TO: **Aaron Bjorkman, Director - Tax**
NorthWestern Corporation

FROM: **Doug Roehm, Unit Manager**
Centrally Assessed Property

DATE: **April 21, 2026**

SUBJECT: **Response to Comments on the 2026 Capitalization Rate Study, Electric Utilities**

Dear Mr. Bjorkman:

The department would like to thank you for taking the time to review our study and for providing additional information for us to consider. We received your submission email provided on April 2, 2026, along with a review of our study prepared by Ann Bulkley and Chris Wall.

The comments received along with these responses will be published on our website at:

https://revenue.mt.gov/dor-publications/cap-rate-studies

Based on the comments and our analysis discussed below, we

- Made adjustments to our Ex Ante approach and to the Kroll "Condition" Ex Ante inputs.
  - These changes resulted in an increase of our selected Ex Ante Cost of Equity from 8.15% to 8.64%.
- We also changed the name of our pre-tax indicator to better communicate what this value represents.

A more detailed discussion on how we arrived at these conclusions follows.

Changes in the Cost of Equity Over Time

The following comments related to interest rates vs Cost of Equity were provided:

> . . . It is generally accepted that there is a positive relationship between the cost of equity and interest rates, meaning that as interest rates increase, the cost of equity also increases. Therefore, it appears that the 2026 capitalization rate study understates the cost of equity when compared over time.

The following table was also provided:

	2024	2025	2026	Chg. 2026-2024
Cost of Debt	5.59%	5.80%	5.90%	0.31%
10-year Treasury Bond Yield	3.88%	4.58%	4.18%	0.30%
20-year Treasury Bond Yield	**4.20%**	**4.86%**	**4.79%**	**0.59%**
30-year Treasury Bond Yield	4.03%	4.78%	4.84%	0.81%
Cost of Equity	**9.99%**	**10.01%**	**9.46%**	**-0.53%**

This concept seems to be based on the general market concept that as interest rates increase the risk-free rate increases, and thus investors will require an increased return for riskier assets such as stocks.

Although current interest rates are important considerations in development of the cost of equity, they are not the only consideration. For example, Value Line just recently provided the following in its January 16, 2026 update of the Electric Utility (West) Industry (emphasis added):

> U.S. Treasury securities are an income generating alternative investment option to high yielding equities, such as utilities. It's important to be aware of the spread between bond rates and the dividend yields on this group (recently 3.5% on average). The benchmark 10-year Treasury yield now stands at 4.17%, down somewhat from 2024's closing level of 4.58%. *Though the aforementioned spread is of consequence, expectations of where rates may go next is of greater importance, as is sentiment regarding the state of the economy.*

Consistent with the insight from Value line if comparing the change in 2026 to 2025, it becomes clear that there is more to determining the cost of equity than just changes in interest rates, even if only considering the direction, as two of the four provided interest rate measures increased while two decreased:

2026-2025 Change in COD and Bond Yields

	2025	2026	Chg 26
Cost of Debt	5.80%	5.90%	0.10%
10-year Treasury Bond Yield	4.58%	4.18%	-0.40%
20-year Treasury Bond Yield	4.86%	4.79%	-0.07%
30-year Treasury Bond Yield	4.78%	4.84%	0.06%

As an example of the fact that there is more to determining the cost of equity, we can look at the Capital Asset Pricing Model (CAPM) equation:

> Cost of Equity = Risk-Free Rate + Beta * Equity Risk Premium[1]

[1] Equity Risk Premium is the Expected Market Return minus the Risk-Free Rate.

Based on the equation, if the risk-free rate increases and the beta and equity risk premium do not change then the cost of equity will increase or decrease based on the change in the risk-free rate. However, both beta and the equity risk premium do change and change because investor sentiment considers more than just interest rates.

MDOR three-stage dividend growth model under-estimates the Market Return.

It was suggested the indicated market return of 7.73% of our three-stage Ex-Ante CAPM model seemed low compared to other market return indicators and the overall market return determined for electric utilities. Because of this it was requested that this indicator be removed from the analysis.

This model has been used for many years, but it has become more difficult to get the source information the model has historically relied upon. Further as mentioned in other comments, the model may not be fully capturing expected return due to not fully considering the impact of buybacks. As opposed to simply removing the model, we recalculated a model that more directly considers buybacks. Ultimately the model that includes buybacks, results in an Expected Market Return of 8.92% and a resulting Equity Risk Premium of 4.13%.

Description	MTDOR Initial Ex Ante ERP	MTDOR Ex Ante ERP w/buybacks
Market Return	7.73%	8.92%
Risk-Free Rate	4.79%	4.79%
ERP	2.94%	4.13%

As a result, when estimating our Ex Ante Equity Risk Premium, we moved weight from our initial Ex Ante model to this model.

Kroll "Conditional" ERP calculation relies on an incorrect risk-free rate and understates the cost of equity

The following comments relating to Kroll's Conditional ERP were provided:

> In estimating a market return of 8.50 percent, the MDOR applied the Kroll ERP of 5.00 percent and a risk-free rate of 3.50 percent. The risk-free rate used in this analysis is incorrect and understates the market return. The January 2026 Kroll cost of capital navigator report estimates an ERP of 5.00 percent, which is consistent with the ERP that the MDOR relied upon in its analysis, however Kroll recommends a risk-free rate that is the higher of 3.50 percent or the spot yield on the 20-year Treasury bond. The MDOR uses the Federal Reserve Statistical Release for the yield on the 20-year Treasury, constant maturity, of 4.79 percent. This rate should be used instead of 3.50 percent as

> the risk-free rate in the Kroll market return estimate. Correcting the risk-free rate to be consistent with Kroll's recommendations increases the market return to 9.79 percent.

We did make this adjustment.

With this and the previous Ex Ante adjustments, our selected Ex Ante Cost of Equity increased from 8.15% to 8.64%.

MDOR cost of equity estimates do not meet comparable standards

The comparable standard that is represented with the comments can be summarized as the authorized return on equity established in rate case hearings is synonymous with the cost of equity.

We do not agree with this position. Both the appraisal handbook published by the Western States Association of Tax Administrators and the appraisal standards published by the National Conference of Unit Valuation States make clear that Authorized Rates of Return are not the same as the Cost of Equity and are produced for different purposes.

The Western States Association of Tax Administrators states, "Government regulators do not determine value, nor do their efforts invalidate any of the established indicators of value. The actions of regulators may affect value, but value is always established and determined by the actions of market participants."[2] The handbook also states, "The setting of required rates of return for a regulated utility is not the same issue as establishing the opportunity cost of capital for an investment".[3]

The Unit Valuation Standards as published by the National Conference of Unit Valuation States provide the following statement:

> For market value appraisals, market capitalization rates and/or discount rates should be used. Authorized rates of return set by rate-regulators for rate-making purposes and market opportunity costs of capital are not synonymous measurements and should not be used interchangeably. Using authorized rates of return in place of a market derived yield, discount or opportunity cost of capital is not appropriate and could lead to gross errors in the estimate of market value.[4]

[2] Western States Association of Tax Administrators Committee on Centrally Assessed Property (WSATA-CCAP), Appraisal Handbook: Unit Valuation of Centrally Assessed Properties. (Self-pub, 2009), p. I-3.
[3] WSATA-CCAP (2009) p. III-31.
[4] National Conference of Unit Valuation States, Appraisal Standards (Self-pub, 10/2018), Pg. 7, Standard IV(C)(10)

Articles and work published by Steven Kihm, who has decades of experience in analyzing economic and finance issues in utility regulation, provide insight as to why. For example, Mr. Kihm opens one of these articles by stating:

> As classic treatises make clear, determining a reasonable return on equity is a judgment call, one that reflect the regulator's broad perspective on public policy matters. That requires one to look beyond economic concepts, such as cost of equity, to find the proper return.[5]

As is discussed by Kihm, "The cost of equity, by definition, is a minimum concept, not necessarily a measure of reasonableness."[6] This is consistent with the financial principle that a company only creates value when its return on invested capital exceeds its cost of capital. Kihm further discusses, "If the return on equity is set at the cost of equity, utilities have no more incentive to expand their systems than they do to terminate operations."[7]

Kihm also provides two strong pieces of evidence that regulators do not set the return on equity at the cost of equity. The first being that Cost of equity estimates lie noticeably below the authorized returns on equity; and second that Utility stock prices lie noticeably above their book values.[8] Both observations are readily observable in the market, and both of Kihm's observations continue to be observed in the market currently. For example, the department has computed market to book ratios of each guideline company as part of our capitalization rate studies for many years. The table below provides the range of Equity Market to Book Ratios for the Electric Utility Industry over the past five tax years and demonstrate the Maret to Book Ratios of Electric Utilities are consistently above 1:

Table 1: Historical Equity Market to Book Ratios for Electric Utilities

Description	TY 2022	TY 2023	TY 2024	TY 2025	TY 2026
Average	2.09	2.04	1.73	1.94	2.13
Median	2.02	2.04	1.78	2.05	2.26
Trimmed Average	2.06	2.02	1.72	1.92	2.15
High	2.92	2.78	2.42	3.01	2.76
Low	1.50	1.52	1.20	1.18	1.22

It is our opinion the cost of equity is not the same as the authorized return on equity, nor should it be. Both indicators serve a different purpose.

[5] Kihm, S. G. (2007). The Proper Role of the Cost-of-Equity Concept in Pragmatic Utility Regulation. *The Electricity Journal*, *20*(10), 26–34. https://www.sciencedirect.com/, 26.
[6] Kihm (2007) p. 27.
[7] Kihm (2007) p. 29.
[8] Kihm (2007) p. 26-27.

The Pre-Tax WACC calculated by the MDOR is not consistent with the Pre-Tax WACC calculated in regulatory environment for Electric Utilities

The comments provided are based on the premise that, "in a regulatory model, the investor-required return on equity on a pre-tax basis would be higher than the after-tax return that is estimated by the CAPM and DDM models". The comments go on to state that, "it is reasonable to expect that the investor-required return would expect that the pre-tax return on equity would be adjusted to reflect the taxes to be paid and therefore be higher than the after-tax return on equity". The following proposed adjustment was then provided:

Weighted Average Cost of Capital (WACC)

	Cap Structure	COC	Marg. Tax Rate	After-tax Weight	Pre-Tax	Corrected Pre-tax Weighted	MDOR Pre-tax Weighted	MDOR After-Tax Weighted
Equity	60%	9.46%		9.46%	12.45%	7.47%	5.68%	5.68%
Debt	40%	5.90%	24%	4.48%	5.90%	2.36%	2.36%	1.79%
WACC						9.83%	8.04%	7.47%

We did not make the proposed adjustment, however we did change the column description to "Pre-Tax Debt Weighted", to better indicate what the rate represents.

Our pre-tax indicator is a pre-tax debt indicator and is produced to be directly applied to an electric utility's Net Utility Operating Income as reported on the FERC Statement of Income. FERC recognizes the income tax shield of debt differently and thus requires specific accounting treatment for this item. Our pre-tax rate is designed to be directly applied to this income stream and ensures an apples-to-apples match between the income and rate.

Further, a pre-tax debt rate is commonly provided in comparison to our models, regardless of how the rate is applied to income, and is a common rate selected from other state studies in comparison to the MDOR rate. For example, in the letter provided along with these comments our WACC is compared to Colorado, Wyoming, and South Dakota. Both Colorado and Wyoming appear to be reporting a pre-tax debt rate.[9] We also received a study produced by Kroll in response to our Telecommunications study which also reports its result as a pre-tax debt WACC. Both sets of rates should be compared to our pre-tax debt rate not our after-tax WACC.

[9] The source files were not provided, and we were unable to locate a study for South Dakota. However, we did find Colorado's preliminary study for 2026 on their website, and we located a 2025 study for Wyoming on their website.