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March 13, 2026

**VIA ELECTRONIC CASE FILING**


Executive Secretary  
Michigan Public Service Commission  
7109 W. Saginaw Highway  
Lansing, Michigan 48917

**Re: Case No. U-21973 – In the matter of the application of DTE Gas Company for authority to increase its rates, amend its rate schedules and rules governing the distribution and supply of natural gas and for miscellaneous accounting authority.**

Dear Executive Secretary:

Enclosed for filing please find the **Association of Businesses Advocating Tariff Equity's Direct Testimony & Exhibits of Christopher Walters** and **Proof of Service** in the above-referenced matter.

Sincerely,

**CLARK HILL PLC**  
Stephen A.  
Campbell  
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SAC/lkd  
cc: Parties of Record

**STATE OF MICHIGAN  
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

\_\_\_\_\_)  
In the matter of the application of )  
DTE GAS COMPANY for authority to )  
increase its rates, amend its rate )  
schedules and rules governing the )  
distribution and supply of natural )  
gas, and for miscellaneous )  
accounting authority. )  
\_\_\_\_\_)

**Case No. U-21973**

Direct Testimony and Exhibits of

**Christopher C. Walters**

On behalf of

**Association of Businesses Advocating Tariff Equity**

March 13, 2026



Project 11976

STATE OF MICHIGAN  
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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\_\_\_\_\_)

Case No. U-21973

Table of Contents to the  
Direct Testimony of Christopher C. Walters

I. INTRODUCTION..... 1

II. RATE OF RETURN..... 3

    A. Capital Structure ..... 3

    B. Ms. Nelson’s Recommended ROE ..... 4

    C. Nelson’s DCF Models ..... 6

    D. Nelson’s CAPM Studies ..... 9

    E. Nelson’s ECAPM Studies..... 15

    F. Nelson’s Bond Yield Plus Risk Premium..... 19

    G. Nelson’s Indicated Range After Corrections ..... 28

III. IMPLICATIONS OF REPEATED OVEREARNING ..... 28

Appendix A: Qualifications of Christopher C. Walters

Exhibit AB-3: Multi-Stage DCF Model

Exhibit AB-4: Weighted Least Squares Risk Premium Model

STATE OF MICHIGAN  
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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accounting authority. )  
\_\_\_\_\_)

Direct Testimony of Christopher C. Walters

I. INTRODUCTION

1

2 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3 A Christopher C. Walters. My business address is 16690 Swingley Ridge Road,  
4 Suite 140, Chesterfield, MO 63017.

5 Q WHAT IS YOUR OCCUPATION?

6 A I am a consultant in the field of public utility regulation and a Principal with the firm of  
7 Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

8 Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

9 A This information is included in Appendix A to my testimony.

10 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

11 A I am appearing on behalf of the Association of Businesses Advocating Tariff  
12 Equity ("ABATE"). ABATE consists of large usage customers that purchase substantial  
13 amounts of electric power and/or delivery service from DTE Gas Company ("DTE" or

1 "Company"). They primarily take service under DTE's Large Transportation ("Rate LT")  
2 and Extra Large Transportation ("Rate XLT") service tariffs.

3 **Q WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

4 A The purpose of my Direct Testimony is to discuss the cost of capital issues raised  
5 by DTE. I will specifically address the Company's investor-required Return on  
6 Equity ("ROE") and ratemaking capital structure.

7 My silence with regard to any position taken by any other party in this  
8 proceeding does not indicate my endorsement of that position.

9 **Q PLEASE SUMMARIZE YOUR TESTIMONY.**

10 A In Section II of my testimony, I respond to Company witness Ms. Nelson's estimate of  
11 the current market cost of equity for DTE. Ms. Nelson recommends the Company be  
12 authorized an ROE of 10.25%. I demonstrate that her ROE recommendations are  
13 excessive and should be rejected.

14 In Section III of my testimony, I discuss the Commission's framework laid out in  
15 Case No. U-21585 and how a reduction to the authorized ROE is warranted in this  
16 case.

17 Based on all the foregoing, I request the Michigan Public Service  
18 Commission ("Commission") adopt the following recommendations:

- 19 1. Reject DTE's proposed ROE of 10.25% and instead adopt a ROE within my  
20 recommended range of 9.20% to 9.80%, which is based on my assessment of the  
21 results of Ms. Nelson's corrected analytical methods which I have used, to  
22 determine a fair and reasonable ROE to be authorized for DTE.
- 23 2. I recommend the Commission reject DTE's proposed equity ratio of 50.75% and  
24 instead authorize DTE an equity ratio of 50.0%, consistent with the Commission's  
25 stated preference for a more balanced capital structure. DTE's requested equity  
26 ratio of 50.75% defies at least three separate directives by this Commission in  
27 Orders issued in previous rate cases.

- 1 3. Reject DTE's requested overall ratemaking Rate of Return ("ROR") of 6.18% and  
2 instead authorize an overall ratemaking ROR in the range of 5.71% to 5.96% based  
3 on my recommendations. Assuming an ROE of 9.50% and a capital structure  
4 reflecting an equity ratio of 50.0% produce a ratemaking ROR of 5.83% and  
5 reduces DTE's claimed revenue deficiency by approximately \$37.9 million.
- 6 4. The Commission's statement in Case No. U-21585 that "with increased certainty of  
7 recovery of investments for the company and additional derisking, the ROE could  
8 be impacted in the future depending on the record evidence in the case" provides  
9 a clear framework for revisiting the Company's authorized return when the risk  
10 profile diminishes. DTE's persistent overearning through repeated revenue  
11 sufficiencies squarely fits within this narrative and should prompt a reduction in the  
12 Company's authorized ROE.

13

## **II. RATE OF RETURN**

### **A. Capital Structure**

14 **Q WHAT IS DTE'S PROPOSED CAPITAL STRUCTURE?**

15 **A** DTE's proposed capital structure is summarized in Table CCW-1 below:

**Table CCW-1**

<b><u>Investor-Supplied Capital Structure</u></b>	
<b><u>Description</u></b>	<b><u>Weight</u></b>
Long-term Debt	49.25%
Common Equity	<u>50.75%</u>
Total	100.00%

17 **Q DO YOU HAVE ANY COMMENTS ON DTE'S PROPOSED CAPITAL STRUCTURE?**

18 **A** Yes. For several rate case cycles now, this Commission has consistently authorized  
19 an equity ratio of 50.0% for DTE Electric Company ("DTE Electric"), DTE, as well as  
20 both of Consumers Energy Company's ("Consumers") operating gas and electric  
21 divisions.

1                   In fact, the Commission reiterated that stance just last month in DTE Electric's  
2 most recent electric rate case (Case No. U-21860). In its Final Order, the Commission  
3 stated as follows:

4                   Having reviewed the record and the parties' arguments on the issue, the  
5 Commission finds the ALJ's recommendation to maintain a balanced  
6 capital structure comprised of 50% debt and 50% equity to be  
7 well-reasoned and supported by the record.

8                   DTE has not presented any credible evidence in support of increasing its  
9 authorized equity ratio from 50.0% to 50.75%.

10 **Q     ARE YOU RECOMMENDING AN ADJUSTMENT TO DTE'S CAPITAL**  
11 **STRUCTURE?**

12 A     Yes, I am. I recommend the Commission continue to authorize DTE its longstanding  
13 authorized equity ratio of 50.0%.

14 **B.     Ms. Nelson's Recommended ROE**

15 **Q     PLEASE SUMMARIZE THE BASIS OF MS. NELSON'S RECOMMENDATIONS.**

16 A     Ms. Nelson proposes an ROE of 10.25% for DTE. She bases her recommendations  
17 primarily on traditional financial methodologies including: Constant Growth Discounted  
18 Cash Flow ("DCF") analysis. Capital Asset Pricing Model ("CAPM") and Empirical  
19 CAPM ("ECAPM"). Bond Yield Risk Premium ("BYRP") analysis. She derives an ROE  
20 range between 10.00%-11.35%.

21 **Q     PLEASE SUMMARIZE MS. NELSON'S ROE ESTIMATES.**

22 A     Ms. Nelson's ROE estimates are summarized in Table CCW-2. With prudent and  
23 reasonable adjustments to Ms. Nelson's DCF model, CAPM, ECAPM, and BYRP  
24 return estimates, her studies show that an ROE of 9.50% is reasonable.

Table CCW-2

<u>Ms. Nelson's ROE Estimate</u>	
<u>Description</u>	<u>Mean Results<sup>1</sup></u>
<u>Constant Growth DCF</u>	
30-Day Average	10.76%
90-Day Average	10.79%
180-Day Average	10.80%
<u>Quarterly Growth DCF</u>	
30-Day Average	11.04%
90-Day Average	11.08%
180-Day Average	11.10%
<u>CAPM</u>	
Current 30-Yr Treasury (4.88%)	9.98% - 12.30%
Projected 30-Yr Treasury (4.53%)	9.87% - 12.21%
<u>ECAPM</u>	
Current 30-Yr Treasury (4.88%)	10.53% - 12.94%
Projected 30-Yr Treasury (4.53%)	10.45% - 12.87%
<u>Risk Premium</u>	
Current 30-Yr Treasury (4.88%)	10.31%
Projected 30-Yr Treasury (4.53%)	10.15%
Average Mean DCF	10.93%
Average Low CAPM	11.37%
Average Risk Premium	10.23%
Recommended Return on Equity	10.25%
<hr/>	
Source:	
<sup>1</sup> Nelson Direct Testimony at 4 and Schedule D5.2 through D5.6	

1 Q ARE MS. NELSON'S ROE ESTIMATES REASONABLE?

2 A No. Ms. Nelson's estimated ROE is overstated and should be rejected. Specifically,  
3 Ms. Nelson's analyses produce excessive results for various reasons, including the  
4 following:

- 1 1. Her constant growth DCF results are based on unsustainably high growth rates;
- 2 2. Her CAPM is based on inflated Market Risk Premiums (“MRP”);
- 3 3. In addition to the same flaws that are present in her traditional CAPM, her ECAPM  
4 overstates the cost of equity further by incorrectly incorporating the use of adjusted  
5 beta estimates; and
- 6 4. Her BYRP model is predicated on an excessive estimated Equity Risk  
7 Premium (“ERP”).

8 I will discuss my concerns with each of her analytical methods and conclusions  
9 below.

### 10 **C. Nelson’s DCF Models**

11 **Q PLEASE DESCRIBE MS. NELSON’S DCF ANALYSIS.**

12 A Ms. Nelson applied the Constant Growth DCF model using average stock prices over  
13 30, 90, and 180 trading days, annualized dividend per share data, and  
14 company-specific earnings growth forecasts for her proxy group companies.<sup>1</sup> She  
15 considers the results of each proxy company’s low, mean, and high growth rates.<sup>2</sup>

16 **Q WHAT ARE THE RESULTS OF MS. NELSON’S CONSTANT GROWTH DCF**  
17 **ANALYSIS?**

18 A The results of Ms. Nelson’s Constant Growth DCF analysis, summarized in her  
19 Schedule D5.2, are as follows:

- 20 • 30-day average: Mean Low 9.99%, Mean 10.76%, Mean High 11.56%;
- 21 • 90-day average: Mean Low 10.06%, Mean 10.79%, Mean High 11.59%; and
- 22 • 180-day average: Mean Low 10.12%, Mean 10.80%, Mean High 11.60%.<sup>3</sup>

---

<sup>1</sup>Schedule D5.2, p. 1.

<sup>2</sup>Direct Testimony of Jennifer Nelson, p. 4, Table 1.

<sup>3</sup>Schedule D5.2.

1 Ms. Nelson also applies the quarterly compounding method of the Constant  
2 Growth DCF model. The results of Ms. Nelson's quarterly compounding DCF analysis,  
3 summarized in her Schedule D5.3, are as follows:

- 4 • 30-day average: Mean Low 10.20%, Mean 11.04%, Mean High 11.88%;
- 5 • 90-day average: Mean Low 10.28%, Mean 11.08%, Mean High 11.91%; and
- 6 • 180-day average: Mean Low 10.35%, Mean 11.10%, Mean High 11.92%.<sup>4</sup>

7 **Q WHY IS THE GROSS DOMESTIC PRODUCT (“GDP”) GROWTH PROJECTION A**  
8 **REASONABLE PROXY FOR THE MAXIMUM SUSTAINABLE LONG-TERM**  
9 **GROWTH RATE?**

10 A A utility's long-term earnings and dividend growth are primarily driven by additions to  
11 rate base, which in turn depend on factors such as economic growth in its service  
12 territory, system reliability needs, and public policy initiatives like renewable energy  
13 mandates. Over the long run, a utility cannot grow faster than the economy in which it  
14 operates. Therefore, the projected nominal U.S. GDP growth rate serves as a  
15 reasonable and conservative proxy for the maximum sustainable long-term growth rate  
16 of a utility.

17 **Q IS THERE RESEARCH THAT SUPPORTS YOUR POSITION THAT, OVER THE**  
18 **LONG-TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT GROW AT A**  
19 **RATE GREATER THAN THE RATE OF GROWTH OF THE U.S. GDP?**

20 A Yes. This concept is supported in published analyst literature and academic work.  
21 Specifically, in a textbook titled *Fundamentals of Financial Management*, published by  
22 Eugene Brigham and Joel F. Houston, the authors state as follows:

---

<sup>4</sup>Schedule D5.3.

1 The constant growth model is most appropriate for mature companies  
2 with a stable history of growth and stable future expectations. Expected  
3 growth rates vary somewhat among companies, but dividends for  
4 mature firms are often expected to grow in the future at about the same  
5 rate as nominal gross domestic product (real GDP plus inflation).<sup>5</sup>

6 The use of the economic growth rate is also supported by investment  
7 practitioners as outlined as follows:

8 **Estimating Growth Rates**

9 One of the advantages of a three-stage discounted cash flow model is  
10 that it fits with life cycle theories in regards to company growth. In these  
11 theories, companies are assumed to have a life cycle with varying  
12 growth characteristics. Typically, the potential for extraordinary growth  
13 in the near term eases over time and eventually growth slows to a more  
14 stable level.

15 \* \* \*

16 Another approach to estimating long-term growth rates is to focus on  
17 estimating the overall economic growth rate. Again, this is the approach  
18 used in the *Ibbotson Cost of Capital Yearbook*. To obtain the economic  
19 growth rate, a forecast is made of the growth rate's component parts.  
20 Expected growth can be broken into two main parts: expected inflation  
21 and expected real growth. By analyzing these components separately,  
22 it is easier to see the factors that drive growth.<sup>6</sup>

23 **Q CAN MS. NELSON'S DCF ANALYSIS BE MODIFIED TO INCORPORATE**  
24 **LONG-TERM GDP GROWTH AS THE MAXIMUM SUSTAINABLE GROWTH RATE?**

25 A As shown above in Table CCW-1, the average of her Low-Growth and Mean-Growth  
26 rate Constant Growth DCF is approximately 10.4%. As shown on my Exhibit AB-3, the  
27 average and median multi-stage DCF ROE for Ms. Nelson's proxy group are 8.53%  
28 and 8.57%, respectively, with a midpoint of 8.55%. Taking the average of 8.55% with  
29 the average of her low and mean constant growth DCF results of 10.38%, 10.43%, and

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<sup>5</sup>*Fundamentals of Financial Management*, Eugene F. Brigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at p. 298. (Emphasis Added).

<sup>6</sup>Morningstar, Inc., Ibbotson SBBI 2013 Valuation Yearbook at pp. 51 and 52.

1 10.46% would produce more reasonable composite DCF results in the range of 9.47%  
2 to 9.51%. A DCF-based ROE closer to 9.5% is reasonable.

3 **D. Nelson's CAPM Studies**

4 **Q PLEASE DESCRIBE MS. NELSON'S CAPM ANALYSIS.**

5 A The CAPM analysis is based upon the theory that the market required ROR for a  
6 security is equal to the risk-free rate, plus a risk premium associated with the specific  
7 security. The risk premium associated with the specific security is expressed  
8 mathematically as:

9 
$$B_i \times (R_m - R_f)$$
 where:

10  $B_i$  = Beta - Measure of the risk for stock

11  $R_m$  = Expected return for the market portfolio

12  $R_f$  = Risk-free rate

13 Ms. Nelson's CAPM model is based on two proxy group average beta estimates  
14 of approximately 0.70 based on the average 5-year beta from *Value Line* and  
15 *Bloomberg*, and an average 10-year beta estimate of 0.74 from *Bloomberg*. She also  
16 relied on a market risk premium in the range of 7.29% to 10.32%, a current risk-free  
17 rate of 4.88%, and the average of the near-term and long-term projected risk-free rate  
18 of 4.53%. These parameters produced a CAPM return in the range of 9.87%  
19 to 12.30%.<sup>7</sup>

20 **Q PLEASE DESCRIBE THE ISSUES YOU HAVE WITH MS. NELSON'S CAPM STUDY.**

21 A My primary concern is that I believe the market risk premiums based on her  
22 DCF-derived expected market returns are significantly overstated because they do not  
23 reflect a reasonable estimate of the expected return on the market.

---

<sup>7</sup>Schedule D5.5.

1    **Q     PLEASE DESCRIBE MS. NELSON’S MARKET RISK PREMIUMS.**

2    A     Ms. Nelson developed three risk premium estimates. She derived her expected market  
3         risk premiums by developing a DCF analysis for the market (S&P 500) using  
4         *Bloomberg’s* data and S&P Earnings & Estimates Report, which produced a market  
5         return of 16.71% and 16.73%, respectively. Ms. Nelson also developed a DCF market  
6         return based on the *Value Line* Index, which yields a market return of 14.84%.<sup>8</sup> To be  
7         conservative she concluded that her *Value Line* market return is more reasonable.  
8         Using her *Value Line* market return of 14.84% less the current and projected risk-free  
9         rates of 4.88% and 4.53%, respectively, she developed a market risk premium in the  
10        range of 9.96% to 10.32%. Finally, Ms. Nelson also used a market risk premium  
11        estimate in the range of 7.29% and 7.65% based on Kroll’s historical market return of  
12        12.17% for the period 1926-2024 less her current (4.88%) and projected (4.53%)  
13        risk-free rates.<sup>9</sup>

14   **Q     WHAT ISSUES DO YOU HAVE WITH MS. NELSON’S MARKET RISK PREMIUM**  
15       **ESTIMATES?**

16   A     Ms. Nelson’s DCF-derived market risk premium is based on a market return of 14.84%,  
17         which consists of a growth rate component of approximately 13.51% and  
18         market-weighted dividend yields of 1.25%.<sup>10</sup> The DCF model requires a long-term  
19         sustainable growth rate. Ms. Nelson’s sustainable market growth rate of 13.51% is far  
20         too high to be a rational outlook for sustainable long-term market growth. Her expected  
21         market growth rate of 13.51% is approximately 3.2x the long-term growth rate outlook

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<sup>8</sup>Schedule D5.4.

<sup>9</sup>Nelson Direct Testimony at p. 32 and Schedule D5.5.

<sup>10</sup>Schedule D5.4.

1 for the U.S. GDP, which is 4.24%.<sup>11</sup> Ms. Nelson's market growth rates are irrational  
2 and unsustainable for perpetuity, which is the assumed period of the DCF model.

3 In fact, in the Chartered Financial Analyst ("CFA") curriculum textbooks, the  
4 CFA Institute notes as follows with regard to earnings growth rates for the companies  
5 within the composite indices (i.e., S&P 500):

6 Earnings growth for the overall national economy can differ from the  
7 growth of earnings per share in a country's equity market composites.  
8 This is due to the presence of new businesses that are not yet included  
9 in the equity indices and are typically growing at a faster rate than the  
10 mature companies that make up the composites. **Thus, the earnings**  
11 **growth rate of companies making up the composites should be**  
12 **lower than the earnings growth rate for the overall economy.**<sup>12</sup>

13 As a result of these unreasonable long-term market growth rate estimates,  
14 Ms. Nelson's market DCF returns used in her CAPM analyses are inflated and not  
15 reliable. Consequently, Ms. Nelson's market risk premiums should be given minimal  
16 weight in estimating DTE's CAPM-based ROE.

17 **Q PLEASE EXPLAIN WHY YOU BELIEVE MS. NELSON'S MRPS OF 9.96% AND**  
18 **10.32%<sup>13</sup> EXCEED MRPS SUPPORTED BY EMPIRICAL RESEARCH.**

19 **A** These MRP estimates exceed the high end of the empirical evidence by as much  
20 as 29%. For example, Dr. Morin notes in his book, Modern Regulatory Finance, that  
21 several studies of the MRP have concluded that a MRP in the range of 5.0% to 8.0%  
22 is a reasonable estimate for the United States.<sup>14</sup> For example, the Duarte and Rosa

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<sup>11</sup>Blue Chip Financial Forecasts, December 1, 2025.

<sup>12</sup>CFA Program Curriculum, 2014 Level II Vol.1, "Ethical and Professional Standards, Quantitative Methods, and Economics", Paul Kutasovic, Reading 15 – Economic Growth and the Investment Decision, p. 609, footnote 5 (Emphasis Added).

<sup>13</sup>Direct Testimony of Ms. Nelson, p. 32.

<sup>14</sup>Dr. Morin references studies by Duarte & Rosa; Professors Ross, Westerfield, and Jordan; Mahera; and Brealey, Myers, and Allen. Roger A. Morin, Modern Regulatory Finance, pp. 190-192 (PUR Books LLC 2021). Dr. Morin notes in his textbook that there is a "slight preference" for the upper end of the range (i.e., 8%) during tumultuous times in capital markets with examples being the 2008-2009 credit crisis and the 2020 pandemic.

1 study that Dr. Morin cites concludes that the historical mean is “quite difficult to improve  
2 upon when considering out-of-sample performance measures.”<sup>15</sup> Dr. Morin also notes  
3 that a survey of professional practices showed that 71% of textbooks/tradebooks used  
4 a historical average as the MRP, and 60% of financial advisors used a MRP in the  
5 range of 7.0% to 7.4% (similar to a long-term arithmetic average MRP).<sup>16</sup>

6 Based on this empirical research, it is clear Ms. Nelson’s MRPs of 9.96% and  
7 10.32% are excessive and overstate the cost of equity.

8 **Q DO YOU HAVE ANY OTHER CONCERNS WITH MS. NELSON’S CAPM ANALYSIS?**

9 A Yes, I do. Ms. Nelson’s CAPM analysis fails to incorporate the MRP recommended by  
10 Kroll, formerly Duff & Phelps, which is one of the most trusted and widely used sources  
11 for estimating cost of capital parameters. Kroll currently recommends a long-term  
12 normalized MRP of 5.0%, which is based on extensive empirical research, reflects  
13 forward-looking investor expectations, and is routinely relied upon by ROR analysts  
14 across North America. Instead of using Kroll’s recommended value of 5.0%,  
15 Ms. Nelson constructs her own MRP estimates that range as high as 10.32%, based  
16 on a DCF analysis of the S&P 500 that includes companies with extreme and  
17 unsustainable growth assumptions, some as high as 93.4%. By relying on these  
18 inflated inputs, Ms. Nelson materially overstates the MRP and, in turn, the cost of equity  
19 in her CAPM results. Had she applied the widely accepted 5.0% MRP from Kroll, her  
20 CAPM-based cost of equity estimates would have been significantly lower and more  
21 consistent with capital market expectations and professional valuation guidance.  
22 Based on this methodology, and utilizing a risk-free rate of 4.75%, a “normalized”

---

<sup>15</sup>See Roger A. Morin, Modern Regulatory Finance, p. 191 (PUR Books LLC 2021) (citing the Duarte and Rosa study).

<sup>16</sup>*Id.*, at p. 190, n. 35.

1 forward-looking MRP of 5.00% produces and expected return on the market  
2 of 9.75%.<sup>17</sup>

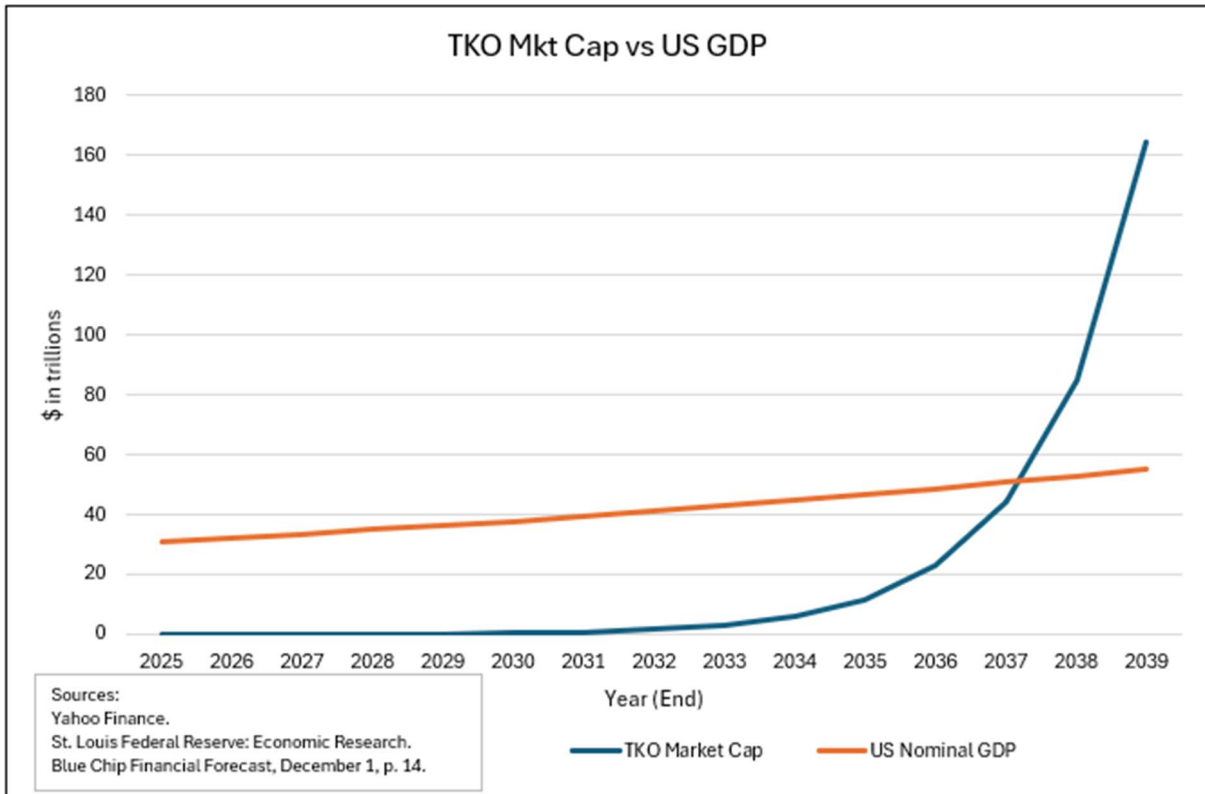
3 **Q CAN YOU DEMONSTRATE HOW UNSUSTAINABLE A GROWTH RATE OF 93.4%**  
4 **REALLY IS?**

5 A Yes. In Figure CCW-1, I have graphed the growth in market capitalization for TKO  
6 Group Holdings (“TKO”), which is the company Ms. Nelson’s analysis assumes will  
7 grow at 93.4% in perpetuity, and the growth in nominal GDP of the United States at its  
8 long-term projected growth rate of 4.24%. The most recently reported nominal GDP  
9 for the United States is approximately \$31.5 Trillion. The most recently reported market  
10 capitalization of TKO is \$16.1 Billion, or \$0.016 Trillion. Assuming TKO’s market  
11 capitalization grows at 93.4% and US GDP grows at 4.24%, TKO’s market  
12 capitalization will surpass US GDP in less than 13 years, at sometime in 2038. This is  
13 simply an irrational assumption that is unsustainable and fails the test of economic  
14 logic. I urge to the Commission to give little weight to Ms. Nelson’s CAPM results.

---

<sup>17</sup>Kroll, *Kroll Cost of Capital Inputs Updated to Reflect Heightened Uncertainty in Global Economy* (Apr. 15, 2025). In its report, Kroll defines a “normalized” risk-free rate as the higher of a U.S. normalized risk-free rate of 3.5% or the spot 20-year U.S. Treasury yield as of the valuation date. The 13-week average yield on the 20-year Treasury bond is 4.75%. Because this yield is higher than 3.5%, the expected return on the market using Kroll’s methodology is 5.00% + 4.75%, or 10.22%.

Figure CCW-1



1 Q HAVE YOU ESTIMATED WHAT MS. NELSON'S CAPM RESULTS WOULD BE  
2 USING KROLL'S NORMALIZED MRP AND RISK-FREE RATE?

3 A Yes. Applying Ms. Nelson's beta estimates of 0.70 and 0.74 in a CAPM with a MRP of  
4 5.00% and a risk-free rate of 4.75% produce CAPM results of 8.25% and 8.45%,  
5 respectively, with a midpoint of 8.35%. The average of the Kroll revised CAPM results  
6 along with Ms. Nelson's Historical CAPM average result of 10.10% produces an overall  
7 revised CAPM estimate of 9.23%.

1 **E. Nelson's ECAPM Studies**

2 **Q PLEASE DESCRIBE MS. NELSON'S ECAPM ANALYSIS.**

3 A Ms. Nelson relies on empirical tests of the traditional CAPM model to modify it in such  
4 a way to attempt to *correct* the original CAPM for some deficiencies inherent in the  
5 original model. Empirical tests show that the expected return line, or security market  
6 line, predicted by the CAPM is not as steep as the model would have us believe. In  
7 other words, the traditional CAPM understates the expected return for securities with  
8 betas less than 1 and overstates the expected return for securities with betas greater  
9 than 1. In order to *correct* for this empirical finding, Ms. Nelson modifies the traditional  
10 CAPM model as follows:

11 
$$R_i = R_f + 0.75 \times B_i \times (R_m - R_f) + 0.25 \times B_m \times (R_m - R_f)$$
 where:

12  $R_i$  = Required return for stock i  
13  $R_f$  = Risk-free rate  
14  $R_m$  = Expected return for the market portfolio  
15  $B_m$  = Beta of the market  
16  $B_i$  = Beta - Measure of the risk for stock

17 **Q WHAT WERE THE RESULTS OF MS. NELSON'S ECAPM ANALYSIS?**

18 A Using the same MRP, risk-free rate, and beta estimates in the ECAPM produced results  
19 in the range of 10.45% to 12.94%.<sup>18</sup>

20 **Q WHAT ISSUES DO YOU TAKE WITH MS. NELSON'S ECAPM ANALYSIS?**

21 A The principal issue I have with Ms. Nelson's ECAPM analysis is her use of an adjusted  
22 beta as published by *Value Line*. The impact of Ms. Nelson's ECAPM adjustments  
23 increases her adjusted 5-year and 10-year beta estimates of 0.70 and 0.74 to 0.77

---

<sup>18</sup>Schedule D5.5.

1 and 0.81, respectively.<sup>19</sup> The weighting adjustments applied in the ECAPM are  
2 mathematically the same as adjusting beta since the inputs are all multiplicative as  
3 shown in the formula above. In other words, Ms. Nelson's use of adjusted betas is  
4 duplicative of the adjustments the ECAPM already makes to correct for any  
5 shortcomings of the traditional CAPM. As a result, her model produces overstated  
6 results.

7 Further, Ms. Nelson's reliance on an adjusted *Value Line* beta in her ECAPM  
8 study is inconsistent with the academic research that I am aware of supporting the  
9 development of the ECAPM.<sup>20</sup> The end result of using adjusted betas in the ECAPM  
10 is essentially an expected return line that has been flattened by two adjustments. In  
11 other words, the vertical intercept has been raised twice and the security market line  
12 has been flattened twice, once through the adjustments *Value Line* made to the raw  
13 beta, and again by weighting the risk-adjusted market risk premium as Ms. Nelson has  
14 done. In addition to the many adjustments employed by Ms. Nelson, she further  
15 increases the intercept and flattens the security market line by using projected  
16 long-term Treasury yields that are at odds with current market expectations and  
17 inconsistent with the Federal Reserve's ("Fed") projections and monetary policy.

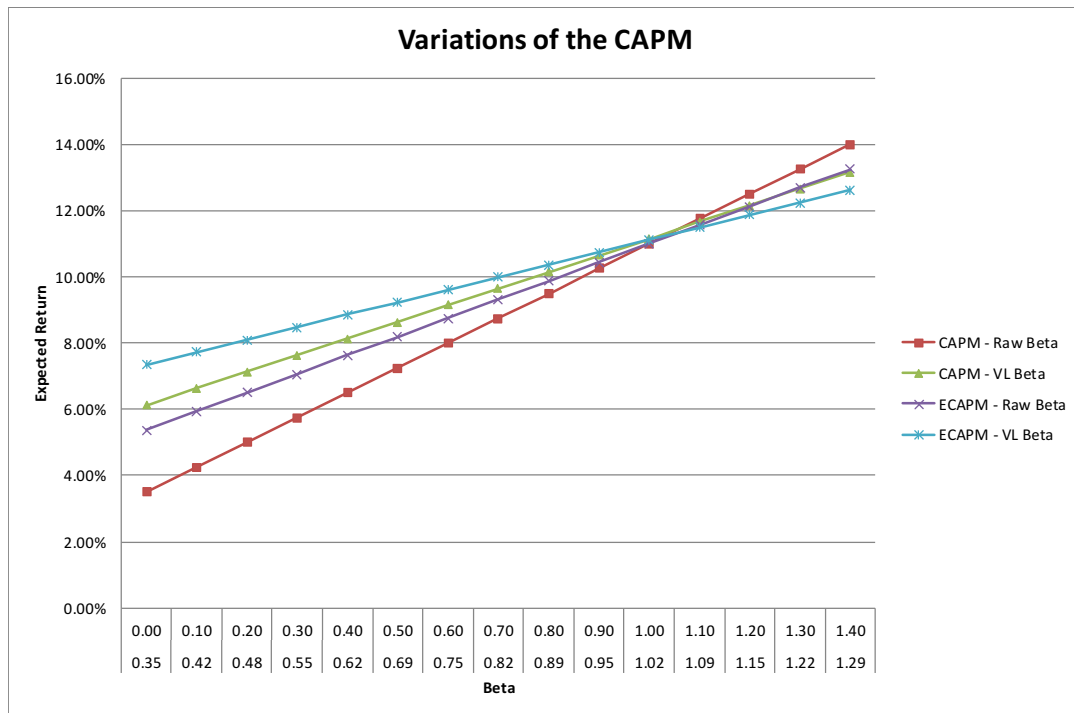
18 The ECAPM with adjusted betas has the effect of increasing CAPM return  
19 estimates for companies with betas less than 1 and decreasing the CAPM return  
20 estimates for companies with betas greater than 1. I have modeled the expected return  
21 line resulting from the application of the various forms of the CAPM/ECAPM below in  
22 Figure CCW-2.

---

<sup>19</sup> $75\% \times 0.70 + 25\% \times 1 = 0.77.$   
 $75\% \times 0.74 + 25\% \times 1 = 0.81.$

<sup>20</sup>See Black, Fischer, "Beta and Return," *The Journal of Portfolio Management*, Fall 1993, pp. 8-18; and Black, Fischer, Michael C. Jensen and Myron Scholes, "The Capital Asset Pricing Model: Some Empirical Tests," 1972.

Figure CCW-2



1            Along the horizontal axis in Figure CCW-2, I have provided the raw unadjusted  
2            beta (top row) and the corresponding adjusted *Value Line* beta (bottom row). As shown  
3            in Figure CCW-2, the CAPM using a *Value Line* beta compared to the CAPM using an  
4            unadjusted beta shows that the *Value Line* beta raises the intercept point and flattens  
5            the slope of the security market line. The two variations with the most similar slope are  
6            the CAPM with the *Value Line* beta and the ECAPM with a raw beta. This evidence  
7            shows that the ECAPM adjustment has a very similar impact on the expected return  
8            line as a *Value Line* beta. Another observation that can be made from the figure above  
9            is the magnifying effect that using the ECAPM with a *Value Line* beta has on raising  
10           the vertical intercept and flattening the slope relative to all other variations. There is  
11           simply no legitimate basis to use an adjusted beta within an ECAPM because it  
12           unjustifiably alters the security market line and materially inflates a CAPM return for a  
13           company with a beta less than 1.

1    **Q     IN YOUR EXPERIENCE, IS MS. NELSON’S PROPOSED USE OF AN ADJUSTED**  
2    **BETA IN AN ECAPM STUDY WIDELY ACCEPTED IN THE REGULATORY ARENA?**

3    A    No. In my experience, regulatory commissions generally disregard the use of the  
4    ECAPM, particularly when an adjusted beta is used in the model. For example, the  
5    Commission recently rejected DTE Electric’s use of ECAPM in its ROE calculation by  
6    adopting the findings of the Administrative Law Judge (“ALJ”) who described ECAPM  
7    as “an approach that this Commission, like most commissions, has rejected.”<sup>21</sup>  
8    Moreover, the Illinois Commerce Commission (“ICC”) has stated the following  
9    regarding the ECAPM:

10           The Commission cannot recall a proceeding in which it relied upon the  
11           ECAPM in establishing the cost of common equity for a utility. In the  
12           instant proceeding, the record supports a finding that use of adjusted  
13           betas in the ECAPM is inappropriate. As Staff witness Ms. Freetly  
14           explained, by using adjusted betas she already effectively transformed  
15           her Traditional CAPM into an ECAPM. Therefore, including an  
16           additional beta adjustment in the ECAPM model would result in inflated  
17           estimates of the samples’ cost of common equity.<sup>22</sup>

18           Similarly, in a more recent Nicor Gas rate case the ICC stated:

19           The Company also used ECAPM analyses and bond yield plus risk  
20           premium models to determine an return on equity, which the  
21           Commission has also historically rejected.<sup>23</sup>

22           The California Public Utilities Commission has even more recently noted:

23           We are not persuaded that ECAPM produces a result that should be  
24           considered. Electric utilities in general have low betas. Adjusting betas  
25           upward guarantees a higher return on equity.<sup>24</sup>

---

<sup>21</sup>*In the Matter of DTE Electric*, PFD, (MPSC Case No. U-21860), p. 368.

<sup>22</sup>Illinois Commerce Commission, Docket No. 11-0767, Illinois-American Water Company, Order at p. 109, September 19, 2012.

<sup>23</sup>Illinois Commerce Commission, Docket No. 21-0098, Northern Illinois Gas Company d/b/a Nicor Gas Company, Final Order at p. 94, November 18, 2021.

<sup>24</sup>Public Utilities Commission of the State of California Application 22-04-008 et al., Decision Addressing Test Year 2023 Cost of Capital For Pacific Gas And Electric Company, Southern California Edison, Southern California Gas Company, And San Diego Gas & Electric Company, at p. 23, December 19, 2022.

1                   Therefore, the Commission should reject Ms. Nelson’s ECAPM, which as  
2                   described above is based on adjusted beta estimates.

3   **F. Nelson’s Bond Yield Plus Risk Premium**

4   **Q     PLEASE DESCRIBE MS. NELSON’S BOND YIELD PLUS RISK PREMIUM**  
5   **METHODOLOGY.**

6   A     Ms. Nelson measures the ERP as the difference between authorized ROE and the  
7           prevailing 30-year U.S. Treasury bond yield. Her dataset includes 1,356 gas utility rate  
8           proceedings from January 1, 1980 through August 29, 2025. To align bond yields with  
9           the regulatory process, she uses the 189-trading day average Treasury yield,  
10          representing the typical time between filing and final order.<sup>25</sup>

11   **Q     WHAT STATISTICAL RELATIONSHIP DID SHE RELY UPON?**

12   A     Ms. Nelson explains that prior research shows an inverse relationship between bond  
13          yields and the ERP, that is, when Treasury yields fall, the ERP tends to increase, and  
14          vice versa. The regression model she presented is a logarithmic model, where the  
15          ERP is expressed as a function of the natural logarithm of Treasury yields. This type  
16          of functional form is generally produced in Excel by applying a “logarithmic trendline”  
17          to a scatter plot of the data.

18   **Q     WHAT ARE THE RESULTS OF HER ANALYSIS?**

19   A     Based on the regression and prevailing interest rates, Ms. Nelson’s Bond Yield Plus  
20          Risk Premium model produced an estimated cost of equity of 10.31% when using the  
21          current 30-year Treasury yield of 4.88%, and 10.15% when using the projected 30-year

---

<sup>25</sup>Schedule D5.6.

1 Treasury yield of 4.53%. Her regression model has an R-squared of 0.8251, meaning  
2 that about 83% of the variation in the ERP is explained by the Treasury yields in  
3 Ms. Nelson's model.

4 **Q WHAT IS THE FUNDAMENTAL PROBLEM WITH MS. NELSON'S ORDINARY**  
5 **LEAST SQUARES ("OLS") APPROACH?**

6 A The fundamental problem is that Ms. Nelson assigns equal weight to every observation  
7 in her dataset, regardless of when it occurred. That equal-weighting treatment causes  
8 the regression to be disproportionately influenced by economic conditions that bear no  
9 resemblance to the current capital market environment.

10 The dataset spans 45 years and includes rate cases decided during the 1980s,  
11 a decade characterized by historically anomalous double-digit Treasury yields. The  
12 30-year Treasury yield averaged 11.23% during the 1980s, compared to 4.884% today.  
13 The authorized ROE in that same decade averaged 14.56%. Those 440 observations  
14 from the 1980s represent 32.4% of the entire dataset. In other words, under  
15 Ms. Nelson's equal-weighting methodology, rate cases decided when 30-year Treasury  
16 yields were above 10% receive more combined influence than the entire period from  
17 2015 through 2025, which comprises only 345 observations, or 25.4% of the sample.  
18 This is not a minor technical concern; it is a structural bias that pushes Ms. Nelson's  
19 implied ROE upward relative to what the current data actually support.

20 Another problem is that with so many daily data points, the model can start  
21 chasing random ups and downs in the numbers instead of capturing a meaningful trend.  
22 In effect, the curve is shaped as much by statistical noise as by real fundamentals.  
23 That makes the results less dependable for setting policy.

1 Further, an R-squared of 0.8251 means that about 83% of the variation in the  
2 ERP is explained by the Treasury yields in Ms. Nelson's model. While that may sound  
3 high, it also means that roughly one-fifth of the variation is left unexplained, which  
4 weakens the reliability of the model for ratemaking purposes.

5 **Q IS THERE A BETTER REGRESSION METHOD THAT CAN BE USED FOR THE**  
6 **BOND YIELD PLUS RISK PREMIUM METHOD?**

7 A Yes. A Weighted Least Squares ("WLS") regression is a variation of the traditional OLS  
8 regression method. Like OLS, it is used to estimate the relationship between variables  
9 such as the ERP and interest rates, but it improves on OLS by allowing certain  
10 observations to carry more influence than others based on their relevance or reliability.

11 OLS regression treats all data points equally, assigning the same weight to each  
12 observation regardless of when it occurred. This equal treatment can be problematic  
13 when analyzing long historical datasets, particularly when the relationship between  
14 variables like bond yields and ERP has evolved over time due to changing market  
15 conditions or regulatory environments. For example, a ROE authorized by a state  
16 commission in 1992 may have been based on vastly different economic, policy, and  
17 risk considerations than one authorized in 2024.

18 WLS regression addresses this by assigning greater weight to more recent  
19 data, which better reflects the current relationship between bond yields and the ERP.  
20 In this analysis, I used an exponential weighting function that gradually reduces the  
21 influence of older data while emphasizing more recent observations. This approach  
22 helps ensure the regression model reflects contemporary market conditions more  
23 accurately, which is especially important for estimating the current cost of equity.

1           By using WLS, the goal is to produce a relevant and timely estimate of the cost  
2 of equity for ratemaking purposes. The estimate better reflects today's utility  
3 environment rather than relying equally on data from decades ago that may no longer  
4 be representative of the current regulatory environment and economic conditions.

5 **Q    IS WLS REGRESSION ONLY APPROPRIATE WHEN CORRECTING FOR**  
6 **HETEROSKEDASTICITY?**

7 A    No. This is a common point of confusion that warrants clarification. Heteroskedasticity,  
8 the condition in which the variance of the regression residuals is non-constant across  
9 observations, is one justification for WLS, but it is not the only one and it is not the  
10 justification I am invoking here. The WLS weights I apply are not derived from an  
11 estimate of residual variance. They are derived from the age of each observation.  
12 Those are two entirely distinct uses of the WLS framework and conflating them  
13 misunderstands the basis on which this analysis rests.

14           WLS is appropriate whenever the analyst has a principled basis for concluding  
15 that not all observations carry equal informational value for the question being  
16 estimated. In the heteroskedasticity case, observations with higher residual variance  
17 are downweighted because they are less precise. In the temporal relevance case,  
18 older observations are downweighted because they reflect a different economic regime  
19 and, therefore, carry less information about the current relationship between Treasury  
20 yields and authorized risk premiums. Both are legitimate applications of the same  
21 estimator. The econometric literature directly supports the temporal relevance  
22 application. Donald W.K. Andrews establishes that when parameters are non-constant  
23 across a sample, the data do not represent a single stable relationship, and pooling  
24 observations across a structural break produces inconsistent estimates of the current

1 parameter values. The direct implication is that pre-break observations carry less  
2 information about the post-break regime than post-break observations do.<sup>26</sup>

3 For example, in a peer-reviewed article published in the Journal of Financial  
4 Markets (2021), Wang and Wu demonstrate that WLS with time-dependent weights  
5 significantly improves the forecasting of stock returns compared to OLS. The purpose  
6 of their weighting scheme was not to correct heteroskedasticity. It was to address  
7 structural breaks and evolving relationships over time, giving more weight to more  
8 recent observations. This is directly relevant here because the ERP and bond yield  
9 relationship has changed across economic cycles. In other words, WLS provides a  
10 disciplined way to allow more recent data, which reflects today's capital market  
11 environment, to carry more weight than very old observations, rather than assuming  
12 that all data points from 30+ years ago are equally relevant.

13 Taken together, these papers establish that once a structural break has been  
14 detected, the econometrically appropriate response is to reduce the influence of  
15 pre-break observations on the estimated relationship, and that exponential  
16 downweighting of the kind applied here is a theoretically grounded and empirically  
17 supported means of doing so.

18 **Q IS THERE EVIDENCE SHOWING THE RELATIONSHIP BETWEEN INTEREST**  
19 **RATES AND THE ERP IS EVOLVING?**

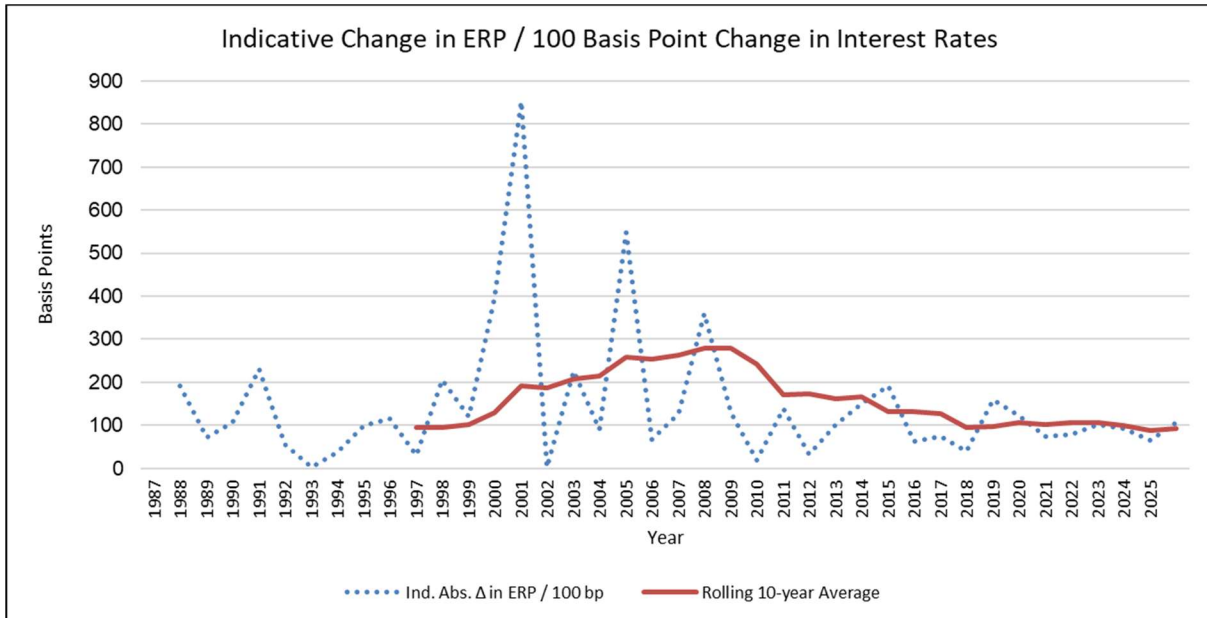
20 **A** Yes. **Error! Reference source not found.** below illustrates the annual indicated  
21 change in the ERP per 100-basis-point change in interest rates (dotted line), along with  
22 the rolling 10-year average (solid line). The chart demonstrates that the relationship  
23 between interest rates and the ERP has not been stable over time. For example, the

---

<sup>26</sup>Donald W.K. Andrews, "Tests for Parameter Instability and Structural Change with Unknown Change Point," *Econometrical*, Vol. 61, No. 4 (July 1993), pp. 821-856.

1 annual indicated change averages 146 basis points, but with a very wide standard  
2 deviation of 159 basis points. This volatility means that the sensitivity of ERP to interest  
3 rates has shifted considerably across different periods.

**Figure CCW-3**



4 A standard OLS regression gives equal weight to every observation in the  
5 dataset, which causes it to dilute or overlook structural changes in the relationship. By  
6 contrast, my WLS regression gives more weight to more recent data, allowing the  
7 analysis to adapt more quickly to evolving capital market conditions. This approach  
8 better reflects the current dynamics between interest rates and ERP rather than relying  
9 on outdated relationships that may no longer apply.

10 **Q IS THERE STATISTICAL EVIDENCE THAT THE RELATIONSHIP BETWEEN BOND**  
11 **YIELDS AND THE ERP HAS CHANGED OVER TIME?**

12 **A** Yes. I applied the Chow structural break test, a standard econometric procedure for  
13 detecting whether the parameters of a regression relationship differ across  
14 sub-periods, to Ms. Nelson's dataset. Using 2010 as the candidate break point

1 (approximately the beginning of the post-financial-crisis low-rate regime), the Chow test  
2 returns an F-statistic of 50.32, which is significant at any conventional level of  
3 significance; the associated p-value is effectively zero. This result is clear evidence  
4 that the pre-2010 and post-2010 data in Ms. Nelson's dataset are not governed by the  
5 same regression relationship. The Chow test establishes that the pre-2010 and  
6 post-2010 data in Ms. Nelson's dataset are governed by structurally different  
7 regression relationships. The underlying data exhibits a structural shift that OLS is not  
8 designed to accommodate. That finding, standing alone under the Andrews (1993)  
9 framework, is sufficient to demonstrate that equal-weighting the full sample, as  
10 Ms. Nelson has done, produces inconsistent estimates of the current ERP-yield  
11 relationship. The null hypothesis that a single pooled OLS regression accurately  
12 describes the ERP-yield relationship across the full 45-year sample is decisively  
13 rejected.

14 **Q HOW ARE THE DATA POINTS WEIGHTED IN YOUR WLS REGRESSION, AND**  
15 **WHAT IS THE ROLE OF THE WEIGHTING PARAMETER LAMBDA ( $\lambda$ )?**

16 **A** In my WLS regression, presented in Exhibit AB-4, each historical observation is  
17 assigned a weight based on how recent it is. More recent data points are given more  
18 weight, while older data points are gradually given less influence. This approach  
19 reflects the view that recent authorized returns and interest rate conditions are more  
20 relevant for determining today's cost of equity than decisions made decades ago. The  
21 weights are assigned using an exponential decay function. Specifically, each  
22 observation's weight is calculated using the formula:

1                   Weight =  $\exp(-\lambda \times (T - t))$

2                   where T is the most recent period, t is the year of the observation, and  
3                    $\lambda$  (lambda) is a decay factor that controls how quickly the influence of  
4                   older data declines.

5                   In my analysis, I used a lambda ( $\lambda$ ) of 0.20.

6   **Q       WHY DID YOU SELECT A LAMBDA VALUE OF 0.20?**

7   A       Lambda values generally range from 0.0 to 1.0. If lambda is set equal to 0.0, the  
8           observations are weighted equally and similarly to OLS regression. If lambda is set  
9           to 1.0, virtually all observations except for the most recent are assigned zero weight. A  
10          lambda of 0.20 provides a reasonable balance. It places meaningful emphasis on the  
11          most recent 5 to 10 years of data, when regulatory policy and investor expectations  
12          have been shaped by modern factors like affordability concerns, decarbonization  
13          mandates, and alternative ratemaking mechanisms, while still retaining some influence  
14          from earlier periods. With this lambda value, observations from over 20 years ago are  
15          not completely disregarded but are weighted substantially less than those from recent  
16          years. A smaller lambda (e.g., 0.05) would allow outdated data to continue exerting  
17          significant influence, potentially diluting the accuracy of the model in current conditions.  
18          A larger lambda (e.g., 0.8) would disregard too much historical information, increasing  
19          volatility. The 0.20 value was chosen based on this tradeoff and where it demonstrated  
20          a strong statistical fit to the data.

1   **Q     WHAT WERE THE RESULTS OF THE WLS REGRESSION ANALYSIS, AND WHAT**  
2           **DO THEY INDICATE ABOUT THE RELATIONSHIP BETWEEN INTEREST RATES**  
3           **AND THE ERP?**

4   **A**    As described above, the WLS regression analysis is used to estimate the relationship  
5           between long-term U.S. Treasury bond yields and the ERP. In this analysis, the ERP  
6           was defined as the difference between the annual average authorized ROE and the  
7           corresponding annual average yield on long-term Treasury bonds. As described  
8           above, I applied exponential weights with a decay factor (lambda) of 0.20 to emphasize  
9           more recent years where regulatory and economic conditions are more consistent with  
10          current conditions. This gives greater influence to more recent data points while still  
11          retaining some information from earlier years.

12                    The resulting regression model is:

13                            
$$\text{ERP} = 9.2868 - 0.8909 \times \text{Bond Yield}$$

14                    The model achieved a very strong statistical fit, with an R-squared of 0.9530,  
15                    indicating that approximately 95% of the variation in ERP is explained by changes in  
16                    long-term bond yields under the WLS framework. Using a projected long-term Treasury  
17                    bond yield of 4.80%, the WLS model produces a predicted ERP of:

18                            
$$\text{ERP} = 9.2868 - 0.8909 \times 4.80 = 5.01\%$$

19                    Adding this ERP to the assumed bond yield yields an estimated cost of equity  
20                    of:

21                            
$$\text{ROE} = 4.80\% + 5.01\% = 9.81\%$$

22                    This result reflects a cost of equity estimate that is consistent with current capital  
23                    market conditions, while giving appropriate weight to the most relevant regulatory data.  
24                    The high explanatory power of the model further supports its suitability for informing  
25                    ratemaking decisions.

1 **G. Nelson's Indicated Range After Corrections**

2 **Q AFTER CORRECTING THE FLAWS IN MS. NELSON'S MODELS USED TO**  
3 **ESTIMATE THE COST OF EQUITY, WHAT IS THE INDICATED REASONABLE**  
4 **RANGE?**

5 A After correcting for all of the flaws identified above, the reasonable range indicated by  
6 proper application of the financial models is 9.20% to 9.80%. This compares to her  
7 recommended base ROE range of 10.00% to 11.35%. The midpoint of the corrected  
8 range of 9.50% is a reasonable outcome for ratepayers and shareholders alike.

9 **III. IMPLICATIONS OF REPEATED OVEREARNING**

10 **Q HAS THIS COMMISSION PROVIDED A FRAMEWORK FOR CONSIDERING AN**  
11 **ADJUSTMENT TO THE ROE?**

12 A Yes, it has. The Commission's statement in Case No. U-21585 that "with increased  
13 certainty of recovery of investments for the company and additional derisking, the ROE  
14 could be impacted in the future depending on the record evidence in the case" provides  
15 a clear framework for revisiting a utility's authorized return when the risk profile  
16 diminishes. DTE's persistent overearning, as discussed by my colleague  
17 Mr. Colin Fitzhenry, particularly through repeated revenue sufficiencies, squarely fits  
18 within this narrative and should prompt a reduction in the Company's authorized ROE.

19 **Q HOW DOES THE FACT THAT DTE CONTINUALLY OVEREARNS ITS**  
20 **AUTHORIZED ROE FIT THE COMMISSION'S FRAMEWORK LAID OUT IN CASE**  
21 **NO. U-21585?**

22 A There are several components of DTE being a serial over-earner that fit the  
23 Commission's framework laid out in Case No. U-21585. First, there is evidence of

1 increased certainty of cost recovery. DTE's ability to consistently overearn reflects a  
2 revenue model with little volatility or uncertainty. The continued use of a fully projected  
3 test year, despite recurring overrecoveries, amplifies the certainty of cost recovery and  
4 suggests a mismatch between projected and actual risk.

5 Second, there is evidence of de-risking. A utility that has a pattern of  
6 overearning its authorized return is evidently operating under conditions of reduced  
7 financial risk. This directly supports the Commission's view that de-risking, such as  
8 through mechanisms that provide stable cost recovery, should be considered when  
9 evaluating whether an ROE reduction is warranted.

10 Third, the authorized ROE should reflect the actual risk. The Commission  
11 clearly stated that while past ROEs are a consideration, they are not fixed and should  
12 evolve with the utility's risk profile. If the utility is repeatedly earning above its  
13 authorized ROE due to regulatory mechanisms that insulate it from risk, then the  
14 authorized ROE should be reduced to reflect those mitigated risks.

15 Finally, the persistent revenue sufficiencies tied to projected test years suggest  
16 that DTE is systematically overprojecting its costs or underestimating its revenues.  
17 Requiring the use of a historical test year would more accurately reflect the utility's  
18 actual earnings and mitigate inflated revenue requirements. This would, in turn, expose  
19 the extent to which the utility's earnings are not only stable but systematically higher  
20 than what the Commission deemed just and reasonable.

21 Given the Commission's own reasoning that greater certainty of recovery and  
22 derisking could support a lower ROE, DTE's consistent overearning is strong evidence  
23 of reduced risk that justifies a downward adjustment. A reduction in the authorized  
24 ROE would align regulatory returns with the utility's actual risk environment and help  
25 restore balance between ratepayer and shareholder interests.

1 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

2 A Yes, it does.

**Qualifications of Christopher C. Walters**

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A Christopher C. Walters. My business address is 16690 Swingley Ridge Road,  
3 Suite 140, Chesterfield, MO 63017.

4 **Q PLEASE STATE YOUR OCCUPATION.**

5 A I am a consultant in the field of public utility regulation and a Principal with the firm of  
6 Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

7 **Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL**  
8 **EMPLOYMENT EXPERIENCE.**

9 A I received a Bachelor of Science Degree in Business Economics and Finance from  
10 Southern Illinois University Edwardsville. I have also received a Master of Business  
11 Administration Degree from Lindenwood University.

12 As a Principal at BAI, I perform detailed technical analyses and research to  
13 support regulatory projects including expert testimony covering various regulatory  
14 issues. Since my career at BAI began in 2011, I have held the positions of Analyst,  
15 Associate Consultant, Consultant, Senior Consultant, and Associate. Throughout my  
16 tenure, I have been involved with several regulated projects for electric, natural gas  
17 and water and wastewater utilities, as well as competitive procurement of electric power  
18 and gas supply. My regulatory project work includes estimating the cost of equity  
19 capital, capital structure evaluations, assessing financial integrity, merger and  
20 acquisition related issues, risk management related issues, depreciation rate studies,  
21 and other revenue requirement issues.

1 BAI was formed in April 1995. BAI and its predecessor firm have participated  
2 in more than 700 regulatory proceedings in 40 states and Canada.

3 BAI provides consulting services in the economic, technical, accounting, and  
4 financial aspects of public utility rates and in the acquisition of utility and energy  
5 services through RFPs and negotiations, in both regulated and unregulated markets.  
6 Our clients include large industrial and institutional customers, some utilities and, on  
7 occasion, state regulatory agencies. We also prepare special studies and reports,  
8 forecasts, surveys and siting studies, and present seminars on utility-related issues.

9 In general, we are engaged in energy and regulatory consulting, economic  
10 analysis and contract negotiation.

11 **Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?**

12 A Yes. I have sponsored testimony before state regulatory commissions including:  
13 Arizona, Arkansas, Colorado, Delaware, Florida, Georgia, Illinois, Iowa, Kansas,  
14 Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri,  
15 Montana, Nevada, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, South  
16 Carolina, Texas, Utah, and Wyoming. In addition, I have also sponsored testimony  
17 before the City Council of New Orleans and an affidavit before the Federal Energy  
18 Regulatory Commission ("FERC").

19 **Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR**  
20 **ORGANIZATIONS TO WHICH YOU BELONG.**

21 A I earned the Chartered Financial Analyst ("CFA") designation from the CFA Institute.  
22 The CFA charter was awarded after successfully completing three examinations which  
23 covered the subject areas of financial accounting and reporting analysis, corporate

1 finance, economics, fixed income and equity valuation, derivatives, alternative  
2 investments, risk management, and professional and ethical conduct. I am a member  
3 of the CFA Institute and the CFA Society of St. Louis.

564059

## DTE Gas Company

### Nelson's Revised Multi-Stage Growth DCF Model

Line	Company	90-Day AVG Stock Price <sup>1</sup> (1)	Annualized Dividend <sup>2</sup> (2)	First Stage Growth <sup>3</sup> (3)	Second Stage Growth					Third Stage Growth <sup>4</sup> (9)	Multi-Stage Growth DCF (10)
					Year 6 (4)	Year 7 (5)	Year 8 (6)	Year 9 (7)	Year 10 (8)		
1	Atmos Energy Corporation	\$157.68	\$3.48	7.17%	6.68%	6.19%	5.71%	5.22%	4.73%	4.24%	7.01%
2	New Jersey Resources Corporation	\$46.35	\$1.80	6.45%	6.08%	5.71%	5.35%	4.98%	4.61%	4.24%	8.88%
3	NiSource Inc.	\$40.40	\$1.12	8.37%	7.68%	6.99%	6.31%	5.62%	4.93%	4.24%	7.99%
4	Northwest Natural Gas Company	\$41.13	\$1.96	6.13%	5.82%	5.50%	5.19%	4.87%	4.56%	4.24%	9.81%
5	ONE Gas, Inc.	\$74.59	\$2.68	5.35%	5.17%	4.98%	4.80%	4.61%	4.43%	4.24%	8.26%
6	Southwest Gas Corporation	\$74.85	\$2.48	10.25%	9.25%	8.25%	7.25%	6.24%	5.24%	4.24%	9.22%
7	<b>Average</b>	<b>\$72.50</b>	<b>\$2.25</b>	<b>7.29%</b>	<b>6.78%</b>	<b>6.27%</b>	<b>5.76%</b>	<b>5.26%</b>	<b>4.75%</b>	<b>4.24%</b>	<b>8.53%</b>
8	<b>Median</b>										<b>8.57%</b>

Sources:

- <sup>1</sup> Schedule D5.2, page 2, column 2.
- <sup>2</sup> Schedule D5.2, page 2, column 1.
- <sup>3</sup> Schedule D5.2, page 2, column 8.
- <sup>4</sup> Blue Chip Financial Forecasts, December 1, 2025, at page 14.

## DTE Gas Company

### Weighted Least Squares Regression Analysis

<u>Year</u>	<u>Auth_ROE<sup>1</sup></u>	<u>Bond_Yield<sup>2</sup></u>	<u>ERP</u>	<u>Weighting (<math>\lambda=0.2</math>)</u>	<u>W_X</u>	<u>W_Y</u>	<u>W_XY</u>	<u>W_X^2</u>	<u>Fitted_ERP</u>
1986	13.46	7.80	5.66	0.00041	0.00320	0.00232	0.01809	0.02492	2.33888
1987	12.74	8.58	4.16	0.00050	0.00429	0.00208	0.01786	0.03684	1.64246
1988	12.85	8.96	3.89	0.00061	0.00548	0.00238	0.02131	0.04906	1.30464
1989	12.88	8.45	4.43	0.00075	0.00631	0.00331	0.02795	0.05330	1.75902
1990	12.67	8.61	4.06	0.00091	0.00785	0.00370	0.03188	0.06757	1.61721
1991	12.46	8.14	4.32	0.00111	0.00906	0.00482	0.03918	0.07372	2.03819
1992	12.01	7.67	4.34	0.00136	0.01043	0.00591	0.04530	0.07996	2.45619
1993	11.35	6.60	4.75	0.00166	0.01096	0.00790	0.05209	0.07234	3.40802
1994	11.35	7.37	3.98	0.00203	0.01496	0.00808	0.05953	0.11023	2.72050
1995	11.43	6.88	4.55	0.00248	0.01706	0.01127	0.07757	0.11747	3.15335
1996	11.19	6.70	4.49	0.00303	0.02029	0.01359	0.09107	0.13594	3.31669
1997	11.29	6.61	4.68	0.00370	0.02443	0.01732	0.11442	0.16136	3.40133
1998	11.51	5.58	5.93	0.00452	0.02519	0.02679	0.14945	0.14055	4.31678
1999	10.66	5.87	4.79	0.00552	0.03236	0.02645	0.15514	0.18981	4.06063
2000	11.39	5.94	5.45	0.00674	0.04004	0.03670	0.21812	0.23794	3.99233
2001	10.95	5.49	5.46	0.00823	0.04521	0.04491	0.24669	0.24835	4.39251
2002	11.03	5.43	5.60	0.01005	0.05458	0.05629	0.30566	0.29638	4.44894
2003	10.99	4.96	6.03	0.01228	0.06086	0.07406	0.36717	0.30174	4.86991
2004	10.59	5.05	5.54	0.01500	0.07568	0.08313	0.41951	0.38192	4.79047
2005	10.46	4.65	5.81	0.01832	0.08509	0.10649	0.49474	0.39532	5.14759
2006	10.40	4.87	5.53	0.02237	0.10902	0.12364	0.60252	0.53129	4.94490
2007	10.22	4.83	5.39	0.02732	0.13209	0.14716	0.71140	0.63853	4.97979
2008	10.39	4.28	6.11	0.03337	0.14281	0.20394	0.87269	0.61111	5.47427
2009	10.22	4.07	6.15	0.04076	0.16587	0.25072	1.02023	0.67495	5.66137
2010	10.15	4.25	5.90	0.04979	0.21164	0.29370	1.24848	0.89963	5.49951
2011	9.92	3.91	6.01	0.06081	0.23782	0.36542	1.42909	0.93007	5.80243
2012	9.94	2.92	7.02	0.07427	0.21694	0.52134	1.52274	0.63365	6.68447
2013	9.68	3.45	6.23	0.09072	0.31283	0.56532	1.94943	1.07873	6.21449
2014	9.78	3.34	6.44	0.11080	0.37008	0.71357	2.38333	1.23608	6.31101
2015	9.60	2.84	6.76	0.13534	0.38446	0.91475	2.59866	1.09220	6.75574
2016	9.54	2.60	6.94	0.16530	0.42936	1.14759	2.98086	1.11527	6.97254
2017	9.72	2.90	6.83	0.20190	0.58449	1.37794	3.98915	1.69210	6.70748
2018	9.59	3.11	6.48	0.24660	0.76753	1.59733	4.97170	2.38895	6.51370
2019	9.71	2.58	7.13	0.30119	0.77783	2.14676	5.54401	2.00876	6.98590
2020	9.46	1.56	7.90	0.36788	0.57451	2.90520	4.53696	0.89719	7.89541
2021	9.56	2.05	7.51	0.44933	0.92225	3.37334	6.92377	1.89291	7.45811
2022	9.53	3.12	6.41	0.54881	1.70955	3.51913	10.96209	5.32524	6.51148
2023	9.60	4.09	5.50	0.67032	2.74273	3.68999	15.09821	11.22232	5.64132
2024	9.71	4.41	5.30	0.81873	3.60719	4.34166	19.12863	15.89268	5.36141
2025	9.68	4.80	4.88	1.00000	4.79556	4.88444	23.42362	22.99735	5.01419

	<u>Yield</u>	<u>ERP</u>	<u>COE</u>
<b>Slope (<math>\beta_1</math>):</b>	-0.8909	<b>4.80</b>	<b>5.01</b>
<b>Intercept (<math>\beta_0</math>):</b>	9.2868		<b>9.81</b>

Weighted Mean of ERP      6.0964

SST (Total)                    5.1798

SSE (Residual)                0.2434

SSR (Regression)              4.9364

**R-squared                      0.9530**

DF (Regression)                1.0000

DF (Residual)                  38.0000

MSR (SSR/DF1)                4.9364

MSE (SSE/DF2)                0.0064

F-statistic                      770.6273

Sources:

<sup>1</sup> Regulatory Research Associates, Inc., Regulatory Focus, Major Rate Case Decisions, Jan. 1997 p. 5, and Jan. 2011 p. 3.

S&P Global Market Intelligence, RRA Regulatory Focus, Major Rate Case Decisions, January - September, 2025, November 6, 2025 at page 3.

<sup>2</sup> St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org/>.

The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

\* \* \* \* \*

In the matter of the application of )  
DTE GAS COMPANY for authority )  
to increase its rates, amend its rate )  
schedules and rules governing the )  
distribution and supply of natural gas, )  
and for miscellaneous accounting authority.)

Case No. U-21973

ALJ Christopher S. Saunders

**PROOF OF SERVICE**

STATE OF MICHIGAN )  
 ) ss  
COUNTY OF WAYNE )

Stephen A. Campbell, being first duly sworn, deposes and says that on March 13, 2026, he did cause to be served the *Association of Businesses Advocating Tariff Equity's Direct Testimony & Exhibits of Christopher Walters* as well as this *Proof of Service*, in the above docket, via electronic mail, to the persons identified on the attached service list.

Stephen A.  
Campbell  
Stephen A. Campbell

 Digitally signed by: Stephen A. Campbell  
DN: CN = Stephen A. Campbell email =  
SCampbell@clarkhill.com C = US O = Clark Hill  
PLC  
Date: 2026.03.13.16:16:43 -04'00'

**SERVICE LIST**  
**MPSC Case No. U-21973**

<p><b>Administrative Law Judge</b>  Hon. Christopher S. Saunders  Administrative Law Judge  Michigan Public Service Commission  7109 W. Saginaw Hwy., 3rd Floor  Lansing, Michigan 48917  Email: <a href="mailto:saundersc4@michigan.gov">saundersc4@michigan.gov</a></p>	<p><b>Counsel for MPSC Staff</b>  Michael Orris  Heather Durian  Anna Stirling  Adam Cozort  Email: <a href="mailto:orrism@michigan.gov">orrism@michigan.gov</a>  <a href="mailto:durianh@michigan.gov">durianh@michigan.gov</a>  <a href="mailto:stirlinga1@michigan.gov">stirlinga1@michigan.gov</a>  <a href="mailto:CozortA1@michigan.gov">CozortA1@michigan.gov</a></p> <p>Lori Mayabb  Email: <a href="mailto:mayabb1@michigan.gov">mayabb1@michigan.gov</a></p>
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