

Exhibit No.: UCAN-01

Docket No.: A.25-03-010 et. al.

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Sponsor/Witness.: Matthew Bandyk

**DIRECT TESTIMONY OF MATTHEW BANDYK ON BEHALF OF UTILITY
CONSUMERS' ACTION NETWORK CONCERNING SAN DIEGO GAS AND
ELECTRIC COMPANY 2026 COST OF CAPITAL**

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1 **1. INTRODUCTION AND PURPOSE OF TESTIMONY**

2 **Q1 Please state your name and occupation.**

3 **A1** My name is Matthew Bandyk. I am a Principal Associate at Synapse Energy Economics
4 Inc., located at 485 Massachusetts Ave, Suite 3, Cambridge, Mass., 02139.

5 **Q2 Please describe Synapse Energy Economics.**

6 **A2** Synapse is a research and consulting firm specializing in energy and environmental
7 issues, including electric generation, transmission and distribution system reliability,
8 ratemaking and rate design, electric industry restructuring and market power, electricity
9 market prices, stranded costs, efficiency, renewable energy, environmental quality, and
10 nuclear power.

11 Synapse's clients include state consumer advocates, public utilities commission staff,
12 attorneys general, environmental organizations, federal government agencies, and
13 utilities.

14 **Q3 Please summarize your work experience and educational background.**

15 **A3** At Synapse, I focus on cost of capital testimony. I was previously a consultant at 5 Lakes
16 Energy, a Michigan-based energy policy consulting firm. My experience is summarized
17 in my resume, attached as Exhibit-MJB-1.

18 In 2025 I successfully completed a comprehensive written exam to be awarded the
19 Certified Rate of Return Analyst (CRRRA) designation from the Society of Utility and
20 Regulatory Financial Analysts (SURFA).

21 **Q4 Have you previously testified before state regulatory commissions?**

22 **A4** Yes. I have previously testified before the Michigan Public Service Commission in the
23 following cases:

24 Case No. U-21806 (Consumers Energy gas rate case);

1 Case No. U-21585 (Consumers Energy electric rate case);
2 Case No. U-21534 (DTE Electric rate case);
3 Case No. U-21555 (UPPCO rate case);
4 Case No. U-21540 (Michigan Gas Utilities rate case);
5 Case No. U-21490 (Consumers Energy gas rate case);
6 Case No. U-21389 (Consumers Energy electric rate case);
7 Case No. U-21048 (Consumers Energy 2022 PSCR Plan case); and
8 Case No. U-21291 (DTE Energy gas rate case).

9 **Q5 On whose behalf are you testifying in this case?**

10 **A5** I am testifying on behalf of Utility Consumers' Action Network.

11 **Q6 What is the purpose of your testimony in this proceeding?**

12 **A6** In this proceeding I will give my expert opinion as to an appropriate return on equity,
13 capital structure and overall rate of return for San Diego Gas & Electric (SDG&E, or the
14 Company).

15 **Q7 How is your testimony structured?**

16 **A7** In Section 2, I summarize my recommendations. In Section 3, I discuss the overarching
17 principles of a fair cost of capital that guide my testimony. In Section 4, I discuss the
18 methodology and results of the financial models that I use to estimate SDG&E's return
19 on equity. In Section 5, I discuss my recommendations for a fair capital structure for the
20 utility. Finally, in Section 6, I discuss the resulting recommendation for an overall rate of
21 return.

1 **Q8 Are you sponsoring any exhibits?**

2 **A8 Yes, I am sponsoring the following exhibits, found at the end of my testimony:**

3 MJB-1: Resume of Matthew Bandyk

4 MJB-2: Equity Risk Premium and Corresponding Risk-Free Rates

5 MJB-3: Beta

6 MJB-4: CAPM Analysis

7 MJB-5: Long-Term Growth Rate Sources

8 MJB-6: DCF (with Earnings Growth Rates)

9 MJB-7: DCF (with Dividend Growth Rate)

10 MJB-8: UCAN-SDG&E Data Request 003

11 **2. FINDINGS AND RECOMMENDATIONS**

12 **Q9 Please summarize your findings.**

13 **A9 My primary findings are:**

14 1. SDG&E's 11.25% proposed return on equity is significantly inflated from the
15 estimated return on equity derived from commonly-used financial models.

16 2. SDG&E's application fails to demonstrate the utility faces larger business and
17 financial risk than comparable utility companies.

18 3. SDG&E's application fails to justify the proposed increase in its authorized equity
19 ratio to 53%.

20 **Q10 Please summarize your recommendations.**

21 **A10 Based on my findings, I offer the following recommendations:**

22 1. The Commission should approve a return on equity for SDG&E of 8.87%.

2. The Commission should approve a capital structure of 48% long-term debt and 52% equity.

3. The Commission should approve an overall rate of return of 6.83%.

3. COST OF CAPITAL - PRINCIPLES

Q11 Please explain the concept of cost of capital and its significance.

A11 The cost of capital is the return demanded by investors on the capital they supply to the Company.¹ It is the weighted average of the costs of the various classes of capital supplied by investors — in this case, debt and equity. The cost of debt and cost of equity are each weighted by the respective amounts of debt and equity in the Company's total capital structure, so the ratio of equity to debt is another important component of the cost of capital. The cost of debt can be relatively easily observed through the interest rates lenders demand on debt issued by the Company. The cost of equity, however, is the product of market expectations that can only be estimated by looking at a number of factors.

Estimating the cost of equity for a regulated utility must be done carefully so as to arrive at a return that ensures rates that are “just and reasonable,” a principle elaborated on in the landmark U.S. Supreme Court cases that set the legal standards governing public utility regulation, *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia* and *Federal Power Commission v. Hope Natural Gas Co.*

For example, in *Hope*, the Court said that the “just and reasonable” standard implies that “the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.”²

But the Court was also clear that the determination of what return is “sufficient” in that regard must also involve a consideration of the interests of the company's

¹ Roger A. Morin, PhD. Modern Regulatory Finance. PUR Books, 2021, p. 27.

² *Fed Power Com v Hope Natural Gas Co*, 320 US 591, 603 (1944).

1 customers. Indeed, just as a return for a utility that is set below the amount
2 “commensurate with returns on investments in other enterprises having corresponding
3 risks” causes the utility to lose wealth relative to what it should earn with a more
4 appropriate return, a return that is set above this amount will cause the utility’s customers
5 to be overcharged and lose wealth relative to what they would be charged with a lower
6 and more appropriate return. In this latter case, that wealth is instead transferred from
7 customers to the utility holding company’s shareholders.

8 **Q12 What methods may be employed to determine the cost of capital?**

9 **A12** In *Hope*, the Supreme Court held that it is the result reached, not the method employed,
10 which is controlling, and that result should be a rate that people would reasonably
11 consider to be commensurate with the risk of the investment. In practice, reaching that
12 result involves using methods that are widely accepted in the financial community to
13 estimate investor perceptions of risk. I rely on these methods in my testimony to estimate
14 the Company’s cost of equity, which informs my recommendation for the authorized
15 return on equity (ROE).

16 **Q13 How have public regulatory commissions historically fared at estimating returns on**
17 **equity for utilities that are commensurate with risk?**

18 **A13** There is strong evidence from multiple observers and peer-reviewed academic research
19 that public regulatory commissions on average have tended to set electric utility ROEs
20 above what economists would arrive at using the widely-accepted methods for estimating
21 cost of equity.³ I will describe this ROE level that regulatory commissions tend to exceed
22 as a “market-based ROE” since it is estimated using methods that gauge how the market
23 rates the risk of a utility investment. Commissions approving ROEs that exceed a market-
24 based ROE has resulted in a transfer of wealth from ratepayers to shareholders.

25 Arriving at an ROE recommendation is a process of estimation, and that process will
26 invariably include some degree of subjectivity. Subjective factors can influence any
27 human decision-making process, including the decisions of public regulatory

³ See footnotes 4, 5 and 6, for examples.

1 commissions, and lead to unintended results. These factors include the influence of
2 utilities in the regulatory process. Utilities often have more resources to make their case
3 heard for why ROE should be higher than opposing groups do to make the opposite case,
4 even if the utilities' arguments are not necessarily stronger.

5 Academics have also noted the phenomenon of a growing premium of regulatory
6 commission-awarded ROEs over the rate of return on long-term U.S. Treasury bonds (the
7 risk-free rate), and research has found that this premium cannot statistically be explained
8 by financial fundamentals, such as a change in the equity or debt risk of the utilities in
9 question.⁴ In other words, the return is set above the actual cost of equity. This premium
10 costs consumers because it ensures that utilities collect a greater return from consumers
11 than would be justified by a market-based ROE. A 2023 paper published by the Energy
12 Institute at the University of California Berkeley's Haas School of Business found that
13 the cost to consumers from rates of return for electric and gas utilities that are set above a
14 market-based return costs U.S. consumers around \$7 billion per year.⁵

15 Experts including utility attorney Steve Huntoon have also examined the record of
16 authorized ROEs and found that regulators tend to set ROEs above returns of investments
17 that are riskier than utilities, indicating that regulatory decisions are not in line with the
18 economic reality that lower risk means lower return.⁶

19 A higher return implies higher risk, so approving ROEs that are higher than market
20 returns would imply that regulated utilities are riskier investments than the market as a
21 whole. But they are not. Regulated utility returns tend to be less risky than the market as
22 a whole, as demonstrated by the betas of regulated utility holding companies. Beta is a
23 measurement of the sensitivity of a stock's returns relative to those of the market as a

⁴ "This growing premium does not appear to be explained by traditional asset-pricing models, often in direct contrast to regulators' stated intent... However, absent some normative justification for this premium, it would appear that regulators are authorizing excessive returns on equity to utility investors and that these excess returns translate into tangible profits for utility firms." David Rode and Paul Fischbeck. "Regulated equity returns: A puzzle." Energy Policy, Oct. 2019. Available at

<https://www.sciencedirect.com/science/article/abs/pii/S0301421519304690?via%3Dihub>

⁵ Karl Dunkle Werner and Stephen Jarvis. "Rate of Return Regulation Revisited." Energy Institute at Haas Working Paper 329R. Revised September 2024. Available at <https://haas.berkeley.edu/wp-content/uploads/WP329.pdf>

⁶ Steve Huntoon. "Nice Work If You Can Get It." Fortnightly Magazine, August 2016. Available at <https://www.fortnightly.com/fortnightly/2016/08/nice-work-if-you-can-get-it>.

1 whole. Utility holding company betas tend to be less than one, meaning that those stocks
2 are less sensitive to changes in overall market returns.

3 **Q14 If regulated utilities are less risky than the market, then why have regulated utilities**
4 **historically been awarded ROEs above market returns?**

5 **A14** The remaining explanation is that public regulatory commissions have tended to accept
6 estimates for ROE that are above fair, market-based ROE estimates.

7 **Q15 What ROE is SDG&E proposing in this case?**

8 **A15** SDG&E is proposing an 11.25%⁷ ROE, a significant increase from its current ROE of
9 10.23%⁸.

10 **Q16 How do these current and proposed ROEs compare to the average ROE authorized**
11 **by regulators around the country?**

12 **A16** Both the 10.23% current ROE and the 11.25% proposed ROE are significantly higher
13 than the 9.74% average ROE authorized by state regulatory commissions in 2024, as
14 cited in SDG&E's application.⁹

15 **Q17 How do you view the utility's proposed ROE in light of the aforementioned evidence**
16 **about ROEs generally being set too high?**

17 **A17** The fact that a) there is evidence that nationally utility ROEs are set too high and b)
18 SDG&E's proposed ROE is higher than the national average provides a reason for the
19 burden of proof to be placed on SDG&E to justify its high ROE request. In my opinion,
20 the utility's application and testimony fails to meet this burden of proof. As I will
21 explain, Mr. Nowak's application of financial models to determine his recommended
22 ROE makes several errors that inflate the ultimate ROE range.

⁷ Application, p. 2.

⁸ Application, p. 3.

⁹ Application, pp. 8-9.

1 **Q18 Mr. Nowak states that “an authorized ROE for SDG&E that is below ROEs**
2 **authorized for other utilities could inhibit its ability to attract capital on reasonable**
3 **terms for investments to be made on behalf of customers in California.”¹⁰ Do you**
4 **agree that the Commission should consider the ROEs authorized in other**
5 **jurisdictions in setting the ROE for SDG&E?**

6 **A18** No. While he is correct that “a company’s cost of equity is defined by, and equal to, the
7 opportunity cost of investing in that company,”¹¹ Mr. Nowak conflates this cost of equity
8 with the authorized ROE. On the one hand, cost of equity is a theoretical concept for the
9 opportunity cost faced by investors when considering a specific investment. ROE, on the
10 other hand, is an accounting concept for the return generated by an equity investment.
11 The cost of equity is what we are trying to estimate through financial models that gauge
12 the opportunity cost. As explained above, regulatory commissions routinely set ROEs
13 well above the cost of equity for utilities. So we cannot look to other jurisdictions to
14 determine the opportunity cost for investors. An ROE can be set below the national
15 average for authorized ROEs and still be above the cost of equity – meaning that ROE
16 still provides a return to investors that more than satisfies what they demand to make it
17 worth it to them to invest in the utility’s equity.

18 **4. COST OF CAPITAL – METHODS**

19 • **ROE Summary**

20 **Q19 What methods did you use to calculate your recommended ROE?**

21 **A19** I summarize my ROE results and methods employed in the table (Fig. 1) below.
22
23
24

¹⁰ Nowak Direct, p. 10, lines 12-14.

¹¹ Nowak Direct, p. 10, lines 8-9.

Fig. 1

DCF	
EPS growth rates	9.41%
DPS growth rates	8.18%
Average	8.80%
CAPM	
with Damodaran ERP and Value Line Beta	9.26%
with Damodaran ERP and Bloomberg Beta	8.04%
with Kroll ERP and Value Line Beta	9.85%
with Kroll ERP and Bloomberg Beta	8.61%
Average	8.94%
Average of Averages	8.87%

- **Proxy Group Selection**

Q20 How does your proxy group compare to the proxy group employed by Mr. Nowak?

A20 I begin with Mr. Nowak's proxy group and apply two additional screens to arrive at my proxy group.

First, I screen out companies that do not provide electric *and* gas distribution utility service. The purpose of this screen is to limit the proxy group to companies that match the operational profile of SDG&E, which serves electric and gas customers, as much as possible. This screen removes the following companies from the proxy group because they only own electric utilities and not gas utilities, as shown in Mr. Nowak's Exhibit JCN-9:

1 American Electric Power

2 Black Hills Corp.

3 Edison International

4 Evergy, Inc.

5 Eversource Energy

6 FirstEnergy Corp.

7 IDACORP

8 OGE Energy

9 Pinnacle West Capital

10 Portland General Electric

11 Southern Company

12 TXNM Energy

13 Next, I screen out any companies that are rated greater than A by S&P. This screen
14 ensures the proxy group are of comparable risk to SDG&E, which is rated BBB+ by
15 S&P. Mr. Nowak applies a floor screen that proxy companies must be rated no lower
16 than BBB-, two notches lower than SDG&E. I apply a screen that proxy companies must
17 also not be rated two notches higher. This screen does not result in any additional
18 companies being removed from my proxy group compared to Mr. Nowak's, as the only
19 company with a greater than A rating, MGE Energy, is screened out by Mr. Nowak for
20 other reasons.

- **Capital Asset Pricing Model (CAPM)**

Q21 Please describe your application of the CAPM to estimate the ROE.

A21 I provide my CAPM estimate in Exhibit MJB-4.

My CAPM analysis follows the same basic formula as Mr. Nowak's. The numbers we use for several important inputs to the formula – the equity risk premium (ERP), beta and the risk-free rate – differ, for reasons I explain below.

Q22 Please explain how you arrived at the ERP used in your CAPM formula.

A22 The ERP is an essential component of the CAPM formula. It represents the excess return an investor would receive over the risk-free rate by investing in the broader equity market. The ERP is calculated as the estimated return on the market an investor can expect from investing in the broad stock market minus the risk-free rate.

It is important when estimating the ERP to not be overly reliant on historical data. While historical estimates of ERP are commonly used by the financial community, that popularity does not make them less flawed. As New York University Stern School of Business Professor Aswath Damodaran, one of the most highly respected and widely cited experts in finance and valuation, has written:

Given how widely the historical risk premium approach is used, it is surprising how flawed it is and how little attention these flaws have received.¹²

There are two main reasons for the flaw with this methodology. First, the historical estimate for ERP is extremely sensitive to the historical time period selected, meaning that the subjective judgment by the person deciding which time period to collect market data for has an outsized impact on the result.¹³

¹² Aswath Damodaran, "Estimating Equity Risk Premiums," Stern School of Business, accessed June 2025, available at <https://pages.stern.nyu.edu/~adamodar/pdfiles/papers/riskprem.pdf>.

¹³ *Id.* "...the risk premium estimated in the US markets by different investment banks, consultants and corporations range from 4% at the lower end to 12% at the upper end... In summary, the risk premium estimates vary across users because of differences in time periods used, the choice of treasury bills or bonds as the risk-free rate and the use of arithmetic as opposed to geometric averages."

1 Second, regardless of the time period selected, historical estimates of ERP are subject to
2 the problem of survivorship bias, where returns that are counted in historical ERPs tend
3 to be those from stocks that remain in the market, rather than those that drop out. This
4 survivorship bias effect tends to inflate historical ERPs.¹⁴

5 **Q23 Are there any methods of estimating ERP not subject to these problems?**

6 **A23** Yes. Dr. Damodaran suggests using an “implied equity risk premium” method:

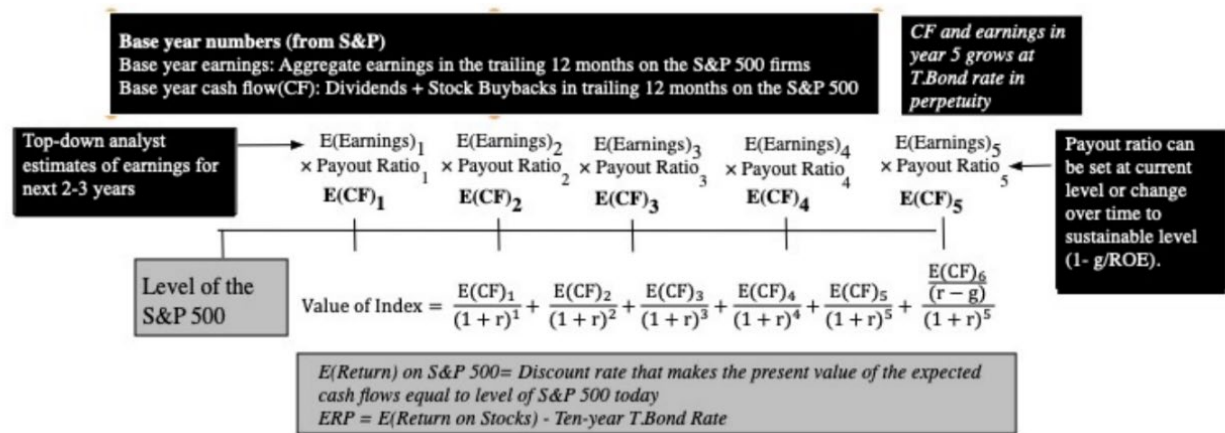
7 *The advantage of this approach is that it is market-driven and current, and does*
8 *not require any historical data. Thus, it can be used to estimate implied equity*
9 *premiums in any market.*¹⁵

10 This approach values stocks in a market at the present value of dividends from each stock
11 growing at a constant rate. Essentially, Dr. Damodaran takes the same discounted cash
12 flow model Mr. Nowak and I use to estimate the cost of equity for a single company and
13 applies it to value the expected return of a broad market index, the S&P 500. Dr.
14 Damodaran’s formula, summarized in the figure below, begins with the base level of
15 aggregate earnings of the S&P 500 index, and then applies the basic assumption of the
16 discounted cash flow model that the present value of an asset is the stream of cash flows
17 it is expected to generate, with each cash flow discounted at a rate that reflects the time
18 value of money.

¹⁴ *Id.* “...the survivor bias will result in historical premiums that are larger than expected premiums for markets like the United States, even assuming that investors are rational and factor risk into prices.”

¹⁵ *Id.*

Fig. 2¹⁶



In Dr. Damodaran's approach, the cash flows are the earnings from dividends and stock buybacks that stocks in the S&P 500 generate, assumed to grow for five years at a rate derived from analyst growth forecasts, and then slowing to a perpetual growth rate that is equal to the risk-free rate. He then algebraically calculates the discount rate that allows these future cash flows to equal the current level of the index, resulting in a rate that reflects the return that investors require to invest in the market. Subtracting the risk-free rate from that required return results in the ERP.

Dr. Damodaran regularly publishes five estimates of the U.S. ERP based on this implied equity premium approach. The estimates are based on different assumptions, such as normalizing earnings by replacing the base year earnings with the average earnings yield over the last decade. For my ERP,¹⁷ I use the highest of five different estimates for ERP from Dr. Damodaran calculated in June 2025. I use the highest estimate to be more conservative.

¹⁶ Reproduced from Damodaran, "Equity Risk Premiums (ERP): Determinants, Estimation, and Implications – The 2025 Edition," March 2025, p. 96. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5168609

¹⁷ See Exhibit MJB-2.

1 So as not to be reliant on one source, I also used the recommended U.S. ERP from
2 financial research firm Kroll for 2025.¹⁸ Kroll's recommended U.S. ERP is based on risk
3 perceptions in the market and other qualitative and quantitative inputs, such as an implied
4 equity risk premium model.

5 **Q24 Is the ERP you calculate forward-looking to account for the fact that the test year**
6 **for this proceeding is in the future?**

7 **A24** Yes. Dr. Damodaran's ERP is purposely calculated to be forward-looking in order to
8 avoid the aforementioned pitfalls with historical approaches for ERP.¹⁹ More specifically,
9 Dr. Damodaran calculates the ERP using an expected growth rate for payouts to investors
10 (i.e., dividends and stock buybacks) that is the average of two-year growth forecasts of
11 the aggregate earnings of the S&P 500 Index from analysts from Thomson Reuters,
12 Factset, Yardeni and S&P Capital IQ.

13 **Q25 Does Mr. Nowak calculate the ERP he uses for his CAPM analysis using the same**
14 **method as Dr. Damodaran?**

15 **A25** No. Mr. Nowak uses a very different methodology. His expected return on the market is
16 the addition of a) a Value Line forecast of the five-year growth rate for earnings per share
17 of companies in the S&P 500 Index and b) a Bloomberg estimate of the dividend yield of
18 companies in the S&P 500 Index.²⁰ This formula, where (cost of equity) = expected
19 dividend yield plus g [growth rate], is essentially a simplified version of the discounted
20 cash flow formula used by Dr. Damodaran and many others.

21 **Q26 Why is Mr. Nowak's ERP estimate so much higher than yours?**

22 **A26** Mr. Nowak has used an inflated estimate for g, and the consequence of that choice is
23 amplified by his use of a more simplified discounted cash flow, which makes his result
24 much more sensitive to the level at which g is set because g is only one of two inputs to

¹⁸ Kroll, "Kroll Recommended U.S. Equity Risk Premium and Corresponding Risk-Free Rates to be Used in Computing Cost of Capital: January 2008 - Present," April 25, 2025. <https://www.kroll.com/en/reports/cost-of-capital/recommended-us-equity-risk-premium-and-corresponding-risk-free-rates>

¹⁹ "The implied ERP is computed by using expected cash flows in the future, and what investors are paying for those cash flows today, making them forward looking." Damodaran, "Equity Risk Premiums," p. 93.

²⁰ Exhibit JCN-5.

1 his formula (the other input being the dividend yield). As I described above, Dr.
2 Damodaran's approach assumes cash flows will grow for five years at an analyst-
3 forecasted rate, then assumes that growth will settle at a more sustainable long-term rate
4 based on the risk-free rate. But Mr. Nowak's approach assumes that cash flows will grow
5 in the long term at a constant rate based on analyst expectations of the next five years. It
6 is unrealistic to assume that earnings can grow in perpetuity at such a high rate, and Dr.
7 Damodaran's assumption that growth will settle to a more sustainable rate is much more
8 appropriate for a realistic application of the discounted cash flow model. This problem
9 with Mr. Nowak's approach will surface again when I discuss his DCF analysis for ROE.

10 **Q27 What risk-free rate did you use in your CAPM formula?**

11 **A27** To be consistent with my two ERPs, I used two corresponding risk-free rates. First, I used
12 the same risk-free rate of 4.41%, representing the current yield on long-term Treasury
13 bonds, that Dr. Damodaran used to calculate his ERP for June 2025. Second, I followed
14 Kroll's recommended method for the risk-free rate and used the spot 20-year Treasury
15 yield of 4.94%. Specifically, I calculated the average of the high and low 20-year
16 Treasury yields from June 25, 2025. My equity risk premiums and corresponding risk-
17 free rates are shown in Exhibit MJB-2.

18 **Q28 Explain how you arrived at the beta used in your CAPM formula.**

19 **A28** The beta coefficient is a measure of the sensitivity of a company's returns to the returns
20 of the market as a whole – how much the historical returns mathematically vary
21 compared to the variance of the historical returns of the market. Its relevance for the
22 CAPM formula is that it measures the risk associated with investing in the company's
23 equity that cannot be eliminated through portfolio diversification. In theory, an investor
24 can buy other stocks in the market to compensate for the risk of any one stock, but if that
25 stock's returns are heavily correlated with the returns of the market, the investor is
26 essentially not diversifying away the stock's risk because it is merely adding more of the
27 same kind of risk. Thus, beta is often described as a measure of "systematic risk" – the
28 financial risk of a company that is not the result of risks from the company itself, but
29 from its performance relative to the market as a whole (the "system").

1 While calculating beta for publicly-traded stocks is fairly straightforward due to the
2 availability of plentiful data on a stock's performance relative to the market, even a
3 company that is not publicly traded, such as SDG&E, carries systematic risk vis-à-vis the
4 market that can be calculated as a beta coefficient.

5 I use as beta in my CAPM formulas two different averages: First, the average of the
6 Value Line beta estimates for the companies in my proxy group, and second, the average
7 of the Bloomberg beta estimates for the companies in my proxy group. But for each of
8 these two betas, I make an important adjustment that makes the beta coefficient more
9 accurate.

10 **Q29 Please explain the adjustment you made to beta.**

11 **A29** To be more precise, as shown in Exhibit MJB-3, I remove an adjustment that has been
12 made to the Bloomberg and Value Line betas by those data sources. Bloomberg and
13 Value Line report "adjusted" betas rather than "raw" betas. Raw betas are converted into
14 adjusted betas through the commonly used "Blume adjustment" equation that is meant to
15 remove the bias that stems from the long-run tendency of betas to regress to 1. For stocks
16 in most industries, this tendency of betas is thought to be a result of efforts by
17 management to keep the systematic risk of a given firm close to that of the market.²¹

18 But this assumption that betas revert to the mean does not hold when it comes to the betas
19 of rate-regulated utilities. The ability to recover costs inoculates rate-regulated utilities
20 from systematic risk. Rate regulation protects investor-owned utilities like SDG&E from
21 the risks of rising expenses, commodity price risk and competitive risks, and they enjoy
22 natural monopolies that mitigate market risks associated with the customer base. As a
23 result, the Blume adjustment is not appropriate to apply to the betas of companies like
24 those in the Company's proxy group.

25 There is extensive academic literature supporting the inapplicability of the Blume
26 adjustment when it comes to utilities. The theoretical argument that the unique

²¹ Michelfelder, "Public Utility Beta Adjustment and Biased Costs of Capital in Public Utility Rate Proceedings"
The Electricity Journal, 2013. <https://www.sciencedirect.com/science/article/abs/pii/S1040619013002340>

1 characteristics of rate regulation reduce systematic risk for utility stocks is well-
2 supported. Utility stock performance tends to be countercyclical, so betas tend to be less
3 than 1.²²

4 There is a strong empirical record in the academic literature showing that rate-regulated
5 utility stock betas in practice do not revert to 1. An empirical analysis of the monthly
6 returns of stocks of 57 publicly-traded electric and gas utilities from 1962 to 2007 found
7 that the mean and median betas decline over time, rather than rise to 1, as the Blume
8 adjustment to beta assumes.²³

9 **Q30 Please explain how you arrived at the ROE using the CAPM.**

10 **A30** I calculated the cost of equity using four different CAPM formulas to account for two
11 different ERPs (Damodaran and Kroll) and two different average betas (Value Line and
12 Bloomberg). I provide the average of the four resulting ROEs in Exhibit MJB-4.

13 • **Discounted Cash Flow (DCF) Model**

14 **Q31 Please explain your application of the Discounted Cash Flow (DCF) model to**
15 **estimate the Company's cost of equity.**

16 **A31** I add the Company's growth rate, or (g), to the dividend yields of each company in my
17 proxy group to arrive at an estimated cost of equity. My DCF result is lower than Mr.
18 Nowak's primarily due to the lower estimate I use for the growth rate. Selecting the
19 growth rate may be the most important element of the DCF analysis.

²² "We note that it has been pointed out in the finance literature that applying the Blume adjustment can cause (rather than remedy) bias, particularly when being applied to industries where a beta of below or above unity is expected." Allen Consulting Group, "Empirical evidence on proxy beta values for regulated gas distribution activities," June 2007. <https://www.aemc.gov.au/sites/default/files/content/3016ea51-04c4-4b64-890c-845d23d2c47d/Annexure-C-Empirical-Evidence-on-Proxy-Betas.pdf>

²³ These results "strongly refute the validity of the Blume equation for public utility stocks." Michelfelder 2013.

1 **Q32 Why is the growth rate you have selected superior to that selected by Mr. Nowak?**

2 **A32**The EPS projections used by Mr. Nowak are all in the short term: five-year consensus
3 analyst earnings per share growth estimates. But a short-term growth rate cannot be the
4 only growth rate used in the DCF model.

5 The use of only short-term rates for perpetual growth leads to a wildly unrealistic
6 outcome. A DCF growth rate input higher than the growth rate of the economy as a
7 whole implies that, in the long run, the Company will grow larger than the entire U.S.
8 economy. Such an outcome is impossible.²⁴

9 **Q33 Explain how you selected the *g* you use in your DCF model.**

10 **A33**My DCF analysis is presented in Exhibits MJB-6 and MJB-7. I use two versions of the
11 DCF model.

12 First, I use a two-stage DCF model that includes a weighted average of a short-term
13 growth rate based on investor expectations of utility earnings growth and a long-term
14 growth rate that matches investor expectations of the growth of the domestic economy as
15 a whole. The formula for this model is essentially the same as that in the model used by
16 Mr. Nowak: $ke = (D1/P0) + g$.

17 But whereas in Mr. Nowak's model, (*g*) is merely the short-term earnings projection, in
18 the two-stage model (*g*) is a composite of the short-term projection and the long-term
19 growth rate that represents the proper bound for SDG&E's long-term growth, reflecting
20 that in the long term SDG&E cannot grow larger than the domestic economy of which it
21 is a part. The reason for this two-step process is that short-term and long-term growth
22 often differ and failing to account for those differences leads to an incorrect application
23 of the DCF model.²⁵

²⁴ Aswath Damodaran. *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset*, 3rd ed. John Wiley & Sons, Inc, 2012 ("If a firm is a purely domestic company, either because of internal constraints . . . or external constraints (such as those imposed by a government), the growth rate in the domestic economy will be the limiting value.")

²⁵ "The standard DCF model would be incorrectly specified when the investors' expected intermediate term EPS growth rate differs from the long-term sustainable EPS growth rate." Morin, p. 385.

1 My method follows FERC's approved methodology used to analyze the base ROE of a
2 public utility's rates under the Federal Power Act using the DCF model. FERC has
3 endorsed a two-step model in which the short-term growth rate is weighed at 80% and the
4 long-term growth rate is weighed at 20%.²⁶ I use those same weightings in my model.
5 Specifically, I weighed the short-term growth rates for each proxy group company from
6 Exhibit JCN-4 at 80%, and the long-term growth rate at 20%.

7 Candidates for long-term growth rates are listed in Exhibit MJB-5, and they each
8 represent conservative estimates of long-term economic growth. I select the highest of
9 these candidates, the nominal GDP growth rate from 2028 to 2035, as the value for the
10 long-term (g) used in the DCF formula.

11 Second, I use another version of the DCF model that is identical to the first except the
12 short-term growth rate is the average of the Value Line forecasts for dividend per share
13 growth of the proxy group companies, rather than an average of forecasts for earnings
14 growth. Regulatory jurisdictions such as the Massachusetts Department of Public Utilities
15 have recognized that DPS growth rates carry the advantage that firms tend to keep their
16 dividend growth stable over time, as opposed to EPS growth rates, which may vary based
17 on firm-specific events and economic conditions.²⁷ With that advantage in mind, I
18 include a version of the DCF model using dividend growth rates rather than earnings
19 growth rates in order to reduce the bias that comes from relying on a single version.

20 **Q34 How else does your DCF model differ from Mr. Nowak's?**

21 **A34** To calculate the stock prices used to arrive at dividend yields, Mr. Nowak uses prices
22 averaged over 30-, 90- and 180-trading-day periods.²⁸ To reflect current investor
23 expectations, the stock price should be as close to the current spot price as possible.
24 Averaging prices over a short time period to remove the risk of picking an outlier price is

²⁶ Stephen M. Spina, J. Daniel Skees and Patrick R. Pennella. "FERC Revises Methodology to Evaluate Return on Equity (Again)." Morgan Lewis, June 2, 2020, available at <https://www.lexology.com/library/detail.aspx?g=02bfb50d-f170-49ea-a65b-396594b7544c>

²⁷ Massachusetts Department of Public Utilities, Order in DPU 23-80 and 23-81, June 28, 2024.

²⁸ Exhibit JCN-4.

1 appropriate, but the 90- and 180-day periods selected by Mr. Nowak run the risk of
2 relying on stale information.²⁹

3 My stock prices represent the average of the high and low prices over the 30-day period
4 ending July 18, 2025, with prices obtained from Yahoo! Finance.

5 • **BYRP**

6 **Q35 Should the Commission consider Mr. Nowak's Bond Yield Plus Risk Premium**
7 **(BYRP) analysis for estimating ROE?**

8 **A35** No, it should not. It should be disregarded because it introduces into the calculation of
9 ROE, a process that should be based on objective data as much as possible, the reliance
10 on ROEs set by other regulatory commissions. That regulatory process of setting ROE is,
11 as the research about excessive utility ROEs I discussed above supports, not one that has
12 empirically resulted in returns that would be set by objective financial methodology.

13 Mr. Nowak's risk premium used in his BYRP analysis is the spread between those ROEs
14 historically set by other commissions in rate cases and long-term Treasury bond yields.³⁰
15 Therefore, the resulting risk premium he calculates is as large as it is only in relation to
16 the degree that regulatory commissions set ROEs at a premium to what the ROEs would
17 be using only objective financial methods.

18 This problem with similar Risk Premium models has been cited by FERC as one of the
19 reasons to reject the use of the model. In Opinion No. 569 in a 2019 order, FERC found
20 that "while all models, including the DCF, feature some circularity, such circularity is
21 particularly direct and acute with the Risk Premium model because it directly relies on

²⁹ Morin recommends no more than one month for an averaging period. Morin, p. 356: "To guard against the possibility that current stock price reflects abnormal conditions or constitutes a temporary aberration, while at the same time retaining the spirit of market efficiency, averaging stock prices over several recent trading days is a reasonable compromise... The average closing stock price calculated over the most recent 10 trading days period at the time of estimating the cost of equity is a reasonable procedure... A similar average computed over a one-month period rather than a 10-day period would not be unreasonable."

³⁰ Exhibit JCN-7.

past Commission ROE decisions.”³¹ In that decision, FERC also rejected the use of the Risk Premium model because it is “largely redundant with the CAPM.”

- **Expected Earnings Analysis**

Q36 Should the Commission consider Mr. Nowak’s Expected Earnings analysis as a benchmark for ROE?

A36 No. Mr. Nowak uses the projected returns on common equity for the utility companies that make up his proxy group.³² But the expected earnings approach requires one to look at the book profitability of unregulated companies with comparable risk to the company whose ROE is being estimated. Mr. Nowak’s proxy group is made up of holding companies that primarily or solely generate revenue from the regulated utilities they own. The problem with using regulated utilities is that the expected earnings approach is meant to be a measure of fair return in the economic sense of the term.³³

But if the book profitability of regulated utilities is used instead of that of unregulated companies, we are no longer estimating what the market views as the fair return for a company of comparable risk. Instead, we are considering the political decisions of other regulators who may diverge from what the market would consider. That is because the returns generated by the proxy group companies are heavily dependent on their authorized returns set by commissions.³⁴ Using the returns of regulated utilities divorces, Mr.

³¹ FERC Opinion 569, 169 FERC 61129 (2019), par. 343. Available at: https://www.ferc.gov/sites/default/files/2020-04/E-11_1.pdf.

³² Exhibit JCN-8.

³³ Morin, pp. 423-24: “The rationale of the method is that regulation is a surrogate for competition. The profitability of unregulated firms is set by the free forces of competition. In the long run, the free entry of competitors would limit the profits earned by these unregulated companies, and, conversely, unprofitable ventures and product lines would be abandoned by the unregulated companies. In other words, the free entry and exit of competitors should ensure that the profits earned by nonregulated firms are normal in the economic sense of the term. Aggregating book rates of return over a large number of comparable risk unregulated companies would even out any abnormal short run profit aberrations, while averaging over time would dampen any cyclical aberrations. Thus, by averaging the book profitability of a large number of unregulated companies over time, an appropriate measure of the fair return on equity for a public utility is obtained.”

³⁴ Morin, p. 426: “In defining a population of comparable-risk companies, care must be taken not to include other utilities in the sample, since the rate of return on other utilities depends on the allowed rate of return... It would be circular to set a fair return based on the past actions of other regulators, much like observing a series of duplicate images in multiple mirrors. The rates of return earned by other regulated utilities may well have been reasonable under historical conditions, but they are still subject to tests of reasonableness under current and prospective conditions.”

1 Nowak's benchmark ROE derived from his expected earnings analysis from economic
2 reality.

3 **5. CAPITAL STRUCTURE**

4 **Q37 What is SDG&E's current authorized capital structure, and does the utility propose**
5 **any changes to this structure?**

6 **A37** The utility's current authorized capital structure is 52.00% common equity, 45.25% debt,
7 and 2.75% preferred stock. Ms. Mekitarian's testimony proposes a structure of 54.00%
8 common equity, 46.00% debt, and 0% preferred stock in order to be "in alignment" with
9 SDG&E's actual five-year average capital structure of 54.9% common equity and 45.1%
10 debt.³⁵

11 **Q38 Has the CPUC supported the principle that a utility's authorized capital structure**
12 **should match its actual capital structure?**

13 **A38** No, quite the opposite. In 2019, the Commission ruled that rather than it "being the policy
14 of the Commission to match the capital structure authorization to the actual recorded
15 capital structure of the IOU," that instead it is "the policy of the Commission for the
16 authorization of an IOU's capital structure to be in the public interest of the ratepayers of
17 California."³⁶

18 **Q39 Does Ms. Mekitarian consider the public interest of ratepayers to justify her**
19 **proposed capital structure?**

20 **A39** No. Rather, she emphasizes how SDG&E shareholders are "not earning a return on the
21 difference" between the authorized and the actual capital structure.³⁷ The Commission is
22 under no obligation to improve the return for SDG&E shareholders without a justification
23 that doing so would be in the public interest of ratepayers. In my opinion, Ms. Mekitarian
24 fails to provide such a justification.

³⁵ Mekitarian Direct, p. 5, lines 2-5.

³⁶ Decision (D.)19-12-056, p. 11.

³⁷ Mekitarian Direct, p. 9, line 21.

1 **Q40** How do you evaluate Ms. Mekitarian’s argument that her proposed capital
2 structure change would “help SDG&E manage its increased business and financial
3 risks and improve its credit ratings”?³⁸

4 **A40** Ms. Mekitarian provides no evidence that SDG&E’s credit rating would improve if the
5 authorized capital structure is moved closer to the actual capital structure. As she herself
6 points out, “credit rating agencies assess SDG&E’s financial metrics based upon its
7 actual, not authorized, capital structure.”³⁹ From the standpoint of credit rating agencies,
8 nothing would change if the CPUC approved Ms. Mekitarian’s proposed capital
9 structure.

10 **Q41** What capital structure do you propose CPUC adopt in this case?

11 **A41** I recommend CPUC maintain SDG&E’s authorized capital structure of 52.00% common
12 equity, but move the 2.75% for preferred stock to debt, increasing the debt share of the
13 capital structure to 48%. Doing so ensures that the cost savings from no longer issuing
14 preferred stock flow to customers because debt is the lowest-cost form of financing.

15 **6. RISK PROFILE**

16 **Q42** Mr. Nowak concludes that SDG&E is “above average risk”⁴⁰ compared to the proxy
17 group, and thus the Company’s ROE should be set on the upper end of the range
18 produced by financial models. Did you adjust your ROE recommendation to reflect
19 business risks that are not captured by the financial models?

20 **A42** No. As I will explain, Mr. Nowak fails to show that the alleged risks faced by SDG&E
21 are greater than those faced by the proxy group companies.

22 • **Capital Expenditure Program**

23 **Q43** Mr. Nowak argues that the magnitude of SDG&E’s capital expenditure program
24 means it has more investments that “elevate the risk profile of SDG&E.”⁴¹ Does

³⁸ Mekitarian Direct, p. 5, line 17.

³⁹ Mekitarian Direct, p. 9, lines 18-19.

⁴⁰ Nowak Direct, p. 59, line 11.

⁴¹ Nowak Direct, p. 52, line 8.

1 **SDG&E have greater risk than the proxy group due to the size of its capital**
2 **expenditure program?**

3 **A43** Mr. Nowak does not attempt to compare the capital expenditure program of SDG&E to
4 those of the proxy group, so we can make no conclusions about the Company's risk
5 relative to the proxy group on this point. I asked in discovery the following question:

6 How does the size of SDG&E's capital spending program compare to those of the proxy
7 group companies?

8 In response, SDG&E said that "Mr. Nowak has not performed the requested analysis."⁴²

9 • **Environmental Mandates**

10 **Q44** Mr. Nowak argues that the requirements imposed on SDG&E to procure electric
11 energy from renewable energy are significantly more stringent relative to the proxy
12 group companies. What evidence does he provide to justify this claim?

13 **A44** Mr. Nowak describes California's climate change mitigation requirements and states that
14 California is one of 17 states⁴³ that will require at least 50 percent carbon-free generation
15 by 2050, citing a National Conference of State Legislatures report from 2021.⁴⁴ He does
16 not provide a statistic pertaining to the states represented in the proxy group companies –
17 only the United States as a whole. He does not explain why California being one of 17
18 states to have this type of climate change mitigation requirement puts it in a unique or
19 unusual position, given this set of states is over 1/3 of the states in the United States.

⁴² MJB-8: UCAN-SDGE Data Request 003

⁴³ Nowak Direct, p. 53, line 4.

⁴⁴ "Brief: State Renewable Portfolio Standards and Goals." National Conference of State Legislatures. Aug. 13, 2021. Available at: <https://www.ncsl.org/energy/state-renewable-portfolio-standards-and-goals>

1 **Q45 Does Mr. Nowak provide sufficient data to compare the renewable energy electric**
2 **procurement requirements imposed on SDG&E to those imposed on the proxy**
3 **group companies?**

4 **A45** No. As I describe above, Mr. Nowak does not state the renewable energy electric
5 procurement requirements for the states represented in the proxy group companies. He
6 does not make an effort to compare the requirements imposed on SDG&E to those
7 imposed on the proxy group companies.

8 **Q46 Mr. Nowak goes on to argue that the more stringent climate change mitigation**
9 **requirements imposed on SDG&E create risks for SDG&E relative to the proxy**
10 **group companies related to demanding public policy goals.⁴⁵ Do you agree that**
11 **these requirements are more stringent and demanding and create more risk for**
12 **SDG&E?**

13 **A46** No. The degree to which a requirement is stringent and demanding depends on context. It
14 is not sufficient to directly compare state renewable portfolio standards (RPS) without
15 considering other factors, for example states' baseline levels of renewable energy electric
16 procurement.

17 Even if Mr. Nowak had proven that California has a higher RPS requirement than the
18 other states in the proxy group, that does not mean that the requirement is more stringent.
19 RPS targets are set with a state's ability and current circumstances in mind. One indicator
20 that supports this point is that most states with an RPS are hitting their targets.⁴⁶

21 **Q47 Putting aside the RPS level, then, how many of the proxy group companies' states**
22 **have RPS requirements at all?**

23 **A47** As mentioned above, Mr. Nowak does not compare the environmental requirements
24 placed on SDG&E to the proxy group companies. I decided to make this comparison. I

⁴⁵ Nowak Direct, p. 53, lines 9-14.

⁴⁶ Barbose, Galen. "U.S. State Renewables Portfolio & Clean Electricity Standards: 2024 Status Update." Lawrence Berkeley National Laboratory. August 2024. Slide 29. Available at: https://eta-publications.lbl.gov/sites/default/files/lbnl_rps_ces_status_report_2024_edition.pdf

1 used data on state renewable portfolio standards (percent of Applicable Retail Electricity
2 Sales) from Lawrence Berkeley National Laboratory in tandem with Exhibit JCN-9 to
3 calculate the percentage of jurisdictions within the proxy group companies that are
4 subject to a non-zero RPS in 2025 and in 2050.⁴⁷

5 I found that of the total operating jurisdictions in the proxy group (114 across the proxy
6 group companies), 61 percent have an RPS in 2025 and 2050. Specifically, 70 operating
7 jurisdictions are subject to an RPS in 2025 and 69 are subject to an RPS in 2050. This
8 indicates that being subject to an RPS (as SDG&E is) is more typical in the proxy group
9 companies than not being subject to an RPS.

10 I repeated this calculation after limiting the proxy group companies in Exhibit JCN-9 to
11 the parent companies that own at least one gas utility to be more comparable to SDG&E,
12 which spans gas and electricity. Of the total operating jurisdictions in the proxy group
13 that operate under parent companies owning at least one gas utility (91 across the proxy
14 group companies), 65 percent have an RPS in 2025 and 2050. Specifically, 60 operating
15 jurisdictions are subject to an RPS in 2025 and 59 are subject to an RPS in 2050. This
16 reinforces the finding that being subject to an RPS is more typical in the proxy group
17 companies than not being subject to an RPS.

18 **Q48 What is your conclusion regarding the risk of environmental mandates and SDG&E**
19 **relative to the proxy group companies?**

20 **A48** I shared that the level of an RPS alone does not dictate stringency or demandingness –
21 that this depends on state context. I conclude that alongside SDG&E, the majority of the
22 proxy group companies are subject to an RPS in 2025 and 2050. Therefore, I conclude
23 that SDG&E does not have elevated risk from environmental mandates relative to the
24 proxy group.

⁴⁷ Barbose, Galen. “RPS and CES Nominal Percentage Targets.” Excel spreadsheet. Lawrence Berkeley National Laboratory. August 2024. Available at: <https://emp.lbl.gov/projects/renewables-portfolio/>

1 • **Wildfire Risk**

2 **Q49 Mr. Nowak claims that “wildfire risk alone” is a reason for SDG&E’s ROE to be set**
3 **at the upper end of the range produced by the financial models.⁴⁸ Do you agree?**

4 **A49** No. I refer to testimony submitted on behalf of UCAN by Karl Pavlovic. Mr. Pavlovic
5 explains how SDG&E’s wildfire risk is already accounted for in its credit ratings.⁴⁹ Out
6 of the 26 companies in Mr. Nowak’s proxy group, 20 have an S&P credit rating of BBB+
7 or lower,⁵⁰ meaning 76.9% of the proxy group have ratings equal to or lower than
8 SDG&E. Clearly, whatever wildfire risk SDG&E is exposed to has not pushed its risk
9 above that of the average proxy group company.

10 • **Regulatory Risk**

11 **Q50 What does Mr. Nowak say about the relationship between the regulatory risk**
12 **framework and revenue decoupling?**

13 **A50** Mr. Nowak names five factors that affect the regulatory risk of SDG&E and proxy group
14 companies. One of these five factors is revenue decoupling.⁵¹ Mr. Nowak shares that
15 revenue decoupling protects against volumetric risk.⁵²

16 **Q51 What point does Mr. Nowak make, following his analysis, about how the regulatory**
17 **framework reduces or doesn’t reduce the risk of SDG&E relative to the proxy**
18 **companies?**

19 **A51** Mr. Nowak argues that overall, from an investor perspective, the regulatory framework
20 does not provide risk mitigation that meaningfully reduces the risk of the Company
21 relative to the proxy companies.⁵³

⁴⁸ Nowak Direct, p. 59, line 13.

⁴⁹ UCAN Exhibit – 02, Direct Testimony of Karl Pavlovich, pp. 5-9

⁵⁰ Exhibit JCN-3.

⁵¹ Exhibit JCN-56.

⁵² Nowak Direct, p. 57, lines 7-10.

⁵³ Nowak Direct, p. 57, lines 15-16.

1 **Q52 Does Mr. Nowak specify how revenue decoupling, as one of the five factors,**
2 **contributes to this overall argument that the regulatory framework does not provide**
3 **risk mitigation that meaningfully reduces the risk of SDG&E relative to the proxy**
4 **companies?**

5 **A52** No. Mr. Nowak states that SDG&E is able to apply a true-up mechanism to mitigate
6 volumetric risk through decoupling, while approximately 54 percent of the operating
7 companies held by the proxy group have either full or partial revenue decoupling
8 measures that protect against volumetric risk.⁵⁴ Mr. Nowak does not explicitly draw a
9 conclusion from this statement.

10 **Q53 What additional information does Exhibit JCN-9 include about how SDG&E**
11 **compares to the proxy group companies in terms of revenue decoupling?**

12 **A53** Exhibit JCN-9 specifies that SDG&E has full revenue decoupling. The exhibit also
13 specifies that 14.9 percent of the proxy group companies have full revenue decoupling.
14 Another 38.6 percent have partial revenue decoupling.⁵⁵ These groups add up to the 54
15 percent Mr. Nowak references in his direct testimony.

16 **Q54 What conclusion do you draw from Exhibit JCN-9 about SDG&E's volumetric risk**
17 **relative to the proxy group companies based on Mr. Nowak's statement that**
18 **revenue decoupling protects against volumetric risk?**

19 **A54** By Mr. Nowak's logic, full revenue decoupling, which SDG&E has, protects against
20 volumetric risk more than partial revenue decoupling does and more than no decoupling
21 does. In the proxy group, 85.1 percent of companies have less revenue decoupling than
22 SDG&E does. I conclude that relative to the proxy group companies, SDG&E has
23 meaningfully lower volumetric risk.

⁵⁴ Nowak Direct, p. 57, lines 7-10.

⁵⁵ Exhibit JCN-9.

Q55 Has Mr. Nowak justified his statement that the regulatory framework does not provide risk mitigation that meaningfully reduces the risk of the Company relative to the proxy companies?

A55 No. The data from Mr. Nowak's own exhibit JCN-9 suggests that in terms of the revenue decoupling factor in the regulatory framework, SDG&E has lower risk relative to the proxy companies. Mr. Nowak has not addressed this nor has he stated that the revenue decoupling factor should be ignored within the regulatory risk framework.

7. OVERALL RATE OF RETURN

Q56 What is the cost of long-term debt you used to calculate the overall rate of return?

A56 I find that the Application's proposed cost of long-term debt of 4.62% to be reasonable.

Q57 How do you calculate the overall rate of return?

A57 I calculate the overall rate of return by multiplying the ratios for equity and long-term debt by their respective costs, and then summing the resulting weighted costs. The resulting ROR is shown in the following table:

Component	Capital Ratio	Cost	Weighted Cost
Long-Term Debt	48%	4.62%	2.22%
Preferred Stock	0.00%	6.22%	0.00%
Common Equity	52%	8.87%	4.61%
Rate of Return	100%	N/A	6.83%

1 **Q58** How does your recommended ROR compare to SDG&E's current authorized
2 ROR?

3 **A58** My recommended ROR of 6.83% is 0.62% lower than SDG&E's current authorized ROR
4 of 7.45%, and, compared to the revenue requirement that results from that 7.45% ROR,
5 my 6.83% ROR would result in revenue requirement savings for customers of \$94.83
6 million on an annualized basis. I calculated those savings by substituting my ROR for
7 SDG&E's in the Company's workpaper where it calculates the revenue requirement
8 impact of its proposed cost of capital (UCAN-SDGE-002_ATTCH_Q1 Rev Req Impact).
9 SDG&E's application states that its application will increase the revenue requirement by
10 \$96.45 million, so my recommendation would lead to \$191.28 million in annual revenue
11 savings for customers relative to SDG&E's proposal.

12 **Q59** Does this conclude your testimony?

13 **A59** Yes.

**ATTACHMENTS TO DIRECT TESTIMONY OF MATTHEW BANDYK ON BEHALF
OF UTILITY CONSUMERS' ACTION NETWORK CONCERNING SAN DIEGO GAS
AND ELECTRIC COMPANY 2026 COST OF CAPITAL**

MJB-1: Resume of Matthew Bandyk

MJB-2: Equity Risk Premium and Corresponding Risk-Free Rates

MJB-3: Beta

MJB-4: CAPM Analysis

MJB-5: Long-Term Growth Rate Sources

MJB-6: DCF (with Earnings Growth Rates)

MJB-7: DCF (with Dividend Growth Rate)

MJB-8: UCAN-SDG&E Data Request 003

MJB-1: Resume of Matthew Bandyk

Matthew Bandyk, Principal Associate

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mbandyk@synapse-energy.com

PROFESSIONAL EXPERIENCE

Synapse Energy Economics, Inc., Cambridge, MA. *Principal Associate*, January 2025 – Present.

- Performs financial analysis for clients in regulatory cases involving utility cost of capital.
- Summarizes complex technical concepts to clients, regulators, and public audiences through papers, presentations, testimony, and meetings.
- Creates, uses, and maintains spreadsheet-based tools and other analytical platforms to analyze energy technologies, programs, and portfolios.

5 Lakes Energy, Northport, MI. *Consultant*, September 2021 – December 2024

- Provided public policy recommendations and financial analysis for nonprofit energy advocacy and government clients.
- Served as expert witness in testimony in Michigan Public Service Commission rate cases; testimony contributed to hundreds of millions of dollars in ratepayer savings from the outcome of cases.
- Frequently used Microsoft Excel for testimony and projects, such as designing financial models for the City of Ann Arbor.
- Coordinated the writing and research for major reports for clients, such as the Citizens Utility Board of Michigan's Utility Performance Report and Evergreen Collaborative's Michigan Clean Energy Framework.
- Served as communications strategist for the Michigan Energy Innovation Business Council, including writing social media, blog posts on utility regulation and policy issues, enterprise articles in publications like Utility Dive, and op-eds in newspapers like the Detroit Free Press and the Detroit News.
- Significantly expanded contract work for 5 Lakes Energy by bringing in clients from my independent consultancy.

Bandyk Consulting LLC, Royal Oak, MI. *Clean Energy Consultant*, January 2019 – September 2021

- Performed communications and regulatory engagement strategy, including writing comments in regulatory cases, for clients such as the Citizens Utility Board of Michigan and the Michigan Energy Innovation Business Council.

Atwell LLC, Southfield, MI. *Financial Services Manager*, May 2018 – January 2019.

- Purchased long-lived assets to support Atwell's work in environmental and engineering project consulting.
- Performed financial analysis to overhaul company's asset leasing policies with goal of saving up to ~\$100k per year by improving asset life.

Environmental Defense Fund, Toledo, OH. *Climate Corps Fellow*, Summer 2017

- Built financial valuation tool for payback, NPV and IRR of solar arrays planned by client, determining best ROI for about \$300,000 in solar investments.
- Designed energy use tracking system for the largest private low-income housing provider in Toledo, Ohio; system saved hundreds of work hours annually.

DTE Energy, Detroit, MI. *MBA Student Consultant*, March 2017 – April 2017

- Performed market and regulatory compliance research on original proposal for DTE to enter the corporate renewable energy space; presented to company leadership.
- Designed tariff to add wind/solar and cut rates by 20% compared to DTE's green tariff.

S&P Global Market Intelligence/SNL Financial, Arlington, VA. *Reporter*, June 2010 – August 2016

- Used Excel analysis of power plant output and commodity price databases to create actionable intelligence about new trends in the energy industry for clients.
- Wrote articles on utilities, power plants, energy efficiency and regulation for subscription website read daily by thousands of energy and investment professionals.

EDUCATION

University of Michigan Stephen M. Ross School of Business, Ann Arbor, MI
Master of Business Administration, 2018

Davidson College, Davidson, NC
Bachelor of Arts in Political Science, 2006; *cum laude*

Society for Utility and Regulatory Financial Analysts
Certified Rate of Return Analyst, 2025

TESTIMONY

Michigan Public Service Commission (Docket U-21806): Direct Testimony of Matthew J. Bandyk regarding the application of Consumers Energy Company for authority to increase its rates for the distribution of natural gas and for other relief. On behalf of Citizens Utility Board of Michigan. April 23, 2025.

Michigan Public Service Commission (Docket U-21585): Direct Testimony of Matthew J. Bandyk regarding Consumers Energy Company's application for authority to increase its rates for the generation and distribution of electricity and for other relief. On behalf of Citizens Utility Board of Michigan, Natural Resources Defense Council and Michigan Environmental Council. September 27, 2024.

Michigan Public Service Commission (Docket U-21534): Direct Testimony of Matthew J. Bandyk regarding DTE Electric Company's application to increase its rates, amend its rate schedules and rules

governing the distribution and supply of electric energy, and for miscellaneous accounting authority. On behalf of Citizens Utility Board of Michigan and Michigan Environmental Council. July 25, 2024.

Michigan Public Service Commission (Docket U-21555): Direct Testimony of Matthew J. Bandyk regarding Upper Peninsula Power Company's application for authority to increase its rates for the generation and distribution of electricity and for other relief. On behalf of Citizens Utility Board of Michigan. July 19, 2024.

Michigan Public Service Commission (Docket U-21540): Direct Testimony of Matthew J. Bandyk regarding Michigan Gas Utilities Corporation's application for authority to increase retail natural gas rates and for other relief. On behalf of Citizens Utility Board of Michigan. June 28, 2024.

Michigan Public Service Commission (Docket U-21291): Direct Testimony of Matthew J. Bandyk regarding DTE Gas Company's application 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. On behalf of Citizens Utility Board of Michigan. May 7, 2024.

Michigan Public Service Commission (Docket U-21490): Direct Testimony of Matthew J. Bandyk regarding Consumers Energy Company's application for authority to increase its rates for the distribution of natural gas and for other relief. On behalf of Citizens Utility Board of Michigan. April 22, 2024.

Michigan Public Service Commission (Docket U-21389): Direct Testimony of Matthew J. Bandyk, Natural Resources Defense Council, Sierra Club, and Citizens Utility Board of Michigan regarding Consumers Energy Company's application for authority to increase its rates for the generation and distribution of electricity and for other relief. On behalf of Michigan Environmental Council. August 29, 2023.

Michigan Public Service Commission (Docket U-21048): Direct Testimony of Matthew J. Bandyk regarding Consumers Energy Company's application for approval to implement a power supply cost recovery plan for the 12 months ending December 31, 2022. On behalf of Citizens Utility Board of Michigan. April 29, 2022.

Resume updated June 2025

MJB-2: Equity Risk Premium and Corresponding Risk-Free Rates

Exhibit MJB-2

Equity Risk Premium and Corresponding Risk-Free Rates

Damodaran¹	Equity Risk Premium
Damodaran (Trailing 12 months with sustainable payout)	4.02%
Damodaran (Trailing 12 months)	4.23%
Damodaran (smoothed)	5.43%
Damodaran (normalized)	3.73%
Damodaran (net cash yield)	3.96%
Kroll ²	5%

High **5.43%**

	Risk-Free Rate
Damodaran	4.24%
Kroll ³	4.94%

¹ Aswath Damodaran. "Implied ERP by month for previous months (September 2008- Current)." https://pages.stern.nyu.edu/~adamodar/New_Home_Page/home.htm. Accessed April 2025.

² Kroll, "Kroll Lowers its Recommended U.S. Equity Risk Premium to 5.0%, Effective June 5, 2024," June 6, 2024. https://media-cdn.kroll.com/jssmedia/kroll-images/pdfs/kroll-lowers-its-recommended-us-equity-risk-premium-effective-june-5-2024.pdf?_ga=2.111398599.2140960630.1741375312-1534596282.1741375312

³ 20-year Treasury yield as of 6/25/25. <https://www.cnbc.com/quotes/US20Y>. Kroll recommends "using the spot 20-year U.S. Treasury yield as the proxy for the risk-free rate if the prevailing spot yield as of the valuation date is higher than the Kroll normalized U.S. risk-free rate of 3.5%."

MJB-3: Beta

Exhibit MJB-3

Beta

Company	Value Line Beta (a)	Raw beta (b)	Bloomberg beta (c)	Raw beta (d)
Alliant Energy Corporation	0.9	0.84615385	0.77	0.656716418
Ameren Corporation	0.9	0.84615385	0.74	0.611940299
Avista Corporation	0.95	0.92307692	0.74	0.611940299
CMS Energy Corporation	0.85	0.76923077	0.73	0.597014925
Consolidated Edison	0.8	0.69230769	0.62	0.432835821
DTE Energy Company	1	1.00000000	0.81	0.71641791
Duke Energy Corporation	0.9	0.84615385	0.71	0.567164179
Entergy Corporation	1	1.00000000	0.84	0.76119403
Exelon Corporation	NMF	N/A	0.85	0.776119403
NorthWestern Corporation	1	1.00000000	0.86	0.791044776
PPL Corporation	1.1	1.15384615	0.93	0.895522388
Public Service Enterprise Group	1	1.00000000	0.85	0.776119403
Wisconsin Energy Corporation	0.85	0.76923077	0.72	0.582089552
Xcel Energy Inc.	0.85	0.76923077	0.72	0.582089552
Average	0.930769231	0.893491124	0.777857143	0.668443497

(a) Exhibit JCN-6

(b) = ((a)-0.35)/0.65

(c) Exhibit JCN-6

(d) = ((c)-0.33)/0.67

MJB-4: CAPM Analysis

Exhibit MJB-4

CAPM Analysis

ERP (Damodaran) ¹	Risk-free rate (Damodaran) ²	Value Line Beta ³	Cost of Equity ⁴
5.43%	4.41%	0.89	9.26%
ERP (Damodaran)	Risk-free rate (Damodaran)	Bloomberg Beta ⁵	Cost of Equity
5.43%	4.41%	0.67	8.04%
ERP (Kroll) ⁶	Risk-free rate (Kroll) ⁷	Value Line Beta	Cost of Equity
5.50%	4.94%	0.89	9.85%
ERP (Kroll)	Risk-free rate (Kroll)	Bloomberg Beta	Cost of Equity
5.50%	4.94%	0.67	8.61%
Average			8.94%

¹ Exhibit MJB-2.

² Id.

³ Exhibit MJB-3.

⁴ = Risk-free rate plus (Beta times ERP)

⁵ Exhibit MJB-3.

⁶ Exhibit MJB-2.

⁷ Id.

MJB-5: Long-Term Growth Rate Sources

Exhibit MJB-5

Long-Term Growth Rate Sources

Nominal GDP annual average growth rate 2028-2035 ¹	3.80%
Real GDP annual average growth, 2028-2035 ²	1.80%
Inflation annual average growth rate, 2028-2035 (GDP price index) ³	2.0%

¹ Congressional Budget Office. *The Budget and Economic Outlook: 2025 to 2035*. Table C-1. January 2025. https://www.cbo.gov/publication/61172#_idTextAnchor004.

² Id.

³ Id

MJB-6: DCF (with Earnings Growth Rates)

Exhibit MJB-6

DCF (with Earnings Growth Rates)

[illegible]

[1] Source: Value Line

[2] Source: Yahoo! Finance covering 30-day period ending June 25, 2025.

[3] Id.

[4] Average of [2] and [3]

[5] [1] divided by [4]

[6] [5] times $[1 + (0.5 * [10])]$

[7] Source: Value Line

[8] Source: Exhibit JCN-4

[9] Id.

[10] Average of [7], [8] and [9]

[11] Source: Exhibit MJB-5.

[12] [6] plus (0.8 times [10]) plus (0.2 times [11])

MJB-7: DCF (with Dividend Growth Rate)

Exhibit MJB-7

DCF (with Dividend Growth Rate)

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
	Annualized Dividend	High Closing Stock Price	Low Closing Stock Price	Average Stock Price	Dividend Yield	Expected Dividend Yield	Value Line Dividend Growth Rate	Long-term Growth Rate	Cost of Equity
Alliant Energy Corporation	\$1.92	62.25	60.01	61.13	3.14%	3.24%	6.00%	3.80%	8.80%
Ameren Corporation	\$2.68	97.32	94.38	95.85	2.80%	2.89%	6.50%	3.80%	8.85%
Avista Corporation	\$1.90	38.82	36.94	37.88	5.02%	5.12%	4.00%	3.80%	9.08%
CMS Energy Corporation	\$2.06	70.92	68.76	69.84	2.95%	3.01%	4.00%	3.80%	6.97%
Consolidated Edison	\$3.32	104.49	98.33	101.41	3.27%	3.35%	4.50%	3.80%	7.71%
DTE Energy Company	\$4.15	137.12	131.17	134.145	3.09%	3.14%	3.00%	3.80%	6.30%
Duke Energy Corporation	\$4.14	117.72	114.45	116.085	3.57%	3.63%	3.50%	3.80%	7.19%
Entergy Corporation	\$2.30	83.29	80.92	82.105	2.80%	2.88%	5.50%	3.80%	8.04%
Exelon Corporation	\$1.52	43.91	42.2	43.055	3.53%		NMF	3.80%	
NorthWestern Corporation	\$2.60	55.69	50.85	53.27	4.88%	4.92%	1.50%	3.80%	6.88%
PPL Corporation	\$1.01	34.85	33.45	34.15	2.96%	3.05%	6.50%	3.80%	9.01%
Public Service Enterprise Group	\$2.40	83.34	78.09	80.715	2.97%	3.06%	6.00%	3.80%	8.62%
Wisconsin Energy Corporation	\$3.34	107.56	103.15	105.355	3.17%	3.28%	7.00%	3.80%	9.64%
Xcel Energy Inc.	\$2.16	70.1	65.65	67.875	3.18%	3.29%	6.50%	3.80%	9.25%
Average									8.18%

[1] Source: Value Line

[2] Source: Yahoo! Finance covering 30-day period ending June 25, 2025.

[3] Id.

[4] Average of [2] and [3]

[5] [1] divided by [4]

[6] [5] times [1+(0.5*[10])]

[7] Source: Value Line

[8] Source: Exhibit MJB-5.

[9] [6] plus (0.8 times [7]) plus (0.2 times [8])

MJB-8: UCAN-SDG&E Data Request 003

Data Request Number: UCAN-SDGE-003

Proceeding Name: A2503013 - SDGE 2026 Cost of Capital

Publish To: Utility Consumers' Action Network

Date Received: 6/3/2025

Date Responded: 6/17/2025

I. GENERAL OBJECTIONS

1. SDG&E objects generally to each request to the extent that it seeks information protected by the attorney-client privilege, the attorney work product doctrine, or any other applicable privilege or evidentiary doctrine. No information protected by such privileges will be knowingly disclosed.
2. SDG&E objects generally to each request that is overly broad and unduly burdensome. As part of this objection, SDG&E objects to discovery requests that seek "all documents" or "each and every document" and similarly worded requests on the grounds that such requests are unreasonably cumulative and duplicative, fail to identify with specificity the information or material sought, and create an unreasonable burden compared to the likelihood of such requests leading to the discovery of admissible evidence. Notwithstanding this objection, SDG&E will produce all relevant, non-privileged information not otherwise objected to that it is able to locate after reasonable inquiry.
3. SDG&E objects generally to each request to the extent that the request is vague, unintelligible, or fails to identify with sufficient particularity the information or documents requested and, thus, is not susceptible to response at this time.
4. SDG&E objects generally to each request that: (1) asks for a legal conclusion to be drawn or legal research to be conducted on the grounds that such requests are not designed to elicit facts and, thus, violate the principles underlying discovery; (2) requires SDG&E to do legal research or perform additional analyses to respond to the request; or (3) seeks access to counsel's legal research, analyses or theories.
5. SDG&E objects generally to each request to the extent it seeks information or documents that are not reasonably calculated to lead to the discovery of admissible evidence, or where the burden, expense, or intrusiveness of the request clearly outweighs the likelihood that the information sought will lead to the discovery of admissible evidence.
6. SDG&E objects generally to each request to the extent that it is unreasonably duplicative or cumulative of other requests.
7. SDG&E objects generally to each request to the extent that it would require SDG&E to search its files for matters of public record such as filings, testimony, transcripts, decisions, orders, reports or other information, whether available in the public domain or through FERC or CPUC sources.
8. SDG&E objects generally to each request to the extent that it seeks information or documents that are not in the possession, custody or control of SDG&E.

Data Request Number: UCAN-SDGE-003

Proceeding Name: A2503013 - SDGE 2026 Cost of Capital

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Date Received: 6/3/2025

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9. SDG&E objects generally to each request to the extent that the request would impose an undue burden on SDG&E by requiring it to perform studies, analyses or calculations or to create documents that do not currently exist.
10. SDG&E objects generally to each request that calls for information that contains trade secrets, is privileged or otherwise entitled to confidential protection by reference to statutory protection. SDG&E objects to providing such information absent an appropriate protective order or non-disclosure agreement.
11. SDG&E objects to any request that states that it is ongoing or that requires subsequent, supplemental information.

II. EXPRESS RESERVATIONS

1. No response, objection, limitation or lack thereof, set forth in these responses and objections shall be deemed an admission or representation by SDG&E as to the existence or nonexistence of the requested information or that any such information is relevant or admissible.
2. SDG&E reserves the right to modify or supplement its responses and objections to each request, and the provision of any information pursuant to any request is not a waiver of that right.
3. SDG&E reserves the right to rely, at any time, upon subsequently discovered information.
4. These responses are made solely for the purpose of this proceeding and for no other purpose.

Data Request Number: UCAN-SDGE-003

Proceeding Name: A2503013 - SDGE 2026 Cost of Capital

Publish To: Utility Consumers' Action Network

Date Received: 6/3/2025

Date Responded: 6/17/2025

1. Mr. Nowak's testimony states that "SDG&E is projecting a substantial capital spending program" that will require investments "that elevate the risk profile of SDG&E." How does the size of SDG&E's capital spending program compare to those of the proxy group companies?

SDG&E Response 1:

SDG&E objects for the reasons contained in general objection number 9. Subject to and without waiving that objection, Mr. Nowak has not performed the requested analysis. As discussed in Mr. Nowak's testimony at page 51, S&P has pointed specifically "Continued negative discretionary cash flow primarily due to robust capital spending" as a "key risk" to SDG&E credit profile. In the cited report (S&P, San Diego Gas & Electric Co. published June 26, 2024) S&P's discussion of financial risk also provides further details, noting "Our base case forecast includes capital spending averaging close to \$2.4 billion for 2024-2026." This discussion also observes, "We expect the company will continue to operate with negative discretionary cash flow through 2026 due to its large capital spending program." S&P also cites "Assumed maintenance capital spending of about \$2 billion" as a "principal liquidity issue."

Data Request Number: UCAN-SDGE-003

Proceeding Name: A2503013 - SDGE 2026 Cost of Capital

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2. Mr. Nowak's testimony states that "California is one of 17 states that will require at least 50 percent carbon-free generation by 2050." What proxy group companies are operating in states with similar environmental mandates?

SDG&E Response 2:

Of the 26 companies included in Mr. Nowak's proxy group, only four companies (ED, EIX, POR, PEG) operate entirely in states with a comparable mandate to require at least 50 percent carbon-free generation by 2050 like SDG&E. Eleven proxy companies (LNT, CMS, DTE, ETR, EVRG, NEE, NWE, OGE, PNW, SO, WEC) operate in states without a comparable environmental mandate. The remaining companies operate in multiple jurisdictions, some with and some without comparable environmental mandates.

However, of those companies that operate in states with varying environmental mandates (AEP, DUK, AVA, BKH, FE, XEL, AEE, IDA, PPL, TXNM, EXC), only one company (EXC) operates in a majority of jurisdictions with comparable environmental mandates.