INFRASTRUCTURE AND PROJECT FINANCE

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US Regulated Utilities Regulatory Lag Persists for Electric Utilities in Missouri

There are several states, such as New Mexico, Kansas, Missouri and Montana, that we view to be less credit-supportive for electric utilities than the majority of states. Although the regulatory environment for electric utilities in Missouri has improved in recent years by implementing a fuel adjustment clause, for example, we continue to observe greater regulatory lag compared with most electric utilities in most other states that we consider credit-supportive. We believe there are three main reasons for the longer regulatory lag times in Missouri.

There are limited opportunities for interim rate adjustments. In Missouri, electric utilities have a limited number of riders and trackers that would allow for rate adjustments between general rate cases. Instead, they must rely on general rate cases to recover most of their investment costs, resulting in longer regulatory lag. Implementation of riders is driven by legislation, resulting in a slower process to adopt a new rate adjustment mechanism. By relying on general rate cases, rate changes could be sharper and can lead to contentiousness between the utilities seeking rate increases and the regulators seeking to manage potential rate increases.

Using a historical test year in rate cases contributes to longer lag times. The reliance on a historical test year to estimate the rate-base value widens this lag. When a forwardlooking or updated test year is used to estimate the value of the rate case, utilities are more likely to capture the latest costs and limit the lag time for cost-recovery. With a historical test year, utilities typically fall behind in recovering the appropriate investment costs even if the rate case takes less than a year to conclude.

Historically, allowed returns on equity in Missouri are lower than the industry average. Based on the rate cases concluded in 2015, the known average allowed return on equity (ROE) is 9.5%. The average allowed ROE from the 23 rate cases for integrated utilities nationwide concluded in 2014 was 10.18% (9.95% if four special rate cases in Virginia are excluded). The average allowed ROE for the Missouri electric utilities prior to the latest round of rate cases was 10.1%.

Other types of utilities in Missouri have shorter regulatory lag. In contrast with Missouri's electric utilities, Missouri's natural gas and water utilities have minimal lag times. In general, we view the regulatory environment for natural gas and water utilities in Missouri to be credit-supportive. There are interim mechanisms in place, such as an infrastructure system replacement surcharge for natural gas and water utilities in Missouri, which helps reduce regulatory lag.

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Missouri Utilities Have Limited Opportunities to Adjust Rates on an Interim Basis

Electric utilities in Missouri have a limited number of mechanisms, such as riders and trackers, that would allow them to update rates in between general rate cases, resulting in longer regulatory lag.

Instead, Missouri's electric utilities rely heavily on general rate cases to recover most of their investment costs and often request a large rate case to cover accumulated costs between rate cases. Thus, rate request amounts tend to be material and can lead to contentiousness during the rate case because the regulator would like to minimize the rate shock and the utilities would like to recover their deferred investment costs.

If rates were adjusted incrementally between rate cases, more gradual increases for ratepayers would result. Without such riders and trackers, however, the general rate case outcomes usually result in sharper and lumpier rate changes.

In Missouri, the implementation of riders is driven by legislation. Legislation is required in Missouri to adopt a new rider. We believe that a legislatively driven effort to implement a new rider takes longer and is more complicated than the regulator having the authority and inclination to do so, potentially creating further delay in timely cost recovery. Although the Missouri Public Service Commission (MPSC) has the authority to implement a new tracker without legislation, it normally does not.

For example, Missouri utilities have a fuel adjustment clause (FAC) to recover most fuel and purchased power costs between rate cases, a credit positive because it improves their cash flow. However, the implementation of the FAC took place only after legislation was passed to adopt such a clause.

In addition, legislation to implement a new rider related to the electric utilities' infrastructure investment was introduced and discussed in 2012. However, this legislation, called Infrastructure Strengthening and Regulatory Streamlining, failed to pass in 2013. This legislation would have created a foundation to establish an infrastructure investment rider for the electric utilities. Without this legislation, there are no specific rate-recovery mechanisms in Missouri outside of general rate cases for the electric utilities to invest in infrastructure and receive timely cost-recovery.

Longer regulatory lag could have a negative impact on utility's financial profile. Exhibit 1 compares the three-year averages of cash-flow-to-debt metrics for Missouri electric utilities with their peers in the neighboring states of Illinois, Kansas and Michigan. Compared to their peers in these states, some Missouri electric utilities tend to have weaker and more volatile financial metrics.

In Illinois, the electric utilities are transmission and distribution (T&D) utilities and their allowed ROE is historically lower than the allowed ROE authorized for integrated utilities in other states, in order to reflect the lower business risk of the wires-only operations. What is notable is that Illinois has established a mechanism to shorten regulatory lag for infrastructure investment costs and that the state's electric utilities produce strong cash-flow-to-debt metrics despite the lower allowed ROE. Their rates are adjusted annually through a formulaic mechanism, where the allowed ROE is adjusted based on a formula defined under the state's Energy Infrastructure Modernization Act. The formula equals the average of the monthly yields of the 30-year US Treasury yield for the calendar year plus 580 basis points. The allowed ROE either increases or decreases, based on the formula every year.

In Michigan, electric utilities are fully integrated and typically file a general rate case annually. As a mechanism to shorten regulatory lag, the electric utilities are allowed to implement an interim rate based on their request six months after the annual rate adjustment filing, and the rates are readjusted after the final rate case decision. Although the Michigan electric utilities are executing a large capital investment program, the state's rate adjustment mechanism has avoided a sharp rate increase for ratepayers.

Although the allowed ROE in Kansas tends to be lower than the industry average, the state allows for a suite of interim rateadjustment mechanisms for electric utilities. As a result, the utilities have an opportunity to produce healthier cash-flow-to-debt metrics more consistently and avoid rate shock.

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Exhibit 1

Compared with Selected Electric Utilities in Neighboring States, the Timing of Cost-Recovery for Missouri Electric Utilities Lags Behind

•	-	-	-	-			-
			(CFO Pre-W/	/C) /	Retained Cash	Flow /	Regulatory Lag
	Rating	Outlook	Debt (3 Year	Avg)	Debt (3 Year	Avg)	(Months)
			Latest LTM	FY 2014	Latest LTM	FY 2014	
Missouri Electric Utilities							
Empire District Electric Company (The)	Baa1	Stable	20.11%	21.16%	14.68%	15.46%	14
Kansas City Power & Light Company	Baa1	Stable	15.63%	16.42%	12.98%	13.33%	17
KCP&L Greater Missouri	Baa2	Stable	17.29%	17.51%	12.10%	12.80%	16
Union Electric Company	Baa1	Stable	24.51%	24.88%	12.13%	14.12%	13
Kansas Electric Utilities							
Kansas City Power & Light Company	Baa1	Stable	15.63%	16.42%	12.98%	13.33%	15
Westar Energy Inc.	(P) Baa1	Stable	20.76%	20.21%	14.90%	14.77%	12
Illinois Electric Utilities							
Ameren Illinois	A3	Stable	21.79%	21.07%	21.81%	21.13%	12
Commonwealth Edison Co.	Baa1	Positive	17.47%	18.08%	16.03%	16.97%	12
MidAmerican Energy Co.*	A1	Stable	24.69%	24.40%	24.38%	24.60%	23
Michigan Electric Utilities							
Consumers Energy Co.	A1	Stable	24.68%	23.29%	18.96%	18.13%	7 (forward)
DTE Electric Co.	A2	Stable	23.59%	25.31%	17.67%	18.17%	5 (forward)
Indiana Michigan Power Co.	Baa1	Stable	20.88%	20.74%	17.14%	16.93%	10 (forward)
*MidAmerican Energy Company operates as a verti	cally integrated	+::::::::::::::::::::::::::::::::::::::					

*MidAmerican Energy Company operates as a vertically integrated utility.

Sources: SNL Financial, company reports, Moody's Investors Service

The reason for implementing and using a interim mechanism in Missouri is primarily driven by the unpredictability and significance of the potential cost. Thus, if the regulator determines that a cost is more known and less material, it no longer deems a rider necessary. In the latest Missouri electric rate cases, the regulator determined that a handful of existing trackers were no longer necessary and discontinued their use. These included trackers related to storm cost and vegetation management.

As a result, if Missouri utilities incur costs associated with storm-related restoration, they would have to wait until they file a general rate case or a separate request, such as Accounting Authority Order, to recover the spending, a credit negative. Also, the regulator determined that regional transmission costs should be excluded from the existing fuel-cost rider. Although these costs have been relatively insignificant over the past two years, the electric utilities in Missouri no longer have an opportunity to recover these costs on a timely basis whether these costs are significant or not.

Exhibit 2

Recent Rate Case Outcomes Have Resulted in Fewer Mechanisms Available for Electric Utilities

	·				Missouri Energy Efficiency Investment	Renewable Energy	Vegetation	Infrastructure		Economic Development
Company	Service	FAC	ISRS	Pension	Act Program	Standards	management	inspection	Storm costs	Rider
Empire District Electric Co	Electric	х		х			Discontinued			х
Empire District Electric Co	Gas	Х	х	х			NA			
Kansas City Power & Light	Electric	х		х	Х	х				
KCP&L GMO	Electric	х		х	Х	х				
Laclede Gas Co.	Gas	х	х	х	NA	NA	NA			
Liberty Utilities (Midstates)	Gas	х	х	х	NA	NA	NA			
Missouri Gas Energy	Gas	х	х	х	NA	NA	NA			
Union Electric	Electric	х		х	Х	х	Discontinued	Discontinued	Discontinued	
Union Electric	Gas	х	Х	х	NA	NA	NA			
Missouri American Water Co.	. Water	х	Х	х	NA	NA	NA			

Sources: Missouri Public Service Commission, SNL Financial, company reports

Rate case fatigue is a risk and can create contentiousness. Exhibit 3 summarizes the three major electric-rate cases in Missouri that have concluded in 2015. Since the Missouri electric utilities rely heavily on general rate cases to recover most of their costs, we expect to see a continued active regulatory schedule. Empire District Electric Company (Baa1 stable) has already filed another rate case to request cost-recovery related to a major generation addition project, as these costs were excluded from its prior rate case. As these utilities continue to use general rate cases as their main avenue to recover costs and file rate cases often, we believe such ongoing rate case activity can create fatigue on all sides and potentially increase contentiousness.

Exhibit 3

Allowed ROE for Missouri Electric Utilities Continues to be Below Industry Average

							Earned ROE	
Company	Service	Latest Rate Case	Allowed ROE	Equity	Rate Base	Decision	(YE 2014)	Prior Allowed ROE
Empire District Electric Co	Electric	6/24/2015	NA	NA	NA	Settled	8.8%	10.8%*
Empire District Electric Co	Gas	1/20/2010	NA	NA	NA	Settled	8.8%	NA
Kansas City Power & Light	Electric	9/2/2015	9.5%	50.1%	2580	Litigated	8.1%	9.7%
KCP&L GMO	Electric	1/9/2013	9.7%	52.3%	1364	Partially	5.4%	10.0%
						Litigated		
Laclede Gas Co.	Gas	6/26/2013	NA	NA	NA	Settled	9.9%	10.5%*
Liberty Utilities (Midstates)	Gas	12/3/2014	10.0%	45.9%	88	Settled	NA	NA
Missouri Gas Energy	Gas	4/23/2014	NA	NA	NA	Settled	9.9%**	10.0%
Union Electric	Electric	4/29/2015	9.5%	51.8%	6976	Litigated	9.4%	9.8%
Union Electric	Gas	1/19/2011	NA	NA	NA	Settled	9.4%	10.0%

Note: NA stands for not available. *Prior Allowed ROE was taken from last publicly known authorized ROE: Empire District Electric Co. (7/30/2008), Laclede Gas Co. (1999). **Earned ROE for Missouri Gas Energy was taken from Laclede Gas Company's 9.9% ROE

Sources: SNL Financial, company reports, Moody's Investors Service

Using a Historical Test Year Contributes to Longer Regulatory Lag

Along with the lack of ability to adjust rates on an interim basis, the reliance on historical test years further widens the regulatory lag.

In Missouri, a historical test year is used in all rate cases to capture the estimated value of the rate base and the amount of spending to be considered in the rate case. When a forward-looking test year or an updated test year is used to estimate the value of the rate base, utilities are better able to recover more recent or projected costs in the rate case in a rising cost environment. Utilities in Missouri are allowed to update certain operating revenue and expenses as well as the rate base value during the rate case proceeding, which helps to minimize some regulatory lag.

Even if a rate case takes less than a year to conclude, utilities that use a historical test year typically fall behind in recovering investment costs. Furthermore, if the regulator decides to defer any of these costs, the regulatory lag for these particular costs would be greater, a credit negative. Although many utilities in other states use a historical test year, the use of the historical test year in Missouri exacerbates the lag in cost-recovery, because Missouri utilities lack mechanisms to adjust rates on an interim basis.

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Utilities included in Exhibit 4 are allowed to use a forward test year. These utilities demonstrate strong cash flow and credit metrics and typically earn close to their allowed ROE.

Exhibit 4

Using a Forward Test Year Contributes to Stronger Metrics and Returns Closer to Allowed ROEs

			Return on	Equity	7	Test Perio	d	•	e-W/C) / Year Avg)	Retained C Debt (3 Y	
~	.		Earned		Date	Test	Date	Latest	51/ 2014		51/ 2014
Company	State	Rating	(Latest LTM)		-		Authorized	LTM	FY 2014	Latest LTM	FY 2014
San Diego Gas & Electric	CA	A1	10.9%	10.3%	4/20/2012	12/2013	12/20/2012	26.5%	28.2%	22.79%	23.63%
Company		Stable									
Southern California Edison	CA	A2	12.9%	10.5%	4/20/2012	12/2013	12/20/2012	27.1%	28.5%	25.29%	26.90%
Company		Stable									
Tampa Electric Company	FL	A2	11.1%	10.3%	4/5/2013	12/2014	9/11/2013	29.9%	34.5%	26.74%	25.72%
		Stable									
Florida Power & Light	FL	A1	10.7%	10.5%	3/19/2012	12/2013	12/13/2012	35.5%	34.5%	26.74%	25.72%
Company		Stable									
DTE Electric Company	MI	A2	9.9%	10.5%	10/29/2010	3/2012	10/20/2011	23.6%	25.3%	17.67%	18.17%
		Stable									
Consumers Energy	MI	A3*	10.3%	10.3%	9/19/2012	12/2013	5/15/2013	24.7%	23.3%	18.96%	18.13%
Company		Stable									
Northern States Power	MN	A2	8.4%	9.7%	11/4/2013	12/2014	3/26/2015	24.8%	24.6%	18.71%	18.70%
Company (Minnesota)		Stable									
Central Hudson Gas &	NY	A2	7.4%	9.0%	7/25/2014	6/2016	6/17/2015	23.1%	25.0%	20.88%	22.33%
Electric Corporation		Stable									
Consolidated Edison	NY	A2	11.7%	9.0%	1/30/2015	12/2016	6/17/2015	21.3%	22.1%	11.06%	11.51%
Company of New York, Inc.		Stable									
Wisconsin Power and Light	WI	A1	10.3%	10.4%	4/9/2014	12/2015	6/6/2014	26.7%	25.1%	20.1%	19.8%
Company		Stable									
Wisconsin Public Service	WI	A1	8.5%	10.2%	10/17/2014	12/2015	4/23/2015	22.0%	23.6%	12.6%	13.7%
Corporation		Stable									
Northern States Power	WI	(P) A2	10.6%	10.2%	5/30/2014	12/2015	12/12/2014	26.2%	25.2%	20.91%	20.10%
Company (Wisconsin).		Stable									
			10.11								

* Implied Senior Unsecured Rating based on A1 Senior Secured Rating

Sources: SNL Financial, Moody's Investors Service

Lower Allowed Returns on Equity Compound the Effects of Regulatory Lag

So far in 2015, three out of four Missouri electric utilities have concluded their rate cases. The allowed ROE in two of these rates cases was approximately 9.5%, while the third case was a black box settlement. By comparison, the average allowed ROE in the 23 rate cases concluded in 2014 for integrated utilities nationwide was 10.18% (most recently available data). When we exclude the four special rate case outcomes related to Virginia Electric and Power Company (VEPCO, A2 stable), the average allowed ROE from the 19 rate cases was 9.95%. The average allowed ROE for the electric utilities in Missouri prior to the latest round of rate cases was 10.1%.

In addition, Missouri's average equity ratio is only slightly higher than the average for the 23 rate cases in 2014, and the difference is not enough to compensate for the wider gap in allowed ROEs. When we exclude the allowed equity ratio from the VEPCO's four special rate cases, the average authorized equity ratio was 51.1%. The average equity component incorporated in the 23 rate cases for integrated utilities nationwide was 50.9%, compared with the Missouri electric utilities' average of 51.4%.

While we recognize that the cost of capital has been steadily declining and the average allowed ROE for the overall industry has been trending downward, the Missouri electric utilities' allowed ROE level continues to be below the industry average on a relative basis. Although allowed ROE could climb if interest rates increase, we believe it is likely that the increase in Missouri electric utilities' allowed ROE will continue to lag behind the industry's average allowed ROE level.

The combination of limited interim rate adjustment mechanisms and the use of historical test years in rate cases results in a longer regulatory lag. Lower allowed ROE on its own does not contribute directly to regulatory lag. However, it could limit utility investors'

interest compared to peers with higher allowed ROE. Also, utilities with a higher allowed ROE would have greater flexibility to earn higher ROE than the utilities with lower allowed ROE without creating any potential regulatory contentiousness.

Constructive Regulatory Environment for Missouri Gas and Water Utilities

In contrast with our view on electric utilities, we generally view the regulatory environment in Missouri for natural gas and water utilities to be credit-supportive. Both natural gas and water utilities benefit from an Infrastructure System Replacement Surcharge. This mechanism allows gas and water utilities to collect the return on (rate of return) and of (depreciation expenses) capital investments. This mechanism is updated periodically without going through a full rate case. Also, some natural gas utilities, such as Missouri Gas Energy (not rated), have a straight/fixed variable rate design, which is credit positive.

Laclede Gas Company (A3 stable) is a major natural gas local distribution company (LDC) in Missouri. Compared with the vertically integrated electric utility peers in the state, Laclede and its affiliate, LDC Missouri Gas Energy (MGE, not rated), operate with a broad suite of interim rate adjustment mechanisms and generate stable credit metrics and transparent cash flows. Although Laclede has a lower risk profile compared with its electric utility peers, its allowed ROE is at a similar level of the electric utility peers that have riskier profiles. With the suite of timely cost-recovery mechanisms, Laclede has a greater opportunity to narrow the gap between its earned and allowed ROE.

Exhibit 5 compares all of the Missouri utilities we rate. Although these utilities operate in the same jurisdiction and are under the purview of the Missouri regulator, we differentiate our methodology grid scoring for the regulatory environment under which they operate and the differences in the utilities' ability to recover cost and earn returns in a timely manner.

	Empire District					
Regulated Electric and Gas Utilities Industry Grid	Electric Co	KCP&L	KCP&L GMO	Union Electric	Laclede Gas	
Factor 1 : Regulatory Framework (25%)	Score	Score	Score	Score	Score	
a) Legislative and Judicial Underpinnings of the Regulatory	А	А	А	A	А	
Framework						
b) Consistency and Predictability of Regulation	А	А	А	Baa	А	
Factor 2 : Ability to Recover Costs and Earn Returns (25%)						
a) Timeliness of Recovery of Operating and Capital Costs	Ваа	Baa	Baa	Baa	А	
b) Sufficiency of Rates and Returns	Ваа	Ba	Ba	Baa	А	
Factor 3 : Diversification (10%)						
a) Market Position	Ba	Baa	Ba	Baa	Baa	
b) Generation and Fuel Diversity	Ва	Ba	Ba	Ba	N/A	
Factor 4 : Financial Strength (40%)						
a) CFO pre-WC + Interest / Interest (3 Year Avg)	4.4x - 4.8x	4.0x - 5.0x	4.2x - 4.6x	4.9x - 5.2x	6.4x - 6.9x	
b) CFO pre-WC / Debt (3 Year Avg)	18% - 22%	14% - 18%	15% -19%	22% - 25%	18% - 23%	
c) CFO pre-WC – Dividends / Debt (3 Year Avg)	13% - 17%	12% - 16%	8% - 12%	13% - 16%	12% - 17%	
d) Debt / Capitalization (3 Year Avg)	43% - 46%	48% - 52%	38% - 42%	39% - 42%	49% - 54%	
Rating:						
Grid-Indicated Rating Before Notching Adjustment	Baa1	Baa2	Baa2	Baa1	A3	
HoldCo Structural Subordination Notching	0	0	0	0	0	
a) Indicated Rating from Grid	Baa1	Baa2	Baa2	Baa1	A3	
b) Actual Rating Assigned	Baa1	Baa1	Baa2	Baa1	A3	

Exhibit 5 Missouri Electric and Gas Utilities' Latest Rating Factors

Source: Moody's Investors Service

Missouri Public Service Commission

The Missouri Public Service Commission (MPSC) consists of five full-time commissioners that are selected via gubernatorial appointment and senate confirmation, and serve six years in staggered terms. The MPSC has approximately 205 employees and a budget of \$15.8 million for fiscal year 2016. Utilities seeking to increase rates within the MPSC must file tariffs 30 days prior to the proposed effective date. In terms of interim procedures, the MPSC may authorize an increase, subject to refund, if a company can demonstrate an emergency, or a near emergency situation, though interim increases have rarely been sought or authorized. The MPSC typically relies on a year-end original-cost rate base, but, by law, must consider fair value, while rate requests are usually filed based on historical or partly forecasted test-period data, which are updated during the course of the proceeding to reflect actual results.

In terms of electric utilities within the MPSC's jurisdiction, the most recent electric rate decision that specified a ROE was issued on 2 September 2015, when the MPSC authorized Kansas City Power & Light a 9.5% ROE. Furthermore, Union Electric is authorized a 9.53% ROE, as established in a 29 April 2015 rate case decision, and the most recent authorized ROE for KCP&L-Greater Missouri Operations occurred in 2013, when the PSC established a 9.7% ROE for the company. The most recent electric decision for Empire District Electric was finalized in June 2015, though the authorized ROE was not revealed.

Moody's Related Research

Methodology

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Credit Opinions

Empire District Electric Company (The)

Kansas City Power & Light Company

KCP&L Greater Missouri Operations Company

Laclede Gas Company

Union Electric Company

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Appendix B

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