foreseeable."83 Previously, however, the Commission had denied the deferral of costs resulting from a mandatory change in accounting methods on the grounds that "UWM's lack of foresight . . . does not justify the issuance of an Accounting Authority Order."84

In one case, that has not been followed since, the Commission added a new element to the Sibley test:85

However, the simple fact that an expense is extraordinary and nonrecurring is not enough to justify the deferral of that expense. Implicit in the Commission's previous orders regarding requests for AAOs is a requirement that there must be some reason why the expense to be deferred could not be immediately included for recovery in a rate case.

In other cases, the Commission has refused to add to the *Sibley* test. Thus, the Commission has stated that the grant of an AAO need not be supported either by a finding that irreparable harm would result were the AAO not granted or by a finding of materiality.⁸⁶ The Commission has reaffirmed that ordinary business expenses are not proper subjects for AAOs.⁸⁷

⁸³ In the Matter of Missouri Gas Energy, 9 Mo.P.S.C.3d 37, 39 (March 2, 2000).

⁸⁴ In the Matter of United Water Missouri, Inc., 8 Mo.P.S.C.3d 124, 128 (April 20, 1999); see also In the Matter of St. Louis County Water Co., 5 Mo.P.S.C.3d 341, 349 (December 31, 1996): "It is also pointed out that the terms 'infrequent, unusual and extraordinary' connote occurrences which are unpredictable in nature."

⁸⁵ In the Matter of St. Joseph Light & Power, 9 Mo.P.S.C.3d 481, 485 (December 14, 2000). Request to defer purchased power expense resulting from a fire and consequent turbine shutdown denied.

⁸⁶ In the Matter of Missouri Gas Energy, 9 Mo.P.S.C.3d 37, 39 (irreparable harm), 38 (materiality) (March 2, 2000). For materiality, see also In the Matter of Missouri Gas Energy, Case No. GO-99-258 (Order Regarding Motion to Reject Pleading, Application for Rehearing, and Request for Reconsideration, issued June 3, 1999), and Sibley, 1 Mo.P.S.C.3d at 206.

⁸⁷ In the Matter of Missouri Public Service and St. Joseph Light & Power, Divisions of UtiliCorp United, Inc., 11 Mo.P.S.C.3d 600, 602-3 (November 14, 2002), supra, No. 76; In the Matter of St. Louis County Water Co., 4 Mo.P.S.C.3d 94, 98 (September 19, 1995).