

WILD TREE FOUNDATION
WTF-DR-002
SDG&E 2022 COST OF CAPITAL - A.21-08-013
DATE RECEIVED: DECEMBER 8, 2021
DATE RESPONDED: DECEMBER 22, 2021

I. 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, contains assumptions or a hypothetical, 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.
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.

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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.

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Question 1:

Please provide a copy of all sources referenced in Mr. Coyne's Direct Testimony.

SDG&E Response 1:

SDG&E objects for the reasons contained in general objection number 6. Notwithstanding and without waiving that objection, the sources referenced in Mr. Coyne's Direct Testimony were provided to Wild Tree Foundation in response to Wild Tree's first data request, WTF-DR-001, Question a, where SDG&E produced data requests responses and the corresponding attachments that it had responded at that time in this proceeding. Specifically, see Response 1-2 of EPUC/IS-DR-001.

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Question 2:

Please provide a copy of the bond indentures of all currently active bond indentures for SDG&E and Sempra Energy.

SDG&E Response 2:

SDG&E objects to this request on the grounds set forth in General Objections Nos. 2, 5, and 8. Subject to the foregoing objection, SDG&E responds as follows. The prospectus/prospectus supplements that are filed with the Securities and Exchange Commission (SEC) provide detailed information with respect to SDG&E's active debt issuances. All prospectus filings can be found at:

<https://www.sec.gov/cgi-bin/browse-edgar?company=San+Diego+Gas&owner=exclude&action=getcompany>

Please note, with respect to each bond issuance listed on the above website, there are three filings: 424B2, 424B5, and FWP. The relevant and informative document filing is the 424B2, which is the prospectus/prospectus supplement. The filing 424B5 is only a preliminary shell of the 424B2 filing. The FWP filing is a summary-level Final Term Sheet, which may also contain relevant information.

Bond indenture documents may be old and do not contain the detailed information contained in the prospectus/prospectus supplement filings.

For the reasons stated in Objection 5, Sempra Energy is a third-party that is not a party to this proceeding. Sempra Energy's bond documents are not subject to SDG&E's possession or control. SDG&E makes its own bond issuances, and it is the capital structure and cost of debt of SDG&E that is at issue in this proceeding. Sempra Energy's bond documents are thus not relevant.

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Question 3:

Is there any “ring fencing” around any of the Sempra Energy subsidiaries to contain liabilities in the event of financial troubles at any one of the subsidiaries? a. If yes, please state which ones have the ring fencing. Provide the documentation that shows this ring fencing exists.

SDG&E Response 3:

SDG&E objects for the reasons contained in general objection number 3. Notwithstanding and without waiving that objection, SDG&E filed the 2021 Affiliate Transactions Compliance Plan with the CPUC on June 30, 2021 (Advice Letter 3796-E/2995G). Please refer to section IX.C. Ring-Fencing of the Compliance Plan for the ring-fencing provisions related to SDG&E. Sempra Energy’s other subsidiaries are not a party in the Cost of Capital proceeding and therefore this response addresses SDG&E only.

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Question 4:

Please provide the current cost of short-term debt to SDG&E and explain how it is determined (e.g., a certain percentage over the LIBOR rate).

SDG&E Response 4:

SDG&E typically raises short-term debt in the commercial paper market. SDG&E can currently access commercial paper at rates ranging from 0.20% for overnights to 0.45% for one-month maturities. The commercial paper rate is determined by supply and demand in the money markets and is influenced by several factors, including those impacting the global economy, U.S. monetary and fiscal policy, etc. While it is generally correlated with the LIBOR rate, it is not tied to it.

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Question 5:

Please explain why SDG&E has not recommended the inclusion of any short-term debt in its capital structure.

SDG&E Response 5:

SDG&E objects for the reasons contained in general objection number 5. Notwithstanding and without waiving that objection, consistent with longstanding California Public Utilities Commission precedent, SDG&E's capital structure for ratemaking purposes includes common equity, long-term debt and preferred stock. As stated in D.12-12-034 at 5, "Debt due within one year, short-term debt, is excluded" from the ratemaking capital structure. There is no "authorized" short-term debt component in the authorized capital structure because SDG&E finances its capital investments with long-term debt and equity.

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Question 6:

Please provide the average balances of: i. Short-term debt used by SDG&E for 2019, 2020, 2021 and projected for the Test Year, and ii. CWIP earning AFUDC for SDG&E for 2019, 2020, 2021 and projected for the Test Year.

SDG&E Response 6:

- i. SDG&E objects for the reasons contained in general objections numbers 5 and 9. Notwithstanding and without waiving those objections, short-term debt is not part of SDG&E's authorized capital structure; therefore SDG&E did not project average short-term balances for the Test Year. However, below are SDG&E's recorded average short-term debt balances from 2019 through November 2021.

Year	Avg. Balance (USD)
2019	\$124,796,083
2020	\$204,724,674
2021 (<i>as of Nov-21</i>)	\$320,638,665

- ii. SDG&E objects for the reason contained in general objection number 5. Notwithstanding and without waiving that objection, in general, allowance for funds used during construction (AFUDC) is applied monthly during construction work-in-progress (CWIP) to capital projects that will result in plant assets. However, there are some exceptions in which AFUDC is not applied. The amount of CWIP that receives AFUDC versus the amount that does not receive AFUDC is not readily available and would be unduly burdensome to calculate.

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Question 7:

How does the business risk of the non-SDG&E portion of Sempra Energy's business compare to the business risk of SDG&E:

- a. Before considering wildfire risk, and
- b. After considering wildfire risk
- c. Provide a copy of all studies relied upon to obtain these answers.

SDG&E Response 7:

SDG&E objects for the reasons contained in general objections numbers 2, 3, 5, 7 and 8. Under longstanding Commission precedent, SDG&E's cost of capital is set based upon SDG&E's risks. Sempra Energy, and other Sempra Energy operating companies, are separate corporations often operating in different spheres. SDG&E is not in a position to offer evidence regarding the risk of non-SDG&E related corporations beyond the risks publicly disclosed by Sempra Energy in its 10-K and 10-Q reports to the Securities and Exchange Commission. Nor is the impact of SDG&E's risks on Sempra Energy's overall risks relevant to this proceeding, as the Commission sets SDG&E's cost of capital. SDG&E has offered relevant testimony and reports from investor analysts and credit rating agencies, among others, addressing both wildfire and non-wildfire risks. As Sempra Energy is publicly traded, relevant investor analyst reports discuss the impact of SDG&E's risks on Sempra Energy's stock value.

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Question 8:

Please provide a copy of all studies relied upon by Sempra Energy to determine what capital structure it feels is appropriate for Sempra Energy.

SDG&E Response 8:

SDG&E objects to this request on the grounds set forth in General Objections numbers 3 and 5. SDG&E has its own authorized capital structure set in cost of capital proceedings. SDG&E also maintains its own actual capital structure. Sempra's capital structure is thus irrelevant to this proceeding. Furthermore, Sempra's capital structure is a result of actual activities. Sempra Energy presumably therefore does not "determine what capital structure it feels is appropriate."

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Question 9:

Please define the cost of equity.

SDG&E Response 9:

The cost of equity is the return an investor requires as compensation for the risk borne by providing capital for a given equity investment.

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Question 10:

Is the cost of equity market-based? Please explain.

SDG&E Response 10:

Yes, the cost of equity is market-based, but estimating the cost of capital often requires both market and other indicators because the cost of equity cannot be directly observed. For SDG&E, the cost of equity cannot be directly observed because, as described on page JMC-33 “the ROE is a market-based concept and SDG&E is not publicly traded.” Therefore, market-based models for similarly situated companies (i.e., the proxy group) are considered for estimating the cost of equity for SDG&E. *See* D.19-12-056 pp. 16-17.

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Question 11:

Are capital markets predictable? Please explain.

SDG&E Response 11:

SDG&E objects for the reasons contained in general objections number 2, 3, and 5. Notwithstanding and without waiving those objections, the question is unclear as to what elements of capital markets the question is asking can or cannot be predicted, what “predictable” means, and at what point of certainty something is predictable as compared to unpredictable. While certain investor behavior can be expected or estimated given a certain set of assumptions, generally speaking, the future behavior of capital markets cannot be predicted with absolute certainty. Such a condition would suggest that there is no risk in capital market investments, when in fact such risks exist at differing levels for different investments.

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Question 12:

Referring to page JMC-3, lines 8-9 of Mr. Coyne's Direct Testimony it states "I have estimated SDG&E's ROE range based on the results from standard models used for the purpose of estimating the required rate of return for regulated utilities..."

- a. Did Mr. Coyne use all standard models? Please explain.
- b. Please list the standard models Mr. Coyne chose not to use and why.

SDG&E Response 12:

- a. SDG&E objects for the reasons contained in general objection number 3, specifically what constitutes a "standard" model. Notwithstanding and without waiving that objection, because the cost of equity is not directly observable, it must be estimated based on both quantitative and qualitative information. Many well-regarded finance texts recommend using multiple approaches when estimating the cost of equity. For example, Copeland, Koller, and Murrin¹ suggest using the Capital Asset Pricing Model (CAPM) and Arbitrage Pricing Theory model, while Brigham and Gapenski² recommend the CAPM, Discounted Cash Flow (DCF) model, and Bond Yield Plus Risk Premium approaches. As a practical matter, however, all of the models available for estimating the cost of equity are subject to limiting assumptions or other methodological constraints. In Mr. Coyne's experience, the DCF model, the CAPM, the Bond Yield Plus Risk Premium model, and the Expected Earnings model are the four most commonly considered approaches to determine the cost of equity in a regulatory proceeding. While other model variations exist (e.g., the Empirical CAPM), Mr. Coyne considered the DCF, CAPM, Bond Yield Plus Risk Premium, and Expected Earnings approaches are the most relevant for estimating SDGE's cost of equity in the current capital market conditions. The Commission has likewise long recognized the benefit of using multiple models.
- b. Please see response to a.

¹ Tom Copeland, Tim Koller and Jack Murrin, Valuation: Measuring and Managing the Value of Companies, 3rd Ed. (New York: McKinsey & Company, Inc., 2000), at 214.

² Eugene Brigham, Louis Gapenski, Financial Management: Theory and Practice, 7th Ed. (Orlando: Dryden Press, 1994), at 341.

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Question 13:

Referring to page JMC-8, lines 18-20 of Mr. Coyne's Direct Testimony it states, "The ROE represents the cost of raising and retaining equity capital and is estimated by using one or more analytical techniques that use market data to quantify investor requirements for equity returns."

- a. Should the cost of raising and retaining equity capital be market-based? Please explain.

SDG&E Response 13:

- a. SDG&E objects for the reasons contained in general number 6. Notwithstanding and without waiving that objection, as described in Response 10 above, the cost of equity, including the cost of raising and retaining equity capital, is a market-based concept. Since SDG&E is not publicly traded the cost of equity cannot be directly observed for the Company but must be estimated using publicly traded proxy companies.

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Question 14:

Referring to page JMC-15, lines 15-17 of Mr. Coyne's Direct Testimony it states "Moreover, additional fiscal stimulus is likely to increase inflationary pressure, and the bond market may be at risk of a sharp upward spike in interest rates if inflation is higher than currently anticipated by investors."

- a. Did Mr. Coyne conduct an analysis to determine investors' current anticipated inflation? If yes, please provide this analysis and its results.
- b. What are investors' inflation expectations over the next 10, 20 and 30 years? Please provide the analysis used to determine these expectations. If it is not possible to measure investors' inflation expectations over these time periods, please explain why not.
- c. Is there a risk that interest rates will decrease? Please explain.
- d. Please explain why investors who expect interest rates to increase would purchase a long-term treasury bond.

SDG&E Response 14:

- a. Please see JMC-21 through JMC-27 for Mr. Coyne's extensive analysis of inflation expectations and its effect on estimates of the cost of equity.
- b. SDG&E objects for the reasons contained in general objections numbers 2 and 8. Notwithstanding and without waiving this objections, Mr. Coyne has not performed the requested analysis regarding 10, 20, or 30 year inflation expectations.
- c. SDG&E objects for the reasons contained in general objections numbers 2 and 8. As described in Response 11 above, the future behavior of capital markets cannot be predicted with absolute certainty and interest rates could increase or decrease in the future, especially when no timeframe for such a condition is given. That said, the Federal Reserve has recently announced plans to end its monthly bond-buying program by March 2022 and raise interest rates three times in 2022. *See* <https://www.nytimes.com/2021/12/15/business/economy/inflation-fed-fomc-meeting-december-2021.html>.
- d. SDG&E objects for the reasons contained in general objections numbers 2 and 3. Notwithstanding and without waiving those objections, the question is unclear as the timeframe and duration for which interest rates are expected to increase. Nonetheless, investment decisions represent opportunity costs. As such, the decision to purchase a long-term treasury bond when an investor expects interest rates to increase may be reasonable given the investors' return requirements, available investment alternatives, and risk appetite.

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Question 15:

Referring to page JMC-10, lines 9-12 of Mr. Coyne's Direct Testimony it states, "It is important to consider current and expected conditions in the general economy and financial markets because the authorized ROE for a public utility should allow the utility to attract investor capital at a reasonable cost under a variety of economic and financial market conditions, as underscored by the Hope and Bluefield decisions." Is Mr. Coyne discussing conditions expected by investors? Please explain.

SDG&E Response 15:

Yes, Mr. Coyne's reference to "current and expected conditions" is with regard to investors' expectations for capital market conditions.

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Question 16:

Referring to page JMC-10, lines 18-21 of Mr. Coyne's Direct Testimony it states "If investors do not expect current market conditions to be sustained in the future, it is possible that the ROE estimation models will not provide an accurate estimate of investors' forward-looking required return. Therefore, an assessment of current and projected market conditions is integral to any ROE recommendation."

- a. Please define investors' expected market conditions.
- b. Please define projected market conditions.
- c. Should the cost of equity be based on investors' expectations or projected market conditions? Please explain.
- d. Does Mr. Coyne agree with the following statement: if investors do not expect 5- year historical betas for electric utilities to be sustained in the future, it is possible that the ROE estimation models based on 5-year historical betas will not provide an accurate estimate of investors' forward-looking required return." Please explain.
- e. What are investors' forward-looking expectations regarding electric utility betas? Please explain.

SDG&E Response 16:

- a. SDG&E objects for the reasons contained in general objection number 3. As a preliminary matter, Mr. Coyne did not use the phrase "investors' expected market conditions" in the referenced section of his testimony. The response assumes that the question is looking for clarification as to Mr. Coyne's use of the phrase "If investors do not expect current market conditions to be sustained in the future...".

This phrase refers to the fact that each model used to estimate the cost of equity are subject to limiting assumptions or other methodological constraints. If investors expect changes in capital market conditions (i.e., "investors do not expect current market conditions to be sustained in the future"), and the limiting assumptions of the models do not allow for such changes in market conditions, the results of the models may not be accurate.

- b. Broadly, "Projected market conditions" refers to estimates of future outcomes of market indices, prices, yields, or other relevant financial or economic metric.
- c. When faced with the task of estimating the cost of equity, analysts and investors are inclined to gather and evaluate as much relevant data as reasonably can be analyzed. Similarly, both investors' expectations and projected market conditions are relevant information in estimating the cost of equity. The relative weight one should give to investors' expectations versus projected market conditions depends on the nature of the specific estimate and the application of the information.

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SDG&E Response 16:-Continued

- d. SDG&E objects for the reasons contained in general objection number 3. This question asks a simplified, stylized hypothetical question, the premise of which may not have any relationship to actual facts and circumstances. Notwithstanding and without waiving that objection, as stated in response to subpart (c), the conclusion to such a hypothetical would depend on the nature of the specific estimate and the application of the information. That is, it would depend on how it was determined that “investors do not expect 5-year historical betas for electric utilities to be sustained.” Further, it would depend on what period investors do not expect such levels to be sustained, whether it is a subset of investors, and the like; in other words the assumed hypothetical’s relationship to all other relevant information.

- e. SDG&E objects for the reasons contained in general objection number 2. Notwithstanding and without waiving this objection, as stated in Mr. Coyne’s Direct Testimony on pages JMC-41 to JMC-42, each component of the CAPM is intended to be forward-looking. With respect to Beta coefficients, it is important to include sufficient historical data to ensure that the estimate is not skewed by anomalous events, but not to include excessive historical data such that the estimate fails to reflect current market conditions. Mr. Coyne’s use of 5-year historical values of the Beta coefficient balances these objectives, and he is not aware that forecasts of betas for individual companies are available to corroborate these historical values, so this is a limitation of the CAPM model.

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Question 17:

Referring to page JMC-33, lines 8-12 of Mr. Coyne's Direct Testimony it states "As interest rates increase, high utility valuations are expected to decline as utilities underperform the broader market. For that reason, the results of the DCF model tend to understate the forward-looking cost of equity because the dividend yield is calculated using historical average stock prices, which do not fully reflect investors' expectation for higher inflation and higher bond yields." Did Mr. Coyle implement a non-constant, or multi-stage, DCF model to measure how investors' expectation that utility valuations will decline impacts the cost of equity? If yes, please provide this analysis. If not, please explain why not.

SDG&E Response 17:

Mr. Coyne did not use a Non-Constant Growth or Multi-Stage DCF model in his analysis. Multi-Stage DCF analysis are typically applied by using multiple growth rates to reflect expectations for changes in growth over time. As discussed on page JMC-33, Mr. Coyne's concern was not with respect to growth rates, but "high utility valuations," which have a direct effect on the dividend yield portion of the DCF model. As such, a Multi-Stage DCF approach would not directly address the concern raised by Mr. Coyne.

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Question 18:

Referring to page JMC-32, lines 13-15 of Mr. Coyne's Direct Testimony it states "The assumptions used in the ROE estimation models have been affected by recent, historically atypical market conditions. Therefore, it is important to consider the results of multiple methodologies to inform the determination of the appropriate cost of equity for SDG&E in this proceeding."

- a. Please explain how Mr. Coyne decided which methodologies to not include in his analysis.
- b. Please explain why Mr. Coyne did not include a non-constant or multi-stage DCF model in his analysis.

SDG&E Response 18:

SDG&E objects for the reasons contained in general objection number 6. Notwithstanding and without waiving this objection, SDG&E responds as follows:

- a. Please see Response 12 above.
- b. Please see Response 17 above.

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Question 19:

Referring to Figure 3 on page JMC - 14 of Mr. Coyne's Direct Testimony:

- a. Please provide a detailed description of the Value Line method of calculating betas, exactly as used to calculate the betas in the chart.
- b. Please provide a detailed description of the Bloomberg method of calculating betas, exactly as used to calculate the betas in the chart.
- c. Confirm or deny that, in calculating betas, the Value Line method applies the "Blume Adjustment."
- d. State whether the application of the "Blume Adjustment" to the calculation of betas is necessary.
- e. State whether Mr. Coyne has undertaken any analysis or research to validate the findings of the 1975 study on the "Blume Adjustment" in the context of subsequent developments in applied economics to validate whether the findings of that study still apply 50 years later. If so, please provide the research.
- f. When applying the CAPM, is it important to use a consistent market index for the calculation of beta coefficients and the overall market risk premium? Please explain.
- g. Could using Value Line's precise methodology on a fixed date, but using a different market index (i.e., the S&P 500 Index vs. the NYSE Composite Index), result in significantly different beta coefficients? Please explain.
- h. Which day of the week was used to calculate weekly returns for the beta calculation?
- i. Are betas based on weekly returns calculated on different days of the week the same?
- j. Please provide the same data as provided in Figure 3, but based on rolling 12- and 18-month betas.

SDG&E Response 19:

- a. SDG&E objects for the reasons contained in general objection number 8, as Value Line is the progenitor of its method for calculating betas. Notwithstanding and without waiving that objection, Value Line describes its methodology as for estimating Beta as "a relative measure of the historical sensitivity of the stock's price to overall fluctuations in the New York Stock Exchange Composite Index. A Beta of 1.50 indicates a stock tends to rise (or fall) 50% more than the New York Stock Exchange Composite Index. The "Beta coefficient" is derived from a regression analysis of the relationship between weekly percentage changes in the price of a stock and weekly percentage changes in the NYSE Index over a period of five years. In the case of shorter price histories, a smaller time period is used, but two years is the minimum. The Betas are adjusted for their long-term tendency to converge toward 1.00."
- b. SDG&E objects for the reasons contained in general objection number 8, as Bloomberg is the progenitor of its method for calculating betas. Notwithstanding and without waiving that objection, Bloomberg Beta coefficients as calculated in the chart are derived from a regression analysis of the relationship between weekly percentage

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SDG&E Response 19b:-Continued

changes in the price of a stock and weekly percentage changes in the S&P 500 Index over a period of five years to calculate a Raw Beta. To derive the reported Adjusted Beta, a Blume adjustment is applied as follows: $(\text{Raw Beta} \times 0.67) + (1.00 \times 0.33)$.

- c. Confirmed.
- d. Yes, the Blume adjustment accounts for the tendency of Beta to trend back over time to the market Beta of 1.00.
- e. Mr. Coyne has not independently validated the findings of the 1975 study on the “Blume Adjustment,” but rather is aware of the recommended use of adjusted Beta coefficients is widespread in the investment community and corporate finance textbooks. As cited by Dr. Roger A. Morin in New Regulatory Finance at 73, several more contemporary publications validate this finding.
- f. As shown on page JMC-42, both equation [3] (the CAPM formula) and equation [4] (the Beta coefficient formula) require an estimate of the required market return as a whole. The return on market indices are used as a proxy for “the return on the market as whole.” To the extent that the Market Risk Premium and Beta coefficient apply different market indices in their respective estimates of the overall market return, as long as the individual estimates are both measures of the overall market and there is no bias between the two estimates, there is no fundamental inconsistency.
- g. Over the period 5-year period analytical period included in Mr. Coyne’s estimates of Beta coefficients, weekly returns on the S&P 500 and the NYSE Composite Index were highly correlated with an R^2 value of 0.941. Therefore, it is unlikely for “significantly different beta coefficients” to result using different market indices (i.e., the S&P 500 Index vs. the NYSE Composite Index) in Mr. Coyne’s analysis.
- h. The weekly market returns are calculated as of the close of business, each week, on Friday.
- i. While it is possible for minor differences in Beta coefficients if different days of the week are used in the calculation of weekly returns, it is unlikely that there is a significant difference unless there was a specific bias associated with market returns for the overall market, or the subject company based on the day of the week.
- j. SDG&E objects for the reasons contained in general objection number 9. Notwithstanding and without waiving that objection, Mr. Coyne has not performed the requested analysis, and Value Line does not publish Beta coefficients based on the requested inputs.

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Question 20:

Referring to page JMC-45, lines 12-14 of Mr. Coyne's Direct Testimony it states, "I then calculated the MRP by subtracting the risk-free rate (based on the current 30-year Treasury bond yield of 2.20 percent, or the 5-year forecast of the 30-year Treasury bond of 3.50 percent) from the total market return." Is the market-based cost of 30-year debt 3.5 percent? Please explain.

SDG&E Response 20:

As described in Mr. Coyne's Direct Testimony on page JMC-43, the 3.50 percent estimate of the risk-free rate is "the Blue Chip forecast of the yield on 30-year Treasury bonds for 2023-2027." This is a projected market cost of debt. As noted on pages JMC-43 to JMC-44, Blue Chip Financial Forecasts has been recognized by regulatory commissions as "widely relied on by investors and provides a useful proxy for investor expectations for the risk-free rate."

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Question 21:

Referring to page JMC-45, Figure 11 of Mr. Coyne's Direct Testimony. Please provide detailed description of the methodology used by the sources provided to calculate the market return.

SDG&E Response 21:

SDG&E objects for the reasons contained in general objection number 6. Notwithstanding and without waiving that objection, the methodologies for the three estimates of the Total Market Return are described in Mr. Coyne's Direct Testimony on pages JMC-44 to JMC-45. In addition, Exhibit JMC-5.1 provides the detailed analysis, including footnotes identifying the specific calculations and source materials used in the derivation of each value included in JMC-45, Figure 11. The Excel version of this exhibit was provided in response to EPUC 1-1, and additional source materials were provided in Response to EPUC 1-2.

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Question 22:

Referring to page JMC-12, lines 3-9 of Mr. Coyne's Direct Testimony it states, "The Chicago Board Options Exchange ("CBOE") Volatility Index ("VIX") measures investors' expectations of volatility in the S&P 500 over the next 30 days. As shown in Figure 2, the VIX reached 82.69 on March 16, 2020 in response to the pandemic. The VIX last traded above 80 in November 2008 during the financial crisis and Great Recession of 2008/09. As a point of comparison, from January 1, 2021 through June 30, 2021 the VIX averaged 20.60, higher than the long-term average of 16.86 from 2010- 2019. This indicates that equity market volatility levels have settled but remain above the historical mean."

- a. How does near-term volatility measures of Electric Utilities compare to that of the overall market?
- b. Has the spread between the near-term volatility measure of Electric Utilities versus the overall market increased or decreased since before the onset of the Covid pandemic in December 2019?

SDG&E Response 22:

- a. As shown in Figure 3 on page JMC-14 and Figure 7 on page JMC-30, Beta coefficient indicate that the volatility of Electric Utilities is somewhat below the level of volatility for the overall market. However, these Figures demonstrate that the volatility of Electric Utilities are approaching the level of volatility of the overall market.
- b. As shown in Figure 3 on Page JMC-14 and Figure 7 on page JMC-30, the overall spread in volatility between Electric Utilities and the overall market has decreased since the period prior to the COVID-19 pandemic. That is, the volatility of Electric Utilities has increased relative to the volatility of the overall market and has converged towards the volatility of the overall market.