BEFORE THE MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS
600 NORTH ROBERT STREET
ST. PAUL, MINNESOTA 55101

FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION
SUITE 350
121 SEVENTH PLACE EAST
ST. PAUL, MINNESOTA 55101-2147

Beverly Jones Heydinger	Chair
David C. Boyd	Commissioner
Nancy Lange	Commissioner
Dan Lipschultz	Commissioner
Betsy Wergin	Commissioner

In the Matter of the Application by MERC for Authority to Increase Natural Gas Rates in Minnesota	OAH Docket No. 8-2500-31126 MPUC Docket No. G-011/GR-13-617

POST HEARING REPLY BRIEF OF THE MINNESOTA DEPARTMENT OF COMMERCE

July 11, 2014

I. INTRODUCTION

The Minnesota Department of Commerce, Division of Energy Resources (Department or DOC) respectfully submits this Reply Brief to the Administrative Law Judge (ALJ) and the Minnesota Public Utilities Commission (Commission) together with separate Substitute Proposed Findings of Fact pertaining to the application for a general rate increase filed by Minnesota Energy Resources Corporation (MERC or the Company). While it continues to rely on the extensive discussion of issues provided in its Initial Brief, the Department provides brief additional response to arguments in the Initial Briefs of the Company and, with regard to Return on Equity and Sales Forecast, the Office of Attorney General (OAG), as follows:

- Return on Equity
- Sales Forecast
- CIP
- Mapping Project
- Regulatory Assets and Liabilities
- Employee Benefit Plan Expenses
- uncollectible expense

II. MERC BEARS THE BURDEN OF PROOF

Critical to consideration of MERC's Initial Brief is the legal requirement that the Company—not public agencies, other parties, or the Commission—bears the burden to demonstrate that its proposed rate increase is just and reasonable. Minn. Stat. § 216B.16, subd. 4 (2012); *In re Petition of N. States Power Co.*, 416 N.W.2d 719, 724–726 (Minn. 1987) (providing the Minnesota Supreme Court's analysis of Minn. Stat. § 216B.16, subd. 4, concluding that a utility does not enjoy at any point in a rate case proceeding a rebuttable presumption of reasonableness that other parties must overcome). Further, Minnesota law provides, "*Any doubt as to reasonableness* should be resolved in favor of the consumer." Minn. Stat. § 216B.03 (emphasis added).

To the extent that MERC failed to show the reasonableness of its requests (generally, that its proposed expenses are not too high or its expected revenues are not too low) the Department either recommended rejection of such proposals or proposed adjustments to MERC's proposals so that the Company might realize some—rather than none—of its requests in a just and reasonable manner. To be clear, however, there is no duty of the Department (or any other party) to propose adjustments: parties simply could recommend complete rejection of the Company's unproven proposals. It is troubling, therefore, that MERC 's recitation of the "applicable law" (MERC Initial Brief at 1-3) fails to state or even acknowledge that MERC alone bears the burden to demonstrate that each aspect of its proposed rate increase is just and reasonable and that any doubt as to reasonableness must be resolved in favor of the consumer.

The Department's recommendations to adjust some of MERC's proposals, where the Company has not shown that such proposals are just and reasonable, mean that the recommendations are that MERC receive some, rather than none, of requested rate changes. The burden of proof has not shifted to the Department, however, as a result of making these recommendations.

III. RETURN ON EQUITY

The Department's recommendation for a return on equity (ROE) of 9.29 percent is strongly supported by DOC Witness Dr. Eilon Amit's Direct, Rebuttal and Surrebuttal Testimonies.[1] No arguments in the Company's or the OAG's Initial Briefs show otherwise. The Department continues to rely on its extensive discussion in its Initial Brief of the reasonableness of Dr. Amit's ROE analysis and the flaws in the ROE analysis of MERC Witness Mr. Moul and

[1] DOC Initial Br. at 11-53. DOC's recommended ROE of 9.29 percent includes MERC's proposed flotation costs. The Department agrees that MERC's flotation costs are reasonable and that they should be included in the Commission's allowed ROE for the Company. *Id.* at 24-45.

OAG Witness Dr. Chattopadhyay. This Reply Brief focuses only on matters for which additional discussion may be helpful.

A. Department Response to MERC

1. The Department's main objections to MERC's ROE analysis

MERC's Initial Brief did not show that its recommended ROE of 10.75 percent, or its alternative recommendation of at least 10.27 percent,[2] is reasonable. On the contrary, Dr. Amit provided comprehensive testimony showing that MERC's recommended ROE is unreasonable and should be rejected, as provided in detail in the Department's Initial Brief. At the evidentiary hearing, Dr. Amit summarized the key failings of Mr. Moul's ROE analyses, as follows:

> My main disagreement with Mr. Moul's analyses are, one, his leverage adjustments for his [Discounted Cash Flow] DCF and [Capital Asset Pricing Model] CAPM analyses. Mr. Moul adjusted the DCF and CAPM estimates to account for the difference between book debt-to-equity ratio and market debt-to-equity ratio. His leverage adjustments imply that investors are not rational and are not aware of the differences between the book debt-to-equity ratio and the market debt-to-equity ratio.
>
> Two, Mr. Moul's size adjustment for his CAPM analysis. If adopted, Mr. Moul's proposed adjustment would isolate a unique risk factor for MERC and would disregard all other risk factors that may be unique to other utilities in his comparison group. It is inappropriate from both a financial and ratemaking perspective to do so.
>
> Finally, I disagree with Mr. Moul's choices of the yield and risk premium for his risk premium analysis. I also disagree with his risk-free yield and risk-free premium choices for his CAPM analysis. His choices inappropriately bias his results upward. I have additional disagreements with other parts of Mr. Moul's analyses, but these disagreements have only small impacts on his recommendation -- on his recommended ROE.

[2] MERC Initial Br. at 7.

Tr. at 200–201 (Amit).

Consistent with the testimony of MERC Witness Mr. Moul, the Company's Initial Brief urges the Commission to adopted MERC's flawed analyses of three financial methods, DCF, CAPM and Risk Premium (RP), and to use subjective judgment to blend those analyses into a final ROE for MERC.[3] The Department continues to disagree, as noted sparingly, below.

2. MERC's flawed proxy group invalidates its ROE analyses

MERC's Initial Brief makes many references to the importance in its ROE analysis of Mr. Moul's proxy group of thirteen companies that he selected as being comparable in risk to MERC; that proxy group is used as an integral component of its DCF, CAPM and Risk Premium ROE analyses.[4] Dr. Amit, however, showed that MERC's proxy group is not comparable in risk to MERC. A key flaw of Mr. Moul's proxy group selection is the inclusion of four non-gas companies that have higher risk characteristics than does MERC.[5] Because the four non-gas companies have risk profiles higher than the remaining companies in Mr. Moul's proxy group, it is reasonable to expect a higher average required rate of return for those companies than for MERC's proxy group without the non-gas companies.[6] MERC's recommended ROE is based on ROE analyses that relied on a flawed proxy group and, thus, the results of its ROE analyses have not been shown to be reasonable.

MERC's criticisms of Dr. Amit's proxy group are not valid. MERC states on page 12 of its Initial Brief, in reference to its upward adjustment to ROE based on size:

> Specifically, Dr. Amit provides a portfolio of companies that reflects a composite risk that is less than MERC's risk and does

---

[3] *See Id.* at 5-25.
[4] *Id.* at 7-8, 10-11, 14.
[5] DOC Initial Br. at 28.
[6] *Id.*

> not compare the risk characteristics of his comparison group to MERC's specific risk characteristics. [citation omitted]

MERC is incorrect. In its Initial Brief, the Department summarized on pages 17-20, Dr. Amit's lengthy testimony regarding the many objective factors he used to screen for companies comparable in risk to MERC and, similarly, to identify companies that are not likely to be comparable in risk to MERC. Further, Dr. Amit checked the likely comparability to MERC of the risk profiles of the companies that passed his screens by analyzing the objective measure of the volatility of rates of return of such companies. The Department's Initial Brief summarized Dr. Amit's objective screening to ensure that the investment risks of companies in his proxy group are reasonably similar to MERC's, as follows:[7]

> Finally, Dr. Amit checked the comparability of the [Natural Gas Comparison Group] NGCG to that of MERC by noting generally that because companies in the NGCG, like MERC, are mostly engaged in the distribution of natural gas and are similarly rate-of-return regulated by the states in which they operate, their business risks are somewhat similar. DOC Ex. 200 at 13 (Amit Direct). A specific quantitative measure of the risk of investing in common stock is the volatility of rates of return (measured by beta or the Standard Deviation of Price Changes (STDPC) or a credit rating). *Id.* a 11–13. MERC is a subsidiary company and therefore, does not have beta, STDPC or a credit rating. *Id.* at 13. Thus, the only market-related quantitative risk measures available for comparison are the long-term debt ratios and the equity ratios. *Id.* at 12.
>
> Based on his examination of 2012 common equity ratios and 2012 long-term debt ratios for NGCG and MERC, Dr. Amit concluded that NGCG and MERC have similar financial risks; further, taking into consideration that MERC and the companies in the NGCG are in the same line of business (natural gas distribution), and are similarly state-regulated, Dr. Amit concluded that MERC's investment risks are reasonably similar to the investment risks of the companies in the comparison group, NGCG. *Id.* at 12–13.

---

[7] *Id.* at 19-20.

MERC's proxy group is flawed; MERC's ROE analyses that rely on that proxy group are not reasonable and must be rejected. MERC's argument that Dr. Amit failed to recognize MERC's unique risks is without merit. As explained in the Department's Initial Brief at pages 36-37, choosing any unique risk factor, such as size, for MERC while failing to attempt to identify unique risk factors for the companies in the proxy groups is inconsistent, subjective and results in unfair risk comparison.

3. MERC failed to demonstrate the reasonableness of the results of each of the three financial models – DCF, CAPM and RP – to arrive at its recommended ROE

The Department's Initial Brief includes significant explanation of the many flaws of Mr. Moul's application of his DCF, CAPM and Risk Premium analysis.[8] In addition, in its Initial Brief the Company failed to show that its "method" of mixing the results of its inappropriate DCF, CAPM and RP analyses resulted in a reasonable recommended ROE. The concept underlying the use of three analyses rather than one method was provided on page 10 of MERC's Initial Brief, as follows:

> The record evidence supports that Mr. Moul's recommendation of 10.75 percent, determined by using three financial models that account for different factors, is more reasonable than a ROE calculation that relies on only one imperfect method.

Dr. Amit agreed that use of the DCF method, if properly applied, is a reasonable method to determine ROE, and that it needs to be checked for reasonableness by use of a properly applied CAPM.[9] He showed, however, that MERC committed significant errors in its application of the DCF analysis,[10] as well as in the applications of the DCF, CAPM and RP analyses. Given such misapplications, MERC's reliance on the three methods resulted in an

[8] *Id.* at 29-34.
[9] *Id.* at 28.
[10] *Id.* at 29-30.

upward biased estimate of the ROE.[11]

Regarding CAPM itself, Dr. Amit explained its theoretical soundness, but also its practical difficulty, as noted in the Department's Initial Brief:[12]

> The basic premise of CAPM is that any risk that is company-specific can be diversified away by investors. [DOC Ex. 200 at 28]. Therefore, the only risk that matters is the systematic risk of the stock. *Id.* This systematic risk is measured by beta. *Id.* While the CAPM is theoretically sound, its use raises some difficult issues including difficulties in determining the appropriate beta, the appropriate riskless asset, and the effect of taxes. *Id.* For these reasons, the Department used the CAPM results *only* as a check on the reasonableness of its DCF analyses. *Id.*

For these reasons, Dr. Amit appropriately used his CAPM analysis only as a check on the reasonableness of his DFC analysis and result.[13] Further, MERC fundamentally misapplied its CAPM analysis.[14]

As to MERC's Risk Premium analysis, Dr. Amit identified several specific and serious flaws in Mr. Moul's application of that analysis that tend to bias the resulting ROE upward.[15] Based on these fatal flaws, Dr. Amit explained that MERC's Risk Premium analysis must be rejected.

Finally, and particularly in light of MERC's flawed application of the DCF, CAPM and RP analyses, the record does not support MERC's conclusion that combining the ROE results

---

[11] DOC Initial Br. at 27-34.
[12] *Id.* at 23.
[13] *Id.* at 22-24; DOC Ex. 200 at 28, 32 (Amit Direct); DOC Ex. 202 at 2-11 (Amit Surrebuttal).
[14] DOC Initial Br. at 32-34. Difficulty in applying CAPM is demonstrated, perhaps, by the very different ROE results of MERC and the Department: Mr. Moul's updated CAPM ROE was 11.97 percent, MERC Initial Brief at 8, while Dr. Amit's updated CAPM was 9.79 percent (a number that was inside his DCF range) and which, therefore, confirmed the reasonableness of his recommended ROE of 9.29 percent. DOC Ex. 202 at 11 (Amit Surrebuttal). Of course, MERC's CAPM results also likely were affected by Mr. Moul's reliance on a non-comparable (higher risk) proxy group.
[15] Tr. at 201 (Amit); DOC Ex. 200 at 51-55 (Amit Direct); DOC Ex. 202 at 14-15 (Amit Surrebuttal).

of its DCF, CAPM and RP analyses produces in a "more reasonable" ROE than results from primary reliance on a properly applied DCF analysis. MERC's recommended ROE, therefore, has not been shown to be reasonable and must be rejected.

4. The record does not support MERC's upward "risk" adjustments to its ROE analyses to determine its recommended ROE

MERC's Initial Brief includes multiple risks it claims are "unique" to MERC relative to its proxy group such that the Company raised its ROE estimates of its DCF, CAPM and RP.[16] The two main risks emphasized by MERC: an upward leverage adjustment to its DCF and CAPM[17], and an upward size-related adjustment only to its CAPM analysis.[18] The Department's Initial Brief at 35-39 fully addressed this issue.

Nonetheless, it may be helpful to note the principal flaws in MERC's upward adjustment rationale. First, MERC inappropriately used a micro risk analysis of companies in Mr. Moul's proxy group rather than the macro risk analysis that is required for a reasonable ROE analysis. The Department's Initial Brief describes the many benefits of the required macro risk analysis, notes that a micro risk analysis results divides the proxy group too finely such that no company would qualify for selection for the overall comparison group, and highlights the unreasonable overemphasis of various characteristics that are likely if a micro risk analysis, like MERC recommends, is adopted:[19]

---

[16] MERC Initial Br. at 8-17.
[17] *Id.* at 8-9, 15-17
[18] *Id.* at 8-14. MERC also briefly argued in its Initial Brief at 14-15 that it faces additional unique risks including 1) The high percentage of revenues received from large volume customers; 2) Volatility of ROE; 3) Operating ratios; and 4) Coverage rates. Dr. Amit discussed each of these claimed risk factors in detail and showed that there is no valid basis to conclude that MERC's investment risk is greater than Mr. Moul's proxy group investment risk. DOC Ex. 200 at 63 (Amit Direct). Dr. Amit disagreed that it is reasonable to isolate these additional factors relative to MERC's proxy group, but he explained that doing so results only in small impacts on MERC's recommended ROE. Tr. at 201 (Amit). For this reason, DOC's Reply Brief addresses only MERC's two main claimed unique risks: size and leverage.
[19] DOC Initial Br. at 36.

> A macro risk analysis is based on using well accepted and readily available business and financial risk indicators. DOC Ex. 200 at 60 (Amit). Companies in the comparison group must have similar business and financial risk indicators, which may include lines of business, credit rating, beta, and standard deviation of price changes. *Id.* Of course, each company in the comparison group may have unique characteristics that impact its investment risk. *Id.* at 60–61. Such characteristics may include the specific mix of customer classes, the amount of storage capacity, the locational density of its customers, and the age of its distribution facilities. *Id.*
>
> Although each company may have unique risk characteristics, there are two key reasons why using micro risk analysis to identify such characteristics is not appropriate for the purpose of selecting a comparable group. DOC Ex. 200 at 61 (Amit Direct). First, since each utility has a somewhat different sets [sic] of risk characteristics, screening for micro risk factors would divide the group too finely such that no company would qualify to be selected for the overall comparison group. Second, the macro risk analysis uses well accepted risk measures that already reflect the unique characteristics of each company. Performing a micro analysis would overemphasize the micro characteristic and, thus, is unreasonable. *Id.*

Second, because MERC's chief reason stated in its Initial Brief for an upward adjustment to ROE is the Company's small size,[20] it is important to stress the fundamental errors in MERC's argument. The Department's Initial Brief articulates the many compelling principles that demonstrate the flaw in MERC's proposed size adjustment:[21]

> Dr. Amit explained in detail why it is unreasonable to adjust MERC's ROE upward based on its size. As a general matter, there exists a "risk premium" for smaller size companies, but ***only if*** all other investment risk characteristics of a group of companies are the same. DOC Ex. 200 at 64 (Amit Direct). For example, for two identical companies in all aspects other than size, the company that is significantly smaller would have a higher required rate of return. *Id.* Mr. Moul made no such showing as to MERC.

[20] MERC Initial Br. at 9-14.
[21] DOC Initial Br. at 37-38 (emphasis added).

> MERC's size is only one aspect of the Company's overall financial and business risk. It is inappropriate to choose one specific factor of the overall investment risk and use it [to] increase MERC's required rate of return to a level that is higher than the rate of return for the comparison group. *Id.* Therefore, any "risk premium" associated with a size-only comparison for MERC is inappropriate. *Id.* To employ a micro risk analysis in order to account for size would require an examination of each company's unique factors that may impact investment risk. *Id.* Mr. Moul did not attempt such an examination. Even if one were to provide a micro risk analysis of each company's unique risk factors, it would be impractical and would defeat the purpose of using well-accepted common-risk factors to screen for risk-comparable groups. *Id.* For these reasons, adding a small-size risk premium to the rate of return for MERC is not reasonable and should be denied. DOC Ex. 200 at 64 (Amit Direct).

Third, MERC provided no new rationale in its Initial Brief to support its proposed upward 'leverage" adjust to its ROE.[22] The leverage argument is that there are significant differences between the market debt-to-equity ratio and the book debt-to-equity ratio for the companies in its proxy group such that an upward ROE adjustment for MERC is warranted. Dr. Amit and the Department's Initial Brief thoroughly rebutted MERC's arguments.[23] Of particular significance is the following explanation of why MERC's proposal contradicts the fundamental economic principle that markets are efficient; that is, investors are well aware of market debt/equity ratios and book debt/equity ratios for utilities in Mr. Moul's proxy group and that these differences are fully reflected in prices such that an upward adjustment to ROE would be unreasonable:[24]

> The companies in Mr. Moul's Delivery group are all rate-of-return regulated and investors are well aware of the fact that the allowed rates of return for equity are applied to book value, not market value of equity. Moreover, investors are well aware of the fact that

[22] *See* MERC Initial Br. at 16-17.
[23] DOC Initial Br. at 38-39.
[24] *Id.* at 38-39 (*quoting* DOC Ex. 200 at 66–67 (Amit Direct)).

> in recent years market debt/equity ratios for utilities in Mr. Moul's Delivery group have been lower than their book debt/equity ratios. Therefore, the common stock prices of companies in Mr. Moul's Delivery group already reflect any risk associated with the discrepancy between book and market ratios of debt/equity and no additional adjustment is required. Mr. Moul's proposed adjustment would inappropriately doubly compensate investors for investment risk already accounted for in their required returns.
>
> The same rationale holds true for Mr. Moul's proposed beta adjustment. Beta is a measure of the price volatility of a company relative to the price volatility of the market (S&P 500 for example) as a whole. Since the prices of companies in Mr. Moul's Delivery group fully reflect the risk associated with the discrepancy between book and market debt/equity ratios, no additional adjustment to beta is needed to recognize such a discrepancy.

MERC failed to demonstrated the reasonableness of any of its proposed upward adjustments to ROE and, thus, the Company's arguments must be rejected.

5. MERC's criticisms of Dr. Amit's recommended ROE of 9.29 percent with flotation costs are unreasonable; the Department's ROE satisfies the *Bluefield* and *Hope* factors

The Department demonstrated in detail why MERC's proposed ROE is unreasonable and showed the reasonableness of Dr. Amit's recommended ROE of 9.29 percent with flotation. The Company argued incorrectly that because Dr. Amit's recommended ROE is lower than MERC's recommended ROE it is so low as to violate the ratemaking principles set forth in the United States Supreme Court's *Bluefield* and *Hope* decisions.[25] Specifically, MERC claims that any ROE lower than 10 percent "may" jeopardize MERC's ability to attract capital and, therefore, apparently, would violate the Supreme Court's criteria of reasonableness.[26]

Again, the Department's Initial Brief fully addressed the flaws in MERC's examples of why Dr. Amit's recommended ROE is too low, including: MERC's incomplete comparisons of

---

[25] *See* MERC Initial Br. at 17-20, 22.
[26] *Id.* at 17-20, 22.

recent state utility commission decisions and the Commission's decisions, erroneous reference to Value Line's projected ROEs, and an incorrect argument regarding the Commission's Order in MERC's last rate case, Docket No. G007,001/GR-10-977.[27]

B. Department's Response to the OAG Initial Brief and Main Criticisms of Dr. Chattopadhyay's ROE Analysis

Dr. Amit demonstrated that the ROE recommended by OAG Witness Dr. Chattopadhyay of 8.62, or a figure within his range of 8.60 to 9.1 percent, is unreasonably low and is based primarily on an incorrect assumption that the standard DCF model is biased upward. The Department's Initial Brief provides a comprehensive discussion of the many flaws of Dr. Chattopadhyay's ROE analysis,[28] and that discussion is not repeated in this Reply Brief. For convenience, however, Dr. Amit's summary of the primary failings of Dr. Chattopadhyay's ROE analyses, is provided as follows:[29]

> My recommendation is based on the average of my DCF analysis. This average, including flotation costs adjustment, is 9.29 percent. The disagreements between Dr. Chattopadhyay and myself are based on fairly involved technical analyses, as discussed in our testimonies. However, these disagreements could be summarized as follows.
>
> One, Dr. Chattopadhyay uses various expected growth rates, as I stated above, and I only used average EPS projected growth rates. The superiority of using EPS growth rates over the average of various projected growth rates is strongly supported by the financial literature and by financial principles.
>
> Two, for the dividend yields, Dr. Chattopadhyay used Value Line projected 2014 dividend rates. I used annualized dividend rates increased by one half of the projected growth rates. However, for both of us the average dividend yield is 3.86 percent.

[27] DOC Initial Br. at 39-41.
[28] *Id.* at 41-53.
[29] Tr. at 201-204 (Amit).

> Three, Dr. Chattopadhyay based his overall recommendation on the premise that when market-to-book ratio is greater than one, the DCF results in an upward bias estimate of the cost of equity. I disagree, as well documented in my rebuttal testimony and surrebuttal testimony.
>
> Four, the relationship between market-to-book ratio and the cost of equity capital is fairly complex. However, according to Dr. Chattopadhyay's hypothesis, for at least the last ten years investors in natural gas utilities received returns above the cost of equity. Such excessive returns for longer than ten years are counter to financial theory and common sense. The return, if excessive, should have caused investors to increase their demand for the stock of natural gas utilities, thus increasing the price and lowering dividend yields until excess profits are eliminated. This clearly has not happened, as market-to-book ratios remain significantly above one.
>
> Five, flotation costs. Dr. Chattopadhyay's objection to the inclusion of flotation costs is solely based on his argument that the DCF produces an upwardly-biased ROE when the market-to-book ratio is greater than one. Since this -- since his basic premise regarding the market-to-book ratio is not well supported, his objection to the inclusion of a flotation cost adjustment is without foundation.

As noted in Dr. Amit's testimony quoted above, and in the Department's Initial Brief, Dr. Amit's recommended ROE for MERC of 9.29 percent with flotation costs is reasonable and well-supported by the record in this matter. The OAG's argument in its Initial Brief that using a combination of projected growth rates is preferred to solely use projected EPS growth rates is incorrect. Averaging various inappropriate projected growth rates with the EPS projected growth rates simply and inappropriately biased the projected growth rates downward. This point is well demonstrated in the Department's Initial Brief at pages 44-49.

Finally, in the OAG's Initial Brief at page 24 the following statement appears:

> It should be recognized, however, that Dr. Chattopadhyay's growth estimate is predominantly -- but not *exclusively* -- influenced by earnings growth. Earnings growth is assigned more than 80% of the weight in Dr. Chattopadhyay's growth estimate, and less than 17 percent of the weight is made up of dividend and book value growth.

First, irrespective of whether this statement is correct, which it is not, it is an acknowledgement that the EPS growth rates dominate any other growth rate estimate. Second, the statement is not supported by Dr. Chattopadhyay's Surrebuttal Testimony. On page 2 of his Surrebuttal Testimony, Dr. Chattopadhyay states that his recommendation of 8.62 percent is the average of his four DCF analyses. The growth rates for each of his four DCF are: 1) the average of EPS, BVPS, and DPS growth rates (*i.e.,* 33 percent EPS); 2) the EPS growth rate (*i.e.,* 100 percent EPS);. 3) br +sv (sustainable) growth rates (*i.e.,* 0 percent EPS); and 4) the Market- to-book method (which uses br+sv for the growth rate) (*i.e.,* 0 percent EPS). Dr. Chattopadhyay averaged those four growth rates to arrive at his ROE recommendation. This average assigns the EPS a weight of only 33 percent (133 percent/4 = 33.25 percent), not the 80 percent claimed in the OAG Initial Brief.

C. Conclusion

For the reasons provided in this Reply Brief, above, and as explained in detail in its Initial Brief, the Department's Recommended ROE of 9.29 percent for MERC is reasonable and appropriate for adoption by the Commission. The recommended ROEs of other parties are not reasonable and must be rejected.

IV. SALES FORECAST

In its Initial Brief, at pages 53 and 54, the OAG references the Otis Surrebuttal testimony in a discussion regarding the topic of heteroskedasticity in the Zero-intercept model that MERC used in the CCOSS. The discussion in two places is not accurate regarding Ms. Otis' Surrebuttal Testimony.[30]

[30] Moreover, Ms. Otis did not specifically testify on this topic.

On page 53 is a passage that states, "according to the expert opinions of Ms. Otis and MERC Witness, Dr. John, as well as Mr. Nelson, heteroscedasticity means that MERC's regression is totally unreliable." On page 54, a passage states, "[a]ccording to the expert witnesses of both the Department and MERC, the presence of heteroscedasticity in MERC's regression means that MERC's results are biased and unreliable." These quoted statements do not accurately characterize Ms. Otis' Surrebuttal testimony. Ms. Otis' Surrebuttal stated,

> A consequence of heteroskedasticity is that the estimated variances and covariances of regression estimates are biased and inconsistent. This problem does not affect the value of the regression coefficients, but *it does impact hypothesis tests.* As a result of heteroskedasticity, regression coefficients and forecasted values may be valid *but statistical tests are not*.[31]

V. CONSERVATION IMPROVEMENT PROGRAM

MERC's Initial Brief contains a discussion of the Department's recommendation to remove CIP from the Distribution rate. That discussion cites Mr. DeMerritt[32] and states at page 26 that the Department's:

> … proposed increase would incorrectly lower MERC's revenue deficiency while the expenses related to CIP actually increase. In other words, the Department is recommending an overall rate increase of approximately \$3.3M, while CIP expense alone is increasing approximately \$3.8M. Therefore, if approved, this adjustment would have the effect of reducing MERC's rates by \$0.5M for all of MERC's other costs included in this case. By imputing CIP revenues of approximately \$3.8M to offset the increase in CIP expense, the Department is effectively reducing MERC's revenue requirement based on revenue that will never be collected.

The Department disagrees that its recommendation has the effect of reducing rates by \$500,000 for all of MERC's other costs included in this case. The Department's

[31] DOC Ex. 214 at 8 (Otis Surrebuttal) (emphasis added).
[32] MERC's Initial Br. at 26 (*citing* Ex. 24 at 5 (S. DeMerritt Rebuttal)).

recommendation would lower the revenue deficiency but a corresponding amount would be included in the CCRA. In other words, the Department's recommendation would remove CIP from the Distribution rate but include the final approved CIP rate in the CCRA on the customer's bill. Thus, MERC would be able to collect its CIP costs.

Further, since nothing requires that the CCRCA be included in the Distribution rate, it is possible to consider collecting all CIP costs through the CCRA. Moreover, the inclusion of all CIP costs on one line item on the bill would be more transparent as to how much CIP costs. Currently, MERC's residential bill includes the following categories:

- Customer Charge (the fixed portion of base rates);
- Distribution Charge (the volumetric portion of base rates including the CCRC);
- Base Gas Cost (rate included in the test year);
- Cost of Gas (the monthly PGA adjustment); and
- MERC CCRA (the CIP adjustment filed between rate cases).

Thus, under the Department's recommendation, all CIP costs would be recovered in the CCRA or alternatively, on a separate line item on the bill (Base CIP Cost) and treated the same as natural gas costs (excluded from the revenue requirement).

VI. THE MAPPING PROJECT

The MERC Initial Brief discusses the mapping project beginning at page 40. The record in this case clearly shows that the mapping project is a classic, conventional one-time project; for that reason, the Department recommended that the costs should be levelized over three years, which is the Department's recommended amortization period for rate case expenses. It would not be reasonable for the Commission to fail to levelize the cost over an amortization period.

The MERC Initial Brief nevertheless contends at page 41 that, "the Department's proposal to spread this expense over multiple years is unreasonable and punitive and MERC's K&M adjustment of $330,000 should be approved."

The Department continues to recommend a three-year amortization period. If the Commission approves a two-year amortization period for rate case expense, however, then the Department would agree with MERC that the costs should be spread over a shorter amortization period, of two years rather than three.

VII. REGULATORY ASSETS AND LIABILITIES

The MERC Initial Brief makes several mistaken, misleading or otherwise inappropriate assertions regarding the treatment of MERC's proposal on regulatory assets.[33]

First, at page 46, the MERC Initial Brief states, with respect to the FAS 158 Account:

> Federal Energy Regulatory Commission ("FERC") account 182.3 (Other Regulatory Assets) allows for regulatory assets. It states, in part, that:
>
> > This account shall include the amounts ***of regulatory-created assets***, not includible in other accounts, resulting from the ***ratemaking actions*** of regulatory agencies.

(emphasis added). This description of regulatory assets supports a finding that FAS 158 is ***not*** properly treated as a "regulatory asset" because it is not a ***"regulatory-created asset"*** and it is not

[33] In addition, there appear to be a variety of simple factual errors in the MERC Initial Brief. At page 48 the MERC Initial Brief states in part, "MERC has agreed to the removal of the following amounts pertaining to nonqualified employee benefit costs from rate base: $163,731 (*Injuries and Damages Reserve,* Account *228305)….*" The MERC Initial Brief should state in part, "MERC has agreed to the removal of the following amounts pertaining to nonqualified employee benefit costs from rate base: $163,731 (*Deferred Cr-Sup Ret Select (SERP)*, Account *228300*)...."
Second, on page 49, MERC cites to Ex. 27 at 17 (Hans Rebuttal) for the proposition, "MERC proposes to include cumulative excess funding in the amount of $11,769,457 in rate base for pre-payment on pension expense and other post-retirement benefits." This amount is not supported by the record. In her Rebuttal, Ms. Hans provided an example of what the cumulative amounts would be during the period 2012 through 2014. That number would be $12,172,998 ($11,751,318 + $421,680) if the two amounts are added from Hans' Rebuttal. Ex. 27 at 15-16 (Hans Rebuttal). Ms. Hans also provided an exhibit that showed annual amounts. Ex. 27 at 15-16, CMH-5 at 2 (Hans Rebuttal). However, MERC proposed to include $16,587,916 in FAS 158 in rate base. Nowhere did MERC propose $11,769,457 or even a corrected amount $12,172,998. Finally, MERC's citation to page 17 in footnote 218 is incorrect. The citation should be to MERC Ex. 27 at 15-16 (Hans Rebuttal).

the result of "***ratemaking actions*** of its regulatory agency, the Commission. The Commission did not by regulation create the account, and it has taken no action on MERC's Account 182.3 (FAS 158).

Not only is FAS 158 not a "regulatory-created asset," it is an asset that was created for business reasons, in that, as Ms. St. Pierre testified, FAS 158 reflects the projected test-year funded status of MERC's defined benefit pension.[34] At the hearing, the Department explained that the cash working capital also does not include the regulatory asset amount for FAS 158 since FAS 158 is not an accrual.[35] Cash working capital includes accrued expenses that are included in the income statement such as the Labor Loader (regulatory asset 186390).[36]

Third, the MERC Initial Brief makes a new and erroneous argument at page 50, where it states, "[e]ven though MERC cannot withdraw the prepaid pension asset or otherwise use it, the earnings on the asset are considered income to the utility". It is fundamentally incorrect for MERC to assert that pension earnings are earnings to the utility. Earnings returned from the pension's investments belong exclusively to the pension. As Ms. Hans acknowledged on cross examination at the evidentiary hearing, as an externally funded benefit trust, the pension fund and its earnings are not income or assets available to the utility[37]; Ms. Hans stated that the contributions are funded to a trust "outside the company." The converse is also true: that is, the value of the pension fund at a given point in time is dependent on the pension's investment strategies, market conditions and past contributions, not MERC's earnings.[38]

Last, the MERC Initial Brief states at pages 50-51 that:

---

[34] DOC Ex. 217 at 8 (M. St. Pierre Direct).
[35] Tr. at 225-226 (M. St. Pierre).
[36] Tr. at 226 (M. St. Pierre).
[37] Tr. at 58:5 to 59:2 (C. Hans).
[38] Ex. 219 at 3 (M. St. Pierre Surrebuttal).

> … the Commission has authorized the inclusion of prepaid pension contributions in rate base ***as part of overall settlement.*** Specifically, in Xcel's 2010 rate case, Docket No. E002/GR-10-971, the Company introduced inclusion of a prepaid pension asset to become an addition to rate base because its actual cash contributions to the fund exceeded the claimed pension expense amount, ***which was included as part of a larger settlement***. Therefore, inclusion of the difference between cumulative funding and cumulative expense in rate base is reasonable, consistent with prior Commission decisions, and should be approved here.

The operative word in the paragraph is "settlement." A settlement is not precedential, and does not support a finding that it is reasonable for the temporary pension balance to be included in rate base. Therefore, the circumstances in Xcel's rate case are not applicable to this rate case.

VIII. EMPLOYEE BENEFIT PLANS

The MERC Initial Brief is inaccurate or introduces new proposals regarding employee benefit plans.

First, from pages 53 to 54, the MERC Initial Brief inaccurately states,[39]

> MERC's proposed employee benefit expense was determined based on the actuarial expense using generally accepted accounting principles ("GAAP") and ***most accurately reflects MERC's reasonable cost of doing business.*** Setting the discount rate equal to the expected return on plan assets, as proposed by the Department, would not accurately reflect MERC's reasonable costs of doing business and would not be representative of the specific facts and circumstances relative to MERC's pension and other employee benefit plans.

[39] Similarly, at page 63, the MERC Initial Brief asserts, "MERC's actuarially determined pension costs, which reflect the new market realities that MERC and many other companies face, is the most accurate cost-measurement tool available." This assertion, that MERC has become subject to unidentified "the new market realities," is not persuasive nor supported by factual evidence in the record. MERC remains a regulated company, not subject to market forces operating on non-regulated companies.

The Initial Brief's claim that GAAP "most accurately reflects MERC's reasonable cost of doing business" is factually false, and not supported by the record. GAAP accounting assumes that the employer company determining an appropriate contribution must be able immediately to "settle" (*i.e.*, liquidate its position in) its pension assets.[40] This assumption is false with respect to regulated utilities; it does not accurately reflect MERC's "reasonable costs of doing business" as a regulated business.

Further, applying GAAP principals in the circumstances of this MERC rate case would harm ratepayers by unreasonably increasing test year expenses. Instead, setting the discount rate equal to the expected rate of return on the plan assets is representative of the specific facts and circumstances that MERC is a regulated utility, and that the Company has presented no evidence to show that the present value of the future pension fund, appropriately discounted should not be equal to the future value of the pension fund if the present value is subject to a reasonable rate of return on plan assets. There is no evidence to support a finding that these two valuations should not have the same growth/discount rate.

Second, MERC's Initial Brief attempts unsuccessfully to distinguish its failure to propose matching employee benefit plan discount rates and rates of return on plan assets, from the Commission's decision in the Xcel 2012 rate case (Docket No. E002/GR-12-961) by arguing, at page 60, that, "MERC has demonstrated that its pension is not similar to the pension plans at issue in Xcel's 2010 rate case." This argument is not compelling for two reasons. First, the appropriate case is Xcel's 2012 rate case, which was not a settlement, rather than Xcel's 2010 rate case. The Commission decided that the discount rate should be equal to the earnings rate, *over Xcel's objections*. Second, MERC's attempt to compare its pension plan accounting to

[40] Ex. 219 at 28 (M. St. Pierre Surrebuttal).

Xcel's is not the appropriate comparison in deciding whether the discount rate should equal the earnings rate. Instead, the relevant question is whether a discount rate was used in the calculation of the plan expense for the two cases. It was. In both the Xcel 2012 rate case and the instant case, a discount rate was used to calculate plan expense. Like the Xcel 2012 case, the Commission here should require a discount rate that is equal to the return on plan assets.

Third, the MERC Initial Brief, at page 61, proposes for the first time in this rate case, as an alternative to its proposed discount, that a "five year historical average" approach, such as was adopted by the Commission in CenterPoint Energy's most recent rate case, Docket No. G-008/GR-13-316, would more reasonably reflect MERC's actual anticipated expense, than would the Department's recommendation of using an eight percent discount rate that is equal to the Company's expected return on plan assets.

MERC's proposal, coming in its Initial Brief for the first time, has not been subject to discovery or investigation, nor has it been subject to cross examination. Thus, it is not appropriate for MERC to introduce a new proposal at this late stage in the proceeding. Further, the Department strongly disagrees with the finding in the CenterPoint Energy, 13-316 docket and has taken the relatively unusual step of filing a request for reconsideration of this single finding by the Commission. The Department's request for reconsideration argues, in part, as follows:[41]

> In its Order, the Commission appropriately rejected CenterPoint's proposed discount rate of 4.75 percent stating, "neither the accounting standard [Accounting Standards Codification 715, or ASC 715 proposed by CenterPoint] nor the federal pension funding laws govern pension expense calculations for ratemaking purposes." The Commission, however, did not adopt the Administrative Law Judge's (ALJ's) methodology, which the Department supported, to use the same rate for the discount rate and expected long term growth rate for ratemaking purposes. Instead, the Commission explained that the Company's historical five-year (2009-2013) average discount rate of 5.35 percent

[41] Department's Corrected Request for Reconsideration at 3-6 (citations omitted).

"provides the best basis" in this record for calculating the discount rate assumption for the test year.

This issue warrants reconsideration because it is important for the level of pension expense charged to ratepayers to reflect reasonable assumptions; as discussed below, the assumptions underlying the figures used in the five-year average are not appropriate for ratemaking purposes. Further, as this record shows, a lower discount rate assumption means a higher test-year pension expense charged to ratepayers.[42] A five-year historical average of 5.35 percent results in a discount rate assumption that is less burdensome to ratepayers because it is higher than CenterPoint's proposed 4.75 percent discount rate; however, the five-year average suffers from a core failing: each of the five discount rates making up that average was calculated based on inappropriate assumptions for ratemaking purposes.

> The low discount rate in ASC 715 is specifically designed to reflect a company's current settlement of its future pension obligation if necessary due to financial difficulties, and results in higher annual pension expense for accounting purposes. As Mr. Johnson testified:
>
> In fact, *under ASC 715, there is an inherent bias built into pension expense* caused by the use of different discount rates from the expected return on plan asset rates [expected long-term growth rates], even though these two rates cover the same time period. *All other things equal, this inherent bias causes the estimates of pension expense, prior to when the pensions will actually be paid to employees, to be overstated for each year in which the discount rate is lower than the expected return on plan assets*.

However, it is not reasonable to assume that such circumstances would apply to a rate-regulated utility. As Mark Johnson testified:

> CPE is a regulated utility. As such, CPE is highly unlikely to ever have to "settle" its pension benefits in the manner contemplated under ASC 715 and would be expected to inform the Commission about any such occurrence. Moreover, even if CPE were to go into financial distress, it is highly unlikely that the Company would be required to immediately settle its future pension benefits. In any event, CPE has not shown that it is likely to incur financial distress and be required to "settle" its pension benefits as contemplated under ASC 715. In fact, CenterPoint was financially strong enough to have survived the recent downturn in the economy.

Not only is CenterPoint a regulated public utility, the Commission did not determine that CenterPoint is likely to go bankrupt between now and its next rate case, since this record includes absolutely no evidence that CenterPoint is near financial collapse or is otherwise at imminent risk of having to "settle" its future pension obligation.

Since each of the five figures that were in the five-year average used in calculating the 5.35 percent discount rate is based on the inappropriate assumptions above (the assumption that CenterPoint must immediately "settle" its pension obligation), which overstate annual pension expenses, the average of these five figures also results in an inappropriate discount rate and inappropriately overstated pension expense to be charged to ratepayers.

Instead, the 7.25 percent expected long-term growth rate assumption adopted by the Commission is also the appropriate rate to use for the discount rate assumption for ratemaking purposes, until the Company files its next rate case. The only reason CenterPoint's discount rate and expected long-term growth rate assumptions are different is that the Company applies to the discount rate an inapplicable accounting standard that would allow CenterPoint to immediately "settle" its future pension obligation, which it does not need to do. Department Witness Mr. Johnson explained that at a fundamental level the use of a discount rate that is different from the expected long-term growth rate *over the same time period* (the period for discounting the future obligation to the present is the same period for extrapolating the present expected long-term growth rate to the future) "creates an incongruity" for ratemaking purposes. He illustrated this incongruity, as follows:

> This incongruity is best illustrated by the following example: Assume that Company A sets aside enough money or pension assets today so that, if it earns the expected return on assets over time (*e.g.*, 8 percent), the resulting future pension assets will be equal to the expected future pension liabilities. However, taking the same expected future pension liabilities and discounting them back *over the same time period* using a lower discount rate (*e.g.*, 4 percent) rather than the expected return on assets (*i.e.*, 8 percent), results in a pension liability in current dollars that is higher than the pension assets in current dollars, even though it has already been established that there is enough money today in the pension fund to cover Company A's expected future pension liability (assuming that the pension assets earn the expected rate of return).

The Company is not harmed by the Commission giving to ratepayers what the law requires: the benefit of any doubt as to reasonableness regarding the discount rate assumption for test-year qualified pension expense.

In the present case, MERC presented absolutely no evidence that it must immediately "settle" its future pension obligation or that it is at imminent risk of having to do so. Thus, the record does not support selection of a test-year discount rate for ratemaking purposes that is based on an average of the past five "actual" *booked* discount rates (not actual annual pension expense) each of which were calculated *as if* MERC had been required to immediately settle its future pension obligation, which it did not do. MERC has not shown that it is reasonable for ratemaking purposes to overstate test-year pension expense by using such an average.

The Department's recommendation to use the same discount rate and expected long-term growth rate assumptions for ratemaking purposes should be adopted because it assumes a reasonable discount rate and because it resolves doubt as to reasonableness in favor of consumers.

X. UNCOLLECTABLE EXPENSE

Upon further investigation after completion of the evidentiary hearing, the Department determined that, except for the sales margin, its calculation of the uncollectable expense did not update the tariffed revenues to include the agreed upon updated cost of gas. The following corrects the Department's position.

The uncollectible expense ratio is calculated by dividing bad debt expense by "tariffed revenues." MERC's tariffed revenues is a combination of two figures: tariffed sales revenue at present rates of $257,506,848[43] plus the revenue deficiency. Regarding the tariffed sales revenue, the Department's calculation of the denominator used tariffed sales revenue at present rates of $257,506,848. In Rebuttal, MERC had proposed "to update the uncollectible expense

---

[43] MERC Ex. 24 at SSD-3 (DeMerritt Rebuttal). MERC's tariffed sales revenue at present rates of $257,506,848 incorrectly included Michigan revenue of $320,286. MERC Ex. 19 at SSD-4 (DeMerritt Direct). Thus, the Minnesota tariffed sales revenue at present rates would have been $257,186,462.

with revenues calculated in Rebuttal Exhibit ___ (GJW-1)."[44] In Surrebuttal, the Department's calculation incorrectly did not update the tariffed sales revenue. Based on review of MERC's Proposed Findings and further analysis, the Department now corrects its tariffed sales revenue to agree with MERC's tariffed sales revenue.[45]

The Department's corrected uncollectible expense is approximately $1,661,164 or a decrease of $104,720 from MERC's initial test year forecast of $1,765,884. This correction increases the Department's recommended revenue deficiency by $228,362 (due to cash working capital, interest synchronization and the bad debt adjustments) from $3,300,164 to $3,528,525.[46]

XI. CONCLUSION

The Department respectfully requests a recommendation from the Administrative Law Judge and an Order from the Commission, determining that the rates filed by MERC have not been shown to be just and reasonable, as required by Minn. Stat. § 216B.16, subd. 5 (2012), for the reasons discussed in its Initial Brief, this Reply Brief, its Proposed Substitute Findings of Fact, and its Issues Matrix filed on June 24, 2014 in response to MERC's Issues Matrix. The

---

[44] DOC Ex. 219 at 37 (St. Pierre Surrebuttal) (*citing* MERC Ex. 24 at 9-10 (DeMerritt Rebuttal)).
[45] The Department notes that its June 24, 2014 Issues List does not reflect this correction.
[46] Amended financials are Attached hereto as Attachment 1.

Department requests that the Commission establish rates consistent with the principles, analyses and recommendations as addressed in the Department's testimony, and in the documents noted above.

Dated: July 11, 2014

Respectfully Submitted,

s/ Linda S. Jensen

LINDA S. JENSEN
Assistant Attorney General
Attorney Reg. No. 0189030

s/ **Julia E. Anderson**

JULIA E. ANDERSON
Assistant Attorney General
Atty. Reg. No. 0138721

s/ Peter E. Madsen

PETER E. MADSEN
Assistant Attorney General
Attorney Reg. No. 0392339

445 Minnesota Street, Suite 1800
St. Paul, MN 55101-2134

Attorneys for the Minnesota Department of Commerce