MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

COST OF SERVICE

SPIRE MISSOURI, INC., d/b/a SPIRE

LACLEDE GAS COMPANY and MISSOURI GAS ENERGY
GENERAL RATE CASE

CASE NOS. GR-2017-0215
and GR-2017-0216

Jefferson City, Missouri
September 2017

**** Denotes Confidential Information ****

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SPIRE MISSOURI, INC., d/b/a SPIRE

LACLEDE GAS COMPANY and MISSOURI GAS ENERGY

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I. Executive Summary

Staff conducted a review of all cost of service components (capital structure and return on rate base, rate base, depreciation expense, and operating revenues and expenses) for both of Spire Missouri Inc. d/b/a Spire's divisions; Laclede Gas ("LAC") and Missouri Gas Energy ("MGE"). This audit was conducted in response to LAC's and MGE's April 11, 2017, filing seeking to increase rates by $58.1 million (LAC) and $50.4 million (MGE). LAC and MGE are currently collecting ISRS revenues, $32.6 million for LAC and $16.4 million for ISRS. Since LAC and MGE are currently collecting these revenues, their proposed net rate increases are approximately $25.5 million for LAC and $34 million for MGE.

Staff Expert/Witness: Kim Cox

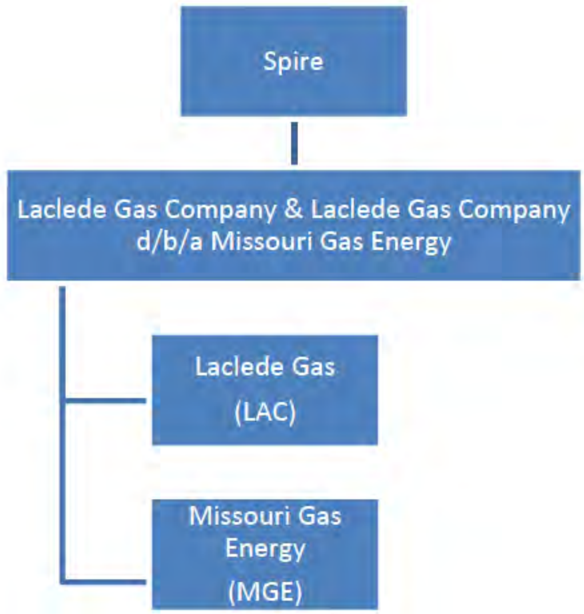
II. Background

A. Laclede Gas Company and Laclede Gas Company d/b/a Missouri Gas Energy Name Change to Spire

Subsequent to the filing of these rate cases, Laclede Gas Company and Laclede Gas Company d/b/a Missouri Gas Energy filed with the Commission a notice of intent to change the company names to Spire Missouri Inc. d/b/a Spire. The Commission issued an order on August 16, 2017, recognizing the name change, which became effective on August 30, 2017. This name change does not provide for unique designations for the separate divisions of Spire's operations in the state of Missouri; both the operating division formerly known as LAC, and the operating division formerly known as MGE, will now both simply be referred to as Spire.

In an effort to save resources, Staff has followed the Companies' lead and created a single report detailing its recommendations for both operating divisions. However, as both operating divisions are now operating under the same name, there is a potential for confusion. In an attempt to limit that potential, Staff, in its Direct filing, will continue to refer to the separate operating units as the companies did in their direct filings; i.e., LAC and MGE. When discussing the operating units together as a single Missouri utility, we will refer to them as Spire Missouri.

Below is a diagram before the name change to Spire Missouri Inc. d/b/a Spire.



Below is a diagram after the name change to Spire Missouri, Inc. d/b/a Spire.

B. Background of MGE

MGE is an operating unit of Spire Missouri Inc. d/b/a Spire, serving approximately 500,000 customers and generally operating in 155 western Missouri communities including the cities of Kansas City, St. Joseph, Warrensburg and Joplin.

Originally, Western Resources, Inc. ("WRI" or "Western Resources"), now Westar Energy ("Westar") acquired MGE - the Missouri natural gas operations of KPL Gas Service - in 1983 when it was called The Gas Service Company. Southern Union then purchased MGE from Western Resources in late 1994. This acquisition was approved by the Commission in Case No. GM-94-40.

On July 17, 2013, the Commission approved the sale of the MGE unit of Southern Union Company to Laclede Gas Company in Case No. GM-2013-0254, when it approved a Unanimous Stipulation and Agreement dated July 2, 2013.

The Commission last authorized a general rate increase for MGE on April 16, 2014, in Case No. GR-2014-0007, with new rates effective on May 1, 2014. In that case the Commission approved a Stipulation and Agreement increasing MGE's Missouri jurisdictional revenues by $7,800,000 and resetting the ISRS to zero.

C. Background of LAC

LAC is an operating unit of Spire Missouri Inc. d/b/a Spire , serving approximately 630,000 residential, commercial and industrial customers in the City of St. Louis and parts of ten counties in eastern Missouri.

The Commission last authorized a general rate increase for LAC on June 26, 2013, in Case No. GR-2013-0171, with new rates effective on July 8, 2013. In that case the Commission approved a Unanimous Stipulation and Agreement authorizing LAC to transfer into its Missouri jurisdictional base rate revenues the $14,811,000 related to its ISRS revenues that previously were approved by the Commission and which LAC had already been collecting.

Staff Expert/Witness: Kim Cox

III. Test Year/True-Up Period

A test year update period reflects any material, known and measurable changes to Staff's case at a future date near the conclusion of Staff's audit. In contrast, true-ups are updates of major elements of a utility's revenue requirement beyond the end of an ordered test year and update period. True-ups are not required for every rate proceeding, and typically are only ordered when it can be demonstrated that material changes to the revenue requirement will likely occur after the end of the ordered update period within a period close enough to the operation-of-law date in the case to allow for a review and verification of these known changes.

The ordered test year for these cases is the twelve months ending December 31, 2016. The test year update period ordered for this case is the six months ending June 30, 2017. Staff also recommends at this time that a true-up audit be performed through September 30, 2017, to address all significant known and measurable changes that occur with regard to LAC and MGE's known and measurable revenues, rate base and expense items.

The issues anticipated for true-up include:

RATE BASE:

Plant in Service

Depreciation Reserve

All other rate base items (with the exception of revenue and expense lags for cash working capital)

CAPITAL STRUCTURE:

Capital structure

INCOME STATEMENT

Revenues for customer growth

Pension and other post-retirement employee benefit costs

Employee benefits

Payroll (including changes in pay rate, number of employees)

Payroll taxes

Insurance expense

Rate case expense

Depreciation expense

Various amortizations

Income taxes

Staff Expert/Witness: Kim Cox

IV. Staff's Revenue Requirement Recommendation

Staff recommends increases of $11,958, 306 to LAC's base rates, and $8,744,120 to MGE's base rates, and that the Companies' Infrastructure System Replacement Surcharge (ISRS) be reset to zero. Staff recommends a return on equity (ROE) of 9.25%, which is the mid-point of Staff's recommended equity cost rate range of 9.0% to 9.5%.

Staff Expert/Witness: Kim Cox

V. General Ledger Recording Issues

During Staff's review of the books and records of LAC and MGE, Staff experienced difficulties validating LAC's and MGE's direct revenue workpaper regarding the removal of test year Gross Receipts Tax revenue, ISRS revenue, and PGA/ACA revenue. Through discussions with LAC and MGE employees; it was relayed to Staff that Spire Missouri's general ledger does not have separate and distinct coding that would allow Staff to pull test year values exclusively for GRT revenue, ISRS revenue and PGA/ACA revenue. These values are imbedded in total revenue in the general ledger and cannot be separated out by a distinct cost element through the billing system. LAC and MGE have detailed monthly reports to support the general ledger totals that are recorded in the general ledger but LAC and MGE do not book the level of detail needed for Staff to verify that the information provided in data request responses and direct filed workpapers regarding test year revenue removal are correct. This is not true for GRT and PGA/ACA expense; it can be separated out by using a distinct cost element through the billing system. LAC and MGE have monthly revenue reports that break out the revenue for the individual items but if Staff is looking at the revenue removal items purely from a general ledger angle, Staff would not be able to tie to the revenue reports. Staff requests that LAC and MGE start recording their revenue in such a manner that the GRT revenue, ISRS revenue and PGA/ACA revenue can be extracted from the general ledger by rate class, by month, by FERC account for both MGE and LAC. In the event that Staff cannot reach an agreement with Spire Missouri regarding the proposed changes to how revenue items are recorded in their general ledger, Staff will request that the Commission order Spire Missouri to record revenue items using a separate code. Staff requests that these changes to the billing system be adopted as soon as possible but no later than the effective date of rates in this rate proceeding.

Staff Expert/Witness: Lisa M. Ferguson

VI. Surveillance Reporting

Presently, Spire Missouri provides Staff with very limited surveillance information regarding its LAC and MGE divisions. As part of this rate case, Staff requests that Spire Missouri provide more robust surveillance (i.e., actual earnings information) separately for both of its current rate divisions, LAC and MGE. Staff has contacted Spire Missouri to inform it about Staff's need for surveillance information. In the event that Staff cannot reach an agreement with Spire Missouri regarding the proposed surveillance reporting Staff will request that the Commission order Spire Missouri to provide the requested reporting requirements on a quarterly basis separately for both the LAC and MGE divisions. Staff requests that all surveillance information begin to be provided for the third quarter of calendar 2018. Specifically, Staff requests that Spire Missouri provide a complete general ledger with all supporting transactional detail, consistent with FERC USOA requirements that include all income statement and balance sheet transactions by month by FERC account; including all transactions occurring between Spire Missouri's divisions and all other Spire affiliated entities, both regulated and unregulated. In addition, Staff also requests that Spire Missouri provide an actual earned return on equity report, separately for MGE and LAC, similar to the Fuel Adjustment Clause (FAC) quarterly surveillance reporting that is currently required of electric utilities pursuant to 4 CSR 240-3.161(6). Specifically, Staff is seeking a report that is consistent with actual earned ROE reporting that is currently provided on a quarterly basis by Union Electric Company d/b/a Ameren Missouri. This information would greatly assist Staff with monitoring actual earned ROE in between Spire Missouri rate cases and allow Staff to better inform the Commission in certain circumstances where Spire Missouri's earnings may need to be reviewed in more detail. Given that Spire Missouri typically has filed rate cases in intervals that are three years or longer, and in light of recent acquisition activity and possibility for future acquisitions, the surveillance data will assist Staff in monitoring Spire Missouri's earnings during these intervals. In addition this would reduce the burden of providing many years of this data in the context of a rate case, as Staff will already have the information on hand. Staff will work with Spire Missouri to further explain and justify the need for the surveillance information being requested.

Staff Expert/Witness: Lisa M. Ferguson

VII. Rate of Return (ROE, Cost of Capital, Capital Structure)

A. Summary

Based on my rate-of-return analyses in the light of current and near-term financial market and economic conditions, I recommend that the Commission set the Companies' return on equity ("ROE") at the midpoint of a range from 9.00% to 9.50%, resulting in an overall rate of return ("ROR") within a range from 6.41% to 6.65%. My recommended ROE will fairly compensate the Companies for their current market cost of common equity ("COE") and it will fairly balance the interests of all stakeholders, particularly in view of the fact that my analyses show that the actual market COE for Spire Missouri, Inc.'s (formerly Laclede Gas Company) ("Spire Missouri") operating units/divisions, LAC and MGE, is presently in the range of 6.90% to 7.70%.

I also recommend that the Commission use the capital structure of Spire Missouri's parent, Spire, Inc., for ratemaking purposes for LAC and MGE because that is the capital structure of significance to investors and rating agencies. Additionally, Spire Missouri's own equity ratio is abnormally high. The use of an operating subsidiary's capital structure, whose equity component is unreasonable as compared to the parent company results in an unnecessarily high revenue requirement.

Consistent with my capital structure recommendation, I also recommend that the Commission use Spire, Inc.'s embedded cost of debt, 4.13%, resulting in an overall ROR in the range 6.41% to 6.65%.

B. Introduction

The purpose of my report is to present Staff's cost-of-capital recommendations in this case. These recommendations reflect my considered professional judgment and are based upon a careful analysis of the economic and financial data reasonably relied upon by cost-of-capital witnesses in cases of this sort. In reaching my opinion, I have employed the analytical methods generally utilized for cost-of-capital analysis in the context of utility ratemaking. I am qualified as an expert in the area of cost of capital by reason of my education, training, experience, knowledge, and skill; and my detailed qualifications are attached to this report as an appendix.

In my report, I will intentionally differentiate between the market-determined cost of equity ("COE") and the allowed ROE because it is clear from my continuous and regular review of utility stock investment analyses that equity analysts use a COE discount rate to value stocks that is much lower than the allowed ROEs authorized by state utility regulatory commissions.[1]

The three issues related to cost-of-capital are: (1) ROE; (2) capital structure; and (3) cost of debt. With respect to ROE, the Commission recently awarded an ROE of about 9.5% to two of Missouri's large, vertically-integrated electric utilities.[2] Therefore, I have compared the current broader and utility-specific capital markets to those which existed when the Commission issued those decisions. I conclude that, while the utility capital markets are similar to those that existed when the Commission allowed an ROE of approximately 9.5% for Missouri's large electric utility companies, there is persuasive evidence supporting a lower allowed ROE for LAC and MGE. To support my conclusion, I will present evidence showing a COE differential between the electric utility industry and gas utility industry of up to 50 basis points.[3]

It is my professional opinion, based on my analysis of capital market data and market participants' commentary, that an allowed ROE at the midpoint of the range of 9.0% to 9.5% is just and reasonable for LAC and MGE.

			Weighted Rate of Return Using Return on Common Equity of:		
Capital Component	Percentage of Capital	Cost	**9.00%**	**9.25%**	**9.50%**
Common Stock Equity	48.84%	-----	4.40%	**4.52%**	4.64%
Long-Term Debt	46.36%	4.13%	1.92%	**1.92%**	1.92%
Short-Term Debt	4.80%	1.38%	0.07%	**0.07%**	0.07%
	100.00%		**6.38%**	**6.50%**	**6.62%**

[1] The cost of common equity is the return required by investors, determined by expert analysis of market data relating to a carefully-constructed group of proxy companies. The allowed ROE, on the other hand, is the value selected by the Commission for use in calculating a utility's forward-looking rates for implementation at the end of the rate case.

[2] ***In the Matter of Union Electric Company d/b/a Ameren Missouri,*** Case No. ER-2016-0179 (***Order Approving Unanimous Stipulation and Agreement,*** issued March 8, 2017) pp. 2-3; ***In the Matter of Kansas City Power & Light Company,*** Case No. ER-2016-0285 (***Report & Order,*** issued May 3, 2017) at p. 22.

[3] However, I will also discuss a variable used in the capital asset pricing model ("CAPM"), *beta*, which suggests the COE for gas and electric utilities may not be significantly different.

I also recommend that the Commission set LAC's and MGE's allowed ROR based on Spire, Inc.'s capital structure as of the end of the update period, June 30, 2017, as set out above.[4]

C. Analytical Parameters

The determination of a fair rate of return is guided by principles of economic and financial theory and by certain minimum Constitutional standards. Investor-owned public utilities such as LAC and MGE are private property that the state may not confiscate without appropriate compensation. The Constitution requires, therefore, that utility rates set by the government must allow a reasonable opportunity for the shareholders to earn a fair return on their investment. The United States Supreme Court has described the minimum characteristics of a Constitutionally-acceptable rate of return in two frequently-cited cases: In ***Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia,*** 262 U.S. 679, *43 S.Ct. 675, 67 L.Ed. 1176* (1923) and ***Federal Power Commission v. Hope Natural Gas Co.,*** 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed. 333 (1943).

From these two decisions, Staff derives and applies the following principles to guide it in recommending a fair and reasonable ROR:

> 1. The rates set by the Commission must provide a return consistent with returns realized from other investments of comparable risk;
>
> 2. The rates set by the Commission must provide a return sufficient to assure confidence in the utility's financial integrity; and
>
> 3. The rates set by the Commission must provide a return that allows the utility to attract capital.

Embodied in these three principles is the economic theory of the opportunity cost of investment. The opportunity cost of investment is the return that investors forego in order to invest in similar risk investment opportunities that vary depending on market and business conditions.

The methodologies of financial analysis have advanced greatly since the ***Bluefield*** and ***Hope*** decisions.[5] Additionally, today's utilities compete for capital in a global market rather than a local market. Nonetheless, the parameters defined in those cases are readily met using

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[4] The details of Staff's analysis and recommendations are presented in Schedules 1-12 in Appendix 2. Staff's workpapers will be provided to the parties. Staff will make any source documents of specific interest available upon the request of any party to this case or upon the Commission's request.

[5] Neither the Discounted Cash Flow ("DCF") nor the Capital Asset Pricing Model ("CAPM") methods were in use when those decisions were issued.

current methods and theory. The principle of the commensurate return is based on the concept of risk. Financial theory holds that the return an investor may expect is reflective of the degree of risk inherent in the investment, risk being a measure of the likelihood that an investment will not perform as expected by that investor. Any line of business carries with it its own peculiar risks and it follows, therefore, that the return LAC's and MGE's shareholders may expect is equal to that required for comparable-risk utility companies.

I have relied primarily on my analysis of a comparable group of companies to estimate the COE for LAC and MGE, applying this comparable-company approach through the use of both the Discounted Cash Flow ("DCF") method and the Capital Asset Pricing Model ("CAPM"). Properly used and applied in appropriate circumstances, both the DCF and the CAPM can provide accurate estimates of a utility's COE. It is well-accepted economic theory that a company that earns its cost of capital will be able to attract capital and maintain its financial integrity; therefore, an *allowed* return on common equity based on the *cost* of common equity is consistent with the principles set forth in ***Hope*** and ***Bluefield***. However, it is common practice for utility regulatory commissions to allow ROEs that are higher than the COE for utilities due to a continued very low cost of capital environment. Consequently, my recommended allowed ROE is higher than my estimate of LAC's and MGE's COE.

I used the Commission's recently authorized ROE of 9.5% for KCPL in Case No. ER-2016-0285 as a benchmark to determine a just and reasonable allowed ROE for LAC and MGE.[6] In the following survey, I will present capital market evidence and investors' views that justify a lower allowed ROE for Missouri's large gas utility systems.

D. Current Economic and Capital Market Conditions

Determining whether a cost of capital estimate is fair and reasonable requires a good understanding of the current economic and capital market conditions, with the former having a significant impact on the latter. With this in mind, I emphasize that an estimate of a utility's COE must pass the "common sense" test when considering the broader current economic and capital market conditions.

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[6] ***In the Matter of Kansas City Power & Light Company,*** Case No. ER-2016-0285 (***Report & Order,*** issued May 3, 2017) at p. 22.

Economic Conditions

Real Gross Domestic Product ("GDP") increased by 3.0% in the second quarter of 2017, after increasing 1.4% in the first quarter of 2017. As of June 2016, the Federal Reserve Board Members and the Federal Reserve Bank Presidents projected real GDP would grow in the range of 2.0% to 2.5% in 2017; 1.7% to 2.3% in 2018; and 1.4% to 2.3% in 2019. The longer run projections for real GDP growth were between 1.5% and 2.2%.[7]

As recently as its June 2017 meeting, the Federal Open Market Committee ("FOMC") agreed to raise the benchmark rate a quarter point, which stands at 1.00 – 1.25%. Since December 2015, the Fed has increased the rate four times.[8] The officials indicated that they believe the economy will recover in an article posted May 24, 2017, by the Wall Street Journal:

> Fed officials left their benchmark short-term interest rates unchanged within a range between 0.75% and 1% at the meeting May 2-3. Several Fed officials in recent weeks have said they believe the economy will still be strong enough to warrant two more quarter-percentage-point rate increases this year.
>
> Officials were inclined to stick to that scenario even though the economy appeared to stumble in the first quarter, the minutes showed. Officials saw that slowdown as likely to be transitory. And while some expressed concern about recent softness in inflation, it wasn't enough to knock them off track.[9]

Although there continues to be discussion about potential increases in the Fed Funds rates, long-term interest rates have been declining in the last couple of months. The reflation trade, associated with the general increase in interest rates immediately following the election of Donald Trump, has subsided. As of June 26, 2017, the 10-Year Treasury hit an all-time low for 2017 of 2.14% and was at its lowest level since November 10, 2016. The 30-year Treasury also hit 2.70%, its lowest level since November 8, 2016. The 10-Year Treasury rate was 2.19% as of August 24, 2017, and the 30-Year Treasury rate was 2.77% as of the same date. The pattern of expectations of a sustained increase in long-term rates, only to be followed by rates settling back into the 30+ year long-term trend of decline, has been fairly consistent in the last few years.

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[7] https://www federalreserve.gov/monetarypolicy/files/fomcprojtabl20170614.pdf.

[8] http://www.cnbc.com/2017/07/05/fed-minutes-inflation-to-rise-loose-policy-posing-risks html

[9] https://www.wsj.com/articles/fed-minutes-show-officials-at-last-meeting-expected-to-raise-rates-soon-1495649043

Schedule 4-3 attached to Staff's Report shows that since 2010 there have been approximately four periods in which long-term rates rallied for a couple of months, only to return to their previous levels, or even lower. In 2015, the belief that long-term interest rates would begin a sustained increase by the end of the year, only to drop to all-time lows, caused utility stocks to increase to valuation levels never experienced in recent history.

This recent return of interest rates to levels consistent with those before the election indicates capital markets are fairly consistent with those that existed when the Commission decided allowed ROEs of 9.5% for Missouri's vertically-integrated electric utilities were just and reasonable. However, as I will demonstrate, evidence shows that it is reasonable for the Commission to set the allowed ROEs for its large gas utilities at levels below that of its large electric utilities by at least 25 basis points.

<u>Capital Market Conditions</u>

Utility Debt Markets

Utility debt markets currently indicate a utility cost-of-capital environment that is fairly consistent with the periods the Commission reviewed in 2014 and 2016 when determining that an authorized ROE of approximately 9.5% was appropriate for its electric utility companies. Although utility bond yields declined significantly in late 2014 to early 2015, as well as mid-2016, these lower yields were dismissed by many of the witnesses in cases during this period as not being sustainable.

If one were to assume that the risk premium[10] required for investing in utility stocks rather than utility bonds was constant, then a change in utility debt yields would correspond to a one-for-one change in required returns on equity as well. Although it is unlikely that the change in utilities' COE will be perfectly correlated to changes in utility debt yields, it is widely recognized in the investment community that regulated utility stocks are a close alternative to bond investments and, therefore, that they are highly correlated over time.

The average utility bond yield based on the Moody's public utility bond index for May 2017 through July 2017 was 4.09%. The average for December 2016 through February 2017, the period consistent with the "reflation" trade, was 4.29%. Average utility bond yields since the nomination of Donald Trump as President peaked at 4.39% in December 2016 and have

[10] Risk Premium in this context is the excess required return to invest in a company's equity rather than its debt.

since decreased to 4.06% in July 2017. These yields compare to the average of approximately 4.35% during the third quarter of 2014 and 4.24% during the fourth quarter of 2014 (*see* Schedules 4-1 and 4-3), which was the general period analyzed for purposes of providing the Commission capital market information to support an approximate 9.5% allowed ROE for Ameren Missouri and KCPL in their recent rate cases. Comparing recent average utility bond yields to those used when quantifying recommended allowed ROEs in the 2014 rate cases shows a 15-25 basis point decline in costs for utility debt.

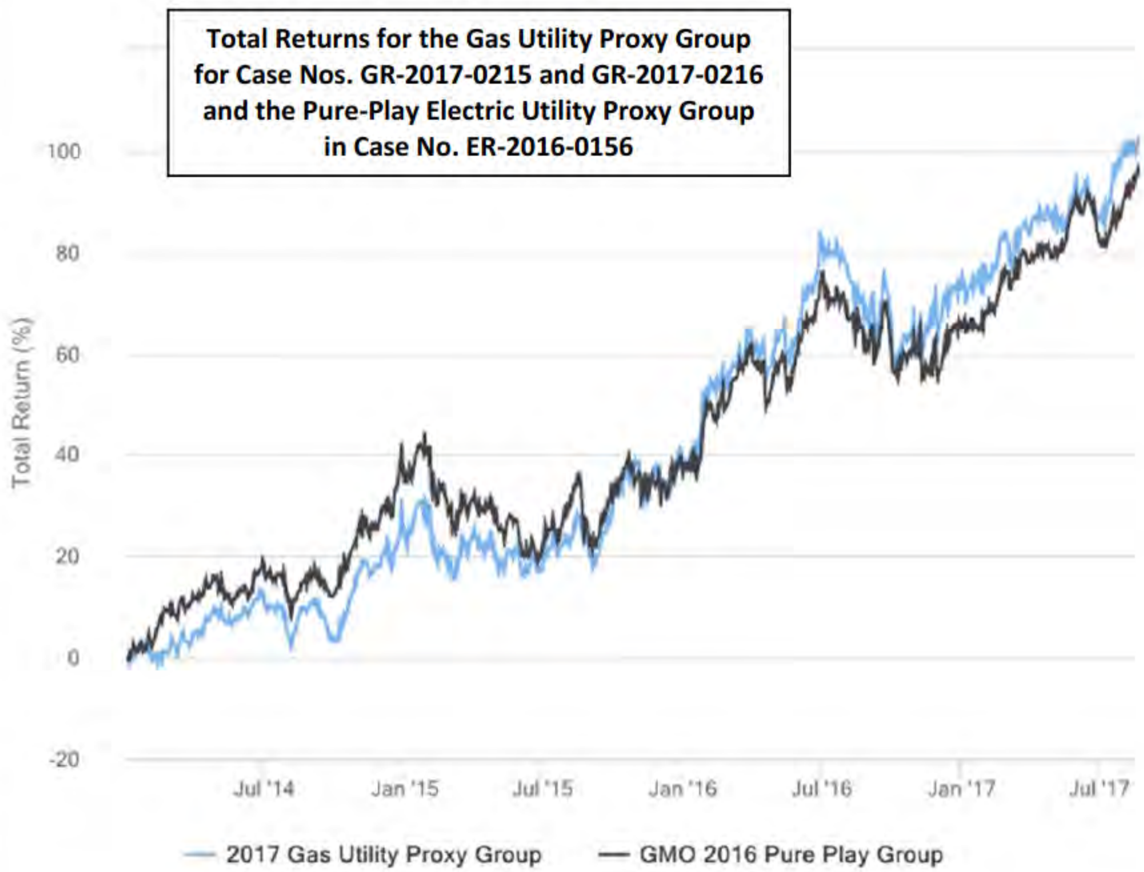
For the most recent three months, the average spread between 30-year T-bonds (2.90%) and average utility bond yields (4.13%) was 123 basis points. For the three months through January 2017 (the general period for the data analyzed in the recent KCPL rate case), the average spread between the 30-year T-bonds (3.00%) and average utility bond yields (4.28%) was 128 basis points. Therefore, both T-bond yields and utility bond yields have declined at fairly consistent rates since the election (*see* Schedules 4-3 and 4-4).

In summary, utility debt markets continue to support a low cost of capital environment.

Utility Equity Markets

Traditionally, over long-term market periods, the total returns on the Standard & Poor's ("S&P") 500 (a proxy for the U.S. capital markets) are expected to be greater than total returns on utility stocks because the S&P 500 is expected to grow at a higher rate than utilities, and investors in the S&P 500 incur greater risk than do investors in utility stocks. This expectation is supported by a common portfolio statistical measure referred to as the "beta" of the stock which measures the covariance of a portfolio or asset as compared to the variance of the market as a whole. Betas for regulated utility portfolios have consistently measured in the 0.60 to 0.80 range over long periods of time, with most regulated utilities typically having betas of around 0.70. This measurement simply means that utility stocks should lag the S&P 500 in both gains and losses as the market moves up or down. Until recently, utility stocks significantly outperformed the S&P 500, which was largely attributed at that time to the slow growth, low long-term interest rate environment.

For the period from January 1, 2014, through August 25, 2017, the total returns on the S&P 500 and the S&P Utilities were 43.96% and 67.18%, respectively. Consequently, the broader utility markets have done fairly well since 2014, when the Commission first decided a 9.5% allowed ROE was appropriate for large electric utilities. Of course, because the gas and electric sectors of the utility industry have both risk and growth differences, it is important to compare and contrast the differences in capital market performance and metrics for these two subsectors of the utility industry. For this comparison, I chose to use the pure-play proxy group Staff used in the GMO rate case (pure-play companies are considered to be confined almost entirely to one business segment)[11] and the current gas proxy group in this rate case. For the same period, the gas utility proxy group had a total return of 103.13% and the electric utility proxy group had a total return of 96.64%. This translates into an annual compound total return of 21.45% for the gas group and 20.42% for the electric group. A graphical illustration of the total returns for the utility proxy groups follows.



During the past few years many utility equity analysts have observed the premium at which regulated utility stocks have traded as compared to the S&P 500, which is not typical over

[11] See pp. 31-32 of Staff's *Cost of Service Report* in Case No. ER-2016-0156. This proxy group consisted of the following companies: Alliant Energy, Ameren Corporation, CMS Energy Corporation, Northwestern Corporation, Pinnacle West Capital, PNM Resources Inc., Portland General Electric Company, and Xcel Energy.

the long-term in capital markets. Typically, due to the low-growth and high-dividend yield characteristics of utility stocks, the price-to-earnings ratios are lower for utility stocks than for the higher-growth, lower-yield profile of the S&P 500. Equity analysts have consistently explained that the higher multiples are driven by the low interest rate environment rather than by higher growth expectations for the regulated utility industry as compared to the broader markets.

Goldman Sachs' analysis consistently shows that utilities typically trade at a premium to the market when U.S. 10-year treasury yields trade below the 3% level and trade at a discount to the market when U.S. 10-year treasury yields trade above 3%. The 10-year Treasury yield has been trading at a yield-to-maturity ("YTM") in the low 2% range recently, continuing to justify utility stocks trading at a premium to that of the market. The fact that utilities are trading at a premium to the S&P 500 even though utilities have lower long-term growth expectations than the S&P 500, clearly indicates that utilities' COE continue to be quite low in the current economic and capital market environment. Because valuation levels for utility stocks are even higher now than they were in 2014, but somewhat consistent with the levels at the time of the recent KCPL rate case, it is reasonable to conclude that COE for utility companies is no higher than it was at the end of 2016 and early 2017.

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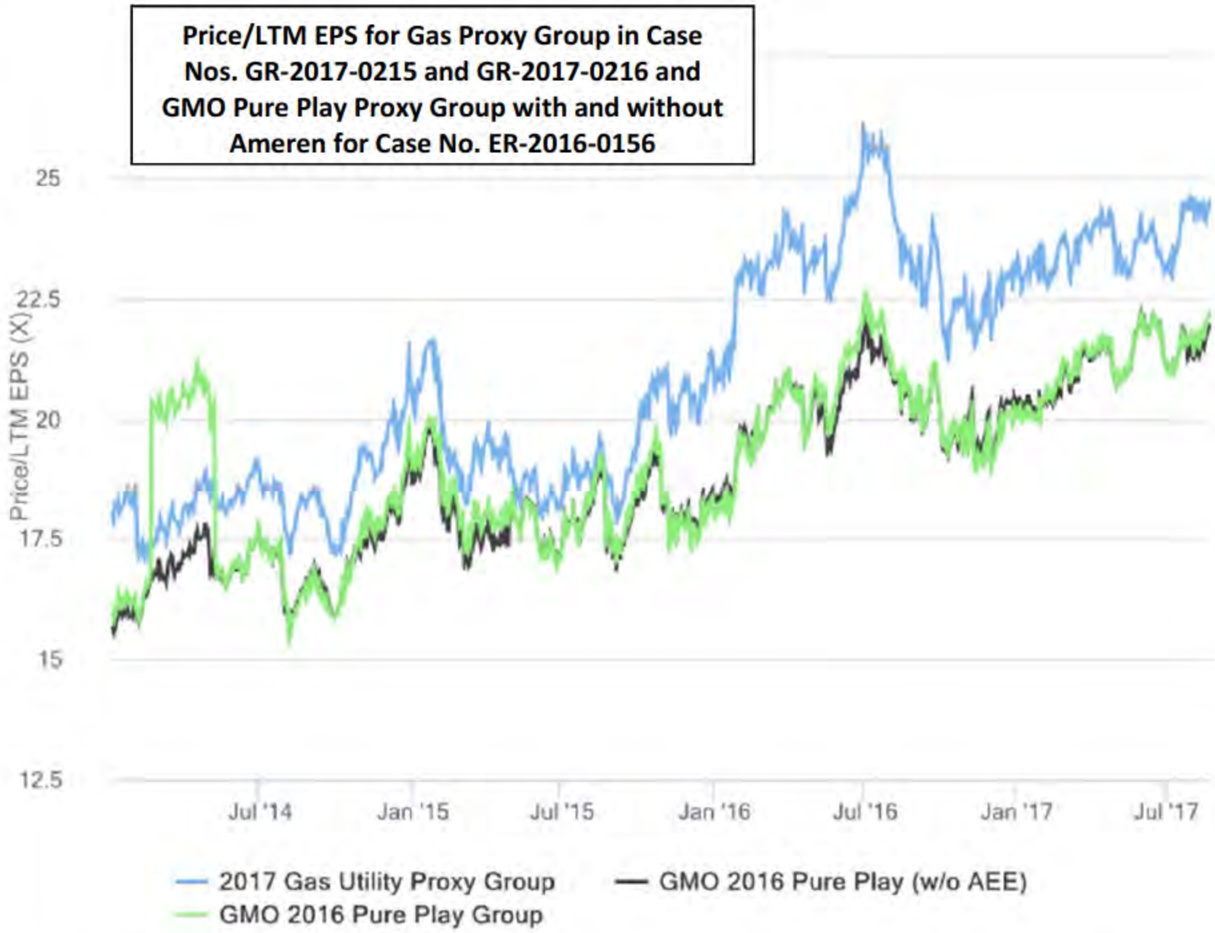

However, it is important to consider the valuation differences between the gas utility industry and electric utility industry, because this can provide intuitive logic as to whether gas utilities should be authorized lower returns due to lower costs of equity and, if so, how much lower. The above graph compares the price-to-last twelve months' earnings per share (price/LTM EPS) ratios for Staff's gas and electric proxy groups.[12] As can be seen, the p/e ratios of the gas proxy group were fairly similar to the electric proxy group until the middle of 2015. However, after that period, gas p/e ratios expanded much more rapidly than the electric companies and to date have sustained this higher premium over electrics. This fact has also been observed by utility equity analysts. Analysts attribute this to both the lower risk of gas utilities as

[12] Staff shows the p/e ratios without Ameren because Ameren's 2013 earnings were impacted by losses it incurred due to its now divested non-regulated merchant generation operations in Illinois. This causes a misleading p/e ratio in early 2014.

compared to electric utilities, as well as slightly higher near-term growth expectations for gas utilities due to infrastructure replacement programs.

Another important consideration when evaluating the reasonableness of a local gas distribution allowed ROE as it compares to a vertically-integrated electric utility allowed ROE is the fact that the local gas distribution industry (as measured by Staff's gas proxy group) has an average credit rating of approximately 'A' to 'A-'. Whereas the vertically-integrated electric utility industry (as measured by Staff's electric proxy group in the GMO rate case), has an average credit rating of 'BBB+'. This supports a differential in allowed ROEs between the industries. The amount of differential depends on whether the Commission adopts Spire, Inc.'s capital structure or Spire Missouri's capital structure. If the Commission adopts Spire Missouri's capital structure, then the allowed ROE should be from the mid-point or lower. If the Commission adopts Spire, Inc.'s capital structure, then the allowed ROE should be from the mid-point or higher.

In summary, observable trends in the utility equity markets indicate that the allowed ROE should be no higher than 9.5%.

E. Operations of Spire, Inc. and Spire Missouri

The following excerpts from Spire, Inc.'s Form 10-K filing with the SEC for the 2016 fiscal year provide a good description of Spire, Inc.'s current business operations, which has added three gas distribution systems (owned through two wholly-owned subsidiaries) since LAC's and MGE's previous rate cases in 2013 and 2014, respectively:

> **<u>Overview:</u>**
>
> The Company has two key business segments: Gas Utility and Gas Marketing.
>
> The Gas Utility segment includes the regulated operations of Laclede Gas, Alabama Gas Corporation (Alagasco), and EnergySouth, Inc. (EnergySouth) (collectively, the Utilities). The business of the Utilities is subject to seasonal fluctuations with the peak period occurring in the winter heating season, typically November through April of each fiscal year. Laclede Gas, a public utility engaged in the purchase, retail distribution and sale of natural gas, is the largest natural gas distribution utility system in Missouri, serving more than 1.1 million residential, commercial and industrial customers, and is headquartered in St. Louis,

> Missouri. Laclede Gas serves St. Louis and eastern Missouri and, through Missouri Gas Energy (MGE), Kansas City and western Missouri. Alagasco is a public utility engaged in the purchase, retail distribution and sale of natural gas principally in central and northern Alabama, serving more than 0.4 million residential, commercial and industrial customers with primary offices located in Birmingham, Alabama. The Company purchased 100% of the common shares of Alagasco from Energen Corporation (Energen) effective on August 31, 2014. Mobile Gas Service Corporation (Mobile Gas) and Willmut Gas and Oil Company (Willmut Gas) are utilities engaged in the purchase, retail distribution and sale of natural gas to 0.1 million customers in southern Alabama and south central Mississippi. Mobile Gas and Willmut Gas are wholly owned subsidiaries of EnergySouth. The Company purchased 100% of the common shares of EnergySouth from Sempra U.S. Gas & Power, LLC, a subsidiary of Sempra Global (Sempra), on September 12, 2016.

Spire, Inc. has been actively involved in acquiring other gas distribution utilities since 2013. Spire, Inc., through Spire Missouri (then Laclede Gas Company), acquired the MGE assets in 2013. Because MGE was a division of Southern Union Company rather than a subsidiary corporation, the transaction was structured as a direct purchase of assets rather than a purchase of stock. Additionally, to the extent MGE needed external funds to finance its capital expenditures, it relied on Southern Union's ability to issue third-party capital, whether this was debt or equity. Because the acquisition of MGE was an asset purchase, there was no long-term debt assumed in the transaction. Spire, Inc. (then The Laclede Group) issued new equity and Spire Missouri issued debt to fund the consideration for the purchase of the MGE assets.

Spire, Inc.'s other acquisitions were structured as stock purchases of the subsidiary corporation that owned the utility systems. Spire, Inc. funded its acquisition of Alagasco by issuing debt, issuing equity, and assuming $250 million of Alagasco debt. Spire, Inc. structured its acquisition of EnergySouth much the same way as it structured the Alagasco acquisition, but on a smaller scale, including the assumption of $67 million of Mobile Gas debt. The acquisitions of Alagasco and EnergySouth resulted in Spire, Inc. having a much more leveraged capital structure than Spire Missouri. As I will explain in more detail in the capital structure section below, it is neither fair nor reasonable to use a subsidiary capital structure for ratemaking that is more costly to ratepayers than the actual capital structure that Spire, Inc. has incurred to support its acquisitions.

F. Credit Ratings of Spire, Inc. and Spire Missouri

Credit Ratings

Spire, Inc. and Spire Missouri are currently rated by Moody's and S&P. It is important to understand the current credit standing of the various entities, as these ratings influence investors' views of the risk associated with investing in Spire Missouri's debt. Although I am not estimating the cost of capital for Spire, Inc. or its other subsidiaries in this case, the influence of these entities' risks on Spire Missouri must be understood in order to estimate a fair rate of return for LAC and MGE.

Spire Missouri's Moody's unsecured credit rating is 'A3' and its S&P corporate credit rating is 'A-.' These ratings are considered equivalent to each other based on S&P's and Moody's ratings scales. Spire, Inc.'s Moody's unsecured credit rating is 'Baa2' (2 notches below the rating it assigns to Spire Missouri). S&P assigns the same family rating of 'A-' to Spire, Inc.

It is important to understand that S&P and Moody's have some methodological differences that can cause differences in their views on credit ratings. One key difference between S&P and Moody's is the weight that each agency gives to the stand-alone subsidiary business and financial risks in assigning ratings. S&P tends to rate most companies based on the consolidated risk profile of the parent company, whereas Moody's tends to give at least some weight to the stand-alone subsidiary risk profile in rating the subsidiary's credit risk.

As explained in S&P's October 21, 2016, credit-rating report, Spire Missouri (then Laclede Gas Company) has a hypothetical stand-alone credit profile ("SACP") of 'A', which is one notch higher than that of Spire, Inc. S&P indicates the following about applying its group rating methodology to Spire Missouri:

> Laclede Gas Co. is subject to our group rating methodology criteria. We assess Laclede Gas as a core subsidiary of parent Spire Inc. because we think that Laclede Gas Co. is highly unlikely to be sold, has a strong long-term commitment from senior management, is successful at what it does, and contributes meaningfully to the group. Because there are no meaningful insulation measures in place that protect Laclede Gas Co. from its parent, the issuer credit rating on the company is 'A-', in line with the group credit profile of Laclede of 'a-'.

In its July 21, 2017, Credit Opinion on Spire Missouri (then Laclede Gas Company), Moody's provided the following "Summary Rating Rationale" in its comments:

> Laclede Gas Company's (Laclede) A1 first mortgage bond rating reflects its low-risk business profile as a regulated natural gas local distribution company (LDC) and the credit supportive regulatory framework for gas utilities in Missouri, which has allowed Laclede to utilize several timely cost recovery rate adjustment mechanisms. The rating incorporates Laclede's solid financial profile as reflected by its stable financial metrics including a ratio of cash flow from operations pre-working capital (CFO pre-W/C) to debt of about 20%. The rating also considers the significant leverage (approaching 40% of consolidated debt) at its parent company, Spire Inc. that constrains the rating.

Although Moody's does give weight to Spire Missouri's stand-alone credit profile when it assigns it a credit rating, Moody's is concerned about the amount of holding company leverage Spire, Inc. issued to complete its recent acquisitions. As Moody's states, this is a constraint on Spire Missouri's credit rating. Of course, Spire Missouri's credit rating would be directly constrained if Spire Missouri's capital structure consisted of approximately 50% debt and 50% equity, but ratepayers would receive the benefit of having lower cost debt supporting the rate base which they are being charged to service.

<u>Consolidated Credit Facility and Commercial Paper Program</u>

On December 14, 2016, Spire, Inc., Spire Missouri (then Laclede Gas Company), and Alagasco executed a new consolidated revolving credit facility. This credit facility has an aggregate limit of $975 million, with sub-limits of $300 million for Spire, Inc., $475 million for Spire Missouri, and $200 million for Alagasco. Because Spire, Inc. is using the credit facility to support its consolidated commercial paper program ("Program"), as of June 30, 2017, it did not have any direct borrowings outstanding under the credit facility. However, as of June 30, 2017, Spire, Inc. had $450.7 million of commercial paper outstanding under its Program. Under Spire, Inc.'s Program, Spire, Inc. is directly accessing the commercial paper markets and then lending the proceeds to its subsidiaries. As Staff will discuss in its capital structure testimony, Spire, Inc.'s approach to managing its liquidity needs supports adoption of a Spire, Inc. consolidated capital structure for setting the allowed ROR.

Spire, Inc.'s commercial paper program is rated A-2 by S&P and P-2 by Moody's (equivalent ratings under each rating agencies' methodologies). Because Spire Missouri no longer directly borrows commercial paper, it is no longer assigned a commercial paper rating. Before the withdrawal of Spire Missouri's commercial paper ratings, its ratings were also A-2 and P-2. However, Spire Missouri's S&P commercial paper rating was downgraded from A-1 to A-2 on July 19, 2013, due to the financing of its acquisition of the MGE assets. Spire Missouri's Moody's commercial paper rating has been P-2 since 2002. If the Commission adopts Spire Missouri's less-leveraged capital structure, it should make a downward adjustment of 25 basis points to Spire Missouri's cost of short-term debt to reflect its stronger pre-acquisition commercial paper ratings.[13]

G. Cost of Capital

In order to arrive at Staff's recommended ROR, Staff specifically examined (1) an appropriate ratemaking capital structure; (2) the Company's embedded cost of debt; and (3) whether the gas distribution industry's risk profile requires a different allowed ROE compared to electric utility companies.

<u>Capital Structure</u>

I compared and contrasted (1) Spire, Inc.'s per books consolidated capital structure with and without short-term debt, (2) Spire Missouri per books capital structure with and without short-term debt, (3) the capital structure containing an imputed amount of debt consistent with Spire Missouri's current S&P credit rating, (4) capital structures in LAC and MGE's last rate cases, and (5) capital structures consistent with those authorized by the Commission in recent electric rate cases. Based on my analysis, I recommend that the Commission use Spire, Inc.'s capital structure with an average level of short-term debt in setting the authorized ROR for LAC and MGE. Spire, Inc.'s capital structure is directly evaluated by third-party equity investors in determining their required rate of return on equity and by debt investors in assessing Spire Missouri's credit quality.

<u>Spire, Inc. Consolidated Capital Structure:</u>

As of June 30, 2017, Spire, Inc.'s per books capital structure contained 46.05% common equity with short-term debt included and 51.30% common equity when short-term debt is excluded. Spire, Inc.'s capital structure consisted of 10.23% short-term debt of as of June 30, 2017.

Spire, Inc.'s consolidated capital structure reflects the sources and types of capital used to finance construction of some of the gas utility properties, but also acquisition of other gas

[13] Supported by the spread between A-1/P-1 and A-1/P-2 commercial paper yields provided through SNL Financial.

systems since 2014. Spire, Inc.'s consolidated capital structure reflects the amount of leverage Spire, Inc.'s management considers reasonable for the level and volatility of cash flows generated by its regulated gas utility assets and still allows for strong credit ratings. As discussed above, S&P evaluates Spire, Inc.'s consolidated credit profile when assigning corporate credit ratings to all of Spire, Inc.'s companies. Therefore, Spire, Inc.'s more leveraged capital structure is the most consequential for purposes of investors' determination of their required rate of return on debt and equity. The consolidated cash flow of all of the regulated utility assets support Spire, Inc.'s ability to issue the amount of leverage it has at the holding company level. Although the debt issued at the holding company level was originally for the purpose of acquiring Alagasco and EnergySouth, Spire, Inc. relies on the cash flows from all of its regulated utility operations to allow it to issue holding company leverage.

As can be seen in the attached Schedules 5-1 and 5-2, since Spire, Inc. acquired Alagasco in 2014, its average equity ratio was about 8% lower than Spire Missouri when short-term debt is included, and 10.5% lower than Spire Missouri when short-term debt is excluded. This discrepancy is caused by the holding company debt Spire, Inc. issued to complete the acquisitions of Alagasco and EnergySouth. Spire, Inc. did not issue any debt at Alagasco or EnergySouth to complete those acquisitions, whereas Spire Missouri did issue the debt to complete the MGE acquisition. Spire, Inc.'s equity ratio improved during the first calendar quarter of 2017 due to the reduction of debt on Spire, Inc.'s books associated with the equity units it issued in conjunction with the Alagasco acquisition. The partial unwinding of the equity units resulted in a long-term debt balance that is $143.8 million lower than it was at the end of 2016. This reduction, coupled with Spire, Inc.'s net retained earnings of approximately $86 million, allowed Spire, Inc.'s common equity ratio to improve to approximately 43% with short-term debt included and 49.5% without short-term debt. Spire, Inc.'s common equity ratio improved even more through June 30, 2017, because the final step of the conversion of the equity units to common equity was completed.

Both the Company and Staff have historically recommended the use of the parent company's consolidated capital structure for LAC for ratemaking purposes. This was before Spire, Inc. acquired Alagasco and EnergySouth. Regardless, S&P still does not recognize any separation between Spire Missouri and Spire, Inc. when assigning Spire Missouri a corporate credit rating of 'A-'. Consequently, investors' required returns on debt and equity are a function of Spire, Inc.'s financing and business decisions. While much of the debt capital issued by Spire, Inc. was used for the purposes of acquiring Alagasco and EnergySouth, the same can be said about the debt issued by Spire Missouri to acquire the utility assets referred to as MGE. Utilities associated with a parent company involved in mergers and acquisitions typically no longer have capital structures that are a function of the original monetary investments in the utility systems. This causes the utility operating company capital structure to be of much less importance to investors for purposes of determining a required return. At this point, the use of the utility operating capital structure for ratemaking purposes will simply result in a higher revenue requirement due to a higher equity ratio, which is not supporting stronger credit ratings for Spire Missouri on a stand-alone basis.

Because the structure of mergers and acquisitions vary greatly, Staff's experience has been that the capital structure used by other states for purposes of setting a utility's allowed ROR also varies greatly. The fact that the Missouri Commission has used various approaches to set the allowed capital structure illustrates the difficulty in applying a universal approach.[14] The approaches adopted by other state commissions have varied as well.[15] One example that is

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[14] For example, the Missouri Commission adopted Algonquin Power and Utilities Corporation's ("Algonquin") consolidated capital structure for purposes of setting the capital structure in the Algonquin Water Resources of Missouri, LLC rate case, Case No. WR-2006-0425; adopted the use of Liberty Utilities Company (the intermediate holding company before Algonquin) for purposes of setting the capital structure for Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities in Case No. GR-2014-0152; adopted Southern Union's consolidated capital structure for MGE in Case No. GR-2009-0355; adopted the use of Great Plains Energy's ("GPE") consolidated capital structure for all rate cases in which KCPL and KCP&L Greater Missouri Operations have been subsidiaries of GPE; and adopted the use of Ameren Missouri's capital structure in all rate cases in which Ameren Missouri has been a subsidiary of Ameren. It is noteworthy that in the Algonquin and Southern Union cases, Staff recommended the use of a hypothetical capital structure rather than a consolidated parent company capital structure, but the Commission still chose to use the consolidated parent company capital structure. In cases involving Ameren Missouri, until Ameren Missouri's most recent rate case, Staff had recommended the use of Ameren Missouri's capital structure because Ameren had a similar capital structure because it carried little, if any, holding company debt.

[15] In order to provide the Commission with some general guidance on how other states have addressed capital structures in rate cases, I reviewed various documents from electric and gas rate cases decided in 2017 in which other states' commissions directly decided the appropriate capital structure or approved it as part of a settlement. There were instances where the holding company issued significant amounts of debt in addition to the debt issued directly by the subsidiary utility. This was the case for DTE Energy Company, CMS Energy Company and Southern Company rate cases. My review of the documents related to the DTE Electric Company rate case and the Consumers Energy Company rate case showed that Michigan does not give consideration to the debt issued at the holding company level. This is a straight-forward example of issuing debt at the holding company to invest in the equity of the utility subsidiary. Although Georgia Staff in the Atlanta Gas Light Company case did not consider Southern Company's capital structure in that rate case, the Georgia Staff did evaluate the capital structure of Atlanta Gas Light Company's intermediate holding company, AGL Resources (now Southern Company Gas). The recommendation prescribed a lower common equity ratio than that shown on Atlanta Gas Light Company's balance sheet. In the Washington Gas Light Company ("WGL") case, although the Public Service Commission of the

relevant and that has directly affected a proposed transaction that involved the holding company of two Missouri utility companies is that of Great Plains Energy. The Kansas Corporation Commission ("KCC") Staff took the position that that the post-acquisition consolidated parent company capital structure should be used for setting the ROR for KCPL and Westar Energy, Inc., because that capital structure allows savings due to GPE incurring a lower cost of capital than the return that would be authorized using subsidiary capital structures. The KCC shared this concern in Paragraphs 44-46 of its April 19, 2016, Order denying GPE's and Westar's Application to merge.[16]

In my opinion, even if a subsidiary issues its own debt, to the extent there are not strong enough mechanisms in place to allow the subsidiary to be rated separate and distinct from the parent company, the most appropriate capital structure to use for setting the utility's allowed ROR is that of the consolidated parent company. While it is true that this capital structure contains capital that has not been directly used to fund investments in LAC and MGE,[17] the

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District of Columbia ("DC Commission") ultimately adopted a capital structure based on a subsidiary-specific capital structure, the DC Commission did lower the common equity ratio from 57.76% to 55.7%. The various parties expressed concern about WGL's high common equity ratios. As support, the Consumer Advocate cited WGL Resources common equity ratio of 49%. The two rate cases in New York, Consolidated Edison Company of New York ("CECONY") and National Fuel Gas Distribution Corporation ("NFGD"), gave consideration to the holding company capital structure in determining the authorized common equity ratio. In the NFGD case, the State of New York Public Service Commission ("NY Commission") based its authorized common equity ratio of 42.90% directly on the parent company's (National Fuel Gas Corporation) common equity ratio. In the CECONY case, both the New York Staff and CECONY accepted a 48% common equity ratio for purposes of the allowed ROR, but the New York Staff only did so after considering the parent company's (Consolidated Edison, Inc.) capital structure. The New York Staff indicated that its, and the NY Commission's approach to capital structure is to only use a "stand-alone" or subsidiary capital structure if there is sufficient separation between the utility subsidiary and its holding company with such separation being recognized by rating agencies. This approach is similar to how the Missouri Public Service Commission's Staff has approached its capital structure recommendations. My review of other rate cases in 2017, in which a common equity ratio was specified, did not identify much controversy in the authorized common equity ratios. In many cases, the other parties simply adopted the company's proposed common equity ratio, which in most cases was based on actual or estimated subsidiary capital structures. However, most of the authorized common equity ratios were in a range of approximately 48% to 52%, with two gas utilities, WGL and CenterPoint Energy Resources Corp. authorized common equity ratios of around 55%. It is relevant to consider that in the WGL rate case, that while the WGL witness suggested it was inappropriate to include Spire in the proxy group for determining a reasonable common equity ratio, the DC Commission dismissed this argument because Spire was part of the proxy group used to estimate the cost of common equity for WGL, noting its operations are predominately gas distribution utilities. The DC Commission did not look to LAC's capital structure for reasonableness because LAC was not party of the proxy group used to estimate the cost of equity.

[16] ***In the Matter of the Joint Application of Great Plains Energy Incorporated, Kansas City Power & Light Company and Westar Energy, Inc. for Approval of the Acquisition of Westar Energy, Inc. by Great Plains Energy Incorporated,*** Kansas Corporation Commission, April 19, 2016, Order, pp. 21-22.

[17] That is, the debt issued to acquire Alagasco and EnergySouth as well as the debt assumed from these companies.

financial risk of this debt impacts the cost of capital to LAC and MGE. In essence, Spire, Inc. has decided that the cash flows of the regulated gas utility subsidiaries can support a much more leveraged capital structure than those that exist at the subsidiaries' level. If the utility subsidiaries' financial risk and flexibility are going to be increased and limited, respectively, by the holding company debt, then the utility subsidiary should receive the benefit of having a lower cost capital structure used for setting its rates.

<u>Spire Missouri's Capital Structure:</u>

As of June 30, 2017, Spire Missouri's per books capital structure contained 52.30% common equity with short-term debt included and 59.20% common equity when short-term debt is excluded. Spire Missouri's capital structure consisted of 11.66% short-term debt of as of June 30, 2017.

Spire Missouri's capital structure ideally would represent the financing that had been issued to directly fund capital expenditures in Spire Missouri's utility systems. But as we know from Spire Missouri's acquisition of MGE's assets, this is not the case. Spire Missouri acquired MGE from Southern Union on September 1, 2013. Because MGE was not a subsidiary corporation that issued its own debt, no legacy debt followed MGE. Consequently, the debt issued by Spire Missouri and the equity issued by Spire, Inc. essentially recapitalized the system. However, now that Spire Missouri owns both the MGE and LAC systems, all of the funding issued to complete the acquisition of the MGE assets is now consolidated with all of Spire Missouri's securities. This was very similar to what transpired in Spire, Inc.'s other acquisitions, except for the fact that Spire, Inc. issued all of the capital, including the debt capital.

The details of post-acquisition capital structures of utilities generally get muddied over the long run. Consequently, an attempt to reconcile capital issued to capital expenditures in the systems is futile. Traditional ratemaking typically assumes that the rate base can be reconciled with the capital in the capital structure. This is no longer possible after utility systems change owners and additional capital is issued to acquire the systems. While some would claim that if the transaction occurred solely at the utility holding company level, this allows for the original capital in the subsidiary corporation to be undisturbed, that theory ignores the fact that the capital issued at the holding company level impacts the risk profile of the subsidiary. If the holding company's capital structure had consistent financial risk with that of the subsidiary, then it would be reasonable to use a subsidiary capital structure. However, when the subsidiary is affiliated with a holding company that has a more leveraged capital structure, then the subsidiary's less leveraged capital structure no longer attracts debt at costs consistent with its more conservative capital structure. This fact should be given consideration when determining the appropriate capital structure to use when setting the utility company's allowed ROR.

Spire Missouri's equity ratio of 59.2% as of June 30, 2017, (excluding short-term debt), is abnormally high when compared to the 53% equity ratio used in 2013 for purposes of establishing the ISRS in LAC's 2013 rate case. It is also much higher than the Commission's allowed equity ratios for its electric utilities over the last several years, which have been approximately in the 50% to 53% range since 2014. If the Commission decides Spire Missouri's capital structure should be used to set the allowed ROR, the Commission should authorize a more reasonable equity ratio, which should be closer to those authorized for Missouri's electric utility companies.

<u>Imputed Capital Structure for 'A-' Assigned Rating:</u>

As is evident from S&P's hypothetical stand-alone credit rating of 'A' to Spire Missouri instead of the actual 'A-' corporate credit rating Spire Missouri receives due to its affiliation with Spire, Inc., Spire Missouri's capacity for leverage is being used by its parent company. If Spire Missouri were stand-alone, it could attain the same credit rating S&P currently assigns to it if it had an approximate $365 million of additional debt on its books based on the FFO of approximately $250 million Spire Missouri generated in 2016. Issuing an additional $365 million of debt would allow for the refunding of $365 million of equity. This recapitalization of Spire Missouri's capital structure would result in a capital structure containing approximately 38% common equity and 62% debt. While Staff does not expect the Commission to adopt this capital structure, this scenario is provided to illustrate how Spire, Inc.'s willingness to incur financial risk at the holding company level places financial strain on the entire family of Spire, Inc.'s companies. This comes at a cost to Missouri ratepayers and Spire Missouri's financial flexibility.

<u>Imputed Capital Structure Based on Common Equity Ratios in LAC's and MGE's most recent rate cases:</u>

In LAC's last rate case, Case No. GR-2013-0171, LAC agreed to a cap on its equity ratio of 53% for purposes of determining capital charges associated with their Infrastructure System Replacement Surcharges ("ISRS"). At the time of MGE's last rate case, Spire, Inc.'s (then The Laclede Group) common equity ratio had to be capped at 51.55% in order to ensure that MGE ratepayers were not charged a higher ROR than it was charged under Southern Union's ownership. Before Spire Missouri (then Laclede Gas Company) acquired MGE, MGE had an authorized common equity ratio of 38.66% based on Southern Union's consolidated capital structure. MGE's pre-tax authorized ROR in Case No. GR-2009-0355 was 10.22%. The pre-tax authorized ROR is the figure that determines that amount of revenue authorized for not only the required return on capital, but the assumed amount of taxes that would need to be paid on income to generate the necessary after-tax required ROE. Consequently, the pre-tax authorized ROR is the relevant benchmark for determining if a subsequent ROR will cause a higher revenue requirement. Based on June 30, 2017, data and assuming the Commission did not include short-term debt in the allowed capital structure, the allowed ROE could be no higher than 10.40% using Spire, Inc.'s capital structure and no higher than 9.62% using Spire Missouri's capital structure.

As Staff explained in the Staff Report in Case No. GM-2016-0342, LAC and MGE ratepayers should not be charged higher rates due to the leverage Spire, Inc. incurred to fund its acquisitions of Alagasco and EnergySouth. Before these acquisitions, LAC consistently recommended the use of the publicly-traded holding company's consolidated capital structure for purposes of ratemaking. Staff also adopted the use of the holding company's capital structure for purposes of ratemaking because the higher equity ratio at the holding company was supportive of credit quality, even if it was accompanied by non-regulated operations. After Spire, Inc. issued leverage to make its acquisitions, Spire Missouri indicated that it would start sponsoring the subsidiary capital structure, which it has done in this case. Because Spire Missouri now requests use of this capital structure for purposes of setting LAC's and MGE's allowed ROR, Spire Missouri has the incentive to manage the subsidiary capital structure to produce a higher revenue requirement in order to generate additional cash flow to support the debt issued by Spire, Inc. Because Spire Missouri is now requesting the use of its subsidiary capital structure, it has a duty to ensure that the rate of return it requests from its ratepayers is not higher than would otherwise be the case if not for its affiliation with Spire, Inc. Therefore, at the very least, LAC and MGE should be authorized a common equity ratio no higher than that which was used prior to the acquisitions.

Hypothetical based on Authorized Common Equity Ratio for Electric Utilities:

The Commission recently authorized a common equity ratio for KCPL of approximately 50%. Considering that gas distribution operations are viewed as having less business risk than that of vertically-integrated electric utilities, it is fair and reasonable to have a similarly authorized equity ratio for LAC and MGE.

H. Cost of Long-Term Debt and Short-Term Debt

I recommend that the Commission adopt Spire, Inc.'s consolidated capital structure and use Spire, Inc.'s consolidated embedded cost of long-term debt of 4.13% and its cost of short-term debt of 1.38% as of June 30, 2017. However, if the Commission adopts Spire Missouri's capital structure for ratemaking purposes, then I recommend that it use Spire Missouri's embedded cost of long-term debt of 4.20% and an adjusted cost of short-term debt of 1.13%. Spire Missouri has not issued any debt since Spire, Inc. issued debt to fund its acquisitions. In my discussion of Spire, Inc.'s and Spire Missouri's credit ratings, I noted that Spire Missouri's hypothetical stand-alone credit profile is one notch better ('A' vs. 'A-') than its actual assigned credit profile. Therefore, if the Commission uses Spire Missouri's capital structure for ratemaking, the cost of its debt should be adjusted downward to reflect the better credit rating Spire Missouri would have if it were not affiliated with Spire, Inc. I will provide my recommended adjustment to the cost of this debt in future testimony after Spire Missouri provides data through the true-up period, September 30, 2017.

I. Cost of Common Equity

I have estimated LAC's and MGE's COE by applying COE methodologies to a proxy group that consists of companies whose operations are predominantly regulated gas distribution. I ensured my proxy group was confined to gas distribution operations by starting with SNL's gas utility index and then screening these companies further by ensuring at least 80% of each company's assets were categorized as regulated gas utility assets, while also ensuring at least 80% of ongoing income is from regulated gas assets (*see* Schedule 7). While I continue to estimate a much lower cost of common equity than the average allowed ROEs around the country, my recommended allowed ROE is based on my quantification of the relative difference in the COE between vertically-integrated electric utilities and local gas distribution utilities. I used a CAPM analysis and a survey of other indicators as a check of the reasonableness of my recommendations.

a. The Proxy Groups

I selected my initial population of natural gas utility companies by downloading companies classified as gas utility companies by SNL Financial. In both LAC's and MGE's previous rate cases, Staff started with companies Edward Jones Inc. classified as natural gas distribution utility companies. Edward Jones discontinued its "Natural Gas Industry" publication at the end of 2015. Because SNL's financial database is used by investors and analysts throughout the industry, and Staff has access to this database, SNL's database is an equally reliable source to use for purposes of selecting an appropriate proxy group. In fact, Staff also used SNL's database in recent electric utility rate cases to select its proxy groups for those cases. The main difference between how SNL defines a gas utility versus how Edward Jones defined a gas utility is that SNL does not include any companies in the gas utility sector that have any electric utility operations. This does not mean that SNL's gas utility proxy group does not have other non-gas utility operations. Therefore, it is necessary to further refine the SNL gas utility proxy group to ensure that the companies' operations are predominately regulated gas utility operations.

Starting with the twelve market-traded companies SNL classifies as natural gas utility companies, I applied a number of criteria to develop a proxy group comparable in risk to LAC's and MGE's regulated gas utility operations (*see* Schedule 7). My criteria are designed to capture companies whose operations are predominately regulated gas utility operations, are financially stable, are not a target of an acquisition and are followed by equity analysts. The criteria I selected accomplished this objective. However, I note that even with my screening criteria, some of the companies I chose for my proxy group have business segments other than rate-regulated utility operations that cause volatility in the contribution of the regulated utility operations to the percentage of income on a year-to-year basis. My criteria are as follows:

1. Classified as a natural gas utility by SNL (12 companies);
2. Publicly-traded stock (no companies eliminated, 12 remaining);
3. At least 80% of assets attributed to regulated utility operations (4 companies eliminated, 8 remaining);
4. At least 80% of income from regulated utility operations (0 companies eliminated, 8 remaining);

5. No reduced dividend since 2014 (0 companies eliminated, 8 remaining);

6. At least investment grade credit rating (2 companies eliminated, 6 remaining);

7. At least 2 equity analysts providing long-term growth projections in the last 90 days (0 companies eliminated, 6 remaining);

8. Not an acquisition/merger target (1 company eliminated, 5 remaining).

I used this final group of 5 publicly-traded natural gas utility companies ("the comparables") as the proxy group to estimate a cost of common equity for the natural gas utility industry. These companies are shown on Schedule 8.

The composition of my proxy group in these cases compared to the 2013 and 2014 rate cases has changed for a number of reasons, with the main one being that of completed mergers/acquisitions or pending mergers/acquisitions. Southern Company acquired AGL Resources on July 1, 2016. Duke Energy Corporation acquired Piedmont Natural Gas Company on October 3, 2016. AltaGas, Ltd. announced on January 25, 2017, its intent to acquire WGL Holdings, Inc. Staff had included New Jersey Resources Corporation ("NJR") in the 2014 rate case since Edward Jones had classified it as a natural gas distribution company in its publication. However, my analysis of NJR's financials showed that NJR's assets and income are not largely confined to its gas distribution operations. Therefore, I excluded NJR from my current proxy group. Staff's 2014 proxy group did not include Southwest Gas Holdings, Inc. because Edward Jones had classified Southwest Gas as a diversified natural gas company rather than as a natural gas distribution utility. My closer analysis of Southwest Gas' financials showed that, while its construction services company, Omega, was a significant part of the Southwest Gas assets and income, its gas distribution operations were still above 80%. My proxy group now includes ONE Gas, Inc., which is a 100% pure-play gas distribution company that was spun-off from ONEOK, Inc. on February 3, 2014.

Of the five companies Staff selected for its proxy group, only two of the companies are truly pure-play gas distribution companies, Northwest Natural Gas Company and ONE Gas. Atmos' operations are mainly confined to regulated gas utility operations, but parts of its operations are classified as natural gas pipelines. Spire, Inc.'s operations are also predominately gas distribution operations, but it still has its energy marketing company, Spire Marketing, which contributes less than 5% to Spire, Inc.'s income. The compositions of each company's operations are important to consider when interpreting the implied COE estimates from the proxy group.

b. The Constant-growth DCF

I estimated LAC's and MGE's COE by applying values derived from the proxy groups to the constant-growth DCF model. The constant-growth DCF model is widely used by investors to evaluate stable-growth investment opportunities, such as regulated utility companies. The constant-growth version of the model is usually considered appropriate for mature industries such as the regulated utility industry.[18] It may be expressed algebraically as follows:

$$k = D_1/P_0 + g$$

Where: k is the cost of equity;

D_1 is the expected next 12 months dividend;

P_0 is the current price of the stock; and

g is the dividend growth rate.

The term D1/P0, the expected next 12-months' dividend divided by current share price, is the dividend yield. I calculated the dividend yield for each of the comparable companies by dividing the consensus analysts' expected dividend per share over the next four quarters (*see* Schedule 10) by the average daily closing stock prices for the three months ending June 30, 2017 (*see* Schedule 10).[19] I used a recent average of the stock prices because it reflects current market expectations, but still ensures daily swings in market prices do not skew the implied COE too high or low. The projected average dividend yield for the proxy group of five comparable companies is approximately 2.70%.

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[18] Aswath Damodaran, *Investment Valuation: Tools and techniques for determining the value of any asset,* University Edition, John Wiley & Sons, Inc., 1996, pp. 195-196; John D. Stowe, Thomas R. Robinson, Jerald E. Pinto and Dennis W. McLeavey, *Analysis of Equity Investments: Valuation,* Association for Investment Management and Research, 2002, p. 64.

[19] The averaging technique minimizes the effects of short-term stock market volatility on the calculation of dividend yield. P0 is calculated by calculating the average of daily closing prices over the selected period.

1. The Inputs

In the DCF method, the cost of equity is the sum of the dividend yield and a perpetual growth rate ("g") that is intended to replicate the projected capital appreciation of the stock. In estimating a growth rate, I considered the actual dividends per share ("DPS"), earnings per share ("EPS") and book value per share ("BVPS") for each of the comparable companies over the past five and ten years, as well as projected DPS, EPS and BVPS in the next three years (*see* Schedules 9-1 through 9-4). I also reviewed equity analysts' consensus estimates for long-term compound annual growth rates ("CAGR") in EPS as reported by S&P Capital IQ and provided by SNL Financial. According to S&P Capital IQ, equity analysts' consensus estimates of 5-year CAGR in EPS for the proxy group averaged 5.19 percent (*see* Schedule 9-4).

Based on the shorter-term projected EPS growth rate data, one may argue that gas utilities can grow at a constant rate of approximately 5 percent, but this assumption would ignore the empirical and logical information that suggests that utility companies should grow at a rate less than that of the overall economy due to the mere fact that investors invest in utility companies for yield and not growth. In fact, considering that companies in the S&P 500 in recent years have retained approximately 65% of their earnings for reinvestment,[20] while natural gas utilities' retention ratio has been approximately 35% over the same period, it follows that utilities will grow at a rate less than that of nominal GDP growth. Consequently, a projected long-term, steady-state nominal GDP growth rate[21] should be considered as an upper constraint when testing the reasonableness of growth rates used to estimate the cost of equity for a regulated gas utility. Most economists do not project nominal GDP to grow much higher than 4.5% per year over the long-term,[22] so serious doubt must attach to a constant growth rate for the gas utility industry that is above the upper constraint. While there is no question that many gas

[20] http://www.wyattresearch.com/article/dividend-payout-ratio.

[21] The nominal GDP growth rate, contrasted to the real GDP growth rate introduced earlier, is not adjusted for inflation.

[22] The CBO projects an annual compound growth rate in nominal GDP of approximately 4.0% through 2027. EIA's reference case projects an annual compound growth rate in nominal GDP of approximately 4.35% for the period 2014 through 2040. The Survey of Professional Forecasters projects a 10-year annual compound growth rate in real GDP of 2.45%. The Livingston Survey for June 2017 projects an average annual compound growth rate in real GDP of 2.20% over the next ten years; and the FOMC projects a central tendency long-term real GDP growth of only 1.8% to 2.0%. In each case in which the sources do not project a nominal GDP growth rate, Staff recommends adding a GDP price deflator of 2.0%, which is the CBO's approximate prediction of long-term inflation and also the inflation rate which is targeted by the Federal Reserve. Based on these projections, the long-term nominal GDP growth rate is expected to be approximately in the range of 3.84% to 4.35%.

utilities are ramping up their capital expenditures for various gas line replacement programs, these replacements have finite periods associated with them. For example, Spire Missouri anticipates that it will complete its gas line replacements within the next 15 years. After these replacement programs are complete, it is not clear what will drive the growth of the gas distribution business, especially in mature service territories. Therefore, the maximum amount of growth in investment would be the increased cost to replace infrastructure at the end of its useful life. This would translate into a growth rate consistent with any inflationary cost in materials and labor to replace the existing infrastructure.

Because the constant-growth DCF is based on the premise that dividends will grow at the same constant growth rate forever into the future, it is prudent to analyze actual realized growth for an industry/company over a very long period. I have access to gas utility industry data dating back to at least 1968. Considering the period 1968-2016 covers almost a 50-year period, this is a robust amount of data to analyze to determine a long-term industry growth rate for the gas utility industry. Because this period includes a time in which the U.S. economy experienced healthy GDP growth and healthy market returns, the growth over this period is more consistent with a "best case" scenario for growth.

In order to evaluate the gas industry's growth compared to GDP growth, I had to select a group of natural gas distribution companies that could be considered a good proxy for the natural gas distribution industry for a long, continuous period. I started with the entire set of companies that Edward Jones had typically classified as natural gas distribution companies in its past quarterly publications on the natural gas industry. Because this exercise is for purpose of evaluating empirical evidence on the actual growth rates of the local natural gas utility industry, it is not necessary to pick companies that still trade as public companies. I then researched Staff's library of Value Line Ratings & Reports to determine which of these companies had continuous historical financial data for at least 20 years. The following companies had at least 20 years of continuous financial data: AGL Resources (now Southern Company Gas), Atmos Energy, Laclede Group (now Spire, Inc.), New Jersey Resources, Northwest Natural Gas, Piedmont Natural Gas (now owned by Duke Energy Corporation), South Jersey Industries and WGL Holdings. Actually, all of these companies, with the exception of Atmos Energy, had continuous financial data in the Staff's library going back until at least the early 1970s, with most companies having information covering the entire historical period (back to 1968) in which

Staff has information available in its library. I still included Atmos in its long-term proxy group, but I also analyzed trends without Atmos because it had less continuous financial data dating back to the early 1970s. Although I did not include New Jersey and South Jersey in its proxy group to evaluate current market data, this does not render these companies irrelevant for purposes of evaluating long-term growth rate trends in the natural gas utility industry. In fact, these companies only recently started to grow their non-regulated operations to the point where the risks are not consistent with a pure-play regulated gas distribution utility.

My analysis of the proxy group's financial data since 1968 revealed that the actual realized growth of the natural gas distribution industry has averaged in the 4% to 4.5% range, or about 66% of average GDP growth of around 6.5% over the same period. Although the natural gas distribution industry grew at a slower rate than GDP, I believe it is also important to consider that the growth in the natural gas distribution industry was not highly correlated with GDP growth over this period. Below is a graph of the natural gas distribution industries' and Spire, Inc.'s average 10-year compound growth rates as they compare to GDP growth for the period 1968 through 2016 (this graph and the supporting data are also contained in Schedules 9-5 through 9-8:

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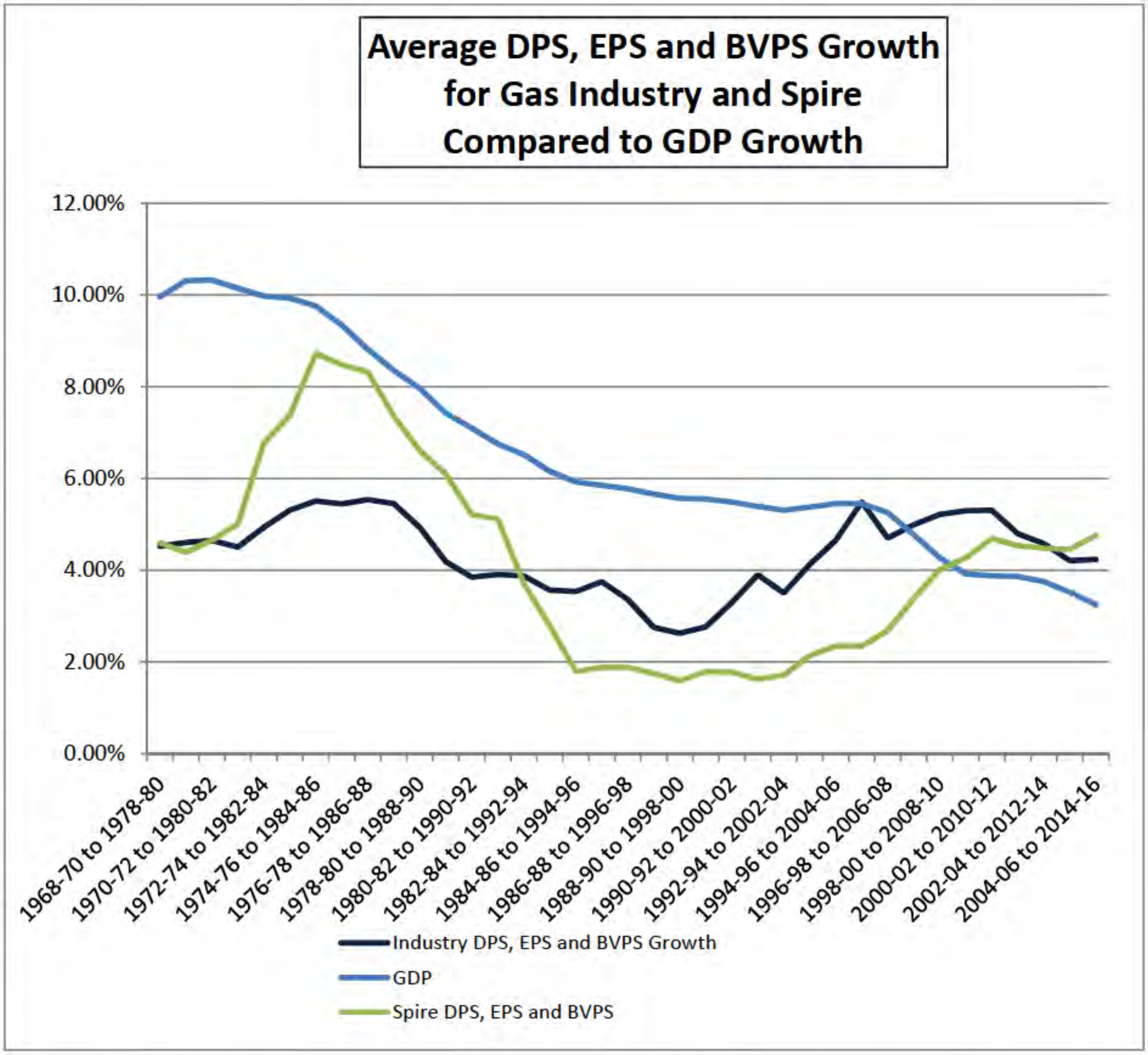

As can be seen in the above graph, the growth for both the natural gas distribution industry and that of Spire, Inc. moved inversely to that of GDP for the 10-year periods from 1970 - 1980 through the mid-70s to the mid-80s. After the mid-70's, during the 10-year periods through 1990-2000, Spire, Inc. and the gas industry generally had declining growth rates along with GDP. However, the 10-year periods ending after the turn of the century has shown that the gas industry has increased while GDP decreased, with growth rates exceeding GDP growth shortly after the financial crisis in 2008 and 2009. Consequently, empirical evidence shows that natural gas distribution utility growth has had very little correlation to that of GDP. In this case, a key question for purposes of understanding the reasonableness of constant growth rates used in a DCF analysis is how one should incorporate GDP into evaluating the reasonableness of gas industry growth rates and what are the major factor(s) that will determine the sustainability of gas industry growth rates going forward?

As I have already explained, even though natural gas distribution industry growth has not been highly correlated to GDP in terms of growth patterns, it has typically been less than GDP growth until recently. Therefore, at least in the long-term, GDP should act as a constraint on potential growth on the utility industry. It is irrational to conclude the gas utility industry will become a driver of economic growth rather than a follower of economic growth, especially given the fact that energy consumption has been declining.

The other factors that often determine potential growth for the regulated gas distribution industry are investment and demand/customer growth. Because most regulated natural gas distribution companies have moved to largely decoupled rate designs in which the recovery of the revenue requirement is not a function of usage, but number of customers, the other major factor should be limited to expansion of the system to serve additional customers. My understanding of the history of the natural gas distribution industry, at least that of the proxy group I analyzed, is that customer growth was a key driver of capital investment in the 1980s. In order to understand the relative magnitude of the capital investment natural gas distribution companies made in the 1980s, I also analyzed the changes in capital spending per share from the period 1968 through the present. I then compared the industry's capital spending to the average growth in DPS, EPS and BVPS and found a high correlation between the two.

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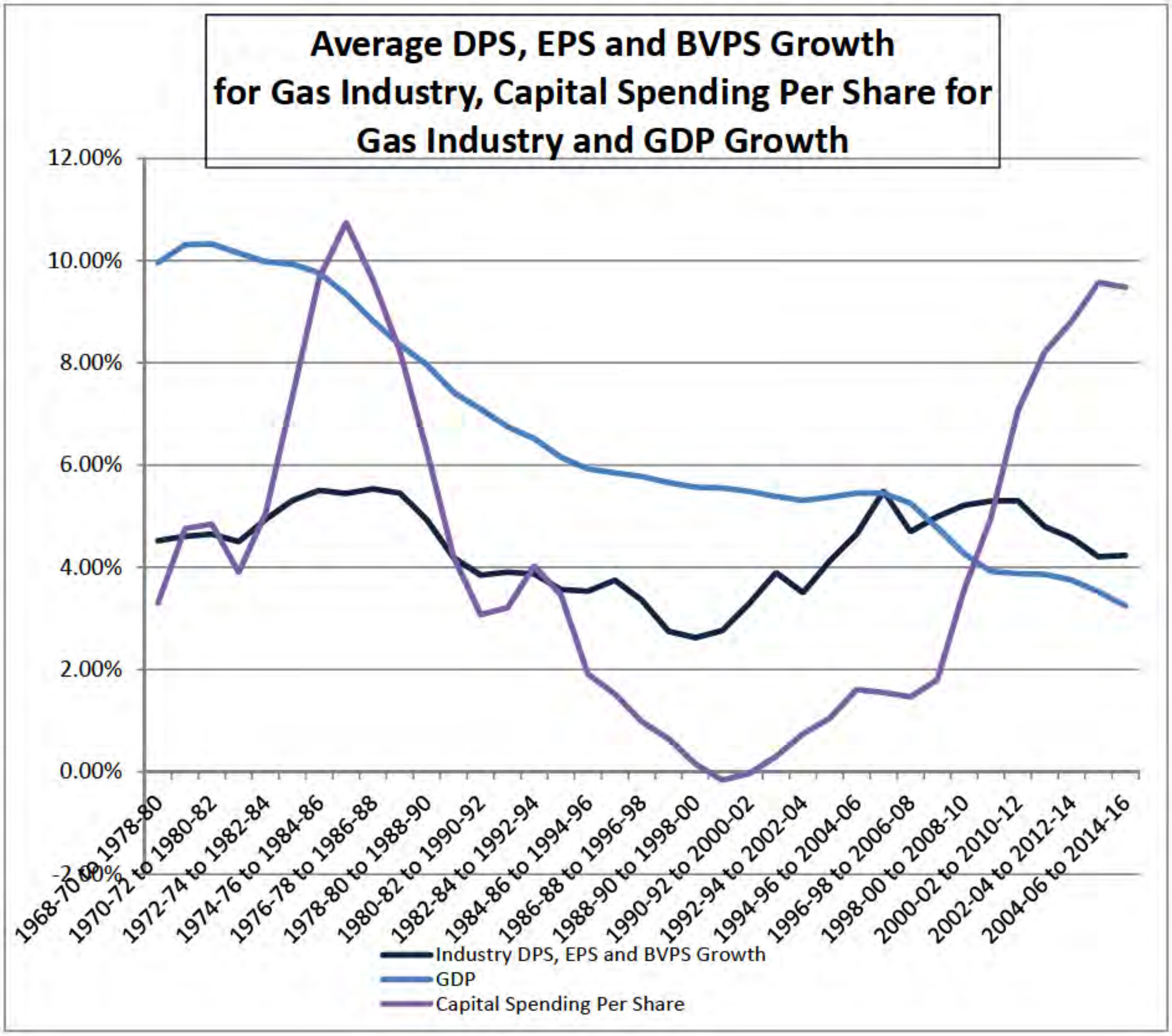

As can be seen, there is a higher correlation between capital spending and industry growth then there is between GDP and industry growth. One would expect capital expenditures to be fairly highly correlated to GDP growth, but this has not been the case for the gas distribution industry. The current rise in capital expenditures is not driven by expected growth in the economy, but in the perceived need to accelerate capital expenditures for infrastructure replacement. Of course, capital expenditure growth would typically cause a direct increase in book value per share growth and earnings growth, but because the U.S. Government has been allowing bonus depreciation rates in order to incentivize capital investment to stimulate the economy, these higher income tax deprecation rates have been an offset to the company's ability to increase the book value of its assets. Therefore, the higher growth rate in capital expenditures will not cause earnings to grow at the same rate.

Consequently, growth of earnings and dividends should primarily be a function of a growth in book value, which is the fundamental premise underlying the retention growth method, which is that growth in earnings is driven by the expected ROE multiplied by the earnings retained for reinvestment, that is, the growth in book value. Of course, only so much capital expenditure can be accelerated due to tax incentives before there is no longer a need for additional investment. This is the point at which growth in investment would revert to a maintenance growth rate. Although many gas companies were already targeting bare steel and cast iron gas lines for replacement before bonus depreciation was instituted, this tax incentive has provided gas companies with incentive to accelerate these replacements even quicker than initially planned. The additional cash flow available from not having to pay income taxes has allowed gas companies to reinvest without having to issue common equity, which would be dilutive to existing shareholders.

My understanding of the investment growth in the natural gas distribution industry is that many companies have been and continue to pursue replacement of existing infrastructure in accordance with various infrastructure replacement programs and favorable rate treatment associated with these programs.[23] To the extent there is limited customer growth, this will be the primary driver of growth for the gas distribution industry in general and Spire, Inc. in particular.

Because investors are well aware of the limitations on potential growth for the industry as compared to its historical growth, as Staff discussed above, Staff believes it is important to

[23] Atmos operates in Kansas, Kentucky, Mississippi, Tennessee, Texas, and Virginia. In Colorado, Atmos receives a System Safety and Integrity Rider (SSIR). The SSIR is implanted for a three year term to December 31, 2018, and then the company can ask for an extension in a future filing. In Kansas, Atmos receives a Gas System Reliability Surcharge (GSRS) between .5% and 10% of revenues to recover new replacement costs. In Kentucky in 2015, the Pipeline Replacement Program (PRP) surcharge was implemented for to replace aging infrastructure. On September 08, 2015, in Mississippi, Atmos was approved for a *Stipulation and Agreement* to establish a long-term plan to hold a review of spending over the next 10 years and the projected rate impact. In 2015, Tennessee approved Atmos to use an Annual Review Mechanism to allow the company to adjust rates to replace infrastructure. In 2003, Texas approved the Gas Reliability Infrastructure Program (GRIP). It allows Atmos to recover investment changes within two years of a rate case to replace infrastructure. In 2010, Virginia approved of a Steps To Advance Virginia's Energy Plan (SAVE) program. It allows for a separate rider to recover return on specific investments. (Office of Energy Policy, 2017). In Kansas, One Gas implemented a GSRS to provide recovery on infrastructure investments. In Texas, they utilize the GRIP mechanism which includes 86% of their customers. Taxes, depreciation, and a return on investment are allowed. The Safety-Related Plant Replacements to defer interest cost, taxes, and depreciation expense on safety-related plant replacements. (One Gas 10-K, 2016). In June 2014, California approved Southwest Gas to institute the Infrastructure Reliability and Replacement Adjustment Mechanism (IRRAM). In January 2014, Nevada approved accelerated recovery of costs with replacing pipelines.

consider the natural gas distribution industry's actual experienced growth over the long-term, when judging whether an assumed growth rate is sustainable at a constant rate forever into the future. Equity analysts project a compound annual growth rate in earnings per share over the next five years of approximately 5.2%. However, based on actual historical growth over the long-term, this growth rate is not sustainable over a longer period, let alone for infinity as assumed in the constant-growth DCF.

Schedule 9-5 shows rolling average 10-year compound growth rates for EPS, DPS, and BVPS for a proxy of the natural gas distribution industry. I calculated the historical compound growth rates consistent with Value Line's methodology, which uses a 3-year average for the beginning period and a 3-year average for the ending period. For example, even though the data I analyzed dates back to 1968, the 10-year compound growth rate is based on the 3-year average of per share data for the period 1968-1970 and 1978-1980. The average rolling 10-year compound annual growth rate in earnings per share for the period Staff analyzed was 4.40% for EPS; the rolling 10-year compound DPS growth rate was 4.20%; the rolling 10-year compound BVPS growth rate was 4.59%; and the overall average for DPS, EPS and BVPS was 4.40% (*see* Schedule 9-5).

Because the gas distribution industry only achieved growth in the low 4.2% to 4.6% during a period of high capital investment and higher average economic growth of 6.54%, a constant-growth rate closer to 4% is more logical considering projected growth rates for the U.S. economy are much lower in the future as compared to the period I analyzed. In order to give some consideration to some of the higher near-term expected growth rates, especially in DPS rather than EPS, I will use a growth rate range of 4.2% to 5.0%. This results in a cost of equity estimate of 6.90% to 7.70%. It is noteworthy that this COE estimate is approximately 100 basis points lower than Staff's estimated COE in MGE's last rate case, Case No. GR-2014-0007. While I understand that my COE estimate is much lower than the average allowed ROEs for gas utility companies in the country, it is quite consistent, if not on the high side, compared to COE estimates by Spire, Inc.'s financial advisors for purposes of determining a fair value for cash flows generated by natural gas distribution assets.

Because the parties settled LAC's and MGE's rate cases in 2013 and 2014, respectively, the Commission did not decide an appropriate allowed ROE for purposes of setting rates. The Commission did determine a fair and reasonable allowed ROE for a Liberty Utilities rate case in

2014, Case No. GR-2014-0152, as well as for Ameren Missouri and KCPL in 2014. The Commission set the allowed ROE at 10.0% for Liberty's gas distribution assets, while it set Ameren Missouri's and KCPL's allowed ROE at 9.53% and 9.5%, respectively. It is recognized in the investment community that gas utilities have less business risk than vertically-integrated electric utilities. This is especially the case in Missouri because gas utilities are allowed weather normalized rate designs as well as ISRS.

It should also be noted that the Commission issued its *Report and Order* in the Liberty rate case on December 3, 2014, whereas the Commission issued its orders in the Ameren Missouri rate case (Case No. ER-2014-0258) and KCPL rate case (Case No. ER-2014-0370) on April 29, 2015, and September 2, 2015, respectively. I observed significant declines in the cost of common equity from the Fall of 2014 through early 2015, which supported lower allowed ROEs. In supporting its decision to authorize a 10% allowed ROE for Liberty, the Commission cited average allowed ROEs for gas utilities at the time of 9.69%. As I will discuss at the end of the ROR section of this report, average allowed ROEs for gas utilities are closer to 9.5% for the first 6 months of 2017, with three fully-litigated allowed ROEs of 8.7%, 9.25% and 9.5%. A final relevant consideration is that the Commission adopted a capital structure that had an equity ratio of 45.89% in the Liberty case.

Consequently, the Commission should use its recently allowed ROE for KCPL of 9.5% as the ceiling for a reasonable allowed ROE in this case. In the information that follows, I will provide valuation metrics and corroborating investment analyst information that supports awarding a lower allowed ROE to LAC and MGE as compared to KCPL.

As I indicated, there is a general perception in the investment community that natural gas distribution company stocks have less business risk than electric utility company stocks. Wells Fargo analysts stated the following in a March 31, 2017, equity research report:

> **Gas & Water Premiums.** In light of recent price action and diminished near-term M&A expectations (tax reform uncertainty), we revisited the often asked question of "where should gas and water utilities trade relative to electrics?" Within our valuation toolbox, we consider the dividend discount model (DDM) to be particularly useful for this exercise. Making the following assumptions for (1) near-term growth (5% elecs and 6% gas/water), (2) discount rate (7.5% elecs, 7.25% gas and 7.0% water) and (3) long-term payout ratio (70% elecs and 65% gas/water), our generic DDMs suggest gas and water utilities

> should trade at 15% and 22% premiums to electrics, respectively. This is not too far off from current 17-19E P/E multiple premiums of 16-19% for gas and 24-26% for water utilities.[24]

However, another factor that should be considered before concluding a subsector of the utility industry is trading at a higher p/e ratio due only to a lower required return is whether there are different growth expectations in one subsector versus the other -- in this case, gas compared to electric. There is little question that most gas distribution companies are involved in gas line replacement programs. This generally has caused equity analysts to be more bullish on growth rate expectations for gas utilities as compared to electric utilities. For example, UBS indicated the following in a recent research report covering the gas industry:

> Gas LDCs continue to support high multiples even as interest rates have increased. The 10-yr Treasury is currently yielding 2.48%, the last time rates were at this level was August 2014 when the multiple was 19.8x vs. 21.4x today. We believe a higher multiple is supported by the mid-to-high single digit earnings growth expected that is supported by pipeline replacement, but think the multiple also includes a premium for the potential for additional M&A in the sector.

The same report went on further to state the following:

> The P/E multiple has contracted 0.8x turns to 21.7x from 22.5x when we initiated coverage in December. Gas LDCs continue to trade at a higher average multiple than Electric Utilities and both are trading higher than their historical averages. We note that both are off their July 2016 peaks when the 10-Yr Treasury hit a near term trough. Figure 2 shows that on a NTM P/E basis, Gas LDCs historically trade 12.5% above electric utilities, but are currently trading at a 20.5% premium.

The report also observes that the electric and gas utility dividend yields have flipped since the financial crisis, in that natural gas utility stocks now have dividend yields that are lower than those of electric utility stocks. Natural gas utility stocks, as evidenced in my DCF analysis, currently trade at a dividend yield of 2.7%, whereas electric utility stocks trade at a dividend yield in the low 3% range. At least a portion of the lower dividend yield is explained by higher expected growth in the natural gas industry.

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[24] Neil Kalton, CFA, Sarah Akers, CFA, Jonathan Reeder, Glen F. Pruitt, "Between The Lines: Wells Fargo Utility Monthly," March 31, 2017, p. 1, Wells Fargo Securities.

Consequently, it is my professional opinion that the Commission should authorize an ROE at least 25 basis points below what it authorized for KCPL and Ameren Missouri in their recent rate cases. Nonetheless, it is also my opinion that the actual market cost of equity is generally lower than allowed ROEs as is shown by ample evidence, both through my testimony and from Spire, Inc.'s very own financial advisors.

J. Tests of Reasonableness

I have tested the reasonableness of my DCF results, both by use of a CAPM analysis and consideration of other evidence.

<u>The CAPM</u>

The CAPM is built on the premise that the variance in returns is the appropriate measure of risk, but only the non-diversifiable variance ("systematic risk") is rewarded. Systematic risks, also called market risks, are unanticipated events that affect almost all assets to some degree because the effects are economy wide. Systematic risk in an asset, relative to the average, is measured by the beta of that asset. Unsystematic risks, also called asset-specific risks, are unanticipated events that affect single assets or small groups of assets. Because unsystematic risks can be freely eliminated by diversification, the reward for bearing risk depends on the level of systematic risk. The CAPM shows that the expected return for a particular asset depends on the pure time-value of money (measured by the risk free rate), the reward for bearing systematic risk (measured by the market risk premium), and the amount of systematic risk (measured by beta). The general form of the CAPM is as follows:

$$k = Rf + \beta\ (Rm - Rf)$$

Where:	k	is the expected return on equity for a security;
	Rf	is the risk-free rate;
	β	is beta; and
	Rm - Rf	is the market risk premium.

For inputs, I relied on historical capital market return information through the end of 2016. For the risk-free rate ("Rf"), Staff used the average yield on 30-year U.S. Treasury bonds for the three-month period ending June 30, 2017; that figure was 2.90%. For beta ("β"), I relied on estimates directly calculated through an Excel spreadsheet designed specifically to be used with the SNL database of market and financial information.[25]

The average beta for the proxy group was 0.71. For the market risk premium (Rm – Rf) estimates, I relied on the historical difference between earned returns on stocks and earned returns on bonds.[26] The first risk premium was based on the long-term arithmetic average of historical return differences from 1926-2016 (6.00%). The second risk premium was based on the long-term geometric average of historical return differences from 1926 to 2016 (4.50%). The results using the long-term arithmetic average risk premium and the long-term geometric risk premium are 7.14% and 6.08%, respectively.

These cost of common equity results support the reasonableness of my cost of equity estimates derived from my DCF analysis. I again note that both U.S. Treasury yields and utility bond yields are quite low (at levels last experienced in the early 1960s) and that the spread between them is presently below their long-term average. Consequently, it is rational and reasonable for investors to require and expect returns on common equity in the 6 percent range for utility stocks.

Other Tests

The "Rule of Thumb"

A "rule of thumb" method allows an objective test of individual analysts' cost of equity estimates. Because this method is suggested in a textbook[27] used for the curriculum for Chartered Financial Analyst ("CFA") Program, I believe this method is free of any bias from those involved in utility ratemaking. It is also a useful test because it is very straightforward and limits

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[25] Although I am no longer using Value Line's published betas for purposes of my CAPM analysis in my direct testimony, because Value Line is used by many retail investors, I still believe Value Line's beta calculation methodology should be considered when performing a CAPM analysis. Because estimating beta is a matter of having access to financial data and performing statistical calculations, unless a financial services provider has a proprietary adjustment they make to their beta calculation, understanding the methodology used by a financial provider allows an analyst to approximately replicate betas of that provider. Fortunately, this is the case for Value Line's beta calculation methodology. Consistent with Value Line's approach to calculating beta, I used 5-years of historical weekly returns of the subject company and the New York Stock Exchange ("NYSE") index. The covariance of the weekly returns on the NYSE index and the weekly returns on the subject company is divided by the variance of the weekly returns on the NYSE index to determine raw beta (unadjusted beta). I then adjusted the raw beta using the Blume adjustment formula as used by Value Line: Adjusted Beta = (.35 + .67(Unadjusted Beta)) (*see* Schedule 11).

[26] From Duff & Phelps *2016 Valuation Handbook: A Guide to the Cost of Capital.*

[27] John D. Stowe, Thomas R. Robinson, Jerald E. Pinto and Dennis W. McLeavey, *Analysis of Equity Investments: Valuation*, Association for Investment Management and Research, 2002, p. 54.

the risk premium to a 100-basis point range. The cost of equity is estimated by simply adding a risk premium to the YTM of the subject company's long-term debt. Based on experience in the U.S. markets, the typical risk premium is in the 3% to 4% range. Considering that this is based on general U.S. capital-market experience and that regulated utilities are on the low end of the risk spectrum of the general U.S. market, a risk premium closer to 3% is more probable. This is especially true considering that regulated utility stocks behave like bonds. For the three months ended through July 2017, Moody's "A" rated and "Baa" rated long-term public utility bonds had average yields of 4.02% and 4.39% respectively.[28] Adding a 3% risk premium, the "rule of thumb" indicates a cost of common equity between 7.02% and 7.39%. Adding a 4% risk premium, the "rule of thumb" indicates a cost of common equity between 8.05% and 8.39%.

Of course, these are just generic indices. Because Spire Missouri has long-term bonds that are traded over the counter, it is informative to look to these yields to at least provide some insight as to a specific estimate of Spire Missouri's' rule of thumb cost of equity. I chose the outstanding Spire Missouri bond that had the longest time until maturity, yet still traded at least in the last few months. Although this bond does not trade frequently, causing me to be concerned about the responsiveness of the yield to current market conditions, Spire Missouri has a $100 million bond that matures on August 15, 2043. The coupon on this bond is 4.625%. This bond last traded at a yield of 4.227% on July 7, 2017. Applying the 3% to 4% rule of thumb risk premium implies a COE of 7.23% to 8.23%.

Average Authorized Returns

In the past, the Commission has applied a test of reasonableness using average authorized returns published by Regulatory Research Associates ("RRA") to test the reasonableness of its allowed ROE. According to RRA, the average authorized return on equity for gas utilities was 9.5% in the first six months of 2017 (based on nine ROE determinations), compared to 2016's calendar year average of 9.54% (based on twenty-six ROE determinations).[29]

As a further refinement, Staff also evaluated allowed ROE information for only cases that were fully-litigated because in these cases, one would expect that each issue is determined based

[28] August 2017 Mergent Bond Record.

[29] RRA Regulatory Focus – Data was included in a study entitled Major Rate Case Decisions – January – June 2017.

on its own merits. Allowed returns determined in the context of a settled case are not as reliable because parties make adjustments to other elements of the ratemaking formula in order to arrive at an overall reasonable number. It has been my experience that some companies do not want a lower ROE published in a settlement because this is a "headline" number. Consequently, companies may compromise on a more obscure area of the rate case in order to have a higher ROE published in the settlement. The average allowed ROE for fully-litigated cases in the first quarter of 2017 was 9.25% (one decision for a gas utility rate case). The average allowed ROE for fully litigated cases in the second quarter of 2017 was 9.1% (two decisions for a gas utility rate case). Allowed ROEs for fully-litigated cases were 9.61% for the 2016 calendar year, and 9.58% for the 2015 calendar year.

K. Conclusion

A just and reasonable rate is one that is fair to the investors and fair to the ratepayers. Fairness to the ratepayers means rates that are not one penny more than is necessary to be fair to the shareholders. Fairness to the shareholders means rates that will produce revenues, on an annual basis, sufficient to cover the Companies' prudent cost of service, which includes an allowed ROR. Using widely-accepted methods of financial analysis and reviewing Wall Street equity analysts' research shows that the COE for gas distribution companies is conservatively around 7%. However, since I have provided this information in past rate cases, including recent electric rate cases in which the Commission decided an allowed ROE of approximately 9.5% was fair and reasonable, I recommend that the Commission consider the evidence that the gas utility industry is widely viewed as less risky than the vertically-integrated electric utility industry. Consequently, I recommend that the Commission allow an ROE that is at least 25 basis points lower than it allowed KCPL in its recent rate case.

Based on all the foregoing, it is my considered professional opinion that an authorized ROE for LAC and MGE in the range of 9.00% to 9.50% would be reasonable, but given that investors view gas utilities in Missouri as having less business risk, an allowed ROE no higher than 9.25% would be most appropriate. Given that the cost of capital is as real a cost as any other cost of service, reducing this cost in the ratemaking formula to a value closer to its actual cost is consistent with the principles of cost-of-service ratemaking. Using my recommended allowed ROE range results in an allowed ROR for LAC and MGE in the range of 6.38% to 6.62% (*see* Schedule 12). This rate was calculated by applying an embedded cost of long-term debt of 4.13% and an allowed ROE range of 9.00% to 9.50% to a capital structure consisting of 48.84% common equity. If the Commission lowers the allowed ROE to at least 9.25%, this will allow a reasonable compression in the spread between the allowed ROE and the cost of common equity. This allowed ROE would balance the concern about the impact of a lower allowed ROE on investors' view of Missouri's regulatory environment, while still passing along the benefit of lower capital costs to ratepayers.

Staff Expert/Witness: David Murray, CFA

VIII. Rate Base

A. Plant in Service and Depreciation Reserve

Staff recommends plant-in-service ("Plant") and accumulated depreciation reserve balances be based on actual booked amounts as of the end of the update period, June 30, 2017, and on September 30, 2017, booked amounts for the true-up in this case. These booked amounts include plant additions that have occurred since the test year ending December 31, 2016, and the related depreciation reserve balances. At the time of the true-up audit, adjustments to the plant and reserve balances used by Staff for its direct filing will be updated to include amounts for plant additions that have become fully operational and used for service as of September 30, 2017, the ending point of the true-up. Staff will also include depreciation reserve balances related to all plant, including those additions and retirements. Plant must be "fully operational and used for service" before it is appropriate to reflect that plant and its associated reserve in rates.

Plant and Depreciation Reserve are two of the largest components of Rate Base. Plant represents the structures and equipment used by the utility to provide service to ratepayers. In the balance sheet, plant is often referred to as "fixed assets." The depreciation reserve represents the sum of all depreciation accruals, net of cost of removal and salvage charges, which have been recorded in the Depreciation Reserve, representing the amount of plant investment that has already been recovered in rates from customers. Depreciation Reserve is an offset to Plant and is a subtraction from plant in the determination of rate base; the resulting balance is known as "net plant."

The LAC and MGE plant identified on the Plant Accounting Schedule 3, Plant in Service, and the accumulated depreciation reserve, identified on Depreciation Reserve, Accounting Schedule 6, respectively, reflect MGE's and LAC's balances by account for these items as of

June 30, 2017, the end of the test year update period in this proceeding. These schedules include plant additions that have occurred since the end of the December 31, 2016, test year and all depreciation reserve accruals that have been booked by MGE and LAC through June 30, 2017. The information in Accounting Schedules 3 and 6 for plant and reserve is shown by Federal Energy Regulatory Commission ("FERC") Uniform Systems of Accounts ("USOA") for each plant category, broken out by distribution, production, underground gas storage, other storage, transmission, and general plant.

Staff requested the plant and reserve amounts by FERC account and plant and reserve information that came directly from the Power Plant record system for both LAC and MGE. LAC uses an accounting package for plant records called Power Plant, commonly used by most of the major utilities operating in Missouri. As such, the plant and reserve information contained in Accounting Schedules 3 and 6 by individual plant categories and FERC accounts are those that directly tie back to the books and records of LAC and MGE.

It is necessary for both LAC and MGE and Staff to make adjustments to the plant reserve balances to account for retirement work in progress ("RWIP"). RWIP is retired plant that has not yet been classified for certain components of depreciation, namely cost of removal and salvage. LAC and MGE removed the retired plant and related depreciation reserve from its plant and reserve account balances as of the retirement dates through June 30, 2017. However, as of June 30, 2017, LAC and MGE have not removed the related reserve amounts associated with cost of removal and salvage accruals calculated for the retired plant included in the RWIP balance. While the actual plant is retired and removed from plant balance and the related reserve, the plant has not been physically disassembled, so the cost of removal and salvage components of depreciation are still included in the reserve. As a result, LAC and MGE books overstate the reserve for this retired plant that is no longer serving utility customers. Because a plant that is no longer being used for utility service is removed from rate base, it is also necessary to make a corresponding adjustment to remove from the reserve balances the cost of removal and salvage amounts for the retired plant. Staff included a line item in the Accumulated Depreciation schedule, identifying the RWIP amount relating to this retired plant.

Depreciation expense is based on Staff witness Keenan B. Patterson's recommended depreciation rates that were applied to the adjusted Missouri jurisdictional plant balances as of

June 30, 2017. This will be further discussed under the heading of Depreciation Expense, in the Income Statement section of Staff's Cost of Service Report.

MGE and LAC also propose adjustments to plant-in-service and accumulated depreciation reserve for Enterprise Software. Staff's adjustment related to the Enterprise Software is being sponsored by Staff witness Jason Kunst and is addressed in the Software Amortization section of this report.

Staff Expert/Witness: Cary G. Featherstone

B. Forest Park District Service Center Facilities Sale and Subsequent 5311 Manchester Ave. Service Center Replacement Facility

For several decades preceding mid-2013, LAC owned and operated three large district service centers that provided critical services such as leak detection, leak repair, construction and maintenance, service and installation, meter replacement and engineering, and marketing, as well as other services. Two of these three regional service centers continue to exist, and are located in St. Louis County, in Berkeley and Shrewsbury respectively. The third service center was located near Forest Park in the City of St. Louis; however, this property was sold in May 2014, and the operations located at this facility were moved to other locations. The service center in Forest Park also supplied gas procurement, gas controls, and diversion services that were not provided by the Berkeley and Shrewsbury facilities. The Berkeley, Shrewsbury, and Forest Park service centers were strategically located by LAC in order to provide optimal service to their customers.

On June 27, 2013, LAC signed an agreement to sell its Forest Park property to The Cortex Innovation Community in St. Louis ("Cortex"). According to its website:

> The Cortex Innovation Community is home to a vibrant 200-acre innovation hub and technology district integrated into St. Louis' historic Central West End and Forest Park Southeast residential neighborhoods, surrounded by nationally ranked universities and medical centers and abundant cultural and recreational assets.
>
> Cortex is a tax exempt 501(c)3 formed in 2002 by Washington University in St. Louis, BJC Healthcare, University of Missouri – St. Louis, St. Louis University, and the Missouri Botanical Garden to capture the commercial benefits of university and regional corporate research for St. Louis.
>
> Since inception, Cortex has completed or has under construction 1.7 million square feet of new and rehabilitated space totaling over $550 million of investment and generating 4,200 technology-

> related jobs. When fully implemented, the Cortex master plan projects $2.3 billion of construction, over 4.5 million square feet of mixed-use development (research, office, clinical, residential, hotel, and retail), a new MetroLink light-rail station and 15,000 permanent technology-related jobs. Currently, there are over 250 companies that call the Cortex Innovation Community their home.

Staff learned in its investigation that Cortex acquired the property in order to serve as the developer for an IKEA retail store. On June 27, 2013, LAC agreed to sell its Forest Park buildings, structures, and land to Cortex for $8.3 million and an additional $5.7 million dollars from Cortex for expenses related to relocating its employees and equipment from the Forest Park location to other LAC facilities. The net book value of the Forest Park facility at the time of sale was approximately $2.5 million. This transaction closed on May 14, 2014; however, ** _____ _____ _____ **. This lease period provided time for Laclede to continue to run a portion of its operations at Forest Park while it sought new facilities for its employees and equipment. During that time, LAC entered into a lease agreement with St. Louis University High School for a warehouse and parking that it used in the interim. ** _____ _____ _____ **

As part of the relocation, LAC moved "shared service" employee groups to its corporate headquarters.[30] Accordingly, functions such as Gas Control, Gas Supply, and Engineering previously located at the Forest Park facility were relocated to the headquarters building in downtown St. Louis. Some of the field-based employees were relocated to the two existing service centers, North and South, while others were moved to a temporary leased location until a permanent replacement facility could be found.

On September 2, 2014, LAC closed on a purchase of land at 5311 Manchester, where it built a centrally-located facility to house a portion of the employees and functions that were previously located at the Forest Park facility. The new facility cost approximately $7 million and was placed into service in November 2016.

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[30] With its acquisition of MGE, LAC implemented a concept of "shared services," which attempts to reduce costs by consolidating services which are utilized by multiple entities within an organization.

Since the new facility is a replacement for a portion of the Forest Park properties that were sold to Cortex, Staff recommends that the $5.7 million of relocation funds received from Cortex, less expenses incurred to relocate Forest Park employees and equipment during the moves, should be used to offset the construction cost of the new Manchester facility. Staff recommends including a regulatory liability to record the rate base offset of the relocation expense and amortizing it over a five year period beginning with the date of new rates in the current case.

Staff has historically taken the approach that the gains and losses on the sale of utility assets should be recorded below the line. For example, in April, 2009 LAC sold gas holders for a gain. Those gas holders were no longer required to provide service, and LAC was able to sell them for a gain and avoid potential environmental clean-up costs. Staff agreed with LAC in Case No. GR-2010-0171 that the gain should be recorded below-the-line.

Instead of its historic approach, in this very specific instance Staff recommends that the Commission consider a sharing of the gain from the sale of the Forest Park facilities between shareholders and ratepayers. The difference between the transaction in Case No. GR-2010-0171, and the sale of the Forest Park facilities in the instant case is that LAC was still using the Forest Park facilities at the time of disposition, and required a replacement facility for a portion of the functions that were located at Forest Park Ave. While the new Manchester facility does not house all of the functions that were previously located at Forest Park, it does house several critical functions that were, such as leak detection and diversion crews, and is located very close to where the previous facilities were located. Additionally, the Manchester facility has an approximate rate base value of $7.7 million compared to the approximate $2.4 million net book value of the Forest Park facilities, thus ratepayers are paying more for the replacement facilities.

In response to Staff Data Request No. 0243, LAC indicated that it calculated the gain on the sale of the Forest Park property by only using the book value of the land, resulting in a gain of $7.6 million. The company stated that the buildings and improvements at this site were retired on the day of the sale and were not included in the calculation of the gain. In response to Staff Data Request No. 0392, LAC provided information showing a net book value of approximately $1.8 million for the buildings and improvements combined at the time of the sale. Staff would recommend calculating the gain on the sale of the Forest Park facilities by including the net book value of the structures and improvements, resulting in a gain of approximately $5.8 million.

The FERC uniform system of accounts for gas utilities proscribes the following treatment for the sale of utility assets:

> F. When gas plant constituting an operating unit or system is sold, conveyed, or transferred to another by sale, merger, consolidation, or otherwise, the book cost of the property sold or transferred to another shall be credited to the appropriate utility plant accounts, including amounts carried in account 114, Gas Plant Acquisition Adjustments. The amounts (estimated if not known) carried with respect there-to in the accounts for accumulated provision for depreciation, depletion, and amortization and in account 252, Customer Advances for Construction, shall be charged to such accounts and the contra entries made to account 102, Gas Plant Purchased or Sold. Unless otherwise ordered by the Commission, the difference if any, between (a) the net amount of debits and credits and (b) the consideration received for the property (less commissions and other expenses of making the sale) shall be included in account 421.1, Gain on Disposition of Property, or account 421.2 Loss on Disposition of Property (see account 102, Gas Plant Purchased or Sold).

Staff's recommended sharing of the gain from the sale of the Forest Park facilities between shareholders and ratepayers is consistent with the Commission's *Report and Order* issued in Case No. WR-83-14, et al. involving Missouri Cities Water Company. In that Order, the Commission stated the following:

> The Commission is of the opinion that it would be possible to develop additional alternative treatments of gains on the sale of appreciated utility assets, for ratemaking purposes, in addition to those presented in this case.

In the 1983 Missouri Cities rate case, one such alternative that the Commission offered with regard to sharing of gain on a utility property sale was to return to the ratepayers a percentage of the net gain equal to the percentage of the Company's capital structure which is non-equity, and allowing the Company to treat "below the line" the percentage of gain representing the percentage of the Company's capital structure which is equity. This, among other alternatives described by the Commission, would allow for a sharing of the benefit of gains on appreciated utility assets between the ratepayer and the shareholder.

Staff is recommending the above method of sharing the gain on the sale of the Forest Park property, as investment is funded by a combination of debt and equity. The equity portion is supplied by shareholders, while the debt portion is funded by ratepayers. While the debtors cannot be owners, the ownership of equity investors should be limited to their investment. In the case where a utility property is sold for a substantial gain and replaced, it is reasonable to limit the below the line treatment of the gain to the percentage of funding received from equity sources

Because it was necessary for LAC to continue to utilize the Forest Park facilities after the completion of the sale to Cortex, and it was necessary to replace a portion of the previous Forest Park facilities with a nearby location (approximately ½ mile away) at greater cost, it is appropriate for the Commission to order a sharing of the $5.8 million gain prorated between shareholder and ratepayers based on Staff witness David Murray's recommended percentage of debt in Staff's capital structure in this rate proceeding. Staff recommends approving a regulatory liability of approximately $3 million with no rate base treatment for the ratepayer portion of the gain, and amortizing it over a five year period.

Staff Expert/Witness: Jason Kunst

C. Propane Investment

During 2011, LAC moved investment and depreciation reserve associated with its propane cavern and other propane equipment below-the-line for accounting purposes. Staff opposed this decision and the associated ratemaking treatment in LAC's subsequent rate case, Case No. GR-2013-0171. Staff's position is that the propane cavern and related equipment represent valuable assets to protect LAC and its ratepayers against extremely cold winters that are occasionally experienced. In fact, LAC used the propane cavern to inject propane into its system as recently as the ** ________________ **. As part of the resolution of Case No. GR-2013-0171, section 14 of the *Stipulation and Agreement* addressed the propane related issues as follows:

> The Parties agree that Laclede's propane cavern and associated equipment and any associated revenues, expenses and investment shall be accounted for "above the line" (meaning that it shall be included in the regulated cost of service calculation) for ratemaking purposes. Revenues shall include, but not be limited to; funds received for use of the propane cavern and associated equipment in any manner whatsoever and also all funds received from the sale of propane inventory. Such accounting treatment shall be without prejudice to the rights of any Party to assert in subsequent rate case proceedings whatever position they believe is appropriate regarding the proper regulatory treatment of propane

> related issues. As part of the settlement of this rate case proceeding, if Laclede seeks different regulatory treatment than as set forth above for Laclede's propane cavern and associated equipment, including all associated revenues, expense and investment prior to its next rate case it agrees to file a request before the MPSC for approval of its proposed treatment, provided that as part of its request for approval Laclede may also seek a Commission determination that its intended treatment may be implemented without further action by the Commission. At the time it makes its filing for different regulatory treatment, Laclede Gas Company will provide a study and all financial and operation justification for the determination and proposed change to the regulatory treatment compared to other alternatives it considered (e.g. reduction of other capacity and peaking supply contracts). Such study shall include related impacts on Laclede Gas Company's cost of service (including gas costs for its customers). All parties agree that this agreement does not have any precedential value in any current or future case or to any other instance where Laclede may seek to dispose of utility assets that it believes are no longer used and useful for the provision of utility service.

LAC has not proposed any below-the-line treatment regarding its propane cavern as part of the current rate proceeding. Staff has verified that the propane cavern and associated equipment are currently recorded above-the-line as of June 30, 2017. Staff will also confirm that this treatment has not changed through September 30, 2017, the true-up cutoff established by the Commission in this rate proceeding.

** **

Staff continues to maintain its long-standing position that the propane assets are valuable to LAC and are still very necessary to serve its customers. ** ______________________ ____________________________________ **, Staff recommends that the Commission mandate that LAC seek specific authorization from the Commission as delineated in the stipulation & agreement language referenced above from Case No. GR-2013-0171, regarding any new ratemaking treatment than what is currently authorized through either a separate case, or in direct testimony filed in the context of a future rate case. At the time it makes its filing for different regulatory treatment, Staff recommends LAC be ordered to provide a study and all financial and operational justification for the determination and proposed change to the regulatory treatment compared to other alternatives it considered (e.g. reduction of other capacity and peaking supply contracts). Such study as ordered by the Commission should include related impacts on LAC's cost of service (including gas costs for its customers).

This issue does not affect MGE as that division does not have propane facilities.

Staff Expert/Witness: Lisa M. Ferguson

D. Cash Working Capital (CWC)

Cash Working Capital (CWC) is the amount of funding necessary for a utility to pay day-to-day expenses incurred in providing the utility services to its customers. Cash inflows from payments received by the utility and cash outflows for expenses paid by the utility are analyzed using a lead/lag study.

When a utility expends funds in order to pay an expense necessary for the provision of service before its customers provide any corresponding payment, the utility's shareholders are the source of the revenue necessary to fund day-to-day operations. This shareholder funding represents a portion of the shareholders' total investment in the utility, for which the shareholders are compensated by the inclusion of these funds in rate base. By including these funds in rate base, the shareholders earn a return on the CWC-related funding they have provided.

Customers supply funds when they pay for utility services—in this case natural gas service—received before the utility pays expenses incurred in providing that service. Utility customers are compensated for the funds they provide by a reduction to the utility's rate base. By removing these funds from rate base, the utility earns no return on the funding that was supplied by customers.

A positive CWC requirement indicates that, in the aggregate, the shareholders provide the CWC for the test year. This means that, on average, the utility paid the expenses incurred to provide the electric services to its customers before those customers had to pay the utility for the provision of utility services. A negative CWC requirement indicates that, in the aggregate, the utility's customers provided the CWC for the test year. This means that, on average, the customers paid for the utility's natural gas services before the utility paid the expenses that the utility incurred to provide those services.

With the exception of gross receipts tax, LAC and MGE performed a lead-lag study specific to costs incurred during the 12-month test year ended December 31, 2016. For gross receipts tax, LAC and MGE utilized expense lags based on MGE's 2009 rate case, Case No. GR-2009-0355. Staff did not perform a complete CWC analysis in this case, and instead largely adopted the calculations made by LAC and MGE in this case and Staff's calculations in previous cases. However, upon review of the Company's CWC schedule and work papers, Staff determined that a current analysis was needed with respect to the Collection lag, the Pension Expense lag, the Gross Receipts Tax lag, the Income Tax lag, and the Use and Sales Tax lag.

As will be discussed below, the results of Staff's analysis resulted in a positive CWC requirement for LAC and MGE. This means that, in the aggregate, LAC and MGE's shareholders provided the CWC to the company during the test year. The components of Staff's CWC calculation found on Accounting Schedule 8 on the EMS run are as follows:

1) Column A (Account Description): lists the types of cash expenses that LAC and MGE pay on a day to day basis.

2) Column B (Test Year Expenses): provides the amount of annualized expense included in LAC and MGE's cost of service. Column B bases the dollars associated with those items on an adjusted jurisdictional basis in Column A.

3) Column C (Revenue Lag): indicates the number of days between the midpoint of the provision of service by LAC and MGE and the payment by the ratepayer for such service. Further explanation of the Revenue Lag can be found later in this section of the Report.

4) Column D (Expense Lag): indicates the number of days between the receipt of and payment for the goods and services (i.e., cash expenditures) used to provide the service to the ratepayer. Further explanation of the Expense Lag can be found later in this section of the Report.

5) Column E (Net Lag): results from the subtraction of the Expense Lag (Column D) from the Revenue Lag (Column C).

6) Column F (Factor): expresses the CWC lag in days as a fraction of the total days in the test year. This is accomplished by dividing the Net Lags in Column E by 365.

7) Column G is the CWC requirement needed for each expense listed. The amounts in this Column are calculated by multiplying the test year/annualized balances in Column B with the CWC Factor (Column F).

The result of Staff's CWC analysis is reflected on the Cash Working Capital Accounting Schedule 8. Staff's CWC analysis result is also reflected on the Rate Base Accounting Schedule 2 in the section entitled "Add to Net Plant In Service." Other aspects of Staff's CWC analysis and results are also listed in the Rate Base Schedule in the section entitled "Subtract From Net Plant" that includes the Federal Tax Offset, State Tax Offset, City Tax Offset and Interest Expense Offset.

The revenue lag is the amount of time between the day the company provides the utility service, and the day it receives payment from the ratepayers for that service. Staff's overall revenue lag in this case is the sum of three (3) subcomponents. They are as follows:

1) Usage Lag: The midpoint of average time elapsed from the beginning of the first day of a service period through the last day of that service period;

2) Billing Lag: The period of time between the last day of the service period and the day the bill for that service period is placed in the mail by the Company; and

3) Collection Lag: The period of time between the day the bill is placed in the mail by the Company and the day the Company receives payment from the ratepayer for the services provided.

Staff determined the usage lag by dividing the number of days in a typical year (365) by the number of months in a year (12) to yield the average number of days in a month (30.42). The 30.42 was then divided by two (2) to yield an average usage lag of 15.21 days. This further calculation of using two (2) as the divisor is necessary since the Company bills monthly and it is assumed that service is delivered to the customer evenly throughout the month.

The billing lag is the time it takes between when the Company reads the meter and when the bills are subsequently mailed to customers. Staff utilized LAC's and MGE's calculated billing lag of 2.17 days.

The collection lag is the average number of days that elapse between the day the bill is mailed and the day the Company receives payment for that bill. Staff determined the collection lag period by using an accounts receivable turnover analysis, which compares a thirteen (13) month average of LAC's and MGE's Account Receivable ending monthly balances for the test year period in this case (the twelve (12) months ending December 31, 2016) to the total sales recorded by the Company in the same time period. The result of this calculation is the average time that customer payments due to the utility are included in its accounts receivables balance, a duration that approximates the Company's collection lag. A utility's accounts receivable balance at any point will include some customer billings that will later be determined to be uncollectible, or "bad debt." The impact of bad debts on a utility are treated separately in rate cases as an annualized expense amount. For that reason, it is Staff's position that the bad debt included in these Accounts Receivable balances should not be included in the revenue lag analysis. Accordingly, Staff excluded a monthly average of bad debt, based on the test year period, embedded within LAC's and MGE's monthly accounts receivable balances that were later written off as uncollectible by the Company. After this adjustment for bad debts, Staff's calculated collection lag is 33.47days for LAC and 30.48 days for MGE.

Although Staff's collection lag was calculated using an accounts receivable turnover ratio, Staff prefers to use a random sample of customer bills to calculate the collection lag. Due to a change in Staff resources, the use of a random sample of customer bills to calculate the collection lag could not be completed.

Staff's revenue lag calculation is based on the time lapse between the point on average when a customer receives service from LAC and MGE and when LAC and MGE receive the customer payment for that service in the mail. Staff recommends a total revenue lag of 50.85 days for LAC and 47.86 days for MGE.

In this case, Staff has reviewed the expense lag calculations made by LAC and MGE and reviewed Staff's calculations in previous cases. The following CWC expense lags were accepted as reasonable: Cash Vouchers, Property Taxes, Payroll and Employee Withholdings, Gas Purchases, Employee FICA Taxes, and Interest Expense. Staff performed a lead/lag study on the expense lags for Property Tax, Federal and State Taxes, and Pensions. Staff made modifications to the Use and Sales Tax lag developed by LAC and MGE and used the expense lags developed in MGE's 2014 rate case for Gross Receipts Taxes and Vacation.

LAC and MGE pay gross receipts taxes (GRT, also commonly referred to as "franchise taxes") for the right to do business in the municipalities in which they operate. Gross receipts taxes are prepaid by customers to the utility, which then have the use of these funds for a period of time prior to paying these amounts to the municipal taxing authorities. This tax is listed on the ratepayer's billing statement as a separate line item. Gross receipts taxes are based on previous revenues on a semi-annual, quarterly, or a monthly basis. For example, GRT assessed on a semi-annual basis with the payment due on January 31, 2017, would be calculated based on the revenues collected from July 1, 2016, through December 31, 2016.

Since LAC and MGE remit the GRT to the taxing authority after they provide utility service and after they collect from their customers, these taxes are considered paid in arrears. LAC and MGE bill ratepayers for the collection of the GRT along with the billing for gas service and collect GRT from the customers at the same time as they collect for the provision of service. Customers are providing the cash for the GRT in advance, which allows LAC and MGE to use these funds for a significant period of time prior to making payment to the municipalities. As previously mentioned, LAC and MGE utilized the GRT expense lags from MGE's 2009 rate case. Staff performed a comprehensive lead-lag study that included gross receipts tax in MGE's rate case, Case No. GR-2014-0007. Consequently, in this case, Staff utilized the expense lag calculated in the 2014 rate case. Staff's recommended expense lag for LAC and MGE is 42.21 days and is reflected in the CWC schedule (Accounting Schedule 8).

LAC and MGE are required to collect taxes for municipalities in which they operate. These taxes include gross receipts tax, use tax, and sales tax, and are included as separate line items on the ratepayer's bill. However, when the funds are received, the Company remits payments to the taxing authority based on the arrangement established with the taxing authority. Since the Company collects the taxes for the taxing authority and a service is not provided to the ratepayer by the Company, measurement of the revenue and expense lags calculations start with the beginning point of the collection lag for these taxes. The collection lag was defined earlier in this report as the period of time between the day the bill is placed in the mail by the Company and the day the Company receives payment from the ratepayer for the services provided. As a result of using this methodology, the gross receipts tax, sales tax and use tax CWC line items have a shortened revenue and expense lag.

The expense lag for Federal and State Income taxes is the time elapsed between the midpoint of the period of the service and the date on which payments were made. The service period used by Staff is based on the LAC and MGE required quarterly payments. Staff recommends a 60.25 day expense lag for Federal and State Income taxes for LAC and MGE.

The expense lag for Property Taxes is the time elapsed between the midpoint of the period of the service and the date on which payments were made. Staff recommends a 182.50 day expense lag for Property Taxes for LAC and MGE.

The expense lag for Vacation is the time elapsed between the midpoint of the period of the service and the date on which payments were made. LAC and MGE employees are provided the amount of eligible vacation days on January 1 of each year and must use the vacation by December 31 of each year. Staff recommends a 182.50 day expense lag for Vacation for LAC and MGE.

LAC and MGE included an expense lag for the PSC Assessment. In addition, LAC and MGE included the PSC Assessment in prepayments. Prepayment balances and CWC, for LAC and MGE, are additions to rate base that allow LAC and MGE to earn a return on the balances. Staff included the PSC Assessment in prepayments consistent with LAC and MGE, but excluded the PSC Assessment from CWC.

The expense lag for Pensions is the time elapsed between the midpoint of the period of service and the date on which payments were made. Staff calculated the pension expense lag based on payments made by LAC and MGE during the test year. Staff recommends a pension lag of 84.95 days for LAC and MGE. MGE has not contributed to its pension fund for the period of 2015-2017 and does not anticipate making payments through the 2018 fiscal year. Since MGE has not incurred pension expense for several years and does not anticipate through fiscal year 2018, Staff excluded pension expense from MGE's CWC.

Staff is also in the process of evaluating Employee Benefit Expense lag. Staff has concerns with the expense lag calculated by LAC and MGE for employee benefits. Staff has requested additional data for these expenses and will address these expense lags in rebuttal testimony. For its direct filing, Staff included the expense lag used in MGE's last rate case, of 33.64 days

All of the Staff's expense lag calculations are measured to the point in which the Company makes payment for the goods and services received. LAC and MGE included a bank float for some of its expense lags. A bank float is defined as the time between when LAC and MGE pay for a cost and when the check clears the bank. Staff is opposed to efforts to incorporate "bank float" or similar electronic measurements of when funds are actually removed from the Company's bank accounts in expense lag calculations.

In conclusion, the results of the study performed by Staff resulted in a positive CWC requirement. This means that in the aggregate, the shareholders have provided the CWC to the Company during the year. Therefore, the shareholders should be compensated for the CWC that they provide, through an increase to rate base.

Staff Expert/Witness: Karen Lyons

E. Stored Gas Inventory

1. <u>Natural Gas and Propane Inventories</u>

Natural gas is purchased and injected into storage facilities during the summer months where it is held until the winter months when that gas is withdrawn and delivered to LAC's and MGE's distribution system for customer use. Propane gas is also purchased and stored to meet peak demand during the winter months. LAC owns propane facilities, but MGE does not.

LAC owns the Lange natural gas underground storage field located north of St. Louis. LAC generally fills this storage field in the summer and uses gas from this storage to serve its customers on cold days during the heating season. The storage field and natural gas in the storage field are LAC investments. The natural gas in the storage field is recorded in one of three accounts as required by the Federal Energy Regulatory Commission ("FERC") Uniform System of Accounts ("USOA"). The natural gas that is included in FERC account 164.10 Gas Stored - Current represents attainable natural gas that is used to meet seasonal demand increases.[31] Prior to this rate case, the balance in account 164.10 and 164.11 was addressed as part of the PGA/ACA process and therefore was not included in rate base. As part of this current rate case, Staff witness Dave M. Sommerer is recommending that both the current natural gas and propane inventories that were previously included in the PGA/ACA process now be

[31] Some of the gas in the storage field is unrecoverable. Attainable natural gas is that which is able to be recovered and used. It is also referred to as current gas.

included as part of rate base in the cost of service calculation, in addition to the natural gas recorded in FERC accounts 117.10 and 352.30, that are already recorded in rate base. The balance of inventory contained in FERC account 117.10 Gas Stored - base gas, also referred to as "cushion gas," represents the volume of gas that must remain in the storage facility to provide the required pressurization to extract the current gas from the storage facility. The balance reflected in FERC account 352.30 is non-recoverable natural gas that is permanently embedded in the storage field and may never be extracted.

LAC also injects and withdraws gas from the Mississippi River Transmission ("MRT") pipeline as a supplemental source of natural gas to the Lange storage field. This gas, along with the current stored gas discussed above, is now being included in LAC's rate base.

LAC also owns a cavern located adjacent to the Lange natural gas underground storage field that contains propane inventories previously included as part of LAC's PGA/ACA. Similar to the current natural gas inventories discussed above, Staff recommends that propane inventory should also be included in rate base.

MGE has firm capacity[32] for access to natural gas storage on the Southern Star Central Gas Pipeline and the Panhandle Eastern Pipeline.

For both LAC and MGE, Staff has reviewed all gas inventories for the period of January 2013 through June 30, 2017, and has included a 13-month average ending June 30, 2017, as the proper amount of natural gas inventory to include in rate base.

For LAC only, Staff has reviewed all propane inventories for the period of January 2013 through June 30, 2017, and has included a 13-month average ending June 30, 2017, as the proper amount of propane inventory to include in rate base.

These amounts are included in rate base in order to give LAC and MGE the opportunity to earn a return on its investment for these inventories until those assets have been used. Staff will continue to review the natural gas and propane inventory levels through the true-up date in this case.

Staff Expert/Witness: Lisa M. Ferguson

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[32] Firm capacity is the amount of gas available for production or transmission which can be, and in many cases must be, guaranteed to be available at a given time.

2. LAC Storage Field

Staff is including a 13 month average level of natural gas and propane inventories in rate base for both MGE and LAC. MGE has traditionally included natural gas inventory in its rate base and so rate base treatment should not be considered a change in ratemaking treatment. The rationale for including inventory in rate base is that natural gas (or propane) must be injected into storage fields (or caverns in the case of propane) prior to withdrawal. Local Distribution Companies ("LDCs") must therefore finance the cost of the inventory until the inventory is withdrawn from storage. The inclusion of gas inventories in rate base is a method of addressing the inventory carrying costs associated with paying for the gas or propane prior to its use and related revenue recovery by giving the LDC the opportunity to earn a return on its investment until these inventories are used.

Based upon a review of LAC's tariffs, LAC has been authorized to recover gas inventory carrying costs as part of its PGA since October 1, 2005. The tariff that describes the PGA treatment is Sheet No. 28-h, and became effective in LAC Case No. GR-2005-0284. The original inclusion of inventory carrying costs in LAC's PGA tariffs was part of a Stipulation and Agreement, and therefore was not a litigated issue. In subsequent LAC rate cases, the Gas Inventory Carrying Cost Recovery ("GICCR") tariff remained, and therefore "current" gas inventories were not included in LAC's rate base as they had been prior to 2005. It should be noted that gas inventories associated with cushion gas[33] continued to receive rate base treatment even after the institution of the GICCR in 2005.

Staff is proposing to revert to the ratemaking treatment used for LAC prior to 2005 and therefore include gas and propane inventories in rate base. This has the beneficial effect of having consistent ratemaking treatment between the two divisions of LAC and MGE. It further has benefits of reducing complexity resulting from the review of the separate GICCR mechanism in the annual Actual Cost Adjustment ("ACA") reviews. Staff has also had a long-standing position that only clear and identifiable "actual gas costs" should be subject to PGA recovery.

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[33] **Base gas (or cushion gas)** is the volume of natural gas intended as permanent inventory in a storage reservoir to maintain adequate pressure and deliverability rates throughout the withdrawal season. (Energy Information Administration, *The Basics of Underground Natural Gas Storage*).

In addition, all other Missouri LDCs have used the “rate base” approach to recover carrying costs associated with gas inventory in their Missouri jurisdictions.

Staff Expert/Witness: David M. Sommerer

F. Prepayments; Materials and Supplies

1. <u>Prepayments</u>

Prepayments are the costs a company incurs and pays in advance for various items needed to operate the utility system. Staff’s recommended treatment of prepayments is to examine each prepayment account individually in order to determine an appropriate measure that most accurately reflects the ongoing future investment costs of a particular account, and then include that amount in LAC’s and MGE’s rate bases. LAC and MGE have utilized their own funds for prepaid items such as insurance premiums and rents. Staff examined LAC’s and MGE’s prepayment account balances on a month-by-month basis. Based on this review and the variability in the monthly account balances, Staff determined the prepayment levels to include in LAC’s and MGE’s rate bases (Rate Base, Accounting Schedule 2) by calculating the 13-month average ending June 30, 2017, the update period. A 13-month average of month-ending balances is used to capture the beginning balance and ending balance of the 12-month period ending June 30, 2017. Staff recommends this approach because there was no discernible upward or downward trend in the monthly balances.

Staff Expert/Witness: Wayne Hodges

2. <u>Materials and Supplies</u>

Materials and supplies consist of natural gas piping, connections for service, main repairs, gas regulators, and spare parts necessary to operate the local distribution natural gas system. Staff’s recommended treatment of materials and supplies is to examine each account individually in order to determine an appropriate measure that most accurately reflects the ongoing future investment costs of a particular account, and that should be included in LAC’s and MGE’s rate base. Staff reviewed the monthly balances for materials and supplies over the last several years and, because the monthly account balances fluctuated with no distinguishable trend, Staff determined that a 13-month average as of June 30, 2017, was appropriate for materials and supplies. Materials and supplies are included in the LAC and MGE rate base (Accounting Schedule 2).

Staff Expert/Witness: Wayne Hodges

G. Pensions Asset Liability

1. <u>Pension Expense</u>

Staff recommends that the ratemaking methodology for LAC's and MGE's pension expense continue in a manner similar to that agreed to in the Stipulation and Agreement (the "MGE Stipulation") from MGE's most recent rate case, Case No. GR-2014-0007. In that case, MGE and Staff agreed to several ratemaking methodologies governing the recognition of pension expense in MGE's cost of service. In LAC's most recent rate case, Case No. GR-2013-0171, a Stipulation and Agreement ("LAC Stipulation") was filed, outlining a ratemaking methodology similar to the MGE Stipulation.

For ratemaking purposes, a tracker mechanism is a unique regulatory tool used to ensure that rate recovery over time is made equal to the actual expenditures for a particular cost of service item. A tracker mechanism compares the ongoing amount of a cash expense actually incurred by a utility to the amount of the same expense reflected in the utility's rates, and provides rate recovery over time of the difference between the two totals. Generally, tracker mechanisms should only be used for certain cost items incurred by utilities that show unusual characteristics or are incurred under extraordinary circumstances. Trackers are used for pensions and other post-employment benefits ("OPEBS") as an exception to the normal ratemaking adjustments because of the significant possible cash flow implications to utilities if their pension funding requirements are materially different from their pension expense recovery levels in rates. Additionally, LAC and MGE are required to fund pensions at a certain level under the Employment Income Security Act ("ERISA") of 1974 and the Pension Protection Act ("PPA") of 2006. Ongoing tracker mechanisms capture both under and over recovery of an expense for recovery from or return to ratepayers.

The overall goal of a tracker mechanism, when properly exercised, is to provide the utility with dollar for dollar recovery of reasonable and prudently incurred cash expenses, but no more and no less than dollar for dollar recovery. For ratemaking purposes, Staff tracks the difference between cash paid for pension contributions and cash received from customers through rates. However, Spire reports pension expense under the Accounting Standard Codification 715, which has historically been referred to as FAS 87 and FAS 88. The FASB issued FAS 87 to give publicly traded companies guidance on accounting for pension expense and to increase comparability between companies' reported costs. The pension expense reported by companies under the FAS 87 guidance is based on the estimated pension obligation a company incurs during the service of its employees. Furthermore, the FAS 87 expense calculation is not directly affected by the company's cash flow. Since the FAS 87 expense calculated by LAC's actuary, Towers Watson, does not capture the cash flow implications, FAS 87 expense is not an appropriate methodology for ratemaking purposes.

Prepaid Pension Asset/Liability

On page seven of the MGE Stipulation from the last rate case, the pension expense tracking mechanism is described as follows:

> MGE shall continue to be authorized to record as a regulatory asset/liability, as appropriate, the difference between the pension costs used in setting rates, Nine Million, Nine Hundred Twenty Thousand, Seven Hundred Twenty Dollars ($9,920,720), before transfers, and the actual contributions to the pension trusts, and such difference shall be recovered from or returned to customer in future rates. The difference between the amount of pension costs included in MGE's rates and the amount funded by MGE shall be included in the Company's rate base in future rate proceedings either as a regulatory asset (increasing rate base) or liability (decreasing rate base).

Since May 1, 2014, the effective date of rates in MGE's 2014 Rate Case and the June 30, 2017, cut-off date in this case, MGE's accumulated pension asset/liability has had the following results:

Time Period	MGE Cash Contributions	Amount in Rates	Difference
	A	B	(A-B)
May 1, 2014 – December 31, 2014	2,600,000	6,613,813	(4,013,813)
January 1, 2015 – December 31, 2015	0	9,920,720	(9,920,720)
January 1, 2016 – December 31, 2016	0	9,920,720	(9,920,720)
January 1, 2017 – June 30, 2017	0	4,960,360	(4,960,360)
Balance at June 30, 2017	$2,600,000	$31,415,613	$(28,815,613)

In addition to the regulatory liability created by the difference between cash expenditures and rate recovery (above), the MGE Stipulation identifies legacy regulatory liabilities (along with specific ratemaking treatment) that still exist as of the June 30, 2017, cut-off date in this case. Staff has accumulated MGE's legacy pension liabilities and the current pension liability into one balance, and offset the total liability by MGE's responsibility of LAC's shared services employee's pensions. This application of shared services cost is described later in this section.

In the LAC Stipulation from its 2013 Rate Case, the pension expense tracking mechanism is described slightly differently from MGE's tracking mechanism. Page 5 of the LAC Stipulation states:

> Laclede shall continue to be authorized to record as a regulatory asset/liability, as appropriate, **the difference between the pension expense used in setting rates ($15,500,000) and the pension expense as recorded for financial reporting purposes** as determined in accordance with GAAP pursuant to Accounting Standards Codification (ASC) 715 (previously FAS 87 and FAS 88, or such standard as the FASB may issue to supersede, amend, or interpret the existing standards), and such difference shall be recovered from or returned to customer in future rates. **The difference between the amount of pension expense included in Laclede's rates and the amount funded by Laclede in accordance with the ERISA minimums** shall be included in the Company's rate base in future rate proceedings. (emphasis added)

Unlike the language in the MGE Stipulation, which tracks the difference between cash expenditures and recovery through rates, the LAC Stipulation language identifies two distinct differences to be tracked. The first tracked amount is the difference between the $15,500,000 annual revenue collected in rates and the GAAP FAS 87 expense recorded on the books of LAC. The second tracked amount is the difference between the $15,500,000 annual revenue collected in rates and LAC's actual cash contributions to its pension fund. However, the language in both Stipulations result in the same asset calculation, which can be simplified to the difference between cash used to fund the pension assets and the amount of pension expense collected in rates.

While the LAC Stipulation identifies the cost to be tracked for deferral, the document does not identify a beginning balance of deferred pension cost. Furthermore, in LAC's 2013 Rate Case, Staff and other intervening parties did not file a direct case. Since an agreed-upon beginning balance is not obtainable in the available documents under Case No. GR-2013-0171, Staff obtained the deferred pension asset from Staff's accounting schedules filed in its direct case in LAC's 2010 rate case, Case No. GR-2010-0171. Using this information, Staff was able to verify the balance found in the accounting schedules by reviewing Staff's 2010 pension workpapers.

Staff did not begin with the deferred asset on LAC's books because the booked prepaid pension asset represents the accumulated difference between FAS 87 and FAS 88 pension cost and cash contributions to the pension fund since 1987, when LAC adopted FAS 87 for financial reporting purposes. However, FAS 87 was not used for regulatory purposes for LAC prior to the effective date of rates in Case No. GR-94-220, which was September 1, 1994. The prepaid pension asset included in rate base should include only the accumulated cash flow difference between FAS 87 pension cost included in rates and the cash contributions to the pension fund since September 1, 1994.

LAC's booked prepaid pension asset also includes FAS 88 gains recognized from September 1, 1994, through September 1, 1996. Prior to September 1, 1996, which was the effective date of rates resulting from Case No. GR-96-193, FAS 88 was not included in LAC's cost of service in a rate case. Therefore, the prepaid pension asset balance should exclude the impact of all FAS 88 gains recognized from September 1, 1994, to September 1, 1996. Staff recommends that LAC reclassify the prepaid pension asset amounts related to these time periods to a non-regulatory asset account so that the book asset amounts represent the accumulation of cash flow differences as represented in prior rate cases.

After obtaining the March 31, 2010, beginning balance of LAC's deferred pension asset, Staff applied the tracking mechanism results from the Stipulation and Agreements approved in both of the 2010 and 2013 rate cases. Since March 31, 2010, the accumulated pension asset has had the following activity:

continued on next page

Time Period	LAC Cash Contributions	Amount in Rates	Difference
	A	B	(A-B)
Beginning Balance @ March 31, 2010			94,337,207
April 1, 2010 – September 30, 2010	0	3,300,519	(3,300,519)
October 1, 2010 – September 30, 2011	16,815,000	15,500,000	1,315,000
October 1, 2011 – September 30, 2012	33,310,000	15,500,000	17,810,000
October 1, 2012 – September 30, 2013	23,400,000	15,500,000	7,900,000
October 1, 2013 – September 30, 2014	16,165,000	15,500,000	665,000
October 1, 2014 – September 30, 2015	27,450,000	15,500,000	11,950,000
October 1, 2015 – September 30, 2016	26,020,000	15,500,000	10,520,000
October 1, 2016 – June 30, 2017	22,500,000	11,625,000	10,875,000
Unadjusted Balance at June 30, 2017	$165,660,000	$107,925,519	$146,381,925
Less: Asset Balance @ August 31, 1994			(19,826,863)
Less: FAS 88 from 9/1/94 – 8/31/96			(8,961,548)
Balance at June 30, 2017			**$117,593,514**

Staff calculated the accumulated pension costs through June 30, 2017, and offset LAC's regulatory asset by MGE's portion of the shared services employee cost. Currently, there are several hundred employees that are identifiable with Spire's shared services department. These employees perform duties that aren't directly assignable to a particular portion of Spire's business activities, and the associated costs must be allocated to the various business units. Some examples of the duties performed by shared services employees are human resources, accounting, engineering, finance, etc. Staff witness Keith Majors examined the allocation method of shared services costs, and found that the shared services costs incurred by LAC employees are allocated to Spire's other business units. Accordingly, Staff allocated a portion of

LAC's pension asset from LAC to MGE beginning on September 1, 2014, the date of LAC's acquisition of MGE.

After the recognition of the effect of shared services employees on LAC's pension asset and MGE's pension liability, Staff amortized the June 30, 2017, balances over eight years. LAC's pension asset and MGE's pension liability are reflected in Staff Accounting Schedules 2, Rate Base, for LAC and MGE. The amortization of the asset and liability are reflected in Staff Accounting Schedules 9 in adjustment E-91.6 (LAC) and E-63.3 (MGE).

Current Pension Expense

To reflect an ongoing level of pension costs, Staff included $0 in MGE's cost of service and $29 million in LAC's cost of service. Staff annualized pension expense based on the most recent actuarial estimate of required pension fund contributions for the next fiscal year, 2018. LAC's actuary, Towers Watson, calculated an estimate of the required contributions for all of Spire's subsidiaries based on the funded status of each subsidiary's pension trust funds. At this time, the trust fund for MGE contains sufficient assets to provide for MGE's pension liability, which leads to an estimated future funding of $0. On the other hand, the level of assets in LAC's trust fund requires $29 million during the next fiscal year to meet LAC's current pension obligation. In this case, Staff recommends that LAC and MGE contribute to their respective pension trusts as required under minimum ERISA funding or other minimum statutory funding. Staff supports tracking the difference of these future contributions and the amount recovered in rates for future recovery from, or to return to, ratepayers.

Staff Expert/Witness: Matthew R. Young

H. Other Post-Employment Benefits ("OPEBS")

Other Post Employment Benefit Costs ("OPEBS" or "postretirement benefits") are costs LAC and MGE incur to provide certain benefits to retired employees. The primary benefit is medical insurance, but these costs also include life, dental, and vision insurance benefits. Historically, OPEBs have been actuarially calculated under the terms of Financial Account Standard 106 ("FAS 106").

FAS 106 is the FASB approved accrual accounting method used for financial statement recognition of the annual amount of OPEBs. The accounting of the cost of postretirement benefits is not based on the actual dollars LAC and MGE pay for OPEBs to its retirees currently. Instead, under FAS 106, this measurement is accrual-based, in that it attempts to recognize the financial effects of noncash transactions and events affecting future OPEBS obligations as they occur. These noncash transactions and events are primarily current benefits earned by employees before retirement, but not paid until after retirement, as well as the interest cost arising from the passage of time until those benefits are paid. Staff's OPEB adjustment to Account 926, Employee Benefits, annualizes the level of LAC's and MGE's forecasted cash contributions, determined by actuary, for fiscal year 2018.

The Stipulation and Agreements in LAC's prior rate case, Case No. GR-2013-0171, and MGE's prior rate case, Case No. GR-2014-0007, describe the continuing use of trackers for OPEBs. The amounts tracked are the differences between the current ongoing level of cash contributions made to fund the OPEB trust accounts and the dollar amount of OPEB expense reflected in rates between each case. Staff calculated the accumulated OPEB costs through June 30, 2017, including the recognition of MGE's net responsibility for OPEB costs related to LAC's shared services employees.

Currently, there are several hundred employees that are identifiable with Spire's shared services department. These employees perform duties that aren't directly assignable to a particular portion of Spire's business activities, and the associated costs must be allocated to the various business units. Some examples of the duties performed by shared services employees are human resources, accounting, engineering, finance, etc. Staff witness Keith Majors examined the allocation method of shared services costs, and found that the shared services costs incurred by LAC employees are allocated to Spire's other business units. Accordingly, Staff allocated a portion of LAC's OPEB asset from LAC to MGE beginning on September 1, 2014, the date of LAC's acquisition of MGE.

After the recognition of the effect of shared services employees on LAC's and MGE's OPEB assets, Staff amortized the June 30, 2017, OPEB asset balances over eight years. As with other rate base items, the unamortized balance of these trackers will be updated through the September 30, 2017, true-up period. Ongoing OPEB expense and the rate base portion of the OPEB trackers mechanisms are included in Staff's Accounting Schedule 2 – Rate Base and Accounting Schedule 9, Adjustment E-91.7 (LAC) and E-63.4 (MGE).

Staff Expert/Witness: Matthew R. Young

I. Customer Deposits and Interest

Customer deposits represent funds received from a utility company's customers as security against potential loss arising from failure to pay for utility service.[34] These deposits are available to the utility for general use. Staff's recommended treatment of customer deposits is to deduct the most current customer deposit balance from LAC's and MGE's rate bases. Since the deposits are supplied by the customers, a representative level is included as an offset to the rate base investment in order to ensure that the utility does not earn a return on the value of these deposits. In addition, since these funds were provided by the ratepayers and not the shareholders, the ratepayers should be allowed to earn a reasonable return on these funds.

For MGE, Staff identified a distinguishable downward trend, and therefore, used the ending balance for customer deposits as of June 30, 2017, (the update period) which is shown on Staff's Accounting Schedule 2, Rate Base. Staff also reviewed monthly balances for customer deposits for LAC, and because the monthly account balances fluctuated with no distinguishable trend, Staff determined that a 13-month average as of June 30, 2017, was appropriate (also shown on Staff's Accounting Schedule 2).

Interest is accrued on these customer deposits based on the rate specified in LAC's and MGE's tariffs. These rates are the federal prime interest rate of 4.25 percent[35] plus 100 basis points for residential customers and a rate of 3.0 percent for MGE's commercial and industrial customers. When a customer becomes eligible for a return of his or her deposit, the amount refunded includes the accumulated interest. The annual accrual of interest on customer deposits is included in the cost of service as an expense. The amount of interest calculated on customer deposits is reflected on Staff Accounting Schedule 10 as Adjustment E-74.1 for LAC and E-85.1 for MGE.

Staff Expert/Witness: Wayne Hodges

J. Customer Advances

Customer advances are funds provided by individual customers of the utility to assist in the costs of the provision of gas service to those customers. Like customer deposits, customer advances are available to the utility for general use. Staff's recommended treatment of customer

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[34] Conditions are outlined in Tariff YG-2014-0056, pages R-12 to R-17.

[35] http://www.wsj.com/mdc/public/page/2_3020-moneyrate.html.

advances is to deduct the most current customer advance balance from LAC's and MGE's rate base. Since the advances obtained are essentially interest-free to the utility, a representative level is included as an offset to the rate base investment in order to ensure that the utility does not earn a return on the value of the level of advances.

Because customers that pay an advance are unlikely to receive a refund of any portion of the customer advance, no interest is paid to those customers for the use of their money, unlike the interest paid on customer deposits. For MGE, Staff identified a distinguishable downward trend; therefore, Staff used the ending balance for customer advances as of June 30, 2017, (the update period) which is shown on Staff's Accounting Schedule 2, Rate Base. Staff also reviewed monthly balances for customer advances for LAC, and because the monthly account balances fluctuated with no distinguishable trend, Staff determined that a 13-month average as of June 30, 2017, was appropriate (also shown on Staff's Accounting Schedule 2).

Staff Expert/Witness: Wayne Hodges

K. Accumulated Deferred Income Taxes (ADIT)

LAC's and MGE's deferred tax reserve represents, in effect, a net prepayment of income taxes by each company's customers in rates prior to actual payment to the taxing authorities by LAC and MGE. For example, because LAC and MGE are allowed to deduct depreciation expense on an accelerated basis for income tax purposes, depreciation expense used for income taxes paid by LAC and MGE is considerably higher than depreciation expense used for rate making purposes. This results in what is referred to as a "book-tax timing difference," and creates a deferral of income taxes to the future. The net credit balance in the deferred tax reserve represents a source of cost-free funds. Therefore, LAC's and MGE's rate bases are reduced by the deferred tax reserve balance to avoid having customers pay a return on funds that are provided cost-free to each company. Since the expense recognized for depreciation is considerably lower for accounting and ratemaking purposes than for income tax purposes, LAC and MGE customers are required to pay higher costs for income taxes in rates than each division will actually pay to the IRS. The difference in income tax paid to the IRS and those paid in utility rates are "accumulated" to recognize the future tax liability that will eventually be paid to the IRS. Because LAC and MGE have retained these tax deferrals they will be used as an offset to rate base. Staff has included a balance of accumulated deferred taxes for LAC and MGE, respectively, through June 30, 2017. All ADIT amounts will be updated in the true-up at September 30, 2017.

Staff Expert/Witness: Lisa M. Ferguson

L. Rate Base Offset GM-2013-0254 – MGE's ADIT

Per the Stipulation and Agreement approved by the Commission authorizing Laclede Gas Company to purchase MGE in Case No. GM-2013-0254, MGE is required to recognize a rate base offset of $125 million:

> Laclede Gas shall include a rate base offset for its MGE Division in the amount of $125 million. Laclede Gas' MGE Division shall amortize this rate base offset over a period of ten years commencing on the effective date of close. For clarification, the outstanding balance of such rate base offset shall serve to reduce rate base for rate making purposes in the context of all future rate proceedings during the amortization period, which will effectively prevent customers from paying a return on such rate base offset. This shall result in lower rates and charges in future periods.

Spire Missouri, then known as Laclede Gas Company, at that time included a rate base offset for its MGE Division in the amount of $125 million as of the effective date of rates in Case No. GR-2014-0007. MGE began amortizing this rate base offset over a period of ten years commencing on the effective date of close of the sale of MGE to Spire Missouri, then known as Laclede Gas Company. Staff has included the unamortized portion of the rate base offset at June 30, 2017, for the direct filing as a reduction to rate base. This balance will be updated as of September 30, 2017, for true-up purposes.

Staff Expert/Witness: Lisa M. Ferguson

M. Insulation Financing and Energy Wise Loan Balances

LAC offers an Insulation Financing Program that permits qualifying residential customers to borrow funds for the purpose of insulating their homes and adding storm windows and storm doors.

In addition, LAC offers the EnergyWise program, which is similar to the insulation financing program except that its focus is offering financing for high-efficiency natural gas furnaces, high-efficiency gas air conditioners, and certain energy efficient appliances. This program is available to credit-qualified residential and commercial customers.

These programs are currently only applicable to LAC; however as part of this rate case, LAC is proposing to establish a new tariff in order to expand these programs to include the MGE service territory. Due to a definitive downward trend in the loan balances of both programs, Staff has included the loan balances at June 30, 2017, as an appropriate level to be included in LAC's rate base. Staff will continue to analyze data associated with these programs and will update the loan balances at September 30, 2017, for true-up. If the Commission orders LAC and MGE to expand these programs to the MGE service territory as part of this rate case, Staff will review data based on actual use of the programs for LAC and will calculate any loan balances established in the MGE division in LAC's next rate case, when actual data is available.

Staff Expert/Witness: Lisa M. Ferguson

IX. Synergies/Allocations

A. Synergies

Laclede acquired MGE effective September 1, 2013, pursuant to the Stipulation and Agreement ("Stipulation") in Case No. GM-2013-0254, dated July 2, 2013, and approved by the Commission effective July 31, 2013. In the Stipulation, Staff and Laclede agreed that MGE and Laclede could amortize in rates one-half of their incurred "transition costs" upon a showing that synergies related to the MGE-Laclede transaction exceeded the amortized level of transition costs.

"Synergies" are cost savings that would not occur but for a specific event, in this case the MGE-Laclede transaction. Examples include employee reductions, fleet reductions, bulk purchase discounts, and insurance savings. Staff's analysis involved analyzing the synergy documentation provided by LAC and MGE.

LAC and MGE maintained an internally designed and maintained synergy tracking model that LAC and MGE offer to prove synergies, identified as the "Post Close Tracking Model". This model was designed to report labor and non-labor savings identified by capital and non-capital amounts. This model is the source of the synergies listed in the monthly reports pursuant to Case No. GM-2013-0254, and was provided in response to Staff Data Request No. 0070. LAC and MGE provided their model, which is a spreadsheet with six tabs, as a result of Staff's request for the model, along with all supporting documentation. LAC and MGE created separate "Business Cases" to identify estimates of synergy savings. The model identified synergy savings estimates by Labor Savings, Non-Labor Savings, split between Operations and Maintenance ("O&M") and Capital spend. LAC and MGE's model and supporting information does not contain calculations of the amounts reported, nor does it list synergy savings by FERC Account. LAC's model does not identify or provide the actual labor (salary and wage) savings; it uses an average salary and wage amount.

The following table summarizes LAC and MGE's claimed synergies from its model:

LAC and MGE Claimed Labor and Non-Labor Synergies

Year	Fiscal Year Time Period	Non-Labor	Labor	Total
FY2014	Oct 2013- Sept 2014	** ________	________	________ **
FY2015	Oct 2014- Sept 2015	** _____	_____	_____ **
FY2016	Oct 2015- Sept 2016	** _____	_____	_____ **
FY2017	Oct 2016- 2017 to Date	** _____	_____	_____ **
	Totals	** ________	________	________ **

"Net synergies," a term utilized to validate the amortization of transition costs, is specifically defined in Attachment 1 to the Stipulation:

> As used herein, Net Synergies means the level of ongoing cost reductions reflected in the test year or update period in the rate case in which transition costs are sought to be recovered resulting from the merger or integration of the LGC and MGE operations based on a comparison of actual pre-merger/pre-integration costs of the two companies' operations versus costs of the combined operations during the test year or update period in the rate case in which transition costs are sought to be recovered. It is expressly understood that any party shall be able to challenge Laclede Gas' representation of eligible transition costs and eligible savings.

On page 10 of the Stipulation, the following clause was agreed upon in regard to the recording of synergies:

> Laclede Gas shall provide in any rate case a listing of all the annual cost reductions by FERC divisional accounts related to the synergies that the Company alleges justified the deferred transition costs.

Staff specifically requested this information in Data Request No. 0070.4, issued on July 6th:

> **Question:**
>
> Description: With respect to the Stipulation and Agreement in Case No. GM-2013-0254, under section II Conditions, 3. Premium and Acquisition Costs, (3) One-Time Non-Capital Transition Costs (found at page 10 of 43) wherein it is stated "Laclede Gas shall provide in any rate case a listing of all the annual cost reductions by FERC divisional accounts related to the synergies that the Company alleges justified the deferred transition costs",
>
> 1. Please provide the complete "…listing of all the annual cost reductions by FERC divisional accounts related to the synergies…" generated from the acquisition of Missouri Gas Energy for each year since this purchase.
>
> 2. Identify and describe with full detailed explanation all the related synergies that came about as the result of the acquisition of Missouri Gas Energy in 2013.
>
> 3. The Stipulation and Agreement in Case No. GM-2013-0254 further states at page 10, that "Laclede Gas will develop and maintain documentation supporting the cost reductions and transition costs information required to justify recovery of eligible transition costs consistent with the provisions of agreement."
>
> a). Provide all supporting documentation for 1 and 2 above to meet the requirements of the Stipulation and Agreement at page 10 in Case No. GM-2013-0254.
>
> b). If Laclede Gas Company did not "…develop and maintain documentation supporting the cost reductions and transition costs information required to justify recovery of eligible transition costs consistent with the provisions of agreement", please provide full and complete detailed explanation why this documentation was not "…develop[ed] and maintain[ed]…"

LAC and MGE objected to this data request on July 17th, on the grounds that this data request was "burdensome and oppressive", but ultimately responded to Staff's data request on July 27th:

Response:

1. Please see the attached for the primary FERC accounts by business case. Due to the nature of synergies and accounting / department changes, accounts will, by nature, vary.
2. Please see DR 70 supplement for the Detailed Synergy Tracking Model
3. Please see the response to parts 1 and 2.
4. N/A

Signed by: Glenn Buck

The document attached to the response listed a "Primary Account" for each Business Case. The document did not list the actual savings by FERC Account. In summary, because the documentation subsequently provided was vague and undetailed and did not include the information by FERC account, as required by the Merger Stipulation, Staff was forced to rely on other documentation.

Staff evaluated the documentation LAC and MGE provided to Staff concerning claimed synergies. In an attempt to validate the "Labor" claimed synergies, Staff requested the specific employee terminations by date with wage, salary, and benefit data in Staff Data Request No. 0040. Specifically, Staff requested the following:

> 3. For each period above by month, identify each Laclede Gas and Missouri Gas Energy employee that was eliminated and related salary/ wages and benefits for each eliminated position resulting from the acquisition of MGE by Laclede Group on a monthly basis and provide on a monthly basis thereafter to current as each month becomes available.

In response to this data request, LAC directed Staff to the "personnel section of the monthly reports submitted to Staff pursuant to the stipulation in Case No. GM-2013-0254". Staff has received monthly reports pursuant to the Stipulation in GM-2013-0254, that list the employees that were terminated as a result of the MGE acquisition. The reports to Staff do not list the annual salary and wage of these individuals. Consequently, Staff cannot independently validate the labor savings at this time. At the time of this filing, Staff does not have the necessary information to adequately quantify the labor synergy savings claims. On September 6, 2017, Staff received a supplemental response to Staff Data Request No. 0040. Staff will review this information to determine if it is responsive and if it provides the necessary information to determine if the labor synergies claimed by LAC and MGE are accurate.

The limited documentation supporting synergy savings provided to Staff did not sufficiently identify the link between the cost savings and the acquisition of MGE for a few of the categories of claimed by LAC and MGE. These are the specific savings that Staff identified as unrelated to the acquisition, based on the information provided in response to Staff Data Request No. 0070.1:

Business Case ID	**Business Case Title**	**Total Savings to Date**
CORP02	Custodial	** _____ **
CORP03	Security Plans	** _____ **
CS003	Process	** _____ **
CS005	Field Collection Outsourcing	** _____ **
GS006	I&C Synergies	** _____ **
OSS-2	Transportation Re-ORG	** _____ **
SLS - 001	Sales Uplift	** _____ **
SLS-005	Medium Term Growth Opportunities	** _____ **
OPF-C6 (Add)	Additional FY15 O&M Savings	** _____ **
SLS-004	Sales Expansion Through Main Extension	** _____ **
CS02	MoNat Business Office Closings	** _____ **
Total		** __________ **

CORP02 – Custodial – This claimed synergy includes outsourcing custodial services at 3 district offices, including services for cleaning, grass cutting, and snow removal.

CORP03 – Security Plan – This claimed synergy includes cancelling weekday patrols, implementing a new camera system, and eliminating Forest Park camera monitoring.

CS003 – Process – This claimed synergy includes the outsourcing of the MGE call center and the elimination of miscellaneous call center expenses.

CS005 – Field Collection Outsourcing – This claimed synergy includes outsourcing of gas utility collections.

GS006 – I&C Synergies – This claimed synergy includes Laclede adopting MGE's practice of home-basing I&C technicians.

OSS-2 – Transportation Re-ORG – This claimed synergy includes outsourcing of maintenance on Laclede automobiles and light trucks, installing GPS to remaining Laclede and Missouri Natural Division ("MoNat") vehicles, and outsourcing DOT inspections.

SLS-001 – Sales Uplift – This claimed synergy includes the claim of greater short-term opportunities in residential and commercial markets as a result of the MGE acquisition.

SLS-005 – Medium Term Growth Opportunities – This claimed synergy includes the claim of a greater portfolio of medium-term initiatives for customer growth as a result of the MGE acquisition.

OPF-C6 (Add) – Additional FY15 O&M Savings – This claimed synergy relates to process enhancements to the Maximo asset management system to increase functionality.

SLS-004 – Sales Expansion Through Main Extension.

CS02 – MoNat Business Office Closings – This claimed synergy relates to activities formerly performed at the MoNat business offices that were absorbed by shared service functions.

Staff Expert/Witness: Keith Majors

B. Transition Costs

Transition costs are costs incurred in order to achieve synergy savings as a result of a merger/acquisition transaction. Transition costs are incremental "costs to achieve" and include consulting fees, information-technology integration fees, and other various incremental expenses incurred to integrate the operations of LAC and MGE. MGE and LAC are authorized to amortize one-half (½) of their transition costs, approximately $8 million, over five years upon a showing that synergy savings exceed the level of amortized transition costs. MGE and LAC purport to have met this test, and have included an amortization of these costs in the cost of service.

The specific language governing transition costs can be found on pages 9-10 of the Stipulation and Agreement in Case No. GM-2013-0254:

> c. Transition Costs. Transition Costs are those costs incurred to integrate and merge the two entities into one organization, and includes integration planning and execution, and "costs to achieve." Transition costs include capital and non-capital costs. Non-capital transition costs can be ongoing costs or one-time costs. See Attachment 1.
>
> (1) Capital Transition Costs. All one-time capital-related transition costs shall be amortized over a period consistent with their current Commission authorized depreciation rate.
>
> (2) On-going Non-Capital Transition Costs. Such transition costs shall be expensed on Laclede Gas' books as incurred. However, in no event shall any amount of markup for transition services that are provided by SUG above actual cost be included in the determination of future rates for Laclede Gas.
>
> (3) One-Time Non-Capital Transition Costs. The Signatories agree that one half of one-time non-capital transition costs incurred no later than the first five years after closing, as described in Attachment 1, shall be amortized over a period of five years beginning upon the effective date of the rates resulting from the next rate case filed by the Laclede and MGE Divisions on or after October 1, 2015. Laclede Gas shall provide in any rate case a listing of all the annual cost reductions by FERC divisional accounts related to the synergies that the Company alleges justified the deferred transition costs. Laclede Gas shall not include in customer rates any amount of transition costs that exceed the level of cost reductions actually experienced by the Company. Laclede Gas will develop and maintain documentation supporting the cost reductions and transition costs information required to justify recovery of eligible transition costs consistent with the provisions of this agreement. Any party shall be free to challenge Laclede

Gas' representation of eligible transition costs and offsetting savings. Laclede Gas shall record and separately identify all one-time transition costs by month, by FERC account and provide a report of all such costs to the Staff and OPC each year on January 15th until such time as the Company files its next general rate case. Such report shall identify with specificity the costs reductions resulting from the incurrence of the one-time transition costs.

Staff requested all documentation identified in the above paragraph as being necessary for transition cost recovery. Staff reviewed all invoices related to transition costs. The following summary table lists the transition costs by fiscal year deferred on the books and records of LAC:

One-Time Non-Capital Transition Costs

Fiscal Year	Total Transition Costs	One-Half Deferred
2013	3,360,138	1,680,069
2014	5,596,753	2,798,377
2015	3,962,809	1,981,404
2016	4,172,687	2,086,343
2017 YTD	581,617	290,809
Total	$17,674,004	$8,837,002

There are several categories of one-time non-capital transition costs:

- Employee Costs: Severance, retention, relocation, and internal payroll costs
- Finance/Accounting Costs: Pension, tax, accounting, and temporary labor costs
- Information Technology Costs: Software contract buyout expenses and the expense portion of systems integration costs
- Administration Costs: Booz Consulting, Facility integration, relocation, and data management costs
- Human Resources: External payroll processor conversion costs

Claimed capital transition costs were also deferred on the books of LAC and MGE.

Capital Transition Cost	Total Balance at June 2017	Annual Amortization
720 Olive Leasehold Improvements	$1,446,774	$469,224
MGE Retired Software	1,942,906	$592,490
Software Costs to Integrate MGE	$32,480,310	$2,273,622

The 720 Olive leasehold improvements are the unamortized leasehold improvements remaining at the time of the LAC headquarters move to 700 Market. The MGE software assets are the unamortized balance of MGE's software packages at the time MGE was integrated with LAC. Neither of these items are incrementally incurred capital transition costs.

The software costs incurred to integrate MGE into LAC's New Blue enterprise software are included in LAC's books and records. These expenses are incrementally incurred capital transition costs but are not identified as such on the books and records of LAC and MGE. These costs are included on LAC's books and records in Account 391.5 Staff Adjustment P-35.2 removes the balance of these costs from the cost of service.

Staff does not recommend inclusion in LAC or MGE rates of any amortization or rate base treatment of transition costs for the following reasons:

1) LAC and MGE did not provide Staff with a listing of all the annual cost reductions by FERC divisional accounts related to the synergies that the Company alleges justified the deferred transition costs, as required under the stipulation for Case No. GM-2013-0254.

2) LAC and MGE did not provide a comparison of actual pre-merger/pre-integration costs of the two companies' operations versus costs of the combined operations during the test year or update period in the rate case in which transition costs are sought to be recovered, as required under the stipulation for Case No. GM-2103-0254.

3) As described in the section above concerning synergy savings, Staff cannot independently validate the synergy savings claimed in LAC's and MGE's model.

Through Staff's analysis, Staff found several one-time transition costs that Staff recommends should not be recovered as transition costs, so should the Commission approve amortization of transition costs in the cost of service, Staff recommends adjustments to these costs. The following summary of these costs is listed below:

One Time Transition Cost	Amount
Southern Union / ETE CSA	$1,137,381
Name Change and Branding and Spire Allocation	$1,505,948
Total	$2,643,328

The expenses to rebrand Laclede Gas to the Spire branding are not transition costs. The rebranding did not specifically unlock synergies related to the acquisition of MGE. Staff does not recommend recovery of these expenses as one-time transition costs, nor does Staff recommend recovery of these costs as an amortization or period cost. The section of this cost of service report that addresses these costs is in the section titled Rebranding Costs, sponsored by Staff witness Jason Kunst.

The expenses related to the Continuing Services Agreement ("CSA"), between LGC and Southern Union / ETE should not be included in any amortized transition costs. These costs were necessary to effectively transition ownership of MGE to LAC, and were otherwise one-time costs necessary to ensure the transfer of ownership. Prior to the acquisition, MGE paid Joint and Common Costs ("JCC") allocated from its owner, Southern Union. These JCC costs were included in rates through the effective date of rates in MGE's 2014 Rate Case. The JCC costs ceased to be incurred and paid by MGE at the date of acquisition. These costs were replaced by payments made under the CSA. To defer and amortize the CSA expenses would amount to double recovery of these costs. Staff recommends no additional recovery of these costs.

If the Commission does authorize amortization of transition costs, Staff recommends the allocation of these costs between LAC and MGE be based on the most current LAC and MGE three-factor allocator and Staff does not recommend rate base treatment of the one-time transition costs. Staff obtained the one time transition costs by year, date, and amount. The amount of transition costs remaining in the test year after the amount deferred would remain in the test year without adjustment. Staff recommends the remaining half of the transition costs should be removed from the test year. Staff Adjustments E-85.4, E-86.5, and E-88.6 to the LAC cost of service remove these expenses. No adjustments are necessary for the MGE cost of service as all transition costs were recorded on LAC's books and records.

Staff Expert/Witness: Keith Majors

C. Transaction Costs

Transaction costs are costs to consummate the acquisition of MGE. They include bankers and broker's fees, SEC fees, and consulting fees during the evaluation phase of the acquisition. Staff and LAC agreed that these costs would not be recovered in rates. LAC agreed to not seek recovery of these costs from Missouri rate payers on page 9 of the Stipulation and Agreement in Case No. GM-2013-0254:

> b. Transaction Costs. Transaction costs are those costs incurred to effectuate and close the Transaction. Laclede Gas including its MGE division shall not ever seek to directly or indirectly include or recover in any future proceeding any transaction costs, which as defined herein include, but are not limited to, outside service costs relating to gaining regulatory approval, development of transaction documents, investment banking costs, and costs related to raising equity incurred prior to closing of the Transaction. Neither Laclede Gas nor its MGE division shall seek either direct or indirect rate recovery or recognition of any transaction costs through any purported acquisition savings adjustment (or similar adjustment) in any future general ratemaking proceeding in Missouri. See Attachment 1.

Staff has not included in the cost of service any transaction costs related to the acquisition. LAC and MGE did not defer any of these expenses on their respective books and records. Therefore, no adjustment is necessary.

Staff Expert/Witness: Keith Majors

D. Allocations/Allocated Directors Fees

The allocation of costs between LAC, MGE, Alagasco, and Energy South, is used in several cost categories in the cost of service. Spire Inc. operates under a "shared services model." There are some specific union employees that provide services only to their respective entities, however, a large amount of management employees are "shared services" employees that provide services to, and are able to allocate time to, all affiliates. Several categories of costs are incurred at the corporate level and allocated to the affiliated entities. Examples are: insurance, benefits, outside services, finance costs, and, facilities costs.

Staff utilized the most current allocation factors as of June 30, 2017, as provided in response to Staff Data Request No. 0017. These allocation factors include a corporate-wide, utility only, Missouri only, and Missouri utility only three factor allocator using fixed assets, revenue, and wages. Other allocation factors include those based on headcount, square footage used, and percentage of shared services payroll allocated.

Staff recommends an adjustment to LAC's and MGE's test year books related to Laclede Insurance Risk Services ("LIRS"). From the response to Staff Data Request No. 017.9, LIRS is an insurance company approved by the United States Department of Labor and approved and regulated by the South Carolina Department of Insurance, its state of incorporation. LIRS provides reinsurance services to the organization's insurance providers.

The purpose of this adjustment is to adjust LAC and MGE's books and records to reflect the insurance provided by LIRS to LAC and MGE at the cost associated with insurance as required in the Commission's affiliate transaction rules. 4 CSR 240-40.015(2)(A)(1) specifies that LAC and MGE is not to provide a financial advantage to an affiliate entity. LAC is providing a financial advantage to LIRS, its affiliate, if LAC and MGE compensates LIRS for insurance above the lesser of fair market value or the fully distributed costs to LAC and MGE to provide the insurance to LAC and MGE. This adjustment complies with the Commission's Affiliate Transaction rules and places the insurance transaction on the terms required to be satisfied for LAC and MGE to participate in the transaction per 4 CSR 240-40.015(2)(D).

Staff Data Request No. 0017.10 requested the amount of revenues and expenses for LIRS for the test year of calendar 2016. In its response LAC and MGE stated "[t]he amounts reported were incorrect, and should have been reported as $0 for Amount Charged, and $0 for Total Cost. Laclede Gas Company does not purchase goods or services from Laclede Insurance Risk Services." However, charges similar to those in Fiscal Year 2016 were incurred during the test year on the books of LIRS. Staff recommends that any proceeds from the provision of insurance services should be redistributed to the entities to which these services are provided. Staff recommends Adjustment E-91.10, $(980,573) to LAC Account 923, and Adjustment E-63.8, $(524,883) to MGE Account 923.

In the annual Cost Allocation Manual Annual Report for Fiscal Year, a section titled "Spire Miscellaneous Expenses" is listed with allocated expenses. A majority of these costs were reviewed by Staff as part of the separate audit of various areas of LAC's and MGE's cost-of-service in this proceeding, such as payroll, outside services and incentive compensation. Based upon that review, appropriate adjustments in these areas are recommended by Staff and discussed in this Report. Due to Staff's overall revenue requirement recommendations in this case, Staff is recommending no further adjustments to the Spire Miscellaneous Expenses cost category in this proceeding. Staff will continue to investigate the nature of all Spire corporate/holding company costs, and the appropriateness of their recovery from Missouri ratepayers, in future LAC and MGE rate proceedings.

Staff Expert/Witness: Keith Majors

X. Income Statement

A. Revenues

1. Introduction

The following section describes how Staff determined the amount of LAC's and MGE's adjusted operating revenues. Since the largest component of operating revenues is a result of rates charged to LAC and MGE retail customers, a comparison of operating revenues with the cost of service is fundamentally a test of the adequacy of the currently effective retail natural gas rates to meet LAC's and MGE's current costs of providing utility service.

One of the major tasks in a rate case is to determine the magnitude of any deficiency (or excess) between a company's cost of service and its operating revenues. Test year revenues need to be appropriately normalized and annualized in order to accurately measure the amount of any deficiency (or excess) in the current level of operating revenues. Once determined, the deficiency (or excess) can only be made up (or otherwise addressed) by adjusting retail rates (i.e., rate revenue) prospectively.

2. Definitions

Operating Revenues are composed of two components: (1) Rate Revenue; and (2) Other Operating Revenue. The definitions of these components are as follows:

Rate Revenue: Test year rate revenues consist solely of the revenues derived from LAC's and MGE's authorized Commission approved rates for providing natural gas service to its retail customers. LAC's and MGE's variable charges are determined by the amount of each customer's usage and the (per unit) rates that are applied to that usage. Each customer also pays a flat monthly customer charge dependent upon each customer's rate class. These rate classes include residential, commercial, industrial and transportation customer classifications.

Other Operating Revenue: Other operating revenue includes late payment charges, collection trip charges, special meter reading charges and disconnection/reconnection of service charges. Each of these charges is also established by the Commission, and all of these revenue items are taken into account in setting retail rates for LAC's and MGE's gas service to customers.

3. The Development of Revenue in this Case

To determine the level of LAC's and MGE's revenue, Staff applied standard ratemaking adjustments to test year (historical) volumes and customer levels. Staff makes these adjustments in order to determine the level of revenue that LAC and MGE would collect on an annual basis, under normal weather or climatic conditions, natural gas usage and customer levels, based on information that is "known and measurable" as of the end of the update period. In this particular case, the test year is the 12 months ended December 31, 2016, updated for known and measurable changes through June 30, 2017. There also will be a true-up in this case through September 30, 2017.

Revenue was developed and summarized in two different ways: (1) type of regulatory adjustment; and (2) total revenue by rate class Staff's workpapers provide the source numbers and analysis, as well as more detail. This Report describes the eight major regulatory adjustments Staff made to test year billed rate revenues:

a. customer growth
b. removal of gas costs
c. removal of Gross Receipts Tax ("GRT") revenue and expense
d. removal of Infrastructure System Replacement Surcharge ("ISRS") revenue
e. removal of off-system sales ("OSS") and capacity revenue
f. 365-day adjustment
g. weather normalization
h. large customer annualization

Not all of these adjustments affect both sales (therms or ccfs) and rate revenue dollars, and not all rate classes are subject to all five adjustments.

Other revenue adjustments proposed by Staff in this proceeding are briefly described in the following Cost of Service Report sections.

4. Customer Growth

All revenue adjustments made by Staff in determining LAC's and MGE's cost of service were priced on the margin (the total rate excluding the Purchased Gas Adjustment (PGA) gas cost rate) included in LAC's and MGE's tariffs. For MGE, Staff analyzed customer growth for the Residential (RS), Small General Service (SGS), and Large General Service (LGS) classes, and for LAC, Residential General Service (RG), Commercial & Industrial (Class I (C1), Class II (C2), Class III (C3)). Adjustments for the Large Volume Service (LV) customers are discussed in Sections VII.B.2. and VII.B.4. of this report.

The annualization of customer revenues contains two components, the base charge and the commodity charge. The base charge is the minimum monthly charge that LAC and MGE assess to a customer for supplying gas service. The monthly base charge revenue is calculated by multiplying the base charge by Staff's annualized level of customers on a monthly basis.

Natural gas customers tend to fluctuate seasonally over a 12-month period, with some customers leaving the system during the spring and summer months and then rejoining the system during the fall and winter months. This seasonal sensitivity in customer numbers makes it impractical to base a customer growth adjustment on one period-ending customer number value as is normally done for electric utilities. To appropriately take into account seasonal customer number fluctuations, Staff used a three-step process to calculate customer growth for LAC's and MGE's different classes of customers.

The first step of this process involved Staff dividing each month of the year by the twelve-month total of customers for that same year to determine the percentage of customers within each month from the period-ending total. Using these percentages, Staff averaged a three year period by month to derive the monthly average of customers from the period-ending customer total for the three-year period.

The second step of the process involved Staff dividing the June 30, 2017, (update period) level of customers for each year by the twelve-month average of the following year.

This process created a percentage that was totaled for the most current three years, and then divided by three to determine a three-year average.

The third step of this process involved Staff dividing the actual customer level for each class as of June 30, 2017, by the three-year average developed in the second step above. This resulted in a monthly customer level which was then multiplied by twelve to derive an annualized level of customers. The annualized number of customers was then multiplied by the monthly percentage that was created in the first step to create an average monthly customer level for each month of the 12 month period ended June 30, 2017. These average monthly customer numbers provide the basis for Staff's customer growth revenue adjustments.

Some customers have two commodity charges covering different periods (November through March and April through October) of the year. To annualize the commodity charge revenues, the monthly level of customers by customer class was multiplied by Staff's weather normalized usage per customer. The normal monthly usages were then multiplied by the seasonal commodity charges to determine the monthly commodity charge revenues.

Staff made additional adjustments to revenues which can be attributed to "rate switching." Rate switching is the term given to a situation in which a customer changes their rate classification, which can occur for a number of reasons. For example, the nature of a customer's operations may have changed and another customer class may become more appropriate. Or the customer may find it to be more economical to switch to another customer class, or a customer may decide to procure its own gas, which would also make a rate switch necessary. Please refer to the rate switching section of this report for further discussion of this topic.

B. Other Revenue Adjustments

All revenue adjustments in Staff's cost of service will be priced on the margin rate (the total rate excluding gas cost) included in LAC's and MGE's tariffs. Therefore, revenues and expenses related to gas costs are removed from Staff's revenue requirement calculations. The cost of gas will be addressed as part of Staff's review of the Companies' Purchase Gas Adjustment ("PGA") and Actual Cost Adjustment ("ACA") filings.

The amounts received from customer payments and recorded as revenues during the test year include GRT. GRTs are imposed by a taxing authority for which LAC and MGE are obligated to charge customers on their utility bills. After LAC and MGE collect these taxes from their customers, these amounts are periodically remitted to the appropriate taxing authority. In this regard, to accurately account for LAC's and MGE's actual test year retail revenues, it is necessary to remove GRT from the amounts recorded as revenues during the test year while at the same time removing the corresponding remittances to the taxing authority as a charge to expense. Staff made adjustments to remove GRT from revenue and expense. In addition, Staff adjusted LAC's and MGE's level of uncollectible expense to account for GRT taxes not paid by those customers whose bill amounts are written off.

ISRS revenues are collected as a result of Commission approved surcharge rates that are determined between rate cases. ISRS surcharge rates are set back to "zero" in the rate case. Staff made adjustments to remove ISRS revenue not included in base rates from the cost of service to derive the appropriate test year margin revenues.

Currently, as an incentive to maximize off-system sales ("OSS") and capacity release revenue, LAC and MGE are authorized to keep a percentage, or share, of the profit from OSS and capacity release transactions. LAC and MGE customers receive the remaining profit through the PGA/ACA mechanism as a reduction to gas costs. Staff made adjustments to remove the OSS and Capacity revenue not included in base rates from the cost of service to derive the appropriate test year margin revenues and related expenses.

The recording of unbilled revenue on the books of LAC and MGE is an attempt to recognize the sales of gas that have occurred, but have not yet been billed to the customer. Since Staff has adjusted revenue to assure that it includes only 365 days of revenue and because revenue has been restated to a billed basis, it is unnecessary to recognize unbilled revenue. Staff eliminated unbilled revenue from its determination of LAC's and MGE's revenue requirements.

1. Revenue - Weather Normal Variables Used for Weather Normalization

Natural gas usage and revenue vary from year to year based on weather conditions. The temperature pattern in the test year is the primary determinant for weather-sensitive customers' gas usage and the Company's revenue in the test year. Each year's weather is unique, so rates for weather-sensitive customer classes must be based on test year usage and revenue adjusted to a level commensurate with "normal" weather conditions, rather than actual test year usages and revenue.

Weather Variables - Staff obtained weather data from the Midwest Regional Climate Center (MRCC).[36] Weather data of St Louis Lambert International Airport ("STL") and Kansas City International Airport ("MCI") were used for the service territories of LAC and MGE, respectively. The weather data sets consist of actual daily maximum temperature ("T_{max}") and daily minimum temperature ("T_{min}") observations. Staff used these daily temperatures to develop a set of mean daily temperature ("MDT")[37] values.

Natural gas sales are predominantly influenced by "ambient air temperature,"[38] so MDT and the derivative measure, heating degree days ("HDD"),[39] are the measures of weather used in adjusting test year natural gas sales. HDDs were originally developed as a weather measure that could be used to determine the relationship between temperature and gas usage. HDDs are based on the difference of MDT from a comfort level of 65°F. HDDs are calculated as the difference between 65°F and MDT when MDT is below 65°F, and are equal to zero when MDT is above 65°F.

Normal Weather - According to the National Oceanic and Atmospheric Administration ("NOAA"), a climate "normal" is defined as the arithmetic mean of a climatological element computed over three consecutive decades.[40] In developing climate normal temperatures, the NOAA focuses on the monthly maximum and minimum temperature time series to produce the serially-complete monthly temperature ("SCMT") data series.[41]

Staff utilized the SCMT published in July 2011 by the National Climatic Data Center ("NCDC") of the NOAA. For the purposes of normalizing the test year gas usage and revenues, Staff used the adjusted T_{max} and T_{min} daily temperature series for the 30-year period of January 1, 1987, through December 31, 2016, at STL and MCI. The series are consistent with NOAA's SCMT during the most recent NOAA 30-year normal period ending 2010.

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[36] http://mrcc.isws.illinois.edu/CLIMATE/

[37] By National Climatic Data Center convention, MDT is the average of daily maximum temperature (T_{max}) and daily minimum temperature (T_{min}) e.g. MDT = $(T_{max} + T_{min})$ /2

[38] Ambient air temperature is the outside temperature of the surrounding air without taking into account the humidity or wind in the air.

[39] Where MDT < 65°F, HDD = 65 – MDT; otherwise, HDD = 0.

[40] Retrieved on October 17, 2013, https://www ncdc.noaa.gov/data-access/land-based-station-data/land-based-datasets/climate-normals.

[41] Retrieved on October 17, 2013, http://www1.ncdc noaa.gov/pub/data/normals/1981-2010/source-datasets/. The SCMT, computed by the NOAA, includes adjustments to make the time series of daily temperatures homogeneous.

There may be circumstances under which inconsistencies and biases in the 30-year time series of daily temperature observations occur, (e.g. such as the relocation, replacement, or recalibration of the weather instruments). Changes in observation procedures or in an instrument's environment may also occur during the 30-year period. The NOAA accounted for documented and undocumented anomalies in calculating its SCMT.[42] The meteorological and statistical procedures used in the NOAA's homogenization for removing documented and undocumented anomalies from the T_{max} and T_{min} monthly temperature series is explained in a peer-reviewed publication.[43]

Subsequent to determining the homogenized monthly temperature time series described above, the NOAA also calculates monthly normal temperature variables based on a 30-year normal period, e.g. maximum, minimum, average temperatures, and HDDs. These monthly normals are not directly usable for Staff's purposes because the NOAA daily normal temperatures and HDD values are derived by statistically "fitting" smooth curves through these monthly values. As a result, the NOAA daily normal HDD values reflect smooth transitions between seasons and do not directly relate to the 30-year time series of MDT as used by Staff. However, in order for Staff to develop adjustments to normal HDD for gas usage, Staff must calculate a set of normal daily HDD values that reflect the actual daily and seasonal variability.

Staff used a ranking method to calculate normal weather estimates of daily normal temperature values, ranging from the temperature that is "normally" the hottest to the temperature that is "normally" the coldest, thus estimating "normal extremes." Staff ranked MDTs for each month of the 30-year history from hottest to coldest and then calculated the normal daily temperature values by averaging the ranked MDTs for each rank, irrespective of the calendar date. The ranking process results in the normal extreme being the average of the most extreme temperatures in each month of the 30-year normals period. The second most extreme temperature is based on the average of the second most extreme day of each month, and so forth. Staff's calculation of daily normal temperatures is not the same as NOAA's calculation of

[42] Arguez, A., I. Durre, S. Applequist, R. S. Vose, M. F. Squires, X. Yin, R. R. Heim, Jr., and T. W. Owen, 2012: NOAA's 1981-2010 U.S. Climate Normals: An Overview. Bulletin of the American Meteorological Society, 93, 1687-1697.

[43] Menne, M.J., and C.N. Williams, Jr., (2009) Homogenization of temperature series via pairwise comparisons. *J. Climate*, **22**, 1700-1717.

smoothed daily normal temperatures because Staff calculated its normal daily temperatures based on the rankings of the actual temperatures of the test year, and the test year temperatures do not follow smooth patterns from day to day. More details of a ranking method for normal weather are explained in a peer-reviewed publication.[44] Using these normal daily temperatures, Staff calculated normal HDD for each day of the test year. This information was made available to Staff witnesses Michelle A. Bocklage and Byron M. Murray to calculate the weather normalization adjustments.

Staff Expert/Witness: Seoung Joun Won, PhD

2. <u>Revenue – Weather Normalization</u>

Introduction and Summary

Since the primary use of natural gas in Missouri is for the purpose of space heating, natural gas sales are dependent upon weather conditions. As natural gas rates are based on usage, it is important to remove abnormal weather influences from the test year in order to provide a more accurate representation of "normal" natural gas usage.[45] This analysis addresses Staff's weather-normalization of natural gas sales for LAC and MGE customers.

LAC Weather Normalization Adjustment

Staff conducted an analysis of weather normalization for the Residential General Service (RG), Commercial & Industrial General Service (Class I (C1), Class II (C2), Class III (C3)), Large Volume Service (LV), and Transportation classes for the test year ending December 31, 2016. Staff's overall weather normalization analyses determined that the weather during the test year was warmer than normal, so actual sales were also lower than normal. In order to account for the reduced sales and warmer weather, Staff performed an adjustment to increase natural gas sales to reflect usage and sales for "normal" weather conditions. The following table illustrates the approximate adjustments to the natural gas volumes of each class.

[44] Won, S. J., Wang, X. H., & Warren, H. E. (2016). Climate normals and weather normalization for utility regulation. Energy Economics, 54, 405-416.

[45] For LAC, usage is billed to customers in therms; and for MGE, usage is billed to customers in CCFs.

Class	Approximate Increase
RG	17.11%
C1	17.35%
C2	12.80%
C3	11.55%
LV	4.44%
Transportation	-.26%

These adjustments account for changes in sales to reflect normal weather and the annual number of days in a billing cycle.

MGE Weather Normalization Adjustment

Staff conducted an analysis of weather normalization for the Residential (RS), Small General Service (SGS), Large General Service (LGS), Large Volume (LV), and Intrastate Transportation Service (ITS) classes for the test year ending December 31, 2016. Staff's weather normalization analysis of MGE gas sales resulted in an increase to natural gas sales because the weather during the test year was warmer than normal. The analyses resulted in an approximate increase of 17.60% for the RS class, an approximate increase of 16.69% for the SGS class, an increase of approximately 13.67% for the LGS class, and an approximate increase of 3.61% for the LV and ITS classes. These adjustments account for changes in sales due to abnormal weather and the annual number of days in the billing cycles.

Process Used to Weather Normalize Sales

Staff adjusted billing units for each class to account for customers who switched between rate classes during the test year and to account for known and measurable changes to rate classes during the update and true-up periods. For MGE, two customers left the LV class and went into the LGS class during the test year. Further, MGE's recommended residential tariff in this case allows for vacant apartment units to be billed under the residential rates once the tenant moves out and the account reverts back to the landlord's name. Staff adjusted for this change by moving the necessary customer accounts from the SGS service tariff to the RS tariff.

Staff's weather normalized adjustments of natural gas sales account for deviations from what are considered normal weather conditions that occurred during the test year. Staff adjusted monthly natural gas volumes to normal by first adjusting the annual number of days for each billing cycle to 365. If the annual number of days in a billing cycle is below or above 365, Staff added or subtracted the difference to the non-heating season.[46] This adjustment is performed so that each billing cycle is set to the same total number of days. Since natural gas utilities are winter peaking, any HDDs that are removed based on the 365 day adjustment are added back to October, since it is a shoulder month to the heating season. Using the non-heating months minimizes the impact on the heating season.

After each billing cycle is adjusted so that it contains the proper number of days, the next step is to calculate the difference between normal and actual HDDs for each billing cycle. Then, Staff multiplied these differences by the estimate rendered from the regression analysis described in further detail below to determine the changes in sales volumes in each billing cycle due to abnormal weather. The next step is to sum each of the changes in sales volumes per month due to abnormal weather. Lastly, Staff adds the monthly adjustments in sales volumes to the total monthly natural gas sales to calculate the normalized volumes.

Application of Weather Normalization Process

Staff witness Dr. Seoung Joun Won provided the daily actual and daily normal HDDs for LAC and MGE. Dr. Won addresses the calculation of HDDs as part of his section of this Cost of Service Report.

LAC and MGE both have established billing cycles for groups of natural gas accounts where each billing cycle corresponds to different days of the month. Customers' accounts are usually grouped into one of approximately eighteen (18) billing cycles. Staggering the billing of customers' accounts throughout the billing month allows the Company to distribute the work required in order to bill LAC and MGE customers. Based on the number of customers, usage, and HDD per billing cycle per month, Staff calculated the average use per customer per day and the number of HDD per day for each of the twelve months of the test period for the rate classes mentioned above for LAC and MGE.

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[46] Since it cannot be determined exactly which day is causing the annual number of days to be over or less than 365 days, adding or removing an average non-heating season day results in an adjustment with the lesser impact compared to an average heating season day.

Staff used a regression analysis to estimate the relationship between the usage per customer per day and the HDD per day for each month. Once the billing cycles were adjusted, Staff calculated the difference between normal and actual HDDs for each billing cycle. The third step was to multiply these differences by the estimate rendered from the regression analysis. The fourth step was to sum the billing cycles' adjusted volumes by billing month. Then, Staff added the monthly adjustments in either therms or ccfs to the total monthly natural gas sales to calculate normalized volumes.

The billing month averages are calculated from the data provided by the utility on the numbers of customers, natural gas usage, and summed HDD from the billing cycles for each billing month by customer class. The daily average HDD in each billing month and billing cycle is weighted by the percentage of customers in that billing cycle. Thus, the billing cycles with the most customers are given more weight when computing the daily average HDD for the billing month. Staff uses the twelve monthly average-usage-per-customer amounts across the billing cycles to calculate the daily average usage for one month. The usage and weather billing month averages are used to study the relationship between space-heating natural gas usage and cold weather, which is used to estimate the change in usage related to a change in HDD.

Staff uses regression analyses to estimate the relationship for each class of customers. The regression equation develops quantitative measures that describe the relationship between daily space-heating sales per customer in Ccf to the daily HDD. The regression equation estimates a change in the daily natural gas usage per customer whenever the daily average weather changes by HDD.

Staff recommends that the Commission utilize Staff's weather normalization adjustments that are outlined above and in Appendix 3.

Staff Expert/Witness: Michelle A. Bocklage (LAC)
Staff Expert/Witness: Byron M. Murray (MGE)

3. <u>Weather Sensitivity of Large Customer Classes</u>

Staff finds a linear relationship between weather and gas usage of large customers in both LAC and MGE. For each month, for each set of customers associated with each of LAC's and MGE's 18 billing cycles, Staff investigated the relationship between temperature and gas usage of Large Volume and Transportation classes using correlation analysis.[47] The result of the correlation analysis shows a strong positive relationship between billing cycle heating degree days[48] and each set of customers' gas usage. For LAC, the correlation coefficient for each billing cycle for all months is greater than 0.75, and the average correlation coefficient is about 0.93. For MGE, the correlation coefficients for each billing cycle for each month are greater than 0.8, and the average correlation coefficient is about 0.98. Based on the correlation analysis, Staff concludes that there is a positive linear relationship between heating degree days and gas usage for each cycle in both LAC and MGE.

Staff Expert/Witness: Seoung Joun Won, PhD

4. Large Volume Customer Adjustments

LAC provided monthly billing units and information for every customer who took service on the Large Volume Service ("LV"), Interruptible Service ("IN"), and Large Volume Transportation and Sales Service ("Transportation") rate schedules during the test year. MGE provided monthly billing units and information for every customer who took service on the Large Volume Service class ("LV"), which includes Large Volume Transportation Service customers. Staff used these units as the basis of its analyses and adjustments. The following adjustments were made:

Large Customer Rate Switching

The general intent of an annualization is to re-state the test year usage as if conditions known at the end of the update period had existed throughout the entire year. Rate switching[49] and annualization adjustments include adjustments for new customers, the exit of existing customers, and load growth or decline of specific existing customers.

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[47] Correlation is a measure of how the variations in one dataset are consistent with the variations in another. A correlation coefficient is a number between −1 and +1 calculated so as to represent the linear dependence of two variables or sets of data. Generally speaking, the closer a correlation coefficient is to 1, the more the datasets vary consistently with each other. If the correlation is negative, the variation in one dataset gets more positive as the variation in the other dataset gets more negative. Conventionally, if a correlation coefficient is greater than 0.7 then it is interpreted that there is a strong positive relationship.

[48] The definition of billing cycle heating degree days is the sum of heating degree days in the given billing cycle. The definition of heating degree days is explained in the weather variables section of the cost of service report.

[49] Rate switching is when customers switch which rate schedule they will be served on during the test year or update period.

If a customer was in a rate class at the beginning of the test year, then transferred to a different rate class during the test year, the customer's billing determinants and associated revenues in the original class were removed from that class' total. The customer's billing determinants were then "priced out" using the tariffs of the class to which the customer switched, and those determinants and revenues were added to the totals in the new class. This resulted in a full year of history for the customer in the rate class they were in at the end of the year.

For new customers having no prior usage, an estimated level of usage was used in order to have 12 months of data.

<u>LAC Large Customer Rate Class Changes</u>

> During the test year[50] seven customers left the Transportation class; three customers entered the IN class; and two customers left the LV class.

<u>MGE Large Customer Rate Class Changes</u>

> During the test year, two customers switched into the Large General Service class ("LGS") from the LV class.[51] Twelve customers were removed from the LV class due to having no usage during the test year. Three additional customers were removed from the LV class[52].

Large Customer 365-Day Adjustment

The 18 bill cycles representative of the 12 months ending December 31, 2016, may or may not include 365 days. For the Interruptible Service class, Staff made adjustments to customers' monthly usage for customers whose test year does not include 365 days, either by adding the appropriate number of days of average usage when there were fewer than 365 days of usage, or by subtracting the appropriate number of days of average usage when there were more than 365 days of usage. The 365-days adjustment for the LAC Large Volume Service class and the Transportation class and the MGE Large Volume Service class is included in

[50] Staff did receive updated LAC LV customer information through April 2017.

[51] The two customers were added to the LGS weather normalization analysis, as discussed in the weather normalization testimony of Byron M. Murray.

[52] See Company's response to Staff Data Request No. 0346.

the weather normalization adjustment computed by Staff witnesses Michelle A. Bocklage and Byron M. Murray.

Staff Expert/Witness: Joseph P. Roling – LAC
Staff Expert/Witness: Byron M. Murray – MGE

Large Customer Weather Normalization Adjustment

Staff applied a weather normalization factor to each of the LAC LV and Transportation customer's monthly usage and to MGE's LV customers' monthly usage to represent the weather-normalized usage computed and provided by Staff witnesses Michelle A. Bocklage and Byron M. Murray, respectively. This adjustment results in the revenue impact from the change in actual usage to weather normalized usage as computed by Staff witnesses Michelle A. Bocklage and Byron M. Murray. The IN class was not weather normalized due to the nature of the class being interruptible.

Staff Expert/Witness: Joseph P. Roling – LAC
Staff Expert/Witness: Byron M. Murray - MGE

C. Other Revenues

1. <u>Propane Cavern Revenues</u>

As was previously discussed in the section Propane Investment, LAC has not requested, as part of this current rate case, different regulatory treatment than what was agreed to by the parties in the *Stipulation and Agreement* for propane investment, revenue and expense in LAC's prior rate case, Case No. GR-2013-0171. Staff has verified that the revenues associated with the propane cavern are currently recorded above-the-line as of June 30, 2017. Staff continues to maintain its position that the propane assets are still required to serve customers. Accordingly, Staff has reviewed, and included in the cost of service calculation, all revenues LAC generated during the test year through the use of its propane assets. Staff has reviewed the contracts in connection with liquid propane storage fees and exchange fees that LAC receives. Staff contends that ratepayers should receive all revenues associated with these fees and any other source of revenue that can be generated by the propane cavern, including the sale of propane itself on an ongoing basis.

This issue does not affect MGE as that division does not have propane facilities.

Staff Expert/Witness: Lisa M. Ferguson

2. Interest Income Energy Wise/Insulation Financing

The loan balances associated with the Insulation Financing Program and EnergyWise program are currently included in rate base. LAC receives interest income that is collected in relation to both of these programs. Interest is calculated on these loan balances using three different interest rates, as stated in LAC's tariff, depending on the type of loan held by each customer in the programs.

Staff has included interest income related to these programs as part of LAC's cost of service based on data from actual use of the program. LAC has requested to expand this tariffed program to MGE. If the Commission orders approval of the expanded tariff to MGE's service territory as part of this rate case, Staff will review data based on actual use of the programs and will calculate interest income based on loan balances established in the MGE division in LAC's next rate case.

Staff Expert/Witness: Lisa M. Ferguson

D. Payroll and Benefits

1. Payroll, Payroll Taxes, 401(k), and Other Employee Benefits

Staff has adjusted LAC's and MGE's test year payroll expense to reflect an annualized level of payroll, payroll taxes, 401(k), and other employee benefit costs as of June 30, 2017, the endpoint of the update period ordered for this case by the Commission.

Base payroll expense was calculated by multiplying the employee levels at June 30, 2017, by the appropriate salary or wage rate to derive the annualized payroll cost. Overtime payroll expense for LAC and MGE was calculated based upon an average of overtime hours and the most current six month average overtime wage rate. Staff analyzed overtime hours from January 2012 through June 2017 for LAC and from April 2014 through June 2017 for MGE. There was not a distinct upward or downward trend in overtime hours. For this reason, Staff used an average of two years, using calendar year 2016 and annualized year 2017, of overtime hours. Due to rising overtime labor costs, Staff used the most current six month average dollar per hour rate in its normalization of overtime; multiplying the current hourly rate by the average of overtime hours, Staff arrived at the normalized overtime expense for this case. Staff added base payroll and overtime dollars to arrive at an annualized total payroll amount.

Total annualized payroll must be separated between amounts charged to expense and amounts charged to capital and below the line accounts. The ratio between these two amounts is referred to as an Operations and Maintenance ("O&M") factor. The test year ending December 31, 2016, O&M factor was 55.90 percent for both LAC and MGE. The establishment of an appropriate O&M factor is important as this ratio directly affects the amount of payroll charged to expense and is used for allocating payroll related benefits. Staff recommends the use of the test year ending December 31, 2016, O&M factor of 55.90 percent for both LAC and MGE. Staff distributed its payroll adjustment to the FERC Uniform System of Accounts ("USOA") based on the test year distribution Staff calculated.

Staff calculated payroll taxes based on June 30, 2017, wage levels and current tax rates. This includes amounts pursuant to the Federal Unemployment Taxes Act ("FUTA"), State Unemployment Taxes Act ("SUTA"), and Federal Insurance Contributions Act ("FICA") taxes. The Staff's annualized payroll and most current tax rates were used to calculate the level of payroll tax proposed in this case.

LAC's and MGE's 401(k) match expenses and its expenses for employee life, accidental death and dismemberment ("AD&D"), and long term disability insurance were calculated based upon actual employee wage and salary levels at June 30, 2017.

LAC and MGE currently offer their employees medical, dental, and vision insurance benefits through a combination of LAC, MGE, and employee contributions. Staff reviewed the actual claims paid balance of medical, dental, and vision expenses incurred by LAC and MGE (less employee contributions). Staff used the actual expense of employee healthcare plans in effect through the update period for the twelve months ending June 30, 2017. This amount was compared to the test year booked expense to determine Staff's adjustments to LAC's and MGE's cost of service.

Staff Expert/Witness: Antonija Nieto

2. <u>Incentive Compensation</u>

Short-Term Incentive Compensation

Employees of LAC and MGE are eligible for annual bonuses under LAC's Annual Incentive Plans ("AIP"). This incentive compensation plan provides an annual cash payout to eligible union and non-union participants based on four components, each component with its own objectives: corporate performance, business unit performance, individual performance, and team unit performance. Measurement goals and a target incentive pool are established for each plan year and terms of the AIP are communicated to all employees within 90 days of the beginning of the plan year. Staff does not support the use of LAC's corporate, business unit, and individual AIP components for ratemaking purposes, but has included the cost of the AIP team unit performance.

Two components of AIP, corporate performance and business unit performance, are measured with the financial metrics, NEEPS and operating income, respectively. NEEPS differs from the traditional Earnings per Share ("EPS") calculation in that NEEPS ignores the effect on net income of certain extraordinary items (e.g. unrealized losses, acquisition losses). Operating income is operating revenue less operating expense. Both of these AIP components are applicable to payouts made to all employees. The Commission, in general, and specifically in the case of MGE, has disallowed incentive compensation based on financial metrics that tie payouts to the level of shareholder's interest achieved. The Commission expressed this position in its Report and Order in MGE's 2004 Rate Case, Case No. GR-2004-0209:

> The Commission agrees with Staff and Public Counsel that the financial incentive portions of the incentive compensation plan should not be recovered in rates. Those financial incentives seek to reward the company's employees for making their best efforts to improve the company's bottom line. Improvements to the company's bottom line chiefly benefit the company's shareholders, not its ratepayers. Indeed, some actions that might benefit a company's bottom line, such as a large rate increase, or the elimination of customer service personnel, might have an adverse effect on ratepayers.
>
> If the company wants to have an incentive compensation plan that rewards its employees for achieving financial goals that chiefly benefit shareholders, it is welcome to do so. However, the shareholders that benefit from that plan should pay the costs of that plan. The portion of the incentive compensation plan relating to the company's financial goals will be excluded from the company's cost of service revenue requirement. (p. 43)

Consistent with past Commission orders,[53] Staff has not included costs related to earnings-based metrics in LAC's or MGE's revenue requirements.

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[53] For similar findings, see the Report and Orders in Case Nos. GR-96-285; ER-2006-0314; and ER-2007-0291.

The third component of incentive compensation, individual performance, is applicable only to non-union employees. Each non-union employee collaborates with his or her supervisor to establish goals for the upcoming year. At the end of the plan year, the supervisor awards a composite rating of actual performance based on the rating of the employee's various personal goals. The employee's performance directly affects the amount of payout the employee can receive from the individual component of the AIP, but does not affect their corporate or business unit component award.

During its review of the individual component objectives, Staff examined the objectives established for plan year 2016 to find if the goals displayed the following attributes:

- Goal provides the employee an incentive to perform at a level that is above what is already required for the applicable job title
- Goal is objective and measurable
- Goal is related to Missouri regulated operations
- Goal requires improvement over past performance
- Goal, if achieved, shows a direct link to overall ratepayer benefit

Many of the metrics that were used to award incentive compensation are not designed to influence an employee to go above and beyond the basic requirements of a full-time employee. Other metrics were vague or required standard performance of an employee. Also, Staff found a number of metrics were tied to the performance of Spire's Alabama/Mississippi operations. Overall, Staff's review found that a substantial portion of the objectives failed to encompass the attributes listed above and do not show a clear ratepayer benefit.

The fourth component of AIP is team unit performance, and is applicable only to union employees. Unlike non-union employees that establish goals for each individual, union employees earn AIP payouts based upon the performance of their respective union (e.g. call center employees or field operation employees). A majority of the metrics embedded in the team unit AIP component are customer-oriented goals such as; average call handle time, call abandonment rate, OSHA recordable incident rate, leak response time, etc. Generally, Staff supports such metrics as successful achievement of these goals can lead to lower costs incurred by the utility, which lead to a lower cost of service. In this case, Staff has calculated a four-year average of historical achievement levels of the team unit metrics, and applied the average achievement to current union wages for inclusion in LAC and MGE's cost of service.

In addition to the four components of AIP, management has awarded discretionary payouts in two ways during the prior four plan years. First, management has altered the actual results of historical performance in order to award its employees for an achievement level the Company was very close to achieving, but did not for various unforeseen circumstances. For example, ** ______________________________ ** Second, management awarded discretionary payouts for "exceptional company performance" during the plan years examined by Staff. Staff did not include the historical cost of discretionary incentive compensation in LAC's or MGE's cost of service. These payments are arbitrary and therefore are unrelated to the cost of providing safe and adequate utility service to either LAC or MGE customers.

As part of its accounting for incentive compensation, LAC and MGE capitalize a portion of the incentive compensation cost. Staff has made adjustments to LAC's and MGE's historical additions to rate base to remove incentive compensation based on Staff's ratio of allowed costs to total costs. Rate base items adjusted include plant-in-service and depreciation reserve.

LAC adjustment numbers: E-8.2, E-9.2, E-10.2, E-11.2, E-12.2, E-14.2, E-15.2, E-17.2, E-19.2, E-20.2, E-21.2, E-22.2, E-23.2, E-24.2, E-25.2, E-26.2, E-27.2, E-28.2, E-30.2, E-35.2, E-36.2, E-37.2, E-38.2, E-40.2, E-41.2, E-42.2, E-43.2, E-46.2, E-47.2, E-48.2, E-49.2, E-50.2, E-51.2, E-52.2, E-53.2, E-54.2, E-56.2, E-57.2, E-58.2, E-59.2, E-60.2, E-61.2, E-62.2, E-63.2, E-64.2, E-68.2, E-69.2, E-71.2, E-75.2, E-76.2, E-79.2, E-80.2, E-81.2, E-85.2, E-91.2, E-93.2, E-95.2, P-6.2, P-7.2, P-8.2, P-9.1, P-10.1, P-11.1, P-12.1, P-13.2, P-14.2, P-15.2, P-16.2, P-17.2, P-18.2, P-19.2, P-20.2, P-21.2, P-22.2, P-23.1, P-24.1, P-27.1, P-28.1, P-29.1, P-30.1, P-31.1, P-34.1, P-35.1, P-36.1, P-37.1, P-38.1, P-39.1, P-40.1, P-41.1, P-52.1, P-43.1, P-44.1, P-45.1, P-46.1, P-47.1, P-50.1, P-51.1, P-52.1, P-53.1, P-56.1, P-57.1, P-58.1, P-61.2, P-63.3, P-64.1, P-65.2, P-66.1, P-67.1, P-68.2, P-69.2, P-70.1, P-71.2, P-72.2, P-73.3, P-74.2, P-75.2, P-76.1, P-77.2, P-78.1, P-79.2, P-80.2, P-81.2, R-6.2, R-7.2, R-8.2, R-9.1, R-10.1, R-11.1, R-12.1, R-13.2, R-14.2, R-15.2, R-16.2, R-17.2, R-18.2, R-19.2, R-20.2, R-21.2, R-22.2, R-23.1, R-24.1, R-27.1, R-28.1, R-29.1, R-30.1, R-31.1, R-34.1, R-35.1, R-36.1, R-37.1, R-38.1, R-39.1, R-40.1, R-41.1, R-52.1, R-43.1, R-44.1, R-45.1, R-46.1, R-47.1, R-50.1, R-51.1, R-52.1, R-53.1, R-56.1, R-57.1, R-58.1, R-61.2, R-63.3, R-64.1, R-65.2, R-66.1, R-67.1, R-68.2, R-69.2, R-70.1, R-71.2, R-72.2, R-73.3, R-74.2, R-75.2, R-76.1, R-77.2, R-78.1, R-79.2, R-80.2, R-81.2.

MGE adjustment numbers: E-16.2, E-17.2, E-19.3, E-20.2, E-23.2, E-24.2, E-25.2, E-27.2, E-29.2, E-30.2, E-31.2, E-32.2, E-33.2, E-34.2, E-39.2, E-40.4, E-42.2, E-46.5, E-47.2, E-52.4, E-57.3, E-68.2, P-7.1, P-8.2, P-9.2, P-10.1, P-11.2, P-15.2, P-16.2, P-17.2, P-18.2, P-19.2, P-20.2, P-21.2, P-22.2, P-30.1, P-31.1, P-33.2, P-37.2, P-39.2, P-40.1, P-41.2, P-43.2, P-44.2, P-46.2, P-47.2, R-7.1, R-8.2, R-9.2, R-10.1, R-11.2, R-15.2, R-16.2, R-17.2, R-18.2, R-19.2, R-20.2, R-21.2, R-22.2, R-30.1, R-31.1, R-33.2, R-37.2, R-39.2, R-40.1, R-41.2, R-43.2, R-44.2, R-46.2, R-47.2.

Long-Term Incentive Compensation

In addition to AIP, Spire offers compensation under the Equity Incentive Plan ("EIP"). Unlike AIP, which pays cash compensation, EIP pays employee awards with shares of Spire stock. Because EIP does not have cash consequences for LAC or MGE, Staff made adjustments to remove the expensed EIP payments from the cost of service.

These adjustments are reflected in LAC adjustment E-85.3 and MGE adjustment E-57.2.

Staff Expert/Witness: Matthew R. Young

3. <u>SERP and Directors' Dividends</u>

Included in Staff's revenue requirement recommendations are normalized levels of recurring supplemental executive retirement plan ("SERP") payments and an eight year amortization of large lump-sum SERP payments LAC and MGE have made to their former executives and other highly-compensated former employees. SERP payments are non-qualified retirement plans for officers and executives, which provide the pension benefits these highly-compensated individuals would have received under other company retirement plans but for compensation and benefit limits imposed by the Internal Revenue Service ("IRS"). The Commission has traditionally included a reasonable amount of SERP expenses in customer rates.

These supplemental pension benefits paid to retired former officers and executives are in addition to the cost of pension benefits LAC and MGE pay under their pension plans. SERP pension benefits generally exceed various limits imposed on retirement programs by the IRS and therefore are referred to as "non-qualified" plans. The IRS compensation limits during 2017 was $270,000 per year, and awarded benefits calculated on earnings above this level are not tax-deductible. Upon review of the LAC and MGE payroll data provided to Staff for the June 30, 2017, cut-off period, 100% of the employees that earn compensation above this limit perform functions that are considered shared services. As such, Staff normalized the cash payments made during 2014 through 2016, and applied the corporate allocation factors recommended by Staff witness Keith Majors. The resulting expense allocated to LAC and MGE are reflected in Staff's Accounting Schedule 9, adjustment E-91.8 (LAC) and adjustment E-63.5 (MGE).

Staff Expert/Witness: Matthew R. Young

4. <u>Severance Expense</u>

Staff recommends removal of employee severance payments incurred during the test year. Severance payments are cash payments to former employees paid for various reasons. Severance agreements typically include commitments from the former employee to not pursue litigation against the company and its officers.

Severance payments are non-recurring in regards to the specific employee. Because of the unique nature of cost of service ratemaking, utilities are able to recover severance payments through regulatory lag. Between the time the employee is terminated and the time rates are changed in the next rate case, LAC and MGE collect both the salary and payroll benefits of the terminated employee. These savings can accumulate to more than the severance paid.

The adjustments for the removal of severance expenses are in Staff Accounting Schedule 10, Adjustments E-91.4 (LAC) and E-63.1 (MGE).

Staff Expert/Witness: Matthew R. Young

E. Other Expenses

1. <u>Advertising Expense</u>

Advertising expenses are incurred by both LAC and MGE. In developing its recommendation of the allowable level of advertising expense for LAC and MGE, Staff relied upon the principles the Commission set forth in ***Re: Kansas City Power and Light Company,*** 28 MO P.S.C. (N.S.) 228 (1986). In that proceeding, the Commission adopted an approach that classifies advertisements into five categories and provides separate rate treatment for each category. While the proceeding specifically addressed an electric utility, the categories of advertisements described are applicable to all utilities regulated by the Commission. The five categories of advertisements recognized by the Commission are:

1. General: advertising that is useful in the provision of adequate service;

2. Safety: advertising which conveys the ways to safely use electricity and to avoid accidents;

3. Promotional: advertising used to encourage or promote the use of electricity;

4. Institutional: advertising used to improve the company's public image;

5. Political: advertising associated with political issues.

The Commission adopted these categories of advertisements because it believed that a utility's revenue requirement should: "1) always include the reasonable and necessary cost of general and safety advertisements; 2) never include the cost of institutional or political advertisements; and 3) include the cost of promotional advertisements only to the extent that the utility can provide cost-justification for the advertisement." (Report and Order in KCPL Case No. EO-85-185, 28 MO P.S.C. (N.S.) 228, 269 271 (April 23, 1986)).

In response to Staff data requests, LAC and MGE provided supporting documentation for its advertising costs and copies of the actual advertisements. Staff examined each advertisement, classifying them into the individual categories the Commission has used in past cases to determine the types of advertisements that should be either included or excluded from LAC and MGE's cost of service. Staff reviewed these advertisements to ensure that only advertising costs for programs necessary for the provision of safe and adequate utility service are included in LAC and MGE's cost of service. For example, all advertising costs related to safe use of natural gas were included in expenses as well as costs necessary for LAC and MGE to communicate with their customers on such matters as notifications relating to operation of the cold-weather rule and the availability of low income assistance programs. Advertising costs relating to the energy efficiency programs being implemented by LAC and MGE were deferred and treated as part of the energy efficiency recovery.

In the KCPL case referenced above, the Commission stated that the utility must not include the cost of institutional advertisements. Staff determined that some of the test year advertising costs were related to institutional advertisements, which are those advertisements designed to enhance the public image of LAC and MGE. Staff recommends adjustments to remove the cost of advertisements classified as institutional because these costs are incurred in order to develop a favorable image of LAC and MGE; they are not required to provide utility service to customers, nor do they provide any direct benefit to these customers. Staff's adjustments can be found on Schedule 10.

Staff Expert/Witness: Wayne Hodges

2. <u>Rebranding</u>

On March 24, 2016, The Laclede Group, the parent company of MGE and LAC, announced it was changing its name to Spire Inc. as a part of an overall strategy to unite the established utilities and all of the recently acquired non-Missouri regulated utilities under one name. It was announced that the individual subsidiaries would eventually "rebrand" as Spire as well. The name change was approved by the shareholders of The Laclede Group on April 28, 2016.

During the test year, costs were incurred for outside consulting work and capital associated with the rebranding strategy. The rebranding was a corporate decision, driven by the recent acquisitions and the potential for future acquisitions. These costs provide no direct benefit to Missouri ratepayers; therefore, Staff has made adjustments to remove all costs incurred during the test year ending December 31, 2016, for outside consultants as well as any capital costs incurred related to the rebranding strategy. Staff will continue to examine these costs as part of its true-up audit, and may make additional adjustments if necessary.

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Staff witness Keith Majors addresses the rate treatment of the rebranding expenses classified by LAC and MGE as "transition costs" as part of his direct testimony.

Staff Expert/Witness: Jason Kunst

3. Rate Case Expenses

Summary of Staff's Recommendation

Rate case expense is the sum of the costs a utility incurs in preparing and filing a rate case. In the instant case, LAC and MGE have incurred expenses in conjunction with outside legal counsel, outside consultants, employee travel, and other costs. Staff recommends assigning LAC's and MGE's discretionary rate case expense to both ratepayers and shareholders, after Staff's recommended adjustments to remove some rate case expenses. The amount of rate case expense assigned to shareholders is based upon the ratio of Staff's recommended rate increase to LAC's and MGE's requested rate increase. This ratio will be updated throughout the remainder of the case and will ultimately be based on the ratio of the Commission-approved rate increase amount to LAC's and MGE's requested rate increase amount.

Background

Rate case expense is defined as all incremental costs incurred by a utility directly related to an application to change its general rate levels. These applications are usually initiated by the utility, but rate case expenses may also be incurred as a result of the filing of an earnings complaint case by another party. The largest amounts of rate case expense usually consist of costs associated with use of outside witnesses/consultants and outside attorneys hired by the utility to participate in the rate case process.

Generally, Staff divides rate case expense over the period of time it expects will pass before the utility's next rate case and includes an annual "normalized" amount in the utility's revenue requirement. Typically, this cost is not "amortized" for ratemaking purposes, and the utility's recovery of this expense in rates is not tracked against its actual rate case expense for consideration of over or under recovery.

Rate Case Expense Sharing Recommendation

Generally, utility management has a high degree of control over rate case expense. Attorneys, consultants, and other services can either be provided by in-house personnel or can be provided by an outside party. The salary and wage expense of in-house personnel is not incremental rate case expense, but is fully included in the cost of service through the salary and wage annualization adjustment at their most current rates. Some Missouri utilities employ in-house counsel and primarily utilize internal labor to process rate filings; therefore, the use of outside attorneys in rate proceedings is not always necessary. However, LAC and MGE currently procure outside counsel, in addition to in-house attorneys who have significant prior experience in Missouri rate proceedings.

During rate proceedings, and generally in the utility regulatory process, there are four broad categories of costs involved:

1) The cost incurred by the Commission for itself and its Staff;

2) The cost incurred by the Public Counsel;

3) The cost incurred by interveners in Commission proceedings; and

4) The cost incurred by the utility in the regulatory process.

Category 1 is the cost incurred by the Commission. This includes all operating expenses, salaries, wages, and benefits of the Commission and its Staff. The Commission's operating expenses are limited to the amount the Missouri General Assembly appropriates for that purpose. An annual amount of operating expenses are assessed by the Commission and paid by the utilities it regulates. The utility is not charged the direct cost of processing its filings or regulating company-specific activities. Similar to all utilities regulated by the Commission, LAC and MGE are charged for Commission costs based on an assignment of the Commission's budget for regulation of the natural gas industry, with this amount allocated to LAC and MGE based on the percentage of LAC and MGE regulated revenues of the total natural gas regulated revenues in Missouri. The utilities, in turn, pass on this expense to their ratepayers through the rate case process. Ultimately, customers pay these expenses through rates for utility services.

Category 2 is the cost incurred by Public Counsel. Public Counsel represents the public and interests of utility customers in proceedings before the Commission. An amount for Public Counsel's annual operating expenses is appropriated by the Missouri General Assembly which is sourced from the Commission's assessment, billed to the utilities and included in the cost of service. Ultimately, customers pay these expenses through rates for utility services.

Category 3 is the cost incurred by interveners in Commission proceedings. Interveners may be involved in Commission proceedings for a variety of reasons, but most frequently for reasons related to revenue requirement and rate design issues raised in general rate proceedings. Some intervening parties represent large individual utility customers or groups of customers. There are several interveners in this case, some of whom have retained their own counsel and experts to review LAC's and MGE's rate increase. Each intervener is responsible for its own rate case expenses.

Category 4 is the cost incurred by the utility in the regulatory and rate setting process. In the past, the Commission had generally allowed utilities to pass through to ratepayers the full amount of normalized and prudently incurred rate case and regulatory expenses to their ratepayers in the rate setting process. When utilities were allowed to pass full rate case costs on to ratepayers, the utilities were the only rate case participants that did not face an inherent limit in the amount of rate case expense they chose to incur. All of the other types of participants were and are limited in the amounts of rate case expense they can incur by the budgetary decisions of the General Assembly or by the willingness of the intervening parties to fund rate case activities. However, with full rate case expense recovery, the utilities were free to plan their rate case activities with the knowledge that the associated cost of those activities were highly likely to be passed on to a third party; i.e., its customers.

Both ratepayers and shareholders benefit from the rate case process. Customers have a vested interest in ensuring that they pay just and reasonable rates for safe and adequate service and shareholders have a vested interest in ensuring an opportunity to receive a reasonable return on their investment. If the utility determines that the rates it charges its customers are inadequate, the ratemaking process before the Commission is the sole venue to remedy that situation. However, utility regulation in Missouri is, at least in part, premised upon an assumption that the utility is not likely in all circumstances to act in the best interests of its customers. This assumption points out the inequity of having customers finance a utility's efforts to increase rates by an amount that may be ultimately be found by the Commission to be excessive or unreasonable.

The practice of allowing a utility to recover all, or almost all, of its rate case expense from customers creates a disincentive to control rate case expenses incurred by the utility. For all other parties to the rate case process, the funds spent are ultimately limited by a budget and financial restraints. Having significant financial resources to fund rate case activities combined with the ability to pass through the entire amount of expenses creates what can be perceived as an unfair advantage over all other parties in the rate case process.

Some expenses incurred for which the utility has a high level of discretion and control are not recovered by the utility in the ratemaking process, even if such expenditures are considered "prudent" from the perspective of the utility. For example, charitable donations have historically not been an includible expense in the cost of service. Donations are defined as discretionary amounts paid to individuals or organizations for charitable reasons, with no direct business benefit. While the utility may believe it has a responsibility to be a "good corporate citizen," charitable contributions, if included in the cost of service, would equate to an involuntary contribution by the ratepayer. Costs associated with political activities (lobbying) are another type of cost usually not allowed to be included in customer rates. These are costs that are not necessary to the provision of utility service in Missouri.

On April 27, 2011, the Commission issued an Order establishing Case No. AW-2011-0330, and within this docket directed Staff to investigate the Commission's current rules and practices regarding recovery of rate case expense in rates by Missouri utility companies. In particular, the Commission asked whether the current policy of generally allowing rate recovery of the entire amount of a utility's incurred rate case expense should be changed either by assigning some portion of these costs to the utility's shareholders, or instituting an overall "cap," or limit, on the amount of recovery of rate case expense in rates by utilities. The Commission stated its concern over rate case expense issues was related to testimony presented in recent rate cases and the recent escalation in the amount of claimed rate case expenses by Missouri utilities. As part of its investigation into these matters, Staff was directed to investigate the practices of other state public utility commissions regarding rate recovery of rate case expense.

Staff discussed several alternative approaches for the Commission's consideration in its report filed in Case No. AW-2011-0330, which was filed in September 2013. One of the options for rate case expense recovery presented in Staff's report was tying a utility's percentage recovery of rate case expense to the percentage of its rate increase request that it is successfully awarded by the Commission.

Staff presented this sharing mechanism, along with other alternatives in the Cost of Service report and testimony in Case No. ER-2014-0370, a prior KCPL rate case. The Commission ordered a sharing of rate case expenses in its Report and Order in Case No. ER-2014-0370, on page 72:

> The Commission finds that in order to set just and reasonable rates under the facts in this case, the Commission will require KCPL shareholders to cover a portion of KCPL's rate case expense. One

> method to encourage KCPL to limit its rate case expenditures would be to link KCPL's percentage recovery of rate case expense to the percentage of its rate increase request the Commission finds just and reasonable. The Commission determines that this approach would directly link KCPL's recovery of rate case expense to both the reasonableness of its issue positions and the dollar value sought from customers in this rate case.
>
> The Commission concludes that KCPL should receive rate recovery of its rate case expenses in proportion to the amount of revenue requirement it is granted as a result of this Report and Order, compared to the amount of its revenue requirement rate increase originally requested. This amount should be normalized over three years. The Commission also finds that it is appropriate to require a full allocation to ratepayers of the expenses for KCPL's depreciation study, recovered over five years, because this study is required under Commission rules to be conducted every five years. [footnotes omitted]

The footnote omitted in the above reference, Footnote 251 on page 72 of the Report and Order in Case No. ER-2014-0370, further clarifies the Commission's conclusions concerning recovery of rate case expenses:

> It is understood that some of the issues litigated in this case do not directly affect the overall revenue requirement granted by the Commission; but it is also clear that the vast majority of the litigated issues do have a direct or indirect impact on the revenue requirement. Accordingly, percentage sharing is a reasonable approach to correlating recovery of rate case expense to the relationship between the amount of litigation that benefited both ratepayers and shareholders and that which benefited only shareholders.

In accordance with the Commission's Report and Order, Staff recommends the same rate case expense sharing mechanism with regard to LAC's and MGE's rate case expense in this case.

Staff concludes that this sharing of expenses is appropriate in this proceeding for the following reasons:

1. This sharing mechanism was ordered by the Commission in the recent KCPL rate case, Case No. ER-2014-0370;
2. Rate case expense sharing creates an incentive, and eliminates a disincentive, on the utility's part, to hold rate case expense to reasonable levels;

3. There is a high likelihood that some positions advocated for by utilities through the rate case process will ultimately be found by the Commission to not be in the public interest; and
4. Both ratepayers and shareholders benefit from the rate case process; the ratepayer receives safe and adequate service at a just and reasonable rate, and the shareholder receives an opportunity to get an adequate return on investment.

Staff intends to examine sharing options for rate case expense in future general rate proceedings for major utilities, and may advocate a different approach to sharing, or different sharing percentages, depending upon the circumstances of each individual filing.

Normalization Period and LAC-MGE Allocation of Rate Case Expense

In addition to the method of recovering rate case expense in rates, Staff must also recommend a normalization period for rate case expense. Staff recommends the LAC and MGE portions of rate case expenses should be recovered over 4 (four) years. This is the approximate period of time between general rate increase filings for LAC and MGE. LAC's most recent rate case was filed on December 21, 2012, 4 years and 4 months prior to the filing of the instant case. MGE's most recent rate case was filed on September 16, 2013, 3 years and 7 months prior to the filing of the instant case.

LAC and MGE have budgeted a total of ** _____ ** of rate case expenses for both rate cases. Most of the expenses incurred or budgeted to be incurred are applicable to both LAC and MGE's costs of services. Staff recommends the rate case expenses should be allocated to LAC and MGE based on the latest total customer counts, resulting in a 56%/45% split, respectively.

Staff Recommended Rate Case Expense Disallowances

In addition to the rate case expense sharing mechanism, Staff recommends disallowance of rate case expenses that should not be subject to any kind of sharing.

ScottMadden CWC Lead Lag Study

LAC and MGE procured a consultant, ScottMadden, to perform a CWC lead lag study. Staff recommends disallowance of all CWC consulting costs in this rate case proceeding. In prior rate cases, all CWC lead lag studies and any resulting issues have been addressed by in-house personnel at LAC. LAC possesses the regulatory experience, knowledge, and resources to handle this entry level accounting issue in-house without assistance of an outside consultant. CWC lead lag studies involve large amounts of internally sourced company information which lends this issue to performance by in-house personnel. The total budget for the CWC lead-lag study is ** _____ **. The total invoiced by this vendor for this scope of work as of June 2017 is ** _____ **. Staff recommends no recovery of the amounts paid for this scope of work, which would not be subject to Staff's rate case expense sharing recommendation.

ScottMadden Other Expenses

Staff requested all contracts or engagement letters and all invoices for amounts charged to rate case expense. Some of the invoices paid to ScottMadden listed a consultant or attorney that was not listed in the contracts or engagement letters. Staff could not determine the scope of work from the engagement letter or the invoices provided, unlike the scope of work by the ScottMadden consultants providing services for CWC, LAC and MGE's class cost of service study, and LAC and MGE's determination of return on equity. Consequently, Staff cannot recommend recovery of these expenses without additional documentation. Staff has a pending data request for this supporting documentation.

Former Employee Consulting and Legal Contract

LAC and MGE engaged in a contract with former employee ** __________ ** to provide services after termination of his employment. Identified in the engagement contract are six scopes of work related to this former employee. Only one scope of work identified specifically relates to the current rate case. Staff did receive invoices related to the engagement contract but could not identify from those invoices what services were related to work performed that would be related to the current rate cases. Consequently, Staff cannot recommend recovery of these expenses without additional documentation. Staff recommends inclusion of expenses from this in current rate case expense only to the extent the expenses are actually related to the current rate cases. Staff has a pending data request for this supporting documentation.

Other Unidentified Expenses

Staff Data Request No. 0073 identified the expenses in detail that have been charged to current rate case expense. Staff was able to verify the majority of claimed rate case expenses, either through the accounting description in Data Request No. 0073, or identified through provided invoices. Staff was unable to identify some of the claimed rate case expenses that were listed in Staff Data Request No. 0073. Consequently, Staff cannot recommend recovery of these expenses without additional documentation. Staff has a pending data request for this supporting documentation.

Depreciation Study

Depreciation study expense is the cost associated with obtaining and supporting the depreciation study required in Commission rule 4 CSR 240-3.160(1)(A). This rule states that, "any electric utility which submits a general rate increase request shall submit…":

> Its depreciation study, database and property unit catalog. However, an electric utility need not submit a depreciation study, database or property unit catalog to the extent that the commission's staff received these items from the utility during the three (3) years prior to the utility filing for a general rate increase or before five (5) years have elapsed since the last time the commission's staff received a depreciation study, database and property unit catalog from the utility.

Staff's interpretation of this rule is that a depreciation study has a useful life of five years. Consequently, Staff obtained the most recent cost incurred by LAC and MGE to retain a consultant for the purposes of conducting a depreciation study including the expense to update the study as needed. The net cost is included in the cost of service as a five-year normalized expense reflected in Staff Adjustment E-92.4 for LAC and E-65.4 for MGE.

Below is a summary of depreciation study expenses for LAC and MGE:

Gannet Fleming Expense	Total Expense	5 Year Normalization
LAC Depreciation Study	** _____ **	** _____ **
MGE Depreciation Study	** _____ **	** _____ **

continued on next page

Below is a summary of total rate case expenses through June 2017:

Summary of Rate Case Expense

Total Rate Case Expense Incurred Through June 2017	** _____ **
Remove ScottMadden CWC Expenses	** _____ **
Remove ScottMadden Other Expenses	** _______ **
Remove Former Employee Consulting Agreement	** _____ **
Remove Blank Costs No Vendor	** _____ **
Remove Gannet Fleming Depreciation Study (Included as full expense over 5 years)	** _____ **
Net Rate Case Costs to be Shared Through June 2017	** _______ **

LAC and MGE's test year includes amortization of rate case expenses from their last prior rate cases, Case Nos. GR-2013-0171 and GR-2014-0004, respectively. Staff removed these test year amortizations from the cost of service, Adjustment E-92.3 for LAC and E-65.3 for MGE.

Recommendation

Staff recommends the Commission approve a normalized amount of rate case expense based on LAC's and MGE's incurred costs, net of Staff's recommended adjustments, multiplied by the ratio of the Commission approved rate increase to LAC and MGE's requested increase. Staff recommends that any subsequent over or under-recovery by LAC and MGE of the ordered amount should not be recognized in future cases.

Since rate case expense is typically end-loaded (i.e. a material amount of cost is incurred near the end of the case, i.e. evidentiary hearings), Staff's examination of rate case expense resulting from this case is not complete. Staff will continue to examine this case's rate case expense and update total rate case expense until a cut-off point is determined. Because of the unique nature of rate case expense, Staff has not included any rate case expenses in the cost of service. Staff recommends an amount should be included based on the ordered amount of rate increase, if any resulting from this rate case.

Staff Expert/Witness: Keith Majors

4. Spire, Inc. Corporate Office Lease Hold Improvements

When Spire Inc. moved into its new headquarters at 700 Market Street, it made changes to the property to better suit its business needs. These costs, known as lease-hold improvements, were then included in rate base and amortized over the term of the lease. All lease-hold improvements are owned and directly charged to LAC. Staff has made an adjustment to allocate the cost of the leasehold improvements of Spire Inc.'s corporate headquarters, 700 Market Street, to the other subsidiaries of Spire Inc. based upon the allocation factors recommended by Staff witness Keith Majors. Staff is using the same allocation percentage that is applied to the lease expense for the corporate headquarters. Staff will continue to review this issue through the true-up date in this case.

Staff Expert/Witness: Jason Kunst

5. Lease-Hold Improvements

When LAC and MGE lease property for operations or administrative space, they make changes to the property to better suit their business needs. These improvements are then amortized over the term of the lease. Staff has made adjustments to annualize the test year expense for non-depreciated leasehold improvements to reflect all changes to these accounts that have occurred through June 30, 2017. Staff will continue to review these amortizations through the true-up date in this case.

Staff Expert/Witness: Jason Kunst

6. Lease Expense

During the test year, LAC and MGE incurred costs towards the leasing of property and equipment that was used in day to day operations. Staff has reviewed the lease expenses and associated lease documentation for the test year and annualized it to reflect the most current expense levels. Staff will continue to review lease expense as part of its true-up audit.

Staff Expert/Witness: Jason Kunst

7. Spire, Inc. Corporate Office Lease

Spire Inc. is currently leasing its corporate headquarters, located at 700 and 800 Market Street in St. Louis, MO. The cost of this lease is allocated between the various regulated and non-regulated subsidiaries of Spire Inc. Staff has made adjustments to the portions of the lease expense allocated to LAC and MGE based on overall allocation factors recommended by Staff witness Keith Majors. Staff will continue to review these costs through the true-up date in this case.

Staff Expert/Witness: Jason Kunst

8. LAC Call Center

LAC leases space for its call center and other customer focused groups on the second floor at 800 Market Street. Currently 53% of the workstations for the call center representatives on the 2nd floor are vacant. LAC has indicated in responses to Staff Data Request Nos. 0277 and OPC data request 2084 that there is currently no plan to hire call center representatives through the end of the update period, and that this space will remain unused. LAC began to outsource a portion of its call center in April 2015. Since then, the number of LAC call center representatives has decreased, while the number of 3rd party representatives has increased. Staff has removed a portion of the lease expense for this unused space as it is a duplicative cost. Staff will continue to review these costs through the true-up date in this case.

Staff Expert/Witness: Jason Kunst

9. Software Amortization

LAC & MGE utilize various software packages in order to conduct business, including their enterprise information management software. The enterprise software is booked to account 391.5, while other software is booked to account 391.3. Staff has made adjustments to annualize the test year expense to the non-depreciable software accounts to reflect all changes to these accounts that have occurred through June 30, 2017. Please refer to the direct testimony of Staff witness Keith Majors regarding the MGE software costs that were classified by LAC and MGE as “transition costs.” Staff will continue to review software amortization costs through the true-up date in this case.

Staff Expert/Witness: Jason Kunst

10. IT Costs/New Blue

New Blue (or "newBlue") is an information technology platform that LAC upgraded to between 2012 and 2015. LAC also upgraded its enterprise information management software that is applied to the newBlue platform. The upgrade consisted of four major components:

- Oracle eBusiness Suite – accounting, reporting, payment processing, supply chain, and human resources management
- PowerPlant System – fixed asset and tax accounting
- Customer Care and Billing System – which is applicable to billing, collections, and customer service functions
- IBM Maximo – enterprise asset management and work management

When Spire Missouri acquired MGE, MGE's software system was replaced with the newBlue platform. This resulted in an allocation of the software costs as well as additional costs to implement the software at MGE. For the treatment of the MGE software integration costs, see the transition cost testimony of Staff witness Keith Majors. ** ____________________

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Staff has made an adjustment to allocate a portion of the software capital costs to MGE using the allocation factors recommended by Staff witness Keith Majors. Staff will continue to review these costs as part of its true-up audit to determine if further adjustments are needed.

Staff Expert/Witness: Jason Kunst

11. Lobbying and MEDA Activities

As part of its analysis of lobbying expense, Staff analyzed the organizations to which LAC and MGE pay dues. If an organization is found to provide legislative activities in part or in whole, Staff made an adjustment to eliminate those lobbying costs. These types of costs primarily benefit LAC and MGE shareholders and should therefore be absorbed by the shareholders of LAC and MGE. Staff believes that any costs related to the Missouri Energy Development Association ("MEDA") should be treated below-the-line for ratemaking purposes and absorbed by the shareholders. The purpose of MEDA is "to work closely with Missouri Investor-Owned Utilities and their strategic partners, representing their interests and advocating balanced policies in legislative and regulatory arenas."[54] Accordingly, MEDA is engaged in governmental affairs and lobbying activities on behalf of Missouri regulated utilities on an ongoing basis. In addition to MEDA, Staff discovered costs related to legislative activities for the American Gas Association ("AGA") that should also be treated below-the-line for ratemaking purposes.[55]

Staff excluded all lobbying costs for MEDA and a percentage for AGA. Staff's adjustments for lobbying are located on Schedule 10 of Staff's Accounting Schedules, Adjustments E-88.5, E-93.9 for LAC and E-60.5, E-66.1 and E-66.6 for MGE.

Staff Expert/Witness: Wayne Hodges

12. <u>Outside Services</u>

During the test year LAC and MGE utilized the services of outside contractors for various work performed such as outside audit services, tax preparation, line location, etc. Staff has made adjustments to these costs to remove those that provide no benefit to the rate payers.

Staff Expert/Witness: Jason Kunst

13. <u>Insurance Expense</u>

Insurance expense is the cost of obtaining protection obtained from third parties by utilities against the risk of financial loss associated with unanticipated events or occurrences. Utilities, like non-regulated entities, routinely incur insurance expense in order to minimize their liability (and, potentially, that of their customers) associated with unanticipated losses. Insurance traditionally consists of the following types of coverage:

- Directors and Officers Liability Insurance
- Workers' Compensation - covers all employees
- General and Excess Liability – all liability claims against the company
- Property – covers tangible property
- Fiduciary Liability – general coverage including theft, forgery, fraud, terrorism, etc.

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[54] Source MEDA website.

[55] Staff Data Request No. 0077, 2016 AGA Lobbying Percentage 5.39%.

As an ongoing and normal expense of a utility, insurance expense should be analyzed in every rate case audit to determine whether annualization and/or normalization of the test year expense amount is appropriate.

Premiums for insurance are normally pre-paid by utilities (i.e., payment is made by the utility to the insurance vendor in advance of the policy going into effect). Most insurance policies cover an annual (twelve month) period. Therefore, insurance payments are normally treated as prepayments, with the amount of the premium being booked as an asset and amortized to expense over the life of the policy. The unamortized balance of the prepaid insurance account (either the period-ending balance or a 13-month average balance) is included in rate base, with an annualized level of insurance expense included in rates. MGE's and LAC's prepayments have been analyzed separately and are included in the rate base. These are discussed in the prepayments section of this Cost of Service Report.

Staff's adjustment to FERC Account 924 reflects the ongoing and normal expense for property insurance premiums, and Staff's adjustment to FERC Account 925 reflects the ongoing and normal expense for all other insurance premiums. Adjustment E-61.2 and E-62.3 reflects MGE's insurance expense and adjustment E-89.1 and E-90.2 reflects LAC's insurance expense.

Staff Expert/Witness: Michael Jason Taylor

14. Injuries and Damages

Injuries and damages expense represents the portion of legal claims against a utility that is not subject to reimbursement under the utility's insurance policies. Injuries and damages expense normally consists of the following components:

- General Liability
- Auto Liability
- Workers Compensation

Generally Accepted Accounting Principles normally require companies to book injuries and damages claims on an accrual basis. This means the expense is based on estimated future claims payout amounts, rather than the actual cash payments made. However, for ratemaking purposes, Staff's position is that injuries and damages expense should be measured on a "cash" basis; i.e., be based upon actual cash payouts by the utility for claims made against it. This approach results in the actual payments forming the basis for the amount allowed in utility rates for recovery instead of the accrued book expense.

For injuries and damages expense, Staff calculated a three-year average of actual cash payouts in Account 925 and, following precedent in prior LAC and MGE cases, used that average to represent a normalized level of actual claims paid. Staff then subtracted the normalized level of actual claims paid from the test year to calculate its adjustment, as reflected on Schedule 10 of Staff's Accounting Schedules, MGE adjustment E-62.2 and LAC adjustment E-90.1.

Staff Expert/Witness: Michael Jason Taylor

15. Treatment of Certain Expenses – JJ's (Incident) – MGE Specific

In Case No. GR-2014-0007, MGE was authorized to defer costs related to an incident that occurred at JJ's Restaurant in Kansas City, Missouri. The Commission approved the following language in a Stipulation and Agreement[56] on April 23, 2014:

> MGE shall be authorized to defer and record to its own subaccount of FERC Account No. 182 as a regulatory asset all costs incurred or payments received by MGE in connection with the Incident, including, but not limited to: (a) all legal fees, outside expert fees, consulting fees or other similar fees and expenses incurred by or on behalf of MGE relating to the investigation and assessment of the Incident and litigation activities associated with the Incident: (b) all unreimbursed damages or costs incurred or paid by or assessed against MGE as a result of the Incident; (c) all costs incurred to recover such costs from potentially responsible third parties and insurance companies; and (d) all reimbursements and recoveries of costs and damages from third parties and insurance companies.

In the course of its investigation for this case Staff requested the amount of all expenses and insurance reimbursements related to the incident that MGE recorded in the deferral account and any other expenses and insurance reimbursements recorded during the test year, 12 month period ending December 31, 2016. MGE responded to Staff Data Request No. 00125 as follows:

> MGE does not have any actual incident-related expenses in respect to the JJ's litigation during the test year, or for periods going forward. MGE/Southern Union paid the $1 million dollar SIR

[56] GR-2014-0007, Stipulation and Agreement, page 13.

> (self-insured retention) prior to Laclede taking ownership of MGE in 2013. Once the SIR level of cost was met, the rest of the expenses have been paid by the former owner's (Southern Union) insurance program which accepted coverage of the incident. Consequently, Laclede/Spire's insurance program was not affected by the JJ's incident.

Based on the response to this data request, Staff asked if MGE is seeking recovery of the costs paid by MGE prior to Laclede taking ownership of MGE in 2013. MGE responded in Staff Data Request No. 0125.3 as follows:

> In August, 2013 MGE exceeded the SIR amount of $1,000,000 at that time all expenditures reimbursed from the insurance provider. We aren't seeking any recovery of the $1,000,000.

Staff reviewed MGE's books and records and confirmed that MGE's books do not currently reflect a regulatory asset that includes costs related to the incident. Although MGE stated that they do not have any actual incident-related expenses in respect to the JJ's litigation during the test year, based on Staff's review of MGE's general ledger and expense reports, Staff found travel related costs associated with the incident. Staff made an adjustment to eliminate these costs from the test year. Staff's adjustment is reflected in Staff Accounting Schedule 10, Adjustment E-58.2.

Staff Expert/Witness: Karen Lyons

16. <u>Environmental Costs</u>

LAC and MGE are subject to environmental remediation costs imposed upon them as a result of federal and state statutory and regulatory requirements. Some of these costs are associated with items such as mercury contamination and asbestos clean-up efforts, but the vast majority of the Company's environmental costs relate to manufactured gas plant (Manufactured Gas) remediation costs.

Manufactured gas plants were facilities owned by companies from the 19th century to the early-to-mid 20th century. Years after the plants ceased operation, they were found to have left residues of pollutants in the ground. The 1980 Comprehensive Environmental Compensation and Liability Act (also known as the Superfund Act), as amended in 1986, imposed strict joint liabilities on present or former owners or operators of facilities where substances have been or are threatened to be released into the environment, including Manufactured Gas sites. LAC and

MGE can be held potentially liable for at least a portion of any clean-up costs required by the Environmental Protection Agency or other regulatory bodies relating to these sites. LAC currently owns two Manufactured Gas sites and MGE owns six sites. LAC and MGE also can potentially be held liable for costs incurred for non-owned Manufactured Gas sites. Non-owned sites for LAC and MGE are sites that are within the historical service territory of LAC and MGE but are not currently owned by either company. Clean-up activities have occurred at several sites owned by LAC and MGE in past years.

Prior to the acquisition of MGE by LAC, MGE had the ability to offset Manufactured Gas costs with insurance proceeds and through an agreement with Westar, formally Western Resources, a former owner of MGE's Missouri gas properties.[57] MGE exhausted these options prior to LAC acquiring MGE in 2013. LAC still has access to environmental insurance proceeds to offset Manufactured Gas remediation costs.

During the course of this rate case, Staff analyzed actual remediation costs incurred by LAC and MGE. For MGE, Staff reviewed remediation costs for the period of 1994 through June 2017. In Case No. GR-2014-0007, Staff included an annualized level of $731,153 in MGE's cost of service. Since the conclusion of the 2014 rate case, MGE has not incurred any Manufactured Gas remediation costs. LAC has not incurred any Manufactured Gas remediation costs for the period of 2012-2016.[58] In addition, in 2007, LAC received insurance proceeds that have been used to offset Manufactured Gas actual incurred costs. As of June 2017, LAC still has access to a significant amount of insurance proceeds. Since LAC and MGE have not incurred any Manufactured Gas remediation costs for several years and LAC still has access to insurance proceeds to offset these costs, Staff did not make an adjustment to include Manufactured Gas remediation expense in its case.

Staff Expert/Witness: Karen Lyons

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[57] Westar entered into an agreement in 1994 with Southern Union (former owners of MGE) accepting partial responsibility for remediation costs incurred through 2009. According to the agreement, Western Resources was responsible for up to 50 percent of remediation costs that could not be recovered through insurance proceeds or third party recoveries. MGE received a payment from Westar in 2010. Subsequent to the payment and also in 2010, Southern Union relieved Westar of any future liability.

[58] Response to Staff Data Request No. 0052 in Case No. GR-2017-0215.

17. Credit Card Processing Fees

In the Partial Stipulation and Agreement filed as part of Case No. GR-2009-0355, MGE was allowed to begin recovering in rates the per-transaction expense associated with processing customer credit card payments. Prior to that case, each customer who utilized this form of payment was responsible for those transaction fees. MGE has continued to recover these transaction fees in rates. LAC requested similar treatment for credit card processing fees as part of direct testimony in this case.

Staff recommends that the actual credit card processing fees for the 12 months ending June 30, 2017, be included as the annualized amount to include in rates for MGE. Since MGE is allowed to recover these payments in rates, for consistency purposes, Staff recommends similar treatment for the credit card processing fees for LAC. Staff has included an annualized amount for credit card processing fees for LAC, based on the number of actual credit card payments for the 12 months ending June 30, 2017, multiplied by the average per payment transaction fee incurred by MGE for the same period.

Staff Expert/Witness: Jason Kunst

18. Dues and Donations

Staff reviewed the list of membership dues paid and donations made to various organizations that MGE and LAC charged to their utility accounts during the test year. Dues and donations are expenditures made by utilities to organizations, clubs, charitable funds and other groups. Dues can be defined as the amount paid to an organization by the utility which allow the utility or individuals employed by the utility company to participate in and benefit from the organization's activities. Donations are defined as discretionary amounts paid to individuals or organizations for charitable reasons, with no direct business benefit.

Staff used the four criteria first used in Case No. EO-85-185, to establish when dues and donations should not be included in customer rates. These criteria have been applied in utility rate cases since 1985:

(1) The expenses are involuntary ratepayer contributions of a charitable nature;

(2) The expenses are supportive of activities which are duplicative of those performed by other organizations to which the Company belongs or pays dues;

(3) The expenses are associated with active lobbying activities which have not been demonstrated to provide any direct benefit to the ratepayers; or,

(4) The expenses represent costs of other activities that provide no benefit or increased service quality to the ratepayer.

In regard to the first criteria listed above, MGE and LAC accounted for all donations made to charitable organizations as a below-the-line expense amount, and, consequently, they are not included in the determination of their revenue requirements.

According to information obtained from the website of the Civic Council of Greater Kansas City, the Civic Council engages in a variety of advocacy activities to advance its mission and vision. Advocacy is accomplished through use of its staff and contract lobbyists, as well as through partnerships with other like-minded organizations and groups in the metropolitan area and across the states of Kansas and Missouri. Civic Council staff may spend multiple legislative sessions educating and informing elected officials and policy makers about Civic Council strategic priorities before focusing on a specific bill.[59]

In addition to participating in statewide coalitions, the Civic Council collaborates with other regional stakeholders and partners, including the Greater Kansas City Chamber of Commerce, to advance the civic agenda.

While Staff recognizes the importance of charitable contributions, donations such as those made to the Civic Council of Greater Kansas City do not provide any direct benefit to ratepayers and are not necessary for the provision of safe and adequate service and should be excluded from MGE's and LAC's revenue requirements. In addition, recovery in rates of donations made by regulated utilities would constitute an involuntary contribution on behalf of the rate-paying customer, and, thus, those donations were excluded from MGE's and LAC's revenue requirements.

LAC and MGE participate in dozens of social and civic organizations. Staff reviewed the contributions made to these organizations to determine if the costs should be recovered in rates based on the benefit derived from these costs to LAC's and MGE's customers.

For example, according to information obtained from the website of the Greater Kansas City Chamber of Commerce, the Greater Kansas City Chamber of Commerce is not directly

[59] www.kcciviccouncil.org.

involved in either economic development or convention/visitors functions. Those efforts are handled by two separate organizations: the Kansas City Area Development Council and the Convention & Visitors Association of Greater Kansas City.[60] Therefore, the Greater Kansas City Chamber of Commerce dues should not be included in MGE's cost of service.

Also, based on Commission criteria detailed in Case No. EO-85-185, Staff recommends removal of chamber of commerce dues if they are in the following categories:

1. Chamber of commerce dues that serve areas outside of the LAC and MGE service territory
2. Chamber of commerce dues for statewide chambers of commerce
3. Chamber of commerce dues that are duplicative of other chamber dues in the same area.

The Missouri Chamber Federation is a network of Missouri's strongest chambers of commerce. Currently, more than 100 chambers of commerce are a part of the Missouri Chamber Federation. For MGE and LAC, Staff recommends the removal of dues for the Missouri Chamber Federation based on item two of the Commission's criteria in Case No. EO-85-185.

Staff's adjustments for dues and donations are located on Schedule 10 of Staff's Accounting Schedules, Adjustments E-22.3, E-39.1, E-55.3, and E-63.1, E-80.4, E-80.5, E-93.3, E-93.5 and E-93.8 for LAC and E-52.2, E-54.1, E-66.1, E-66.2 and E-66.3 for MGE.

Staff Expert/Witness: Wayne Hodges

19. <u>Ticket Expense</u>

LAC and MGE make use of corporate suites and season tickets to sporting and entertainment events to entertain large customers, government employees, and their own employees and families. LAC and MGE made an adjustment to remove the cost of the tickets in their direct filing. In addition to the costs removed by LAC and MGE, Staff has removed additional expenses related to tickets, as well as the food, alcohol and other beverage costs associated with attending these events.

Staff Expert/Witness: Jason Kunst

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[60] www.kcchamber.com.

20. Property Tax Expense

Property taxes are those taxes assessed by state and local county taxing authorities on a utility's "real" property. Property taxes are computed using the assessed property values and property tax rates. The taxing authorities, either state or local, use an assessment date of January 1 of each year. This date is critical because it forms the basis for the property tax bill, which is generally paid at the end of that same year, no later than December 31. A utility is required to file with the taxing authorities a valuation of its utility property based on the January 1 assessment date. The taxing authorities will then provide the utilities with what they refer to as "assessed values" for each category of property owned. Typically in the late summer/fall time frame, the utilities will be given the property tax rate. Property tax bills are then issued with "due dates" before December 31 based on property tax rates applied to the utilities' assessed values.

Staff annualizes property taxes by using a ratio of plant-in-service as of January 1 to property taxes paid in the same year. Staff uses this ratio to evaluate the property taxes paid by LAC and MGE, develop an annualized level of property taxes to include in LAC's and MGE's cost of service, and determine the level of property taxes to include in future ISRS cases.

Since the update period in this case is June 30, 2017, Staff determined the annualized property taxes based on the property LAC and MGE had in-service on January 1, 2017. Staff applied a property tax ratio based on actual 2016 property tax payments to January 1, 2017, plant. The property tax rate is calculated by dividing the total amount of property tax paid by LAC and MGE in 2016 by the total cost of the taxable property owned on January 1, 2016. This ratio when applied to the January 1, 2017, plant provides the amount of property taxes expected to be paid for 2017. Staff recommends that this is the appropriate method for developing an annualized level of property taxes, because this method relies upon the actual January 1, 2017, balance of MGE's and LAC's property, and uses the most recent known tax rate (2016), without attempting to estimate any change in the rate of taxation for 2017 that is not known as of the update period.

Staff's approach is consistent with previous Staff recommendations and with the Orders by the Commission in the following litigated rate cases:

- Missouri Gas Energy, Case No. GR-96-285
- St Louis County Water Company, Case No. WR-2000-844
- The Empire District Electric Company, Case No. ER-2001-0299
- Kansas City Power & Light, Case No. ER-2006-0314

In the most recent case listed above, Case No. ER-2006-0314, the Commission ordered the following:[61]

> Staff recommends that the Commission calculate property tax expense by multiplying the January 1, 2006 plant-in-service balance by the ratio of the January 1, 2005 plant-in-service balance to the amount of property taxes paid in 2005. KCPL wants the property tax cost of service updated to include 2006 assessments and levies. The Commission finds that the competent and substantial evidence supports Staff's position, and finds this issue in favor of Staff.

Staff's recommended level of property taxes for LAC and MGE is reflected in Staff's Accounting Schedule 10, adjustment E-79.1 for MGE and adjustment E-105.1 for LAC.

Staff Expert/Witness: Karen Lyons

21. <u>Kansas Property Taxes – MGE Specific</u>

For several years, the state of Kansas has attempted to collect property taxes from gas local distribution companies (LDCs) for gas held in storage at sites physically located in its jurisdiction. MGE and other litigants have pursued litigation through the appeals process in the court system in an attempt to overturn the property tax assessments on stored gas.

The state of Kansas has attempted to assess and collect property taxes from MGE in this manner since approximately 2000. In Case No. GR-2001-292, Staff included Kansas property taxes in MGE's revenue requirement. However, in that rate case, parties reached a global settlement with no specific dollar amount tied to that specific issue.[62] In October 2003, the Kansas Supreme Court ruled that MGE was entitled to an exemption from the Kansas property taxes and as such was no longer responsible for payment of Kansas property taxes.[63]

In 2004, Kansas passed legislation changing the previous law, empowering the state of Kansas to again assess and collect property taxes for natural gas stored in its jurisdiction. In Case No. GR-2004-0209, MGE requested recovery of these taxes. At the time of the rate case, Kansas had not assessed or billed MGE for the gas stored in its jurisdiction. Therefore the

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[61] Case No. ER-2006-0314, Commission Report and Order, page 68.

[62] See GU-2005-0095 Commission Report and Order, pages 4-5.

[63] See GU-2005-0095 Commission Report and Order, page 4.

property taxes were not known and measurable. The Commission denied recovery of Kansas property taxes, stating the following in its Report and Order issued September 21, 2004:

> The Commission agrees that MGE cannot recover the new Kansas taxes in this case. These taxes were not paid during the test year established for this case and the taxes will not be paid at all, until December 2004. MGE also indicated that it would be paying the taxes under protest. That means that if its legal challenge is upheld MGE would receive a refund from the state of Kansas. However, MGE's witness testified that if MGE received a tax refund, it probably would not pass that refund back to ratepayers unless it was ordered to do so by this Commission.[64] As a result, MGE's potential tax liability is not currently known or measurable and on that basis it cannot be included in MGE's cost of service for this case.[65]
>
> MGE will not be permitted to recover the new Kansas property tax for gas in storage in this case. The Commission will not issue an Accounting Authority Order in this case but MGE may file an application for such an order in a new case if it wishes to do so.[66]

Subsequently, MGE filed an application requesting an AAO in Case No. GU-2005-0095, for Kansas property taxes. The Commission granted an AAO, stating the following in its Report and Order issued September 18, 2005:

> That Missouri Gas Energy, a division of Southern Union Company, is granted an Accounting Authority Order whereby the company is authorized to record on its books a regulatory asset, which represents the expenses associated with the property tax to be paid to the state of Kansas pursuant to Senate Bill 147 for tax years 2004, 2005, and 2006. Missouri Gas Energy may maintain this regulatory asset on its books until the beginning of the month after the final judicial resolution of the legality of that tax. Thereafter, Missouri Gas Energy shall commence amortization of the deferred amounts, with the amortization to be completed over a five-year period.

In addition to a successful appeal in 2003, MGE was successful in appealing the assessment and collection of Kansas property tax based on the 2004 Kansas Legislation and, therefore, since it

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[64] Transcript, pages 2524-2525, Lines 1-25, 1-13.

[65] GR-2004-0209-Commission Report and Order, page 79.

[66] GR-2004-0209 Commission Report and Order, page 92.

did not have to pay these taxes, MGE did not seek recovery of these taxes in its 2006 rate case, Case No. GR-2006-0422.

However, in 2009, the Kansas Legislature passed a new law, Kansas House Substitute for Senate Bill No. 98, to allow for assessment of all gas being stored and held for resale in Kansas. Similar to its position in Case No. GR-2004-0209, MGE requested recovery of Kansas property tax it had not yet paid in Case No. GR-2009-0355. As part of the Stipulation and Agreement on November 5, 2009, in the 2009 rate case, approved by the Commission on February 10, 2010, MGE was granted an AAO for the expenses associated with property tax to be paid to the state of Kansas. According to the Stipulation and Agreement on page 4:

> MGE shall be granted the following accounting authority order (AAO): That Missouri Gas Energy, a division of Southern Union Company, ("MGE") is granted an Accounting Authority Order whereby the company is authorized to record on its books a regulatory asset, which represents the expenses associated with the property tax to be paid to the state of Kansas in relation to natural gas in storage pursuant to House Substitute for Senate Bill No. 98 for 2009 and subsequent years based on assessments from Kansas taxing authorities. Missouri Gas Energy may maintain this regulatory asset on its books until the beginning of the month after the final judicial resolution of the legality of that tax. Thereafter, Missouri Gas Energy shall commence amortization of the deferred amounts, with the amortization to be completed over a five-year period. If MGE files a general rate case prior to that final resolution, ratemaking treatment of the deferral may be considered within that case. If MGE is allowed ratemaking treatment providing a return of any AAO funds for Kansas Property Tax, there shall be no return on the Kansas Property Tax AAO funds included in rates. The Commission shall include language in its Order stating that the grant of this AAO does not in any way control how the Commission will treat this deferral for ratemaking purposes in subsequent rate cases, except there shall be no rate base treatment of deferred amounts as provided above.

In both the 2004 and 2009 rate cases, the Commission made it clear that if the courts concluded that MGE had to pay the Kansas taxes, the deferral treatment would end and the five-year amortization was to commence the following month. No rate base treatment was to occur related to any unamortized balance for this deferral treatment.

In addition to the cases discussed above, as part of the Stipulation and Agreement in Case No. GM-2013-0254 (concerning the merger of Laclede Gas Company and MGE), approved by the Commission on July 17, 2013, "pre-acquisition regulatory assets of Laclede Gas and MGE will continue in accordance with the Commission approved terms and conditions that created or continued the asset."[67]

On December 6, 2013, the courts issued an order holding MGE responsible for Kansas property taxes. MGE and other litigants appealed the Kansas Supreme Court's decision to the United States Supreme Court. On October 6, 2014, The United States Supreme Court denied the Petition for a writ of certiorari.

As part of the Stipulation and Agreement filed on April 11, 2014, in the general rate case denoted as Case No. GR-2014-0007, and approved by the Commission on April 23, 2014, MGE was allowed to defer a portion of Kansas property taxes and allowed to recover a portion in base rates. According to the Stipulation and Agreement on page 14:

> The Parties agree that the rates recommended herein include an allowance of One Million Six Hundred Thousand ($1,600,000) for the amortization of MGE's current regulatory asset relating to the assessment of Kansas Ad Valorem Taxes and One Million Four Hundred Thousand ($1,400,000) to reflect an annual ongoing level of Kansas Ad Valorem Taxes. MGE shall be authorized to record as a regulatory asset/liability, as appropriate, the difference between any Kansas Ad Valorem taxes paid by the Company and the allowances included in rates, and such difference shall be recovered from or returned to customers in future rates through a five year amortization of such difference, provided that if the Company prevails in its current appeal challenging the lawfulness of such tax assessments, the Company shall apply interest to any amounts recovered in rates at the Company's short term debt rate but shall seek approval as soon as reasonably practical to flow through any difference to customers through a separate tariff mechanism. In the event the amortization of the asset or liability becomes fully amortized between rate cases, the amount included in rates between the date it became fully amortized and the effective date of rates in the next rate case shall be returned to shareholders or ratepayers, as appropriate, over a time period not to exceed five years.

The annual amortizations approved by the Commission in the 2014 rate case, $1.6 million for historical deferred property taxes (2009-2013) and $1.4 million for an ongoing level, were based on estimates. Estimates were used because the final decision from the Supreme Court was not

[67] GM-2013-0254 *Stipulation and Agreement* pages 12-13.

known. As part of this case, Staff reviewed invoices, inventory levels, gas prices, and tax rates for 2009 through 2013 to verify the deferred balances recorded in the regulatory asset approved in Case No. GR-2014-0007, were correct. Staff determined after reviewing the actual property tax invoices that the regulatory asset created in the 2014 rate case using estimates was overstated. In this case, Staff revised the regulatory asset created in the 2014 rate case to reflect actual property tax paid by MGE. The revised regulatory asset was used to calculate the unamortized balance through the update period, true-up period, and estimated effective date of rates. The following reflects the revised regulatory asset balance, the amount of amortization collected and the unamortized balance as of the update period, true up period and estimated effective date of rates:

Regulatory Asset-Deferred Kansas Property Taxes (2009-2013)			
	Update Period June 30, 2017	**True Up Period September 30, 2017**	**Estimated Effective Date of Rates February 28, 2018**
Actual Taxes Paid (2009-2013)-Revised Regulatory Asset beginning balance.	$7,802,197	$7,802,197	$7,802,197
Amortization Collected	$5,066,667	$5,466,667	$6,133,333
Unamortized Balance	$2,735,531	$2,335,531	$1,668,864
Annual Amortization (5 years)	$547,106	$467,106	$333,773

Staff also compared the annual amortization approved in MGE's 2014 rate case to the actual Kansas property taxes paid on an annual basis since 2014 to determine the amount of over or under recovery.

continued on next page

Difference of Actual and Amortization of Ongoing Kansas Property Taxes (2014-current)			
	Update Period June 30, 2017	**True Up Period September 30, 2017**	**Estimated Effective Date of Rates February 28, 2018**
Actual taxes paid since 2014.	$4,391,608	$4,672,237	$5,139,951
Amortization Collected	$4,433,333	$4,783,333	$5,366,667
Amount Over-Collected	$(41,725)	$(111,097)	$(226,716)

At the end of the true up period in this case, September 30, 2017, the balance of the deferred account will be approximately $2.3 million. Based on the current annual amortization of $1.6 million, the regulatory asset will be fully recovered in March 2019. MGE has historically filed a rate case every three years. Allowing an annual amortization of $1.6 million to continue will result in a significant over-collection of the deferred costs. Consequently, Staff recommends spreading the annual amortization, over a five-year period, and for the deferred Kansas Property taxes to be revised to $547,106 for the update period and $467,106 for the true up period. Staff further recommends that the amortizations be reduced by the amount of over-collection identified in the second chart above for the update period and true up period. Staff's adjustment to reduce the annual amortization is reflected in Staff Accounting Schedule 10, Adjustment E-79.3

In addition to the deferred balances for Kansas Property taxes, MGE now incurs an annual expense for Kansas Property taxes. Based on Staff's analysis of MGE's invoices, inventory levels, gas prices and tax rates, Staff recommends recovery of an annual level of Kansas property taxes based on a level of Kansas Property taxes MGE incurred in 2016. Staff's adjustment for the annualized level of Kansas Property taxes is reflected in Staff Accounting Schedule 10, Adjustment E-79.2

Staff Expert/Witness: Karen Lyons

22. <u>Uncollectibles</u>

Uncollectible expense is the portion of retail revenues LAC and MGE are unable to collect from retail customers by reason of bill non-payment. After a certain amount of time has passed, delinquent customer accounts are written off. If LAC and MGE are subsequently able to successfully collect some portion of previously written off delinquent amounts owed, then those amounts collected reduce the actual write-offs. This results in the net write-off which is used to determine the annualized level of bad debt expense. Staff examined all levels of net write-offs for at least the last ten years for both LAC and MGE. LAC and MGE both made significant changes to their write-off policies in September 2015. For that reason, Staff's opinion is that it is appropriate to use the most current data available to represent ongoing levels of uncollectible expense for LAC and MGE. So, Staff arrived at an annualized/normalized level based on the 12 months ended June 30, 2017, which is the update period in this case. Staff will reexamine the level of net write-offs as part of Staff's proposed true-up audit through September 30, 2017.

Staff Expert/Witness: Amanda McMellen

23. <u>Amortization of Non-Depreciated Accounts – UGS Royalties and Easement Expense</u>

Certain items such as leasehold improvements, franchises and consents, land and land rights, intangible plant and easements/right of way costs are items that LAC and MGE include in their rate base but are not assets that have a depreciation rate assigned to them. In place of this, LAC and MGE amortize and recover the asset over the life of that asset.

Specifically, in account 352.1 Storage Leaseholds & Rights, LAC owns mineral rights associated with the property it owns that is known as the Lange natural gas storage field and the propane cavern located in north St. Louis County. LAC pays royalties for these mineral rights, and books these payments as an amortization. Staff has included the yearly amortization expense for these royalties in the cost of service. MGE does not pay royalties as MGE has only pipeline storage. Also, in account 350.2 UGS Easements, LAC amortizes land easements related to its Lange natural gas storage field. A small amount related to these easements is contained in this account and is not currently being amortized. Staff recommends LAC begin amortizing these easements over a 20 year life beginning with the effective date of rates in this current rate proceeding.

Staff Expert/Witness: Lisa M. Ferguson

24. Officer Expense Accounts

The officers of LAC and MGE submit expense reports for items such as travel costs, membership dues, and other miscellaneous charges. Staff has reviewed the expense reports for the officers of LAC and MGE and removed charges for items that provide no benefit to ratepayers and are not necessary in the provision of safe and adequate service.

Staff Expert/Witness: Jason Kunst

25. PSC Assessment

The Missouri Public Service Commission assessment ("PSC Assessment") is an amount billed to all regulated utilities operating under the jurisdiction of the Commission as an allocation of the Commission's operating costs for regulating those utilities. The expense of the PSC Assessment is then included by these regulated utilities in the rates charged to customers.

LAC and MGE's PSC Assessments were adjusted to the latest assessment available for the current fiscal year (FY-2018) based upon information obtained from the Commission's Budget and Fiscal Services Department. Staff's adjustment for the PSC Assessment is located on Schedule 10 of Staff's Accounting Schedules, Adjustment E-65.1 reflects Staff's adjustment for MGE and adjustment E-92.1 reflects Staff's adjustment for LAC.

Staff Expert/Witness: Michael Jason Taylor

26. Corporate Franchise Tax

Corporate franchise tax is a tax that corporations pay in advance to the state of Missouri for the privilege of doing business within the state. According to the Missouri Department of Revenue, no franchise tax is to be imposed on corporations for tax years beginning on or after January 1, 2016. Staff reviewed LAC's and MGE's general ledgers for the 12-month period ending December 31, 2016, the test year in this case. Staff found that MGE did not record corporate franchise taxes during this period. However, LAC recorded corporate franchise tax expenses from January 2016 to September 2016. Since corporate franchise tax is no longer paid by LAC and will not be paid in the foreseeable future, Staff made an adjustment to eliminate these costs from the test year. Staff's adjustments are identified on Schedule 10 of Staff's Accounting Schedules, Adjustment E-108.1.

Staff Expert/Witness: Wayne Hodges

27. Cyber Security/Integrity Management Costs

Staff analyzed LAC's and MGE's Cyber-Security and Integrity Management costs for the fiscal year period of 2015 through June 2017, based in part on LAC's and MGE's request for a Cyber-Security/Integrity Management tracker mechanism. Although LAC and MGE requested a tracker for these types of costs, no adjustment to the test year was proposed by LAC or MGE. In response to Staff Data Request No. 0228, LAC and MGE provided software maintenance and license amortization amounts for this period. LAC and MGE prepay the software maintenance vendor and amortize the balance of the costs over the life of the contract. Staff's review of the costs shows that LAC and MGE established new contracts beginning in October 2016. Staff was unable to verify the test year balance Cyber-Security and Integrity Management for LAC and MGE for the direct filing and as a result could not make an adjustment to the test year to reflect the current costs. Staff will annualize the software maintenance and license amortization based on the current contracts once Staff receives the test year data, and address the adjustment in rebuttal testimony.

The costs addressed in this section are non-labor and non-capital related costs. Staff included labor and capital costs for Cyber-Security and Integrity Management in its labor annualization and net plant-in-service, to the extent these types of costs were incurred by LAC and MGE through June 2017.

Staff Expert/Witness: Karen Lyons

28. Non-Wage Maintenance

Maintenance Normalization Adjustments

Maintenance expense is the cost of maintenance chargeable to the various operating expenses and clearing accounts. It includes labor, materials, overheads, and any other expenses incurred in maintaining a utility's assets. Maintenance expense normally consists of the costs of the following activities:

- Direct field supervision of maintenance;
- Inspecting, testing and reporting on condition of plant, specifically to determine the need for repairs and replacements;
- Work performed with the intent to prevent failure, restore serviceability, or maintain the expected life of the plant;
- Testing for, locating, and clearing trouble;

- Installing, maintaining, and removing temporary facilities to prevent interruptions; and
- Replacing or adding minor items of plant, which do not constitute a retirement unit.

Staff analyzed maintenance costs for each month from January 1, 2012, through June 30, 2017, for LAC and from January 1, 2004, through June 30, 2017, for MGE, by FERC account. Maintenance costs for LAC prior to January 1, 2012, were not available for Staff to analyze. Staff separated maintenance between labor and non-labor costs. Since Staff specifically addresses labor costs separately within the payroll discussion in the cost of service analysis, labor costs were segregated from the non-labor costs to perform the review of maintenance costs. A detailed discussion concerning payroll is located under the heading *Payroll, Payroll Related Benefits* in this cost of service report. The maintenance analysis was done only on non-labor maintenance and operating costs.

Staff took several steps to analyze the maintenance data, including examining the non-labor maintenance amounts to identify any trends or fluctuations from one period to another. Staff calculated a range of averages from a two (2)-year average to a five (5)-year average to determine any such trends or fluctuations. Each yearly cost and each average for maintenance was also compared to the test year (the 12-month period ended December 31, 2016). Staff reviewed the data to establish a maintenance level that is representative of an annual level of the Companies' future maintenance costs.

Staff recommends that the 12-month test year, ended December 31, 2016, account balances are reasonable and representative of a normalized level of maintenance costs for LAC and MGE for purposes of its direct case filing.

Staff Expert/Witness: Antonija Nieto

29. Propane Expense/O&M Associated with Propane Cavern

As was previously discussed in the sections Propane Investment and Propane Revenues, LAC has not requested, as part of this current rate case, a request for different regulatory treatment than what was agreed to by the parties in the *Stipulation and Agreement* for propane investment, revenue and expense in LAC's prior rate case, Case No. GR-2013-0171. Consistent with its position on propane cavern investment and revenues, Staff has included all operation and maintenance expenses associated with operating the propane cavern in its cost of service calculation as well as all property taxes associated with the propane cavern.

This issue does not affect MGE as that division does not have propane facilities.

Staff Expert/Witness: Lisa M. Ferguson

30. <u>Line Locate Costs</u>

LAC and MGE contract underground line locating costs through a third party, United States Infrastructure Corporation (USIC). During the test year ending in this case, LAC and MGE received notification from USIC that there would be an increase in the costs for location services related to finding underground fiber optic cables. LAC and MGE filed direct testimony in this case seeking an increase in these costs. Staff has reviewed the contract and invoices from USIC to determine the annualized amounts of line location costs to include in rates.

Staff Expert/Witness: Jason Kunst

31. <u>St. Peters Lateral Costs – LAC Specific</u>

LAC planned to invest in a pipeline to connect its distribution network to interconnect with MoGas Pipeline LLC (MoGas) to reduce its reliance on that pipelines' system. This lateral pipeline was named the St. Peters Pipeline. On March 1, 2017, LAC entered into a contract for approximately 13 years with MoGas to supply pipeline services to LAC's system at a reduced price per volume of natural gas flow. As part of the agreement with MoGas, LAC agreed not to complete the St. Peters Pipeline. LAC had invested approximately $2 million on the St. Peters Pipeline before the MoGas contract was completed.

LAC provided a workpaper on July 31, 2017, proposing to include an amortization of approximately $2 million over 12 years in its cost of service. Based on discussions with LAC personnel, the revised MoGas contract results in a substantial savings over the expired contract-savings far greater than the $2 million of costs incurred for the St. Peter Pipeline. Staff is in the process of reviewing the costs incurred for the St. Peter Pipeline and the amended contract. If Staff confirms there are substantial savings after reviewing the costs and the MoGas amended contract, Staff will support LAC's proposal and include the amortization over 12 years in the LAC cost of service. Staff will address this issue further in rebuttal testimony.

Staff Expert/Witness: Karen Lyons

32. Energy Efficiency and Low Income Programs

a. Energy Efficiency Balances

MGE

In Case No. GR-2014-0007, the Commission approved a Stipulation and Agreement[68] allowing MGE to continue to defer costs related to energy efficiency programs with potential recovery in a future case. The Stipulation and Agreement states, in part:[69]

> The amount of Conservation and Energy Efficiency Program funding currently reflected in rates, and the starting balances in the Conservation and Energy Efficiency Program asset account, to which additional deferrals on and after December 31, 2013 shall be added. is $9,226,037. No interest or carrying costs shall be accrued on any existing or future balances of the Company's Conservation and Energy Efficiency Programs until such balances are included in future rates. The rates reflected herein also include an allowance of $244,000 to begin amortization of the Company's energy efficiency asset.

Staff reviewed MGE's Energy Efficiency Collaborative Quarterly reports that included actual costs incurred for energy efficiency programs and its regulatory asset for deferred energy efficiency costs for the period of January 2014 through June 30, 2017, the update period in this case. Examples of costs included in MGE's deferred account balances include marketing costs and customer incentives and rebates. Staff determined that the actual energy efficiency costs included in MGE's quarterly reports are consistent with the costs included in the energy efficiency regulatory asset. Consequently, Staff included the unamortized balance as of June 30, 2017, in Staff's Accounting Schedule 2, Rate Base and an annual amortization based on a ten-year period in Schedule 10 of Staff's Accounting Schedules (Income Statement), Adjustment E-46.4.

LAC

In Case No. GR-2013-0171, the Commission approved a Stipulation and Agreement[70] allowing LAC to continue to defer costs related to energy efficiency programs. The Stipulation and Agreement states, in part:[71]

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[68] GR-2014-0007, EFIS Item Number 113.

[69] GR-2014-0007, Stipulation and Agreement, Page 19.

[70] GR-2013-0171, EFIS Item Number 68.

[71] GR-2013-0171, Unanimous Stipulation and Agreement, Pages 12-14.

> The amount of Conservation and Energy Efficiency Program funding currently reflected in rates, and the starting balances in the Conservation and Energy Efficiency Program asset account to which additional deferrals on and after March 31, 2013 shall be added are set forth on Attachment 3, attached hereto and incorporated herein. No interest or carrying costs shall be accrued on any existing or future balances of the Company's Conservation and Energy Efficiency Programs until such balances are included in future rates.
>
> …
>
> The rates recommended herein also include One Hundred and Fifty Thousand Dollars ($150,000) annually which may be used to pay for program development, implementation and evaluation, including any consulting services employed in the process.
>
> …
>
> Subject to a review by any party, including charter members of the EEC, for program implementation and evaluation implementation prudence in future rate cases, such expenditures for the development, implementation and evaluation of energy efficiency programs that are not funded through rates shall be accumulated in a regulatory asset account at the time such expenditures are made. Such expenditures will then be reflected in Laclede's rate base in its next general rate case in the same manner as other rate base items, provided that a ten-year amortization shall be presumed for such expenditures. The $4,112,344 amount shown on Attachment 3 as the Post 3/31/10 C & EE regulatory asset balance at 3/31/2013 shall also be subject to a review by any party, including charter members of the EEC, for program implementation and evaluation implementation prudence in future rate cases.

Staff reviewed LAC's Energy Efficiency Collaborative Quarterly reports that include actual costs incurred for energy efficiency programs and its regulatory asset for deferred energy efficiency costs for the period of March 2013 through June 30, 2017, the update period in this case. Examples of costs included in LAC's deferred account balances include marketing costs and customer incentives and rebates. Staff determined that the actual energy efficiency costs included in LAC's quarterly reports are not consistent with the costs included in the energy efficiency regulatory asset. In addition, Staff could not confirm that LAC's energy efficiency deferred balances were reduced for the annual $150,000 allowance included in base rates for the period of March 2013 through June 2014. Beginning with the March 31, 2013, ending balance,[72] Staff reflected the actual costs reported by LAC in the Energy Efficiency Collaborative Quarterly reports and reduced the deferred balances by the allowance included in base rates.[73] Staff's recommendation for the unamortized energy efficiency balances as of June 30, 2017, is included in Staff's Accounting Schedule 2, Rate Base and an annual amortization based on a ten-year period is included in Schedule 10 of Staff's Accounting Schedules (Income Statement), Adjustment E-75.1.

During Staff's analysis of the energy efficiency costs, Staff found that LAC and MGE incurred costs for an energy efficiency advertisement in the Missouri Times. The costs for this advertisement were not recorded in the deferral account consistent with other energy efficiency advertisements, but instead were recorded as an expense. Staff determined that this advertisement was duplicative of other LAC and MGE energy efficiency advertisements. Staff made an adjustment to remove these costs from the test year. The adjustments are reflected on Staff Accounting Schedule 10, LAC adjustment, E-75.3 and MGE adjustment E-46.4.

In addition to rate base treatment of the unamortized energy efficiency balances and a ten-year amortization, LAC and MGE proposed a normalized level of energy efficiency costs in base rates in their direct filings. Staff recommends LAC and MGE continue to defer and amortize energy efficiency costs with no allowance for these costs included in base rates.

Staff Expert/Witness: Karen Lyons

b. <u>Accounting Treatment of Initial Energy Efficiency Amortization (LAC Only)</u>

Costs associated with LAC's Energy Efficiency Program discussed above occurred after March 31, 2010.[74] LAC incurred energy efficiency costs prior to March 31, 2010, that were recorded in a separate regulatory asset from those discussed above and consistent with the terms and conditions in the Stipulation and Agreement in Case No. GR-2010-0171. In LAC's most recent rate case, Case No. GR-2013-0171, the Commission approved the following language as part of the Stipulation and Agreement:

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[72] GR-2013-0171, Unanimous Stipulation and Agreement, Appendix 3

[73] GR-2013-0171, Unanimous Stipulation and Agreement, Appendix 3.

[74] GR-2013-0171, Unanimous Stipulation and Agreement, Page 14 and Attachment 3.

> Any regulatory asset balances existing prior to March 31, 2010 shall continue to be amortized in accordance with their established terms

The Commission approved a 10 year amortization period for these costs in the LAC's 2010 rate case.[75] The test year amount recorded on LAC's books reflects the appropriate amortization level; therefore, no adjustment is necessary for this amortization in this case. These costs will be fully amortized in December 2020. Once these costs are fully amortized, LAC may be collecting funds in rates for expenses it is no longer incurring. Staff recommends that any future over-collection of these costs be used to offset any other unrecovered energy efficiency costs incurred by LAC.

Staff Expert/Witness: Karen Lyons

c. <u>Low Income Energy Assistance Program (LAC Only)</u>

The Commission approved a Low Income Energy Assistance Program for LAC in Case No. GR-2010-0171.[76] In LAC's most recent rate case, Case No. GR-2013-0171, the Commission approved the following language as part of the Stipulation and Agreement:

> Any regulatory asset balances existing prior to March 31, 2010 shall continue to be amortized in accordance with their established terms.

The Commission approved a ten-year amortization period for low-income energy assistance program costs in LAC's 2010 rate case.[77] Staff made an adjustment to the test year amount recorded on LAC's books to reflect the appropriate amortization level. Staff's adjustment is reflected in Schedule 10 of Staff's Accounting Schedules, adjustment E-75.2. These costs will be fully amortized in December 2020. Once these costs are fully amortized, LAC may be collecting funds in rates for expenses it is no longer incurring. Staff recommends that any future over-collection of these costs be used to offset any unrecovered low income energy efficiency costs incurred by LAC.

Staff Expert/Witness: Karen Lyons

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[75] GR-2010-0171, Unanimous Stipulation and Agreement, Page 7.

[76] GR-2010-0171, Unanimous Stipulation and Agreement, Page 4.

[77] GR-2010-0171, Unanimous Stipulation and Agreement, Page 4.

d. One Time Energy Affordability Program (MGE Only)

In Case No. GR-2014-0007, the Commission approved a Stipulation and Agreement allowing MGE to defer up to $400,000 for an energy affordability program. This temporary program was established because of the unusually cold winter of 2013-2014 and the hardship it created for MGE's low-income customers. MGE low-income customers were allowed to enroll in the Program from May 1, 2014, through August 31, 2014, pursuant to the terms set forth in MGE's tariff.[78] The following language in MGE's tariff addresses the ratemaking treatment for the Low-Income Energy Affordability Program:

> The Program shall be funded with up to $400,000 in Company funds, exclusive of administrative costs. Any Company funds used in the Program, plus administrative funds, shall be deferred into a low-income asset account for recovery over a five-year period in the Company's next rate case. The Company shall not charge or recover fees for its own work administering the program.

Staff reviewed the costs for this program and determined that they are consistent with the Stipulation and Agreement and the tariff in MGE's 2014 rate case. Consequently, Staff included an annual amortization based on a five-year period in Schedule 10 of Staff's Accounting Schedules (Income Statement), Adjustment E-46.2.

In its direct filing, MGE proposed a ten-year amortization for these costs and rate base treatment. Staff recommends the costs are treated consistent with MGE's current tariff, and the terms of the Stipulation and Agreement, by including a five-year amortization with no rate base treatment.

Staff Expert/Witness: Karen Lyons

e. Low Income Weatherization

In Case No. GR-2013-0171, the Commission approved a Stipulation and Agreement allowing LAC to continue to collect $950,000 annually for the Income Eligibility Weatherization Program in base rates. In Case No. GR-2014-0007, the Commission approved a Stipulation and Agreement allowing MGE to continue to collect $750,000 annually for the Income Eligibility Weatherization Program in base rates. Staff reviewed LAC and MGE's test year balances for these costs and confirmed they are consistent with the Stipulation and Agreements previously

[78] Tariff Sheet R-93.

approved for LAC and MGE. As Staff recommends continuing the same level of funding as previously recommended, no adjustment is necessary for the test year balances.

Staff Expert/Witness: Karen Lyons

f. **Red Tag Program Costs**

In Case No. GR-2013-0171, the Commission approved a Stipulation and Agreement allowing LAC to establish an experimental Low Income "Red Tag" Repair Program. As part of the Stipulation and Agreement filed on May 31, 2013, and approved by the Commission on June 26, 2013, LAC was allowed to defer costs up to $25,000 annually in relation to this program.[79]

Staff reviewed LAC's actual costs incurred for the Red Tag program and its regulatory asset balances for the deferred costs for the period of January 2014 through June 30, 2017, the end of the update period in this case. Staff determined that the actual Red Tag costs recorded in LAC's regulatory asset are consistent with the costs recorded in the general ledger. Consequently, Staff recommends an annual amortization based on a four-year period with no rate base treatment. Staff's adjustment is reflected in Schedule 10 of Staff's Accounting Schedules (Income Statement), Adjustment E-75.3.

In Case No. GR-2014-0007, the Commission approved a Stipulation and Agreement allowing MGE to implement a Red Tag program similar to the program it previously approved for LAC in Case No. GR-2013-0171. As part of the Stipulation and Agreement filed on April, 11, 2014, in the 2014 rate case and approved by the Commission on April 23, 2014,[80] MGE was allowed to defer up to $100,000 associated with the program.

Staff reviewed MGE's actual costs incurred for the Red Tag program and its regulatory asset balances for the deferred costs for the period of September 2014 through June 30, 2017, the end of the update period in this case. Staff determined that the actual Red Tag costs recorded in MGE's regulatory asset are consistent with the costs recorded in the general ledger. Consequently, Staff recommends an annual amortization based on a four-year period with no rate

[79]GR-2013-0171, Stipulation and Agreement, Page 11.

[80] GR-2014-0007, Stipulation and Agreement, Page 5 and 18.

base treatment. Staff's adjustment is reflected in Schedule 10 of Staff's Accounting Schedules (Income Statement), Adjustment E-46.3.

In its direct filing, LAC and MGE proposed a ten-year amortization for these costs and rate base treatment. As discussed, Staff recommends the costs be recovered over a four-year period with no rate base treatment.

Staff Expert/Witness: Karen Lyons

33. <u>Gas Safety Related Service Line Replacement AAOs</u>

As part of Case Nos. GR-99-315, GR-2001-0629, GR-2002-0356 and GR-2005-0284, the Commission authorized LAC to defer depreciation, property taxes and carrying costs associated with its gas safety related service line replacement projects. Staff has been amortizing all deferred costs associated with these AAOs that were previously ordered by the Commission as part of those cases. The AAOs which have been fully recovered include the portion of those costs which were authorized for a ten year amortization period in Case No. GR-99-315; the costs authorized in Case No. GR-2001-0629; as well as the costs authorized in Case No. GR-2002-0356. Staff has reviewed the remaining amortization stemming from the above cases to determine if all costs have been fully recovered and include any over-recovery of these costs as an offset in the cost of service.

Section 24 of the Stipulation and Agreement that was adopted in LAC's last rate case, Case No. GR-2013-0171, states:

> The parties agree that Laclede will continue to amortize the items identified in Attachment 5 which represent amortizations established in rate proceedings prior to the current rate case (Case No. GR-2013-0171).

LAC continued to amortize the Gas Safety AAO per the stipulation until September 2015 when the time period for the amortization came to an end. However, the amount of this amortization has remained in rates, and has resulted in an over collection of the amortization Staff recommends a return of the funds included in rates during the time period from September 2015, when the amortization ended, to the effective date of rates in this current rate case. This will flow back any over-recovery of the Gas Safety AAO to customers. Staff recommends returning these funds over a four year period.

Staff Expert/Witness: Lisa M. Ferguson

F. Income Taxes

Staff's methodology for calculating income tax expense is largely consistent with the methodology used in LAC's and MGE's previous rate cases. The income tax calculations begin by taking adjusted net operating income before taxes, then adding to or subtracting from net income certain timing differences in order to obtain the net taxable income amount for ratemaking purposes. These "add back" and/or subtraction adjustments are necessary to identify new amounts for the tax deductions that are different from those levels reflected in the income statement as revenues or expenses. Tax timing differences occur when the timing used in reflecting a cost (or revenue) for financial reporting purposes (book purposes) is different than the timing required by the IRS in determining taxable income (tax purposes). The current income tax calculations for LAC and MGE reflect timing differences consistent with the timing required by the IRS. Staff has included LAC's and MGE's calculations of timing differences as placeholders for direct testimony. Spire Missouri has not provided this information to Staff at the time of this direct testimony filing. Staff plans to review this information once it is supplied and address these calculations further at true-up.

The ratemaking calculation of income taxes for regulated utilities may reflect either the "normalization" approach or the "flow through" approach of recognizing the effect of tax timing differences on income tax expense. The tax normalization method defers for ratemaking purposes the deduction taken for tax purposes for certain tax timing differences. The effect of use of tax normalization is to allow utilities the net benefit of certain net tax deductions for a period of time before those benefits are passed on to the utility's customers in rates. The flow-through tax method essentially provides for the same tax deduction taken as a deduction for ratemaking purposes as is taken for tax payment purposes. Staff utilized a normalization approach in calculating income taxes for this case. Under either the tax normalization or tax flow-through approach, the resulting net taxable income for ratemaking is then multiplied by the appropriate federal, state, and city tax rates to obtain the current liability for income taxes. A federal tax rate of 35 percent and a state income tax rate of 6.25 percent were used in calculating LAC's and MGE's current income tax liability. The difference between the calculated current income tax provision and the per book income tax provision is the current income tax provision adjustment.

LAC is subject to taxes from the City of St. Louis, MO, and MGE is subject to taxes from the City of Kansas City, MO. The earnings tax is a one percent (1%) general revenue tax that is collected from all city residents and any non-city residents who work within city limits.

Staff has reviewed the earnings tax information for both LAC in the City of St. Louis and MGE in the City of Kansas City. LAC and MGE have not been required to pay earnings taxes since 2013. In recent rate cases, Staff has chosen to include any city tax amounts recoverable in rates through an adjustment to operating expense instead of attempting to incorporate the earnings tax rate as part of the composite effective tax rate along with federal and state income taxes. Since it has been several years since either LAC or MGE has paid earnings taxes, Staff believes no inclusion of any city earnings taxes in either LAC or MGE's cost of service is appropriate at this time.

Spire Inc. files a consolidated tax return including all of its regulated and non-regulated affiliate enterprises. Spire has not actually paid a tax liability to the IRS since the end of fiscal year 2013 due to the existence of a net operating loss ("NOL"). This NOL is driven mainly by the availability of "bonus depreciation" deductions in recent years. Spire does not anticipate paying taxes to the taxing authorities until the bonus depreciation sunsets and the net operating loss carryforwards are exhausted. However, Staff is normalizing the tax treatment and is including a positive amount of income tax expense for both LAC and MGE.

Staff will review income tax expense as part of its true-up audit and make additional adjustments as necessary.

Staff Expert/Witness: Lisa M. Ferguson

G. Depreciation Expense

Capitalized Depreciation Expense

Staff recommends adjustments to remove a portion of the annualized depreciation expense calculated on transportation and power-operated equipment. This equipment is used by LAC and MGE to perform both operation and maintenance ("O&M") activities, which are expensed costs, and construction-related activities, which are capitalized. Therefore, a portion of the annualized depreciation calculated on both transportation and power-related equipment is capitalized and charged to construction projects that ultimately are recorded in plant-in-service. As a result, a portion of depreciation relating to construction must be removed from the annualized depreciation expense included in the calculation of net operating income to prevent a double recovery. Staff's adjustments are reflected in Staff's Accounting Schedule 10, Adjustment E-98.2 for LAC and Adjustment E-71.2 for MGE.

Staff Expert/Witness: Cary G. Featherstone

XI. Depreciation

Summary

Staff conducted a study of the depreciable plant of LAC and MGE. Schedules KBP-d1 and KBP-d2 in Appendix 3 list the Staff-recommended depreciation rates for LAC and MGE, respectively.

Staff's recommended rates would increase the estimated annual depreciation expense for LAC from approximately $51,132,732 based on deprecation rates approved in Case No. GR-2013-0171, to approximately $51,228,342. This is an increase in depreciation expense of $95,610.

For MGE, Staff's recommended rates would increase the estimated annual depreciation expense from approximately $32,981,102 based on depreciation rates approved in Case No. GR-2014-0007, to approximately $38,081,940. This is a total increase of $5,100,838. The largest component of this increase relates to a recommended change in the net salvage rate for Account No. 380—Services from negative 7.2 percent to negative 100 percent. This results in an estimated increase in depreciation expense of $9,506,829. Significant decreases are associated with Account Nos. 376—Mains and 382—Meter Installations. For Account No. 376, Staff recommends increasing the average service life from 50 to 69 years, resulting in a decrease in depreciation expense of $2,759,930. For Account No. 382, Staff recommends an increase in average service life from 35 to 65 years, which results in a decrease in depreciation expense of $1,184,636 when combined with a recommended change in net salvage rate.

Depreciation

"Depreciation," as applied to depreciable utility plant means:

(a) the loss in service value not restored by current maintenance,

(b) incurred in connection with the consumption or prospective retirement of utility plant in the course of service,

(c) from causes which are known to be in current operation and

(d) against which the utility is not protected by insurance.

Among the causes to be given consideration are: wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and changes to the requirements of public authorities.[81]

The purpose of depreciation in a regulatory setting is to recover the cost of capital assets over the useful lives of the assets. The depreciation rate for each plant account is designed to recover, over the average service life of the assets in that account, the original cost of the assets plus an estimate for any cost of removal less scrap value. Annual depreciation expense for a plant account is the depreciation rate for that plant account multiplied by the balance of plant in that account. The annual depreciation expense returns to the Company's shareholders a portion of the costs of the capital assets. In a regulatory setting, this return is commonly referred to as a return *of* equity. The remaining portion of the costs of the capital assets of the Company, known as net plant-in-service, is returned to the Company's shareholders in the future. The Company is permitted during this period to earn a return on the capital assets in rate base, commonly referred to as a return on net plant-in-service, a component of rate base. In a regulatory setting this return is also commonly referred to as a return *on* equity.

Depreciation Study

LAC and MGE are required to submit depreciation studies under rule 4 CSR 240-3.235. The companies submitted reports prepared by Gannet Fleming Valuation and Rate Consultants, LLC. LAC and MGE witness Mr. Glenn W. Buck stated in his direct testimony that the companies request no change to their depreciation rates.

Staff conducted its own depreciation study for the capital assets of LAC and MGE using the straight-line method, broad group-average life procedure, and whole life technique for its depreciation study. Staff used the following formula to calculate depreciation rates for each plant account:

$$\text{Depreciation Rate} = (100\% - \text{Net Salvage }\%) \div (\text{Average Service Life})$$

This equation is consistent with the direction of the Commission in its *Report and Order* in Case No. ER-2004-0570. In this equation, average service life is the expected period, in years, that

[81] National Association of Regulatory Utility Commissioners (NARUC), *Public Utility Depreciation Practices* (Washington, DC: NARUC, 1996), p. 53.

depreciable plant will be in service. Net salvage is the difference between gross salvage, the amount received from the retirement of property, and the cost of removal.

For each account, Staff estimated the average service life and net salvage rate. Where there was adequate data to support it, Staff's recommendation is informed by statistical analysis of plant retirements as described below. For accounts that did not have adequate data to produce a reasonable result using statistical analysis, Staff relied on its engineering experience, informed judgment, and previous cases to prepare recommended rates. In Case No. GR-2014-0007, Staff noted that there was insufficient data available to conduct a statistical analysis for MGE accounts because of missing plant records prior to 1994. However, in this case, Staff utilized a statistical analysis of retirements since 1994 to inform its recommendations on certain accounts. This approach provided Staff with adequate information to complete a study of MGE's depreciable plant.

Staff used available data to prepare estimates of service life and net salvage for each account. These sources include the depreciation studies submitted by LAC and MGE that were prepared by Gannet Fleming Valuation and Rate Consultants, LLC, spreadsheets submitted along with those studies, LAC and MGE's responses to data requests, and previous Commission orders.

Staff conducted statistical analysis of retirements when data supported its use, and used Gannet Fleming Depreciation Analysis Software to prepare stub survival curves for plant accounts. Survivor curves describe the amount of plant in an account, expressed as a percent that is still in service at various ages. For an account in which all plant is retired, the average service life can be calculated as the area under the curve. Because there is surviving plant in these accounts, the curves produced are partial and called stub curves.

In order to estimate average service life, Staff fitted an Iowa curve to the stub curve for each account. Iowa curves are widely used models of the life characteristics of utility plant. Staff also used the Gannet Fleming software to assist in mathematical and visual fitting of the stub curves to Iowa curves. Average service lives for these accounts were drawn from the fitted Iowa curves.

In addition, where data supported it, Staff calculated the net salvage rates. This is the net salvage cost, including gross salvage and cost of removal, of retired plant for an account divided by the book cost of that plant.

These estimates of average life and net salvage were used in the equation noted above to calculate depreciation rates. In addition to the analysis of statistics, Staff's recommended rates are informed by judgment and relevant previous orders of the Commission.

Additional Issues

Staff intends to pursue additional discovery on depreciation-related issues. Staff noted that some accounts have negative depreciation reserves and intends to explore the source of these negative reserves. Staff may make adjustments to its recommendations based on further review.

Recommendation

Staff recommends that the Commission order LAC and MGE to use the rates in Appendix 3, Schedules KBP-d1 and KBP-d2 respectively.

Staff Expert/Witness: Keenan B. Patterson, PE

XII. Appendices

Appendix 1 - Staff Credentials

Appendix 2 - Support for Staff Cost of Capital Recommendation
- David Murray

Appendix 3 - Other Staff Schedules

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF MICHELLE A. BOCKLAGE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW MICHELLE A. BOCKLAGE and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Michelle A. Bocklage
MICHELLE A. BOCKLAGE

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 7th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF KIM COX

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW KIM COX and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Kim Cox
KIM COX

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 7th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF CARY G. FEATHERSTONE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW CARY G. FEATHERSTONE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Cary G. Featherstone

CARY G. FEATHERSTONE

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 1st day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF LISA M. FERGUSON

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW LISA M. FERGUSON and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Lisa M. Ferguson
LISA M. FERGUSON

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 7th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D. Suzie Mankin
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF WAYNE HODGES

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW WAYNE HODGES and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

WAYNE HODGES

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 1st day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF JASON KUNST

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW JASON KUNST and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

JASON KUNST

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 7th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF KAREN LYONS

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW KAREN LYONS and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Karen Lyons
KAREN LYONS

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 7th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF KEITH MAJORS

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW KEITH MAJORS and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Keith Majors
KEITH MAJORS

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 7th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF AMANDA C. McMELLEN

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW AMANDA C. McMELLEN and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Amanda C McMellen

AMANDA C. McMELLEN

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 7th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF BYRON M. MURRAY

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW BYRON M. MURRAY and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Byron M. Murray

BYRON M. MURRAY

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 7th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF DAVID MURRAY

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW DAVID MURRAY and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

David Murray

DAVID MURRAY

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 7th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF ANTONIJA NIETO

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW ANTONIJA NIETO and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

A Nieto
ANTONIJA NIETO

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 1st day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF KEENAN B. PATTERSON, PE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW KEENAN B. PATTERSON, PE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Keenan B. Patterson

KEENAN B. PATTERSON, PE

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 7th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF JOSEPH P. ROLING

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW JOSEPH P. ROLING and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Joseph P. Roling

JOSEPH P. ROLING

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 5th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF DAVID M. SOMMERER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW DAVID M. SOMMERER and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

David M. Sommerer
DAVID M. SOMMERER

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 7th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF MICHAEL JASON TAYLOR

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW MICHAEL JASON TAYLOR and on his oath declares that he is of sound mind and lawful age; that he contributed to thc foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

MICHAEL JASON TAYLOR

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 1st day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0216

AFFIDAVIT OF SEOUNG JOUN WON, PhD

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW SEOUNG JOUN WON, PhD and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Seung Joun Won

SEOUNG JOUN WON, PhD

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 7th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service	)))	Case No. GR-2017-0215
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AFFIDAVIT OF MATTHEW R. YOUNG

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW MATTHEW R. YOUNG and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Report - Revenue Requirement - Cost of Service; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Matt Young
MATTHEW R. YOUNG

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 7th day of September, 2017.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

D. Suzie Mankin
Notary Public