market with the trade-off of a lower expected return than the market. The reverse is expected for a beta greater than one.

**Q. Have utility stock betas increased recently?**

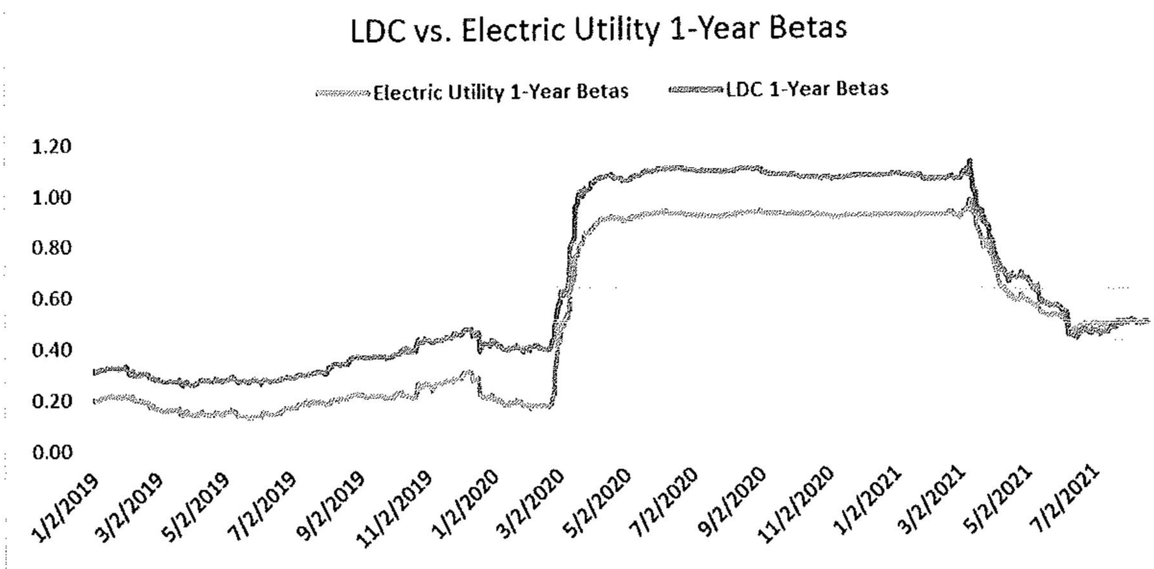
A. Yes. At the time I drafted testimony for the Empire and Ameren Missouri 2019 rate cases, electric utility stock betas had declined to quite low levels of around 0.55. Gas utility betas at that time were also around 0.6. Both electric utility stock betas and gas utility stock betas had increased to around 0.80 as of April 2021. Electric utility and LDC betas have moderated recently and seem to be returning to a level of around 0.7 to 0.75.

**Q. What was the primary cause of the increase in utility stock betas?**

A. The spike in utility stock betas occurred when the market plummeted at the onset of the pandemic in March 2020. It is quite common for all securities, both higher-risk and lower-risk securities, to move in tandem during significant market corrections. Because betas measure the relative volatility of a company or a portfolio as it relates to the market, if all securities rapidly decline at the same time, this causes all betas to converge toward one. For example, the semiconductor equipment industry typically have betas that significantly exceeds one. However, when all securities declined at the start of the pandemic, the semiconductor equipment industry's betas decreased towards one. After the stock market data associated with the synchronized decline of equity markets during March and April of 2020 began to drop off of 1-year beta calculations, the semiconductor equipment industry's betas started to increase back to their normal higher levels.

**Q. How much have gas and electric utility one-year raw betas changed over the last couple of years due to the market contraction at the onset of the pandemic?**

A. As can be seen in the following chart, LDC utility raw betas increased to over 1.0 from around 0.3 before the pandemic, and have now fallen back to approximately 0.45. Electric utility raw betas were in the 0.2 to 0.25 range before they increased to approximately 0.9 and then declined to around 0.45 as well.




**Q. Based on your CAPM analysis, what it the estimated COE for Ameren Corp and the proxy groups?**

A. My CAPM COE is in the range of 6.5% and 7.0%. (see Schedules DM-D-5-1 through DM-D-5-3).

**Q. Are there any other reasonableness tests to show your COE estimates are rational and logical?**

A. Yes. First, as I indicated earlier in my testimony, a simple rule of thumb the Chartered Financial Analyst ("CFA") suggests in its curriculum to estimate the COE is to add 3% to 4% risk premium to a company's bond yield to provide a fairly simple, but objective cost of equity. Being that the investment community views utility stocks as bond surrogates/substitutes, it is logical and reasonable to not add a risk premium any higher than 3% to the bond. Simply adding a 3% risk premium to the recent 2.75% yields on Ameren Missouri's long-term bonds implies a COE of around 5.75%.

Second, one just needs to think about the basic characteristics of utility stocks, which is that investors view them as yield investments. **

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This analysis showed that between 1974 to 2010, approximately 68% of returns from utility stocks were from the income received through dividends, with the remaining from capital gains.[32] Even if we assumed that Ameren Corp had sustainable investment opportunities to allow it to generate 50% of returns from capital gains, this would translate into only a 5.2% required return based on Ameren Corp's current dividend yield of 2.6%. However, this would mean that there would be a fundamental shift in the composition of expected utility returns, which historically has been more heavily weighted to returns being achieved through income. **

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**Q. Based on your analysis and understanding of Ameren Corp's COE, the electric utility industry's COE, investor expectations on allowed ROEs, average electric utility authorized ROEs and Ameren Missouri's affiliates' allowed ROR for its electric utility operations, what would be a fair and reasonable allowed ROE range in this case?**

A. 8.5% to 9.25% would be justified with 9% being more than adequate for Ameren Missouri to attract capital from Ameren Corp for investment in its electric utility operations. However, my recommended authorized ROE is dependent on the authorized equity ratio to which it is applied.

[32] Hugh Wynne, Francois D. Broquin, and Saurabh Singh, "U.S. Utilities: Our Dividend Growth Model Identified Utilities Poised to Pay More," May 20, 2011, Bernstein Research.
[33] Ameren Corporation Finance Committee, 4-37, October 13, 2011.

## CAPITAL STRUCTURE

**Q. Will you briefly explain capital structure?**

A. Capital structure represents how a company's assets are financed. The typical capital structure consist of common equity, long-term debt, and short-term debt. Some utilities' capital structures, including Ameren Corp and Ameren Missouri, also include a small portion of preferred stock. Although short-term debt is a typical component of a utility company's capital structure, if it is fully supporting construction work in progress ("CWIP"), then it typically is excluded from the rate making capital structure and reflected in the allowance for funds used during construction ("AFUDC") rate.

**Q. What capital structure do you recommend for purposes of setting Ameren Missouri's rate of return (ROR)?**

A. I recommend a capital structure that consists of approximately 45% common equity, 0.82% preferred stock and 54.18% long-term debt. While not exactly the same as Ameren Corp's consolidated capital structure as of December 31, 2020, this is in line with the capital structure ratios Ameren Corp is targeting for its consolidated operations over the long-term.[34]

**Q. What is the basis for this capital structure recommendation?**

A. My recommended capital structure is consistent with Ameren Corp's consolidated capital structure, net of short-term debt. This capital structure best represents the amount of debt capacity Ameren Corp considers reasonable and appropriate for its regulated utility assets, including Ameren Missouri. Use of this capital structure ensures that Ameren Missouri receives credit for the additional debt capacity it has provided to Ameren Corp for historical investments as well as under its current lower business risk profile with its assurance of full recovery of return on and of investments between rate cases through PISA. It is clear that Ameren Corp's strategy for managing its regulated utility subsidiary capital structures

[34] "Leading the Way to a Sustainable Energy Future," Rating Agency Update, March 2021.

is primarily for purposes of ratemaking. Ameren Corp has targeted a common equity ratio of around 52% for Ameren Missouri for at least the past ten years and plans to continue targeting this common equity ratio for ratemaking for the foreseeable future. This constant targeting of a 52% common equity ratio regardless of changes in business risk and/or economic conditions, contradicts one of the primary purposes of managing a company's capital structure; to achieve the lowest reasonable cost without jeopardizing financial stability. As I will discuss later in my testimony, Ameren Missouri's lower business risk has afforded Ameren Corp the ability to have a higher proportion of debt in its capital structure, but instead of sharing the lower cost of this additional debt capacity with Ameren Missouri and its customers, Ameren Corp is using this additional debt capacity through issuing an increasing amount and proportion of holding company debt.

**Q. What is the basis for your conclusion that Ameren Corp targets common equity ratios for ratemaking purposes?**

A. My conclusion is based on Ameren Corp's past financial management of its subsidiaries and Ameren Corp's projected equity ratios for the next few years. Ameren Corp has been authorized a 60.1% equity ratio at Ameren Transmission Company of Illinois ("ATXI"), a 50% equity ratio for Ameren Illinois' electric utility operations, a 52% equity ratio for Ameren Illinois' natural gas distribution operations and an approximate 52% equity ratio for Ameren Missouri's last litigated electric rate case in 2014, Case No. ER-2014-0258. ** ______________________________ **[35] In other words, Ameren Missouri's equity balance does not represent the most efficient amount for Ameren Missouri. Its equity balance is based on Ameren Corp's desire for an equity ratio that allows it to attempt to charge higher rates to Ameren Missouri customers.

[35] "Leading the Way to a Sustainable Energy Future," Ameren Rating Agency Update, p. 46.

**Q. What capital structure has Ameren Corp managed for purposes of taking advantage of debt capacity afforded by Ameren Corp's low-risk regulated utility subsidiaries?**

A. They have managed Ameren Corp's consolidated capital structure for purposes of taking advantage of the regulated utilities' debt capacity. Ameren Corp has been steadily increasing the amount of holding company debt it uses to invest in its subsidiaries. As of the updated test year in Ameren Missouri's last rate case, Case No. ER-2019-0335, Ameren had $700 million of holding company debt outstanding (8.39% of total consolidated debt). As of the December 31, 2020 test year in this case, Ameren had $1.6 billion of holding company debt outstanding (14.63% of total consolidated debt). Ameren issued another $450 million of holding company debt on March 5, 2021, which raises the holding company debt to 16.59% of total consolidated debt. It is clear that Ameren has dynamically managed its consolidated capital structure to take advantage of the debt capacity provided by its regulated utility subsidiaries, but chooses to target a static 52% equity ratio at Ameren Missouri for ratemaking purposes. Ameren Missouri should not be allowed an equity ratio that its own parent company deems to be cost inefficient. This is especially egregious since Ameren Missouri's ratepayers are now incurring the risk associated with Ameren Missouri's ability to defer investment costs using PISA.

**Q. Can you provide other evidence that supports your position that Ameren Missouri should have a lower common equity ratio than the 52% it has constantly targeted over the last ten years?**

A. Yes, Ameren Missouri's business risk has declined due to the passage of SB 564, passed by the Missouri Legislature in 2018, and Ameren Missouri's decision to elect plant-in-service accounting (PISA). A fundamental consideration in determining how much financial risk, i.e. additional debt, an asset/business can support is how much business risk is inherent in that asset/business. Consequently, because Ameren Missouri's business risk declined, it could carry more leverage, i.e. debt, in its capital structure. Despite operating under less risk, Ameren Corp has not adjusted its targeted capital structure for Ameren Missouri to reflect the lower cost of capital that Ameren Missouri's customers support through the certainty of funding of investments subject to PISA. Based on Ameren Corp's continued management of Ameren Missouri's capital structure to a 52% common equity ratio, it is evident that Ameren Corp is trying retain the financial benefits enabled by SB 564, rather than passing this reduced cost through to ratepayers by adjusting its equity ratio. The Commission can ensure ratepayers realize the benefits of the lower risk they support by authorizing Ameren Missouri's ROR based on a lower common equity ratio. This can most objectively be accomplished by authorizing a common equity ratio consistent with Ameren Corp's on a consolidated basis. In addition, by using Ameren's common equity ratio for purposes of setting Ameren Missouri's revenue requirement, Ameren will be incentivized to manage its consolidated capital structure to a more conservative level, which will provide it financial flexibility during uncertain business and market conditions.

**Q. What corroborating information supports your position that Ameren Missouri's business risk is lower due to its ability to recover a return on and of investments between rate cases through PISA?**

A. First, the very fact that Ameren Corp has committed to investing significant amounts of capital in Ameren Missouri's system shows that Ameren Corp has confidence that it will receive timely recovery of and on its investments subject to PISA.

Second, on March 29, 2019, Moody's lowered Ameren Corp's Funds from Operations ("FFO")/debt[36] threshold to 17% from 19%, which means that Ameren Corp can incur more leverage as it compares to cash flow and still maintain its current credit rating of Baa1 (functional equivalent of S&P's BBB+). One of the primary reasons Moody's cited for allowing Ameren Corp to have a lower FFO/debt threshold (i.e. use of more leverage) was "improved regulatory construct in Missouri facilitating meaningful rate base growth and reducing regulatory lag [PISA]."[37] Ameren Corp's management indicated the following: ** ________________________

[36] FFO/Debt (as generally referenced by most evaluating credit worthiness) is the credit metric that receives the most weight by both Standard & Poor's (S&P) and Moody's. This metric provides insight as to how much sustainable cash flow the operations generate as it relates to the amount of fixed obligations, which includes traditional debt, but also other obligations such as capital leases. The higher the ratio, the less financial risk implied by the ratio. Moody's more specifically defines FFO/debt as "Cash flow from Operations – Pre Working Capital to Debt". However, I will generally refer to each as FFO/debt.

[37] "Update to Credit Analysis," Moody's Investor Service, March 29, 2019, p. 2.

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____________________________ **This additional debt capacity should be reflected in Ameren Missouri's authorized capital structure because Ameren Missouri's customers are providing the cash flows that make this lower business risk possible. Considering the anticipated sizeable increase in Ameren Missouri's rate base over the next several years, it is just and reasonable to ensure ratepayers are charged a ROR based on the additional debt capacity they provide to Ameren Corp through lower-risk of rate recovery. Recognizing the reduced cost of capital through Ameren Corp's ability to utilize more debt in its capital structure, allows Ameren Missouri's ratepayers to receive credit for Ameren Corp's reduced risk profile afforded by the legislative opportunity to receive a return on and of plant placed in service between rate cases.

Third, as I discussed previously, Ameren Corp is now viewed as a premium utility by investors because of the anticipated growth in its investment and the investors' confidence in the probability of the recovery of a return of and on this investment. This is illustrated by the fact that Ameren Corp's price-to-earnings (P/E) ratios have been trading at a premium to an average for its peers. These market signals are clear indications that Ameren Missouri has both a reduced business risk profile through legislative support for increased investment as well as higher expected growth in earnings and eventually dividends as a result of this growth in investment.

**Q. What is the primary cause of Ameren Corp's current consolidated capital structure having a much lower equity ratio than Ameren Missouri's capital structure?**

A. Ameren Corp's increased use of holding company debt to fund its investments. As of the updated test year, June 30, 2019, in Ameren Missouri's last rate case, Ameren had $700 million of holding company debt outstanding. Ameren Corp has approximately tripled the amount of holding company debt in less than two years. As of June 30, 2021, Ameren Corp had $2.05 billion of holding company debt outstanding.

[38] Ameren Corp's Finance Committee Meeting, February 7, 2019, p. 24

**Q. Can you provide some examples of how Ameren Corp has managed its subsidiaries' capital structures to target ratemaking common equity ratios?**

A. Yes. Although Ameren Corp's management of Ameren Missouri's capital structure is our primary focus, because Ameren Corp's management, through Ameren Services ("AMS"), is ultimately managing all of its subsidiaries for the benefit of Ameren Corp shareholders, it is important to evaluate and understand Ameren Corp's decisions as it relates to all of its subsidiaries.

Ameren Corp's management of Ameren Transmission Company of Illinois' ("ATXI") capital structure provides the most glaring example of how Ameren Corp manages its subsidiaries' capital structures to its benefit for ratemaking purposes. ATXI's rates are based on an authorized common equity ratio of 60.1%. Because ATXI was a new company with no financial experience and no significant assets until around 2014 to 2015, it completely relied on Ameren Corp for its capital needs until 2017.

Ameren Corp provided steady incremental financing to ATXI since 2010. Ameren Corp relies on its shared credit facilities with Ameren Missouri and Ameren Illinois in order to have access to commercial paper for financing needs at the holding company level. Ameren Corp has used this short-term debt capital to finance both its equity and debt investments in ATXI.[39] While it appears a majority of Ameren Corp's commercial paper financing was used for purposes of investing in ATXI's assets, which were classified as equity infusions into ATXI, it is also possible some of the commercial paper was issued to finance other Ameren Corp capital needs. For example, Ameren Corp used commercial paper to repay $425 million of long-term debt due in May 2014. In order to reduce the amount of short-term debt carried at the holding company due to the aforementioned financing needs, Ameren Corp issued $700 million of long-term debt. However, during much of this period in which Ameren Corp was funding these investments with external capital, it was also receiving a significant amount of dividends from Ameren Missouri. Being that there is no way to trace the capital once Ameren Corp receives it and redeploys

[39] Ameren Missouri response to OPC DR No. 3033 in Case No. ER-2019-0335.

it as it deems consistent with its organizational objectives, it becomes a futile effort to try and disaggregate the various forms of capital for each subsidiary. Fortunately, this is not necessary for purposes of determining how much debt the subsidiaries support because the consolidated capital structure provides this transparency.

After Ameren Corp financed ATXI's investments through short-term and long-term debt, ATXI issued $450 million of third-party debt on June 22, 2017. The proceeds from this debt were used to refund $425 million of the $500 million of debt financing Ameren Corp had provided to ATXI. None of the proceeds were used to return any portion of the equity financing Ameren Corp had infused into ATXI. It is important to emphasize that ATXI's equity and debt capital had been funded from the same source, Ameren Corp's commercial paper. After the aforementioned transactions were completed, ATXI still had a per books common equity ratio of around 55%, which was close to the 56% targeted at the time for FERC ratemaking purposes, despite being financed by debt.

Ameren Corp also manages Ameren Illinois' capital structure for ratemaking purposes. Ameren Illinois, Staff of the Illinois Commerce Commission ("ICC") and the industrial intervening party extensively litigated over several cases about whether Ameren Illinois's authorized ROR should be based on Ameren Illinois's per books capital structure, which showed a common equity ratios in the range of 52% to 54% in various dockets from 2011 to 2013[40], or if it should be adjusted to a lower level in order to recognize the reduced business risk afforded by the Illinois' Grid Modernization Act. The ICC Staff first determined Ameren Illinois's common equity ratio on a stand-alone basis after making adjustments to remove goodwill from Ameren Illinois's common equity balance. After going through this exercise, ICC Staff still determined that Ameren Illinois's common equity ratio was still unreasonable for the reduced business risk associated with the certainty of formula ratemaking allowed with the Grid Modernization Act.

[40] Docket Nos. D-11-0279, D-12-0293 and D-13-0301.

The ICC Staff then recommended a common equity ratio for Ameren Illinois consistent with Ameren Corp on a consolidated basis. After many years of litigation on the issue, the parties eventually agreed to deem a common equity ratio of "up to and including 50% of the total capital" as reasonable for purposes of setting rates for Ameren Illinois without requiring further litigation. This agreement was codified into law by the 2016 Illinois Legislature's passage of the Future Energy Jobs Act ("FEJA") as an amendment to the 2011 Illinois Energy Infrastructure Modernization Act. Until recently, Ameren Corp has managed Ameren Illinois's actual adjusted year-end common equity ratio to within 25 basis points (0.25%) of the 50% determined reasonable for ratemaking in Illinois. The adjusted year-end common equity ratio has not varied by more than 15 basis points (0.15%) over this period. However, in Ameren Illinois' current docket, Docket No. D-21-0365, Ameren Illinois is requesting a 53.06% common equity ratio. Ameren Illinois claims that its reduced 7.36% authorized ROE and lower cash flows due to the reduction of the corporate income tax rate starting in 2018, required it to manage to a higher common equity ratio.

**Q. How has Ameren Corp managed Ameren Missouri's capital structure for ratemaking?**

A. Ameren Missouri manages to its 52% targeted common equity ratio by means of its equity infusions, its dividend payments and its debt financings. Ameren Missouri's common equity ratios for rate cases since 2010 have been in the range of 51.26% to 52.30%, with all cases but the 2010 rate case being within 51.75% and 52.30%.

Despite Ameren Missouri's FFO/debt ratios being consistent with 'A' ratings based on both Moody's and S&P's benchmark credit metrics, Ameren Corp has not allowed Ameren Missouri's capital structure to reflect its true debt capacity.[41] Allowing Ameren Missouri's capital structure to carry more debt would reduce the cost of capital Ameren Missouri ratepayers would be charged in the revenue requirement. Of course, being that Ameren Corp had historically needed to raise debt capital for investment in its other

[41] Union Electric Co. d/b/a Ameren Missouri, S&P Global RatingsDirect, April 30, 2021, p. 9. Union Electric Company, Moody's Investors Service, April 3, 2020, p. 2.

subsidiaries as well as support its dividend payments to its shareholders, Ameren Corp had a financial incentive to maintain a higher common equity ratio at Ameren Missouri because this generated more cash flow for the consolidated entity. It is not fair to Ameren Missouri's ratepayers for Ameren Corp to use Ameren Missouri's debt capacity for the benefit of Ameren Corp and its shareholders.

Q. **What evidence can you provide that shows Ameren Missouri's capital flows are not managed as if it were a stand-alone entity?**

A. If Ameren Missouri's capital structure were being managed for its own benefit, then one would expect that it would have a carefully managed dividend payment policy, similar to how Ameren Corp manages its dividend payments to a targeted payout ratio in the range of 55% to 70%. However, over the most recent five years, Ameren Missouri has had a dividend payout ratio that has ranged from a low of 15.03% in 2020 to a high of 111.04% in 2017. If Ameren Missouri were financially managed as a stand-alone entity, it would have its own formal dividend policy. Ameren Missouri shouldered the burden of dividends ultimately paid to Ameren Corp shareholders through 2018 because Ameren Corp had only been minimally reinvesting in Ameren Missouri until it elected PISA as of September 12, 2018, whereas it had been investing significant amounts of capital in ATXI and Ameren Illinois. Ameren Illinois distributed $110 million of dividends in 2016 and $9 million of dividends in 2020. ATXI has required much less investment since 2017, which is the last year in which ATXI did not distribute a dividend to Ameren Corp. ATXI had a dividend payout ratio of 97.22% in 2018, 18.03% in 2019 and 32.78% in 2020. If Ameren Corp's subsidiaries were stand-alone entities, then it would be impossible for their cash flows to be managed in this fashion because the shareholders of each entity would expect a consistent and steady dividend payout ratio.

**Q. What other tools allow Ameren Corp to manage its subsidiaries' common equity ratios?**

A. First, the subsidiaries do not have the capability to manage their own capital needs. AMS provides this function for all of Ameren Corp's subsidiaries that have total operational control of all entities, except for Ameren Missouri and Ameren Illinois.

AMS uses short-term debt, i.e. commercial paper, at Ameren Corp to make capital infusions in its subsidiaries. Being that Ameren Missouri has a finite amount of cash it can provide to Ameren Corp via dividends, at times Ameren Corp has not received enough dividends from its subsidiaries to fully fund the dividends it pays to its shareholders. Consequently, other capital has to be raised to fund this deficiency.

Ameren Corp freely admits that it issues short-term debt and long-term debt at the holding company level to invest in its Ameren Illinois and ATXI subsidiaries.[42] However, Ameren Corp indicates it's a matter of policy not to do the same for Ameren Missouri because it wants to ensure that Ameren Missouri's equity is supported by Ameren Corp's third-party equity issuances.[43] This has been Ameren Corp's basis for maintaining that Ameren Missouri's equity ratio is legitimate for ratemaking purposes. Although Ameren Corp made a strategic financing decision to issue third-party equity to partially finance its planned purchase of wind projects, Ameren Corp had just as significant of financing needs in years leading up to the purchase of the wind projects, in which it could have issued equity to third-party equity investors. There have been several periods in which Ameren Corp's short-term debt balances have been approximately $1 billion, which would have warranted issuing common equity to reduce the amount of leverage at Ameren Corp.

[42] See Ameren Missouri's response to DR No. 3033 in Case No. ER-2019-0335.
[43] *Id.*

**Q. Are there any other consequences of maintaining a high common equity ratio on Ameren Missouri's revenue requirement other than charging a higher return for a higher proportion of the capital structure?**

A. Yes. Although the common equity ratio has been my primary point of contention as to how Ameren Corp inflates Ameren Missouri's cost of service, because debt yields have been very favorable, reaching all-time lows recently, Ameren Corp's strategy also prevents Ameren Missouri ratepayers from realizing lower cost of debt capital. Ameren Corp's decision to issue holding company debt also impacts Ameren Missouri's debt issuance strategies. ** ______________________________ **[44]

Considering Ameren Corp has $425 million of debt that matures in 2024, $350 million that matures in 2026, $450 million in debt that matures in 2028 and $800 million of debt that matures in 2031, this precludes Ameren Missouri from issuing sizeable debt that matures in these years. However, because Ameren typically refinances Ameren Missouri's long-term debt with debt that have tenors in excess of ten years, Ameren Missouri's financings do not cause problems for Ameren Corp. But considering the fact that this longer-tenor debt is more costly than shorter-tenor debt, this increases the cost of debt capital charged to Ameren Missouri ratepayers.

**Q. How does the weighted-average maturity of Ameren Corp's holding company debt compare to Ameren Missouri's debt as of August 26, 2021?**

A. Ameren Missouri's is almost 10 years longer at 16.22 years as compared to Ameren Corp's 6.54 years.

**Q. If Ameren Missouri issued shorter-term tenor debt, how would this impact its cost of debt?**

A. It would be lower in most situations.

[44] Ameren Corporation Finance Committee Materials, December 10, 2020, p. 16.

**Q. What have you done to ensure that Ameren Missouri receives the benefit of current low debt capital costs in its capital structure?**

A. If Ameren Missouri had a common equity ratio similar to Ameren Corp's on a consolidated basis, it would substitute $626.715 million of common equity with debt. For purposes of the assumed cost of this debt, I used a weighted average cost of 2.88% based on Ameren Missouri's issuance of 30-year, 2.65% debt on October 9, 2020 and 10-year, 2.95% debt on March 20, 2020. Including the amount and the cost of this debt in Ameren Missouri's embedded cost of debt reduced Ameren Missouri's embedded debt cost by approximately 14 basis points.

**Q. Why do you consider Ameren Corp's long-term equity ratio to be the most appropriate for setting Ameren Missouri's allowed ROR?**

A Ameren Corp allocates capital around its companies to target and achieve ratemaking common equity ratios. The most objective and practical measure of the capital structure that captures the debt capacity of Ameren Corp's regulated utility assets, is that of the Ameren Corp on a consolidated basis. Consequently, this is why I am recommending Ameren Missouri's common equity ratio be set no higher than Ameren Corp's, which is currently approximately 45%, net of short-term debt.

**Q. Do Ameren Corp's financial projections anticipate a 45% common equity ratio?**

A. No. Ameren Corp expects its consolidated common equity ratio to be around ** ______________________________ **[45] Because short-term debt costs are used for purposes of capitalizing construction work in progress ("CWIP") through the AFUDC capitalization rate, it is appropriate to exclude short-term debt from the capital structure used for ratemaking as long as short-term debt balances do not exceed CWIP balances. If short-term debt were to exceed CWIP progress balances, then inclusion of short-term debt in the authorized capital structure should be considered.

[45] "Leading the Way to a Sustainable Energy Future," Ameren Rating Agency Update, March 2021.

Q. **How much short-term debt has Ameren Corp been carrying on its balance sheet from December 31, 2019, through December 31, 2020?**

A. Ameren Corp's average monthly balances of short-term debt has been approximately $317 million.

Q. **What was Ameren Corp's cost of short-term debt at the end of December 31, 2020?**

A. 0.20%.[46]

Q. **How much CWIP has Ameren Corp been carrying on its balance sheet for the same period?**

A. Over $1 billion.

Q. **How much CWIP and short-term debt has Ameren Missouri been carrying on its balance sheet for the same period?**

A. Ameren Missouri has had CWIP of about $663 million, with short-term debt balances around $147 million.

Q. **What was Ameren Missouri's cost of short-term debt at the end of December 31, 2020?**

A. 0.20%.[47]

Q. **Based on this information, do you think it is appropriate to exclude short-term debt from Ameren Missouri's ratemaking capital structure?**

A. Yes.

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[46] Ameren Missouri Response to Staff Data Request No. 113 in Case No. GR-2021-0241.
[47] *Id.*

**Q. How can the Commission determine an equitable, market-tested and objective capital structure that more closely captures the amount of debt capacity that is consistent with Ameren Missouri's business risks?**

A. The Commission can more closely capture debt capacity consistent with Ameren Missouri's business risks by using Ameren Corp's consolidated capital structure as a proxy. While this capital structure includes capital that is used for investment in all of Ameren Corp's assets, this should not be the focus for determining the proper balance of capital as it relates to each of Ameren Corp's subsidiaries. For example, while FERC has decided to allow ATXI a common equity ratio of 60.1% for purposes of setting its allowed ROR, Ameren Corp understands that these assets can support a much higher amount of leverage because of the low business risk associated with these assets. Consequently, Ameren Corp initially issued all holding company debt for purposes of funding its investment in ATXI. In 2017, ATXI issued $450 million of third-party debt, which was used to refund the affiliate loans Ameren made to ATXI. Ameren Corp's strategic financing decisions primarily concentrate on the amount of leverage Ameren Corp can carry on a consolidated basis. This capital structure most accurately reflects the debt capacity afforded by Ameren Missouri's assets.

## OVERALL RATE OF RETURN

**Q. Should the Commission take anything else into consideration when deciding a fair and reasonable rate of return, which includes the authorized capital structure and the authorized ROE, for Ameren Missouri?**

A. Yes. I have provided my recommendations regarding a fair and reasonable allowed ROE considering the current low cost of capital environment for the utility industry. I have also recommended a capital structure that recognizes the debt capacity made possible by Ameren Missouri's lower business risk. However, as became apparent over the last few years, Ameren Corp diverted significant amounts of capital to its jurisdictions that provided more favorable ratemaking treatment. Apparently Ameren Corp decided it could create more value for its shareholders by investing in Ameren Illinois and ATXI. At least for

Ameren Illinois's electric utility operations, this higher value would likely have been a function of lower business risk since Ameren Illinois has been able to earn its allowed ROR through formula rates. Ameren Missouri elected PISA in September 2018. This mechanism eliminates all but a minimal amount of regulatory lag as it relates to Ameren Missouri's capital investments. Under GAAP, Ameren Missouri will be able to flow through the debt portion (about 5%) of its deferred ROR directly to earnings as the plant goes into service. Although the equity portion will still accrue and eventually be charged to ratepayers through a higher rate base, Ameren Corp is not allowed to book it in current earnings.

Ideally, Ameren Corp would be indifferent between its investments in Ameren Illinois' electric utility operations and Ameren Missouri's electric utility operations assuming regulatory ratemaking parity. Under such an ideal scenario, Ameren would invest in the most economically efficient projects. However, the last few years has proven this is not how Ameren Corp approaches its investment decisions, at least as it relates to its electric utility investments. Ameren Corp has allocated a majority of its electric utility investments to Ameren Illinois. As long as this doesn't cause overinvestment and a strategy of achieving shareholder returns by simply growing rate base without consideration of need for investments, then this policy may be palatable. However, there are means by which regulators can discourage such strategies when a company has assets in several jurisdictions, such as Ameren Corp. One of those means is to take into consideration the allowed ROR in the other jurisdiction. It is noteworthy that Ameren Corp has made significant amounts of capital investment in Illinois even though its allowed ROE for its electric utility operations have ranged from 8.38% to 9.25% since 2014 with a 50% allowed common equity ratio. Ameren Illinois requested an ROE of 7.36% applied to a 53.08% equity ratio for the upcoming year. Ameren Illinois's allowed ROE is set by a formula which adds 580 basis points to the previous calendar year's averaged 30-year US Treasury ("UST") yield. Therefore, the 30-year UST yield averaged approximately 1.56% in 2020. While the 2021 year-to-date average 30-year UST yield hasn't been as low as 2020, it is still only 2.13%. This would result in a potential ROE of approximately 8% for 2023.

**Q. Is there any evidence that shows that Ameren Illinois's and Ameren Missouri's cost of capital are fairly similar?**

A. Yes. I reviewed current over-the-counter trades for both Ameren Illinois's and Ameren Missouri's longer maturity bonds. Ameren Illinois's bonds maturing in 2049 and 2050 have traded at a YTM in the range of 2.7% to 2.9% in August 2021. Ameren Missouri's bonds of similar maturities trade at YTM of 2.6% to 2.85%. These similar yields substantially support using the same cost of capital, i.e. discount rates, for purposes of determining the net present values ("NPV") of projects being considered for Ameren Illinois or Ameren Missouri. Therefore, if one jurisdiction sets its authorized ROR at a level higher than parity compared to the other jurisdiction, then given two comparable projects, Ameren Corp naturally will invest in the jurisdiction that authorizes a higher ROR because it would create more value for shareholders. It is this very conflict that underlies the principle of authorizing a ROR based on the market cost of capital because otherwise, jurisdictions will be bidding against each other. Awarding ROR's based on a desire to compete with other states will create a perverse incentive for utility projects to be pursued based on earnings alone, not economics and customer need. If the economics of potential projects, not just the awarded ROR, support the possibility of achieving a ROR higher than the cost of capital, then the company will pursue such projects.

**Q. Can you provide an example based on Ameren Missouri's current authorized ROR as compared to Ameren Illinois's current authorized ROR?**

A. Yes. Ameren Missouri currently has an authorized ROE of 9.53% with an approximate 52% equity ratio. Ameren Illinois currently has an authorized ROE of 8.38% with a 50% equity ratio. Both companies have a current market cost of 30-year debt of approximately 2.75%. Therefore, I will assume the same cost of debt for each company's revenue requirement. Through a simple example of investing $1 billion in rate base, I will show how much additional value Ameren Corp will earn for its shareholders as compared to if they made this same investment with an authorized return similar to Ameren Illinois.

For simplicity, I assumed that the additional $1 billion investment is made at one time rather than periodically. I also assumed the project would have a depreciation life of 30 years. Ameren Missouri's authorized ROR using a 52% equity ratio, a 9.53% allowed ROE and a 2.75% cost of debt is 5.94%. Ameren Illinois's authorized ROR using a 50% equity ratio, an 8.38% allowed ROE and a 2.75% cost of debt is 5.22%. Ameren Corp would create an additional $73.4 million of return/value for its shareholders if it invested the $1 billion in Ameren Missouri projects as compared to Ameren Illinois projects.

**Q. What if Ameren Missouri's allowed ROE were applied to your recommended capital structure consisting of 45% common equity?**

A. A $1 billion investment in Ameren Missouri rather Ameren Illinois would still generate an additional $20.4 million of shareholder return. If the allowed RORs on projects were closer to parity, then Ameren Corp is much more likely to choose projects that are likely to create value beyond just being awarded a higher ROR.

**Q. What is Ameren Illinois's expected allowed ROE for 2022?**

A. Ameren Illinois's requested allowed ROE for 2022 is 7.36%, applied to a 53.08% equity ratio. At this authorized ROR level for the upcoming year, Ameren would be indifferent to a $1 billion dollar investment in Ameren Missouri compared to Ameren Illinois at an 8.31% authorized ROE applied to a 45% common equity ratio. Conversely, if Ameren Missouri were allowed a capital structure that had an approximate 52% common equity ratio, Ameren would be indifferent between an investment in Ameren Missouri compared to Ameren Illinois at an authorized ROE of 7.47%.

**Q. Is Ameren pursuing a change in legislation to change how Ameren Illinois' ROR is set for its electric utility operations?**

A. Yes. It is my understanding that there have been two proposals. In one draft bill, Ameren Illinois' risk premium added to the average 30-year UST yield would be increased by 100 basis points, from 580 to 680 basis points. In the other proposal, Ameren Illinois allowed ROE would be simply set based on an average awarded ROE for the industry.

**Q. What would Ameren Illinois' awarded ROE be in the first scenario?**

A. 8.36%.

**Q. What about the second scenario?**

A. Somewhere in the range of 9.1% to 9.45% based on average awarded ROEs in 2020.

**Q. If Ameren Illinois were awarded an ROE of approximately 8.75% and a 50% equity ratio, what would be the breakeven ROE for Missouri based on your recommended 45% common equity ratio?**

A. 9.5%.

## SUMMARY AND CONCLUSIONS

**Q. Can you summarize your main conclusions and views as it relates to an authorized ROR in this case?**

A. Yes. The cost of capital for utilities continues to be low with direct proof supported by extremely low long-term debt yields. Ameren Corp is taking advantage of the low-cost-debt by issuing increasing amounts and proportions of debt at the holding company level. However, it is not providing Ameren Missouri's ratepayers their fair share of the lower cost of capital. The lower long-term interest rates directly affect awarded ROEs for Ameren's Illinois electric utility operations. This is logical because the utility industry's cost of equity is correlated to changes in interest rates. Although Ameren Missouri has gained favorable reductions in its business risk due to legislation passed in Missouri, there has been no direct recognition of such in Ameren Missouri's allowed ROR. Not only has Ameren Missouri's business risk declined since it has been able to use PISA, but capital market conditions have loosened considerably since Ameren Missouri elected PISA. Ameren Missouri's allowed ROR should reflect the higher debt capacity associated with lower business risk through both a lower equity ratio and a lower ROE.

There are other simple and direct market indicators that indicate Ameren Missouri's cost of capital is quite low. For example, Ameren Missouri recently issued a 30-year bond at a coupon of 2.625%. I personally don't know the last time Ameren Missouri was able to issued 30-year bonds at this low of a cost, but if it has been able to do so, it would had to have been over 70 years ago. All simple and objective signs indicate Ameren Missouri's electric utility operation should be authorized an ROE no higher than 9.25%.

It is also clear that Ameren Missouri's business risk is lower, which means it can take on more financial risk, i.e. debt, in its capital structure. Ameren Corp has not managed Ameren Missouri's capital structure to allow it to realize the lower cost of capital that accompanies its lower business risk. The Commission should lower Ameren Missouri's allowed equity ratio to ensure ratepayers receive the benefit of a lower capital cost during Ameren Missouri's period of rapidly increasing rate base prompted by SB 564.

Although I recommend the Commission authorize Ameren Missouri a lower common equity ratio of 45%, I recognize that economic efficiency would more likely be achieved if Ameren Corp did not choose an Ameren Missouri project or an Ameren Illinois project based solely on which state awards a higher ROR. Therefore, to maintain some parity between Ameren Illinois and Ameren Missouri, I recommend the Commission award a 9.00% ROE applied to a 45% equity ratio. If the Commission authorizes an equity ratio that his higher than 45%, then I recommend the Commission authorize a corresponding lower allowed ROE.

**Q. Does this conclude your testimony?**

A. Yes.

# DAVID MURRAY, CFA

## Educational and Employment Background and Credentials

I have been employed as a Utility Regulatory Manager at the Office of the Public Counsel (OPC) since July 1, 2019. Prior to accepting employment with the OPC, I was the Utility Regulatory Manager of the Financial Analysis Department for the Missouri Public Service Commission (Commission) from 2009 through June 30, 2019. I accepted the position of a Public Utility Financial Analyst in June 2000 and my position was reclassified in August 2003 to an Auditor III. I was promoted to the position of Auditor IV, effective July 1, 2006. I was employed by the Missouri Department of Insurance in a regulatory position before I began my employment at the Missouri Public Service Commission.

I was authorized in October 2010 to use the Chartered Financial Analyst (CFA) designation. The use of the CFA designation requires the passage of three rigorous examinations addressing many investment related areas such as valuation analysis, portfolio management, statistical analysis, economic analysis, financial statement analysis and ethical standards. In addition to the passage of the examinations a CFA charterholder must have four years of relevant professional work experience.

In May 1995, I earned a Bachelor of Science degree in Business Administration with an emphasis in Finance and Banking, and Real Estate from the University of Missouri-Columbia. I earned a Masters in Business Administration from Lincoln University in December 2003.

In April 2007 I passed the test required to be awarded the professional designation Certified Rate of Return Analyst (CRRA) by the Society of Utility and Regulatory Financial Analysts (SURFA). I served as a board member on the SURFA Board of Directors from 2008 through 2016. I am not currently an active member of SURFA.

## Case Participation

Case Participation While Employed with the Missouri Office of the Public Counsel (July 2019 through Current):

I sponsored rate of return testimony in the following cases:

| | |
|---|---|
| Union Electric | ER-2019-0335 |
| Empire District Electric | ER-2019-0374 |
| Missouri-American Water Company | WR-2020-0344 |
| Spire Missouri | GR-2021-0108 |

Case Participation While Employed with the Staff of the Missouri Public Service Commission (July 2000 through June 2019):

In addition to supervising employees who sponsored rate of return (ROR) testimony as Manager of the Financial Analysis Department of the Missouri Public Service Commission, I directly sponsored ROR testimony in the following electric, gas and water case proceedings (I also filed ROR testimony in several other smaller proceedings that are not listed):

| | |
|---|---|
| Union Electric | ER-2010-0036, ER-2011-0028, ER-2012-0166, ER-2014-0258, and ER-2016-0179 |
| Empire District Electric Company | ER-2002-424, ER-2004-0570, and ER-2006-0179 |
| Kansas City Power & Light Company | ER-2009-0089, ER-2010-0355, ER-2012-0174, and ER-2016-0285 |
| KCP&L Greater Missouri Operations and Former Aquila Inc. dba Aquila Networks MPS and L&P | ER-2001-672, EC-2002-265, ER-2004-0034, ER-2005-0436, ER-2009-0090, ER-2012-0175; and ER-2016-0156 |
| Spire Missouri West and former Missouri Gas Energy | GR-2001-292, GR-2004-0209, GR-2006-0422, GR-2009-0355, GR-2017-0216 |
| Spire Missouri East (Laclede Gas) | GR-2017-0215 |

| | |
|---|---|
| Missouri American Water Company | WR-2003-0500, WR-2007-0216, WR-2010-0131, and WR-2015-0131 |
| Missouri Gas Utility | GR-2008-0060 |
| Summit Natural Gas of Missouri | GR-2014-0086 |
| Liberty Midstates Gas Company | GR-2018-0013 |

In addition to the above, I have sponsored testimony in other proceedings, such as merger applications, which involve various general financial matters.

## Multiple-Stage Dividend Discount Model (DDM)
## for Ameren Corp.

### 3.0% Perpetual Growth Rate Multi-Stage DDM

| Financial Metrics | Cost of Equity | Stock Price 8/31/2021 | 9/30/2021 | Consensus Annual Analysts' Estimates 12/31/2021 | 6/30/2022 | 6/30/2023 | 6/30/2024 | Transition of EPS Annual Growth Rates from 7.32% to 3.0% Perpetual Growth Rate (2025 - 2035) Assumed Annual Compound Growth Rates in Earings Per Share 7.32% 6/30/2025 | 6.89% 6/30/2026 | 6.46% 6/30/2027 | 6.03% 6/30/2028 | 5.59% 6/30/2029 | 5.16% 6/30/2030 | 4.73% 6/30/2031 | 4.30% 6/30/2032 | 3.86% 6/30/2033 | 3.43% 6/30/2034 | 3.00% 6/30/2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Projected Annual EPS | | | x | x | $4.04 | $4.33 | $4.59 | $4.93 | $5.27 | $5.61 | $5.95 | $6.28 | $6.61 | $6.92 | $7.21 | $7.49 | $7.75 | $7.98 |
| DPS Estimates | 6.96% | -$84.90 | $0.55 | $0.55 | $2.32 | $2.47 | $2.63 | $2.78 | $2.98 | $3.17 | $3.36 | $3.55 | $3.74 | $3.91 | $4.08 | $4.28 | $4.79 | $5.32 |
| Dividend Payout Ratio | | | NM | NM | 57.30% | 56.95% | 57.28% | 56.44% | 56.55% | 56.55% | 56.55% | 56.55% | 56.55% | 56.55% | 56.55% | 57.06% | 61.86% | 66.67% |

### 2.5% Perpetual Growth Rate Multi-Stage DDM

| Financial Metrics | Cost of Equity | Stock Price 8/31/2021 | 9/30/2021 | Consensus Annual Analysts' Estimates 12/31/2021 | 6/30/2022 | 6/30/2023 | 6/30/2024 | Transition of EPS Annual Growth Rates from 7.32% to 2.5% Perpetual Growth Rate (2025 - 2035) Assumed Annual Compound Growth Rates in Earings Per Share 7.32% 6/30/2025 | 6.84% 6/30/2026 | 6.36% 6/30/2027 | 5.88% 6/30/2028 | 5.39% 6/30/2029 | 4.91% 6/30/2030 | 4.43% 6/30/2031 | 3.95% 6/30/2032 | 3.46% 6/30/2033 | 2.98% 6/30/2034 | 2.50% 6/30/2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Projected Annual EPS | | | x | x | $4.04 | $4.33 | $4.59 | $4.93 | $5.27 | $5.60 | $5.93 | $6.25 | $6.56 | $6.85 | $7.12 | $7.37 | $7.59 | $7.78 |
| DPS Estimates | 6.79% | -$84.90 | $0.55 | $0.55 | $2.32 | $2.47 | $2.63 | $2.78 | $2.98 | $3.17 | $3.35 | $3.54 | $3.71 | $3.87 | $4.00 | $4.53 | $5.07 | $5.62 |
| Dividend Payout Ratio | | | NM | NM | 57.30% | 56.95% | 57.28% | 56.44% | 56.55% | 56.55% | 56.55% | 56.55% | 56.55% | 56.55% | 56.14% | 61.50% | 66.86% | 72.22% |

### 3.5% Perpetual Growth Rate Multi-Stage DDM

| Financial Metrics | Cost of Equity | Stock Price 8/31/2021 | 9/30/2021 | Consensus Annual Analysts' Estimates 12/31/2021 | 6/30/2022 | 6/30/2023 | 6/30/2024 | Transition of EPS Annual Growth Rates from 7.32% to 3.5% Perpetual Growth Rate (2025 - 2035) Assumed Annual Compound Growth Rates in Earings Per Share 7.32% 6/30/2025 | 6.94% 6/30/2026 | 6.56% 6/30/2027 | 6.18% 6/30/2028 | 5.79% 6/30/2029 | 5.41% 6/30/2030 | 5.03% 6/30/2031 | 4.65% 6/30/2032 | 4.26% 6/30/2033 | 3.88% 6/30/2034 | 3.50% 6/30/2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Projected Annual EPS | | | x | x | $4.04 | $4.33 | $4.59 | $4.93 | $5.27 | $5.62 | $5.96 | $6.31 | $6.65 | $6.99 | $7.31 | $7.62 | $7.92 | $8.20 |
| DPS Estimates | 7.12% | -$84.90 | $0.55 | $0.55 | $2.32 | $2.47 | $2.63 | $2.78 | $2.98 | $3.17 | $3.37 | $3.56 | $3.75 | $3.94 | $4.13 | $4.30 | $4.50 | $5.01 |
| Dividend Payout Ratio | | | NM | NM | 57.30% | 56.95% | 57.28% | 56.44% | 56.44% | 56.44% | 56.44% | 56.44% | 56.44% | 56.44% | 56.44% | 56.44% | 56.86% | 61.11% |

Notes:

1. Downloaded consensus analysts' annual estimates for EPS and DPS on August 31, 2021 from S&P Global CIQ PRO.
2. Dividend payout ratios for 2021 through 2025 are based on consensus analysts' estimates of DPS and EPS for each year. For the period after 2025, the dividend payout ratios remains consistent with 2025 until the projected growth rate reaches a level consistent with sustainable growth (2032 to 2035). Then transition to a final sustainable payout ratio in 2035 consistent with final assumed perpetual growth and 9% reinvestment ROE.
3. Initial 7.32% growth in EPS in 2025 premised on median equity analysts' 5-year CAGR.
4. 2.5% to 3.5% perpetual growth rate rates based on long-term industry average growth rates, investor information and sustainable growth logic.
5. NM - Not Meaningful

# Multiple-Stage Dividend Discount Model (DDM)
# for Ameren Corp.

### 3.0% Perpetual Growth Rate Multi-Stage DDM

| | | Stock | | | | | | Transition of EPS Annual Growth Rates from 7.26% to 3.0% Perpetual Growth Rate (2025 - 2035) | | | | | | | | | | Terminal |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Assumed Annual Compound Growth Rates in Earings Per Share | | | | | | | | | | Value |
| | Cost of | Price | Consensus Annual Analysts' Estimates | | | | | 7.26% | 6.83% | 6.41% | 5.98% | 5.56% | 5.13% | 4.70% | 4.28% | 3.85% | 3.43% | 3.00% |
| Financial Metrics | Equity | 8/31/2021 | 9/30/2021 | 12/31/2021 | 6/30/2022 | 6/30/2023 | 6/30/2024 | 6/30/2025 | 6/30/2026 | 6/30/2027 | 6/30/2028 | 6/30/2029 | 6/30/2030 | 6/30/2031 | 6/30/2032 | 6/30/2033 | 6/30/2034 | 6/30/2035 |
| Projected Cash Flows | 6.95% | -$84.90 | $0.55 | $0.55 | $2.32 | $2.47 | $2.63 | $2.78 | $2.98 | $3.17 | $3.36 | $3.55 | $3.73 | $3.90 | $4.07 | $4.28 | $4.79 | $143.49 |

### 2.5% Perpetual Growth Rate Multi-Stage DDM

| | | Stock | | | | | | Transition of EPS Annual Growth Rates from 7.26% to 3.0% Perpetual Growth Rate (2025 - 2035) | | | | | | | | | | Terminal |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Assumed Annual Compound Growth Rates in Earings Per Share | | | | | | | | | | Value |
| | Cost of | Price | Consensus Annual Analysts' Estimates | | | | | 7.26% | 6.78% | 6.31% | 5.83% | 5.36% | 4.88% | 4.40% | 3.93% | 3.45% | 2.98% | 2.50% |
| Financial Metrics | Equity | 8/31/2021 | 9/30/2021 | 12/31/2021 | 6/30/2022 | 6/30/2023 | 6/30/2024 | 6/30/2025 | 6/30/2026 | 6/30/2027 | 6/30/2028 | 6/30/2029 | 6/30/2030 | 6/30/2031 | 6/30/2032 | 6/30/2033 | 6/30/2034 | 6/30/2035 |
| Projected Cash Flows | 6.78% | -$84.90 | $0.55 | $0.55 | $2.32 | $2.47 | $2.63 | $2.78 | $2.98 | $3.17 | $3.35 | $3.53 | $3.70 | $3.86 | $4.00 | $4.53 | $5.06 | $139.35 |

### 3.5% Perpetual Growth Rate Multi-Stage DDM

| | | Stock | | | | | | Transition of EPS Annual Growth Rates from 7.26% to 3.0% Perpetual Growth Rate (2025 - 2035) | | | | | | | | | | Terminal |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Assumed Annual Compound Growth Rates in Earings Per Share | | | | | | | | | | Value |
| | Cost of | Price | Consensus Annual Analysts' Estimates | | | | | 7.26% | 6.88% | 6.51% | 6.13% | 5.76% | 5.38% | 5.00% | 4.63% | 4.26% | 3.88% | 3.50% |
| Financial Metrics | Equity | 8/31/2021 | 9/30/2021 | 12/31/2021 | 6/30/2022 | 6/30/2023 | 6/30/2024 | 6/30/2025 | 6/30/2026 | 6/30/2027 | 6/30/2028 | 6/30/2029 | 6/30/2030 | 6/30/2031 | 6/30/2032 | 6/30/2033 | 6/30/2034 | 6/30/2035 |
| Projected Cash Flows | 7.12% | -$84.90 | $0.55 | $0.55 | $2.32 | $2.47 | $2.63 | $2.78 | $2.97 | $3.17 | $3.36 | $3.56 | $3.75 | $3.93 | $4.12 | $4.29 | $4.50 | $147.65 |

Notes:
1. Downloaded consensus analysts' annual estimates for EPS and DPS on August 31, 2021 from S&P Global CIQ PRO.
2. Dividend payout ratios for 2021 through 2025 are based on consensus analysts' estimates of DPS and EPS for each year. For the period after 2025, the dividend payout ratios remains consistent with 2025 until the projected growth rate reaches a level consistent with sustainable growth (2032 to 2035). Then transition to a final sustainable payout ratio in 2035 consistent with final assumed perpetual growth and 9% reinvestment ROE.
3. Initial 7.32% growth in EPS in 2025 premised on median equity analysts' 5-year CAGR.
4. 2.5% to 3.5% perpetual growth rate rates based on long-term industry average growth rates, investor information and sustainable growth logic.
5. NM - Not Meaningful