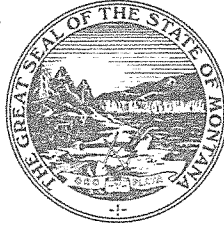


# Montana Public Service Commission



Brad Johnson - Chairman  
Travis Kavulla - Vice Chairman  
Roger Koopman - Commissioner  
Bob Lake - Commissioner  
Tony O'Donnell - Commissioner

December 1, 2017

Ms. Tamie A. Aberle  
Director of Regulatory Affairs  
Montana-Dakota Utilities Co.  
400 North Fourth Street  
Bismarck, North Dakota 58501

RE: Data Request in Docket D2017.9.79

Dear Ms. Aberle,

Enclosed please find Montana Public Service Commission data requests PSC-037 to PSC-058 Montana-Dakota Utilities Co., regarding the application and supporting testimonies in the above-referenced docket. If you could please respond by December 15, 2017 it would be greatly appreciated. If you have any questions, please contact me at (406) 444-6193.

Sincerely

A handwritten signature in black ink that reads "Scott Fabel".

Scott Fabel  
Rate Analyst  
Montana Public Service Commission

Enclosure

cc: Service List

DEPARTMENT OF PUBLIC SERVICE REGULATION  
BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MONTANA

IN THE MATTER OF the Application of the ) REGULATORY DIVISION  
Application of Montana-Dakota Utilities Co. for )  
Authority to Establish Increased Rates for Gas ) DOCKET NO. D2017.9.79  
Service in the State of Montana )

**DATA REQUESTS PSC-037 THROUGH PSC-058 OF THE  
MONTANA PUBLIC SERVICE COMMISSION TO  
MONTANA-DAKOTA UTILITIES CO.**

PSC-037

Regarding: Cost of Equity  
Witness: J. Stephen Gaske

In your testimony you argue that due to the Federal Reserve’s debt purchases a potential “bubble” has been created in the equity markets. Please provide external sources corroborating the statement that the markets aren’t currently rational and such a “bubble” currently exists?

PSC-038

Regarding: Cost of Equity  
Witness: J. Stephen Gaske

Please describe the process by which Montana-Dakota Utilities Co. (MDU) receives financing from equity markets.

PSC-039

Regarding: Flotation Costs  
Witness: J. Stephen Gaske

Please describe how Montana-Dakota accounts for common stock flotation costs per their Generally Accepted Accounting Principles (GAAP) books as well as for regulatory purposes.

PSC-040

Regarding: Flotation Costs  
Witness: J. Stephen Gaske

- a. When was the last time Montana-Dakota Utilities incurred flotation costs associated with a stock issuance?
- b. Has Montana-Dakota signified an intent to issue additional shares in the next 48 months?

PSC-041

Regarding: Flotation Costs

Witness: J. Stephen Gaske

Regarding the proxy group of companies:

- a. For each company included in the proxy group, please describe if their current rates allow for the recovery of flotation costs.
- b. If, in response to “a” the answer is “yes,” please provide your reasoning for a 4 percent “adder” if the results of your cost of equity analytics already account for flotation costs (they are included in the returns achieved by the proxy group).
- c. If, in response to “a” the answer is “no,” please provide information regarding whether or not recovery of flotation costs was requested in each utilities most recent rate case.
- d. If flotation cost recovery was specifically requested by the proxy group companies and not granted by the applicable commission, please describe the commission’s reasons for not granting recovery of these costs.

PSC-042

Regarding: Sustainable Growth Rates

Witness: J. Stephen Gaske

- a. Please explain the rationale and theory behind using the following formula when calculating the portion of the increase of common equity that accrues to existing ratepayers. (“V”): $1 - (1 / (\text{market to book ratio}))$ .
- b. In your estimation of growth (“g”), why is it necessary to calculate which portion of “g” (attributable to the issuance of new shares) accrues to existing ratepayers?

PSC-043

Regarding: CAPM Size Adjustment

Witness: J. Stephen Gaske

In JSG-2 (Schedule 8, page 2 of 2) you show the recommended size adjustment for the proxy group and reference Duff & Phelps 2017 Valuation handbook exhibit 7.2. Using the market capitalization amounts shown in JSG-2 (Schedule 8, page 2 of 2), please show how you determined the appropriate size decile for each company. In your illustration, please include exhibit 7.2 from the Duff & Phelps Valuation Handbook.

PSC-044

Regarding: Quarterly Dividend DCF model

Witness: J. Stephen Gaske

- a. Please provide your reasoning for “inflating” the cost of equity for the opportunity cost related to distributing dividends on a quarterly basis.
- b. In the quarterly DCF example on page 14 of your testimony, please explain what the 0.5g and 0.75g represent. Do they represent a fraction of the fiscal year? If so, is it the remainder of the fiscal year or the fraction of the fiscal year prior to performing your calculation?

PSC-045

Regarding: CAPM  
Witness: J. Stephen Gaske

On page 28 of your testimony (lines 16-17) you state that you do not consider the CAPM to be a reliable measure of the cost of capital. Please explain why.

PSC-046

Regarding: Effects of the Federal Reserve’s Monetary Policy  
Witness: J. Stephen Gaske

On page 12 of your testimony (lines 13-17) you note that the Federal Reserve’s monetary policy has created “a potential stock market valuation bubble that increases the risks in the equity markets.” This statement carries an implication that equity market returns are currently inflated and not “rational.”

On page 24 of your testimony (lines 8-11) you state that “The market’s expectation for rising interest rates suggests that the calculated cost of equity for the proxy companies using current market data is likely to be an artificially depressed estimate of investors ‘ required return at this time.”

Please address these seemingly contradictory statements.

PSC-047

Regarding: Risk Premium Analysis  
Witness: J. Stephen Gaske

On page 25 (lines 17-18) of your testimony you note that the historical return on large company stocks has exceeded the return on long-term corporate bonds by 570 basis points. You cite Duff & Phelps 2017 Valuation Handbook, exhibit 2.3 in support of your statement. Exhibit 2.4 of the Duff & Phelps Handbook supports a risk premium of 370 basis points ( $11.5 - 7.8 = 3.7$ ). The differences between the two exhibits is the time period they cover. Exhibit 2.3 spans a time period of 1926-2016, and exhibit 2.4 spans a time period of 1963-2016. Please explain your rationale for using the longer time period, which includes a significant anomaly such as the Great Depression (where stock volatility was two to three times higher than any other period in American financial History (Cortes & Weidenmier, 2017), as the basis for your risk premium.

PSC-048

Regarding: Risk Premium Analysis  
Witness: J. Stephen Gaske

In your calculation of the 14% risk premium associated with small company stocks discussed on page 26 (line 6) of your testimony, please explain why you chose to use exhibit 4.1 in Duff & Phelps 2017 Valuation Handbook as the basis for your calculation as opposed to exhibit 2.3 which supports a 11.7% (18-6.3) risk premium or exhibit 2.4 which supports a 8.3% (16.1-7.8) risk premium.

PSC-049

Regarding: Risk Premium Analysis (Bond Yield)  
Witness: J. Stephen Gaske

In the calculation of the average corporate bond yield used in your Risk Premium analysis of 4.14%, please explain your rationale for choosing an average of the 6 month time period ending July 2017 as opposed to a longer time span.

PSC-050

Regarding: Natural Gas Industry Risk Premium Regression Analysis  
Witness: J. Stephen Gaske

In JSG\_2, Exhibit 5, pages 1 & 2 (of 3), please explain why you excluded certain quarterly data for various years (i.e., 1995.1 is missing, 1998.1 is missing, 1999.3 is missing, 2001.3 is missing) from the analysis.

PSC-051

Regarding: Risk Premium Regression Analysis  
Witness: J. Stephen Gaske

- a. In your analysis, please describe why you chose to use the 30-year Treasury bond yield as opposed to the yield(s) of a 20-year Treasury bond which, per Duff & Phelps Valuation Handbook, is the proxy they use for the risk-free rate?
- b. In your analysis, please describe why you chose to use the 30-year Treasury bond yield as opposed to the average yield of a long-term corporate bonds such as you used in the risk premium analysis described in your answer to Q32?
- c. Please re-perform this analysis using the current spot yield(s) on a 10- & 20-year Treasury bond as the basis for the premium and ceteris paribus.
- d. Please re-perform this analysis using the average long-term corporate bond yields used in Q32 as the basis for the premium and ceteris paribus.

PSC-052

Regarding: Risk Premium Analyses  
Witness: J. Stephen Gaske

Please discuss the fundamental differences between the two Risk Premium Analyses you discuss in Q32 & Q33. Specifically, please explain why you took different approaches in determining an appropriate risk premium.

PSC-053

Regarding: Forward-Looking CAPM  
Witness: J. Stephen Gaske

On page 28 of your testimony (lines 13-15) you attribute the large difference between your proxy company DCF results, and the S&P 500 DCF results, to the proxy company results being on the “low side.” Do you have any support for this statement? Is it merely a matter of opinion?

PSC-054

Regarding: Forward-Looking CAPM  
Witness: J. Stephen Gaske

- a. Per Duff & Phelps 2017 Valuation Handbook, the two most commonly used risk free bond maturities have been the 10- & 20-year U.S. government bond yields. Please discuss your reasoning for using a 30-year Treasury bond rate as opposed to a 10- or 20-year Treasury bond rate.
- b. Please re-perform your adjusted CAPM calculations using the current spot yield(s) on a 10- & 20-year Treasury bond as the risk free rate and ceteris paribus.

PSC-055

Regarding: Size Adjustment  
Witness: J. Stephen Gaske

On page 32 of your testimony (line 14) you suggest that, due to MDU’s small size, their cost of equity may require an additional 100 basis points.

- a. Please explain how you reached the 100 basis point figure?
- b. Did you use Duff & Phelps 2017 Valuation Handbook in arriving at this amount?
- c. Please identify how you accounted for this 100 basis point adjustment in your results found on pages 37-38 of your testimony.
- d. Please specify where this adjustment was factored-in for each of the methodologies you employed in arriving at your final requested return on equity.

PSC-056

Regarding: Cost of Equity  
Witness: J. Stephen Gaske

Please explain how you calculated the requested 9.9% return on equity based on the results referenced on pages 37-38 of your testimony.

PSC-057

Regarding: Capital Structure  
Witness: Tammy J. Nygard

Please provide your calculation and support for the 12/31/2017 Common Equity amount represented in Mont. Admin. R. 38.5.146 (Statement F, page 2).

PSC-058

Regarding: Capital Structure  
Witness: Tammy J. Nygard

Please explain why the amounts represented as Common Equity in Mont. Admin. R. 38.5.146 (Statement F, page 2) are not reduced by non-utility property and other investments as shown in Mont. Admin R. 38.5.121 (Statement A) when arriving at the Utility Common Equity totals?