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Exhibit No.:

Issue: Phase-in Carrying Costs Witness: David Murray Sponsoring Party: MoPSC Staff Type of Exhibit: Rebuttal Testimony File No.: ER-2012-0024 Date Testimony Prepared: November 18, 2011

Missouri Public Service Commission

MISSOURI PUBLIC SERVICE COMMISSION

REGULATORY REVIEW DIVISION

UTILITY SERVICES DEPARTMENT

REBUTTAL TESTIMONY

OF

DAVID MURRAY

KCP&L Greater Missouri Operations Company

FILE NO. ER-2012-0024

Staff Exhibit No. 5 Reporter 12 Date | R-2012-000 File No.

Jefferson City, Missouri November 2011

1		REBUTTAL TESTIMONY				
2		OF				
3		DAVID MURRAY				
4		KCP&L Greater Missouri Operations Company				
5		FILE NO. ER-2012-0024				
6	Q.	What is your name?				
7	А.	David Murray.				
8	Q.	Are you the same David Murray who prepared Direct Testimony prefiled in				
9	this case?					
10	А.	Yes, I am.				
11	Q.	What is the purpose of your Rebuttal Testimony?				
12	А.	The purpose of my Rebuttal Testimony is to respond to part of KCP&L Greater				
13	Missouri Operations Company ("GMO" or "Company") witness Kevin E. Bryant's Direct					
14	Testimony. Mr. Bryant sponsored testimony supporting the 3.25 percent carrying rate Staff					
15	and GMO agreed to in the non-unanimous stipulation and agreement filed in this case on					
16	September 2, 2011. Although Mr. Bryant supports the 3.25 percent rate in the agreement, in					
17	his Direct Testimony he also explains that, absent this agreement, he believes the carrying					
18	costs for the phase-in of GMO's rates should be calculated based on the Commission-allowed					
19	rate-of-return ("ROR") in GMO's last general electric rate case, File No. ER-2010-0356.					
20	While I agree with using a weighted average cost of capital ("WACC") for GMO for					
21	the carrying costs, considering the statutory language contained in Section 393.155.1, RSMo,					
22	I do not agree that the WACC authorized in a ratemaking proceeding is the same					
23	WACC investors would use to determine subsequent cash flows required to allow them to					
Í						

"recover the revenue which would have been allowed in the absence of a phase-in...." If the
 Commission accepts that a utility's WACC should be used to determine the carrying costs,
 Staff urges the Commission to adopt Staff's estimated WACC for GMO, as this is how
 investors would estimate the loss of value caused by the deferral of GMO's expected cash
 flows that will result due to the phase-in of the rate increase.

Q. If you agree with Mr. Bryant that a GMO WACC should be used to determine
the carrying costs, why did Staff agree to use of a rate premised on GMO's estimated cost of
short-term debt?

9 A. Because the statute pertaining to the carrying charge for the phase-in of a rate 10 increase is vague. I believe the "just and reasonable adjustment" as stated in the statute is one 11 where investors in the utility are made no worse or better off because of the phase-in of the 12 general rate increase. This requires investors to be made whole for the deferral of expected 13 cash flows during the years in which the utility would have been allowed the rate increase 14 earlier absent the phase-in. As a result of the phase-in, investors will simply reduce the 15 expected cash flows during the years of the phase-in and increase expected cash flows in the later years to be compensated for the deferral of revenues. The rate phase-in changes the 16 17 timing of the expected cash flows, but not the discount rate investors use to estimate the present value of the expected cash flows, which would be based on an estimate of the current 18 after-tax weighted average cost of capital ("ATWACC") appropriate for the risk of GMO's 19 20 operations. Investors estimate this cost of capital by weighting the current cost of equity and 21 debt appropriate for the firm by an estimated capital structure. The cost of debt is reduced for 22 the fact that the interest expense paid on the debt is tax deductible.

If the statute does not require investors to be made whole, then a rate less than the cost of capital, e.g., a short-term debt rate, may be appropriate. In any event, the discount rate should not be any higher than the cost of capital that is consistent with the risks of the expected cash flows over the period of the phase-in. It is important for the Commission to remember that phase-in or no phase-in, there is no guarantee the utility company will realize the ordered rate increase. This is why an investor would use a discount rate consistent with the cost of capital to determine a fair value of expected cash flows.

8 Q. What are your primary disagreements with Mr. Bryant's use of the
9 8.414 percent rate of return the Commission allowed in GMO's last general electric rate case
10 for determining the rate phase-in carrying costs?

11 Mr. Bryant assumes that investors require a return consistent with the allowed A. 12 rate of return to be compensated for the deferral of revenues associated with the phase-in. 13 Staff has reviewed several different valuation and investment analyses in its research in 14 estimating the cost of capital. Staff can confidently advise the Commission 15 that, while investment analysts do use the allowed rate of return to model expected cash flows, 16 they do not use the allowed rate of return to discount those expected cash flows for purposes of 17 determining the present value of those expected cash flows. Although the return on equity embedded in the allowed rate of return is in theory based on the current cost of equity, the cost 18 of debt is not. The cost of debt in ratemaking is an embedded rate, based on historical coupon 19 20 rates and issuance expenses. The historical cost of debt is used in utility ratemaking because it allows the utility to recover all costs associated with issuing that debt. However, the historical 21 cost of debt bears no relevance to the current debt costs that would be used in a discount rate to 22

1 estimate the present value of expected future cash flows. Consequently, Staff used an estimate 2 of the current cost of debt consistent with the risks of investing in GMO's operations. 3 Q. Can you illustrate your point? 4 A. Yes. In Schedule 1 attached to this testimony I present various assumed rate 5 phase-in scenarios to compare the impact these scenarios would have on the value investors 6 would assign to GMO's expected cash flows. 7 Would you explain the significance of these scenarios? Q. 8 A. If GMO was not required to phase-in the annual rate increase of \$29,772,796, 9 the current present value of these expected cash flows over the next four years would be 10 \$102,227,928. In Staff's view, a fair and reasonable adjustment to GMO's rates in later years 11 would result in the same present value to investors as if there was no rate phase-in. As can be 12 seen, the only scenarios that allow for this are when rates are adjusted to allow for recovery of 13 lost revenues and carrying costs calculated using an estimated current cost of capital, which 14 Staff has assumed to be 6.40 percent per year. All other scenarios result in a lower present 15 value to shareholders which, in Staff's view, would not allow the Company the potential to 16 recover revenues it otherwise may have collected absent a rate phase-in. What impact does the use of the allowed rate of return, which Mr. Bryant 17 Q.

suggests is the proper carrying cost rate, have on the present values of the scenarios you evaluated?
A. It causes the present values to decrease, due to the higher discount rate
(*see* Schedule 2). As Staff has already discussed, the allowed rate of return is not used to
estimate the fair value of expected or foregone cash flows. The historical cost of debt bears no
relationship to the return currently required for the risk associated with GMO's regulated
electric utility assets. The current required return on debt (approximately 5.0%) is lower than

1	the embedded cost of debt (6.42%) reflected in the rate of return the Commission allowed					
2	GMO in its last rate case, File No. ER-2010-0356. Additionally, because the expected					
3	lowered cash flows discounted by investors are higher due to the tax deductibility of interest					
4	payments, the cost of debt should be reduced by one minus the tax rate (assumed to be					
5	38.39 percent for purposes of Staff's analysis).					
6	Although I respectfully disagree with the Commission that GMO's current cost of					
7	equity is 10.0 percent, Staff used that 10.0 percent cost of equity for GMO to estimate a					
8	current after-tax cost of capital of 6.40 percent.					
9	Q. Would a 3.25 percent carrying cost rate make investors whole for the delay in					
10	expected revenues caused by the phase-in of GMO's rate increase?					
11	A. No. As Staff shows on Schedule 1, this would decrease the value of GMO's					
12	expected cash flows by \$313,772 (\$102,227,928 - \$101,914,156).					
13	Q. How does this compare to a straight phase-in, without the allowance for					
14	carrying costs or recovery of lost revenues?					
15	A. This would decrease the value of GMO's expected cash flow by \$10,598,528					
16	(\$102,227,928 - \$91,629,400).					
17	Q. Considering your analysis of these various scenarios, does Staff still support the					
18	3.25 percent carrying cost rate?					
19	A. Yes. While this rate will not create the same value to investors as if the					
20	Commission had not ordered a rate phase-in, because of possible differing interpretations of					
21	the controlling statute, Staff believes this is a reasonable rate.					
22	Q. Does this conclude your rebuttal testimony?					
23	A. Yes it does.					

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Determination of Carrying) Costs for the Phase-In Tariffs of KCP&L) Greater Missouri Operations Company)

File No. ER-2012-0024

AFFIDAVIT OF DAVID MURRAY

STATE OF MISSOURI)) ss. COUNTY OF COLE)

David Murray, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form, consisting of $\underline{5}$ pages to be presented in the above case; that the answers in the foregoing Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

David Murray

Subscribed and sworn to before me this 184 day of November, 2011.

D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 08, 2012 Commission Number: 08412071

Mankin

Notary Publi

KCPL Greater Missouri Operations Company File No. ER-2012-0024

Present Value of Cash Flow Scenarios Using 6.40% Discount Rate

Scenarios	Present Value	Year 1 Expected CF ¹	Year 2 Expected CF ¹	Year 3 Expected CF ¹	Year 4 Expected CF ¹	Undiscounted Sum
Scenario 1: No Phase-in	\$102,227,928	\$29,772,796	\$29,772,796	\$29,772,796	\$29,772,796	\$119,091,184
Scenario 2: Straight Phase-in (no lost revenue recovery and carrying cost allowance)	\$91,629,400	\$22,101,088	\$25,936,942	\$29,772,796	\$29,772,796	\$107,583,622
Scenario 3: Lost Revenue Phase-in Loaded in Year 2 and 3 (no carrying cost allowance)	\$101,590,422	\$22,101,088	\$33,608,650	\$33,608,650	\$29,772,796	\$119,091,184
Scenario 4: Lost Revenue Phase-in Loaded in Year 2 and 3 and Allowance for 3.25% Carrying Costs	\$101,914,156	\$22,101,088	\$33,857,981	\$33,733,315	\$29,772,796	\$119,465,180
Scenario 5: Lost Revenue Phase-in Loaded in Year 2 and 3 and Allowance for 6.40% Carrying Costs ²	\$102,227,928	\$22,101,088	\$34,099,639	\$33,854,145	\$29,772,796	\$119,827,668

Notes:

Schedule 1

^{1.} CF = cash flows

^{2.} 6.40% based on Staff's estimate of after-tax weighted average cost of capital

KCPL Greater Missouri Operations Company File No. ER-2012-0024

Present Value of Cash Flow Scenarios Using 8.414% Discount Rate

Scenarios	Present Value	Year 1 Expected CF ¹	Year 2 Expected CF ¹	Year 3 Expected CF ¹	Year 4 Expected CF ¹	Undiscounted Sum
Scenario 1: No Phase-in	\$97,709,341	\$29,772,796	\$29,772,796	\$29,772,796	\$29,772,796	\$119,091,184
Scenario 2: Straight Phase-in (no lost revenue recovery and carrying cost allowance)	\$87,369,476	\$22,101,088	\$25,936,942	\$29,772,796	\$29,772,796	\$107,583,622
Scenario 3: Lost Revenue Phase-in Loaded in Year 2 and 3 (no carrying cost allowance)	\$96,906,865	\$22,101,088	\$33,608,650	\$33,608,650	\$29,772,796	\$119,091,184
Scenario 4: Lost Revenue Phase-in Loaded in Year 2 and 3 and Allowance for 3.25% Carrying Costs	\$97,216,830	\$22,101,088	\$33,857,981	\$33,733,315	\$29,772,796	\$119,465,180
Scenario 5: Lost Revenue Phase-in Loaded in Year 2 and 3 and Allowance for 8.414% Carrying Costs ²	\$97,709,341	\$22,101,088	\$34,099,639	\$33,854,145	\$29,772,796	\$119,827,668

Notes:

^{1.} CF = cash flows

^{2.} Rate used by GMO Witness Bryant.