

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



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Application of Pacific Gas and Electric
Company for Authority to Establish Its
Authorized Cost of Capital for Utility
Operations for 2026.

Application 25-03-010
(Filed March 20, 2022)

And Related Matters.

A.25-03-011 (March 20, 2025)
A.25-03-012 (March 20, 2025)
A.25-03-013 (March 20, 2025)

**SIERRA CLUB & THE PROTECT OUR COMMUNITIES FOUNDATION
REPLY BRIEF**

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SUMMARY OF RECOMMENDATIONS

Sierra Club & PCF recommend the Commission approve the following costs of capital and capital structure for the utilities.

	Sierra Club & PCF Recommendations			
	PG&E	SCE	SCG	SDG&E
Rate of return	5.62	5.47	5.64	5.42
Cost of equity	6.22	6.11	6.21	6.15
Cost of preferred equity	NA	NA	NA	NA
Cost of long-term debt	5.01	4.70	4.99	4.61
Capital structure				
Common equity	50.4	54.7	52.9	52.6
Preferred equity	0.0	0.0	0.0	0.0
Long-term debt	49.6	45.3	47.1	47.4
Annual customer savings compared to utility's requested rate of return (\$ B)	-3.33	-2.02	-0.44	-0.33
Annual customer savings (percentage)	-15.9	-17.5	-11.4	-11.9

- The Commission should include analysis of overall ratepayer costs before approving any utility rate of return.
- The Commission should reject any cost of capital estimates based on the Risk Premium Analysis or Expected Earnings Analysis models.
- The Commission should reject cost of capital estimates based on a Discounted Cash Flow model that assumes impossible levels of utility growth.
- The Commission should reject any cost of capital estimates based on a Capital Asset Pricing model that includes either inflated risk-free rates of returns or inflated estimates of utility-specific risk.

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SIERRA CLUB & PROTECT OUR COMMUNITIES FOUNDATION REPLY BRIEF

Pursuant to Rule 13.12 of the California Public Utilities Commission (“Commission”) Rules of Practice and Procedure, and the July 16, 2025 Assigned Commissioner’s Ruling Consolidating Four Applications and Scoping Memo and Ruling (“Scoping Memo”), Sierra Club and Protect Our Communities Foundation (“PCF”) respectfully submit this timely filed joint Reply Brief.

I. INTRODUCTION

Through their applications and in their opening briefs, Pacific Gas & Electric (“PG&E”), Southern California Edison (“SCE”), San Diego Gas & Electric (“SDG&E”) and Southern California Gas (“SoCalGas” or “SCG”; collectively “Utilities”) ask the Commission to approve excessive rates of return without demonstrating that they are meet the just and reasonable standard and prioritize shareholder interests over ratepayer interests. As justification, the utilities point to financial models—some of which have been rejected by federal courts, and some of which include unrealistic assumptions that inflate the estimated cost of capital for Utilities. The Utilities’ opening briefs raised to resolve these issues or provide sufficient rationale for approving their requested rates of return.

In contrast, multiple stakeholders established evidence that the Utilities’ proposals are inflated by unrealistic assumptions and fail to reflect the actual cost of capital. Multiple experts

demonstrate that California utility rates of return have provided windfall profits to utility shareholders at enormous expense to ratepayers.

The Commission should reject the Utilities’ proposals for unreasonably high returns on equity (“ROEs”) and equity-heavy capital structures, as the Utilities’ requested rates of return are not justified by the Utilities’ evidence or market conditions.

All of the non-utility stakeholders agree that approving the excessive ROEs requested by the utilities would exacerbate the state’s affordability crisis. Instead, the Commission needs to identify and approve lower, market-based ROEs and balanced capital structures to protect ratepayers.

II. THE COMMISSION’S STATUTORY OBLIGATIONS MUST GUIDE ITS ANALYSIS IN THIS PROCEEDING.

The Utilities and others misconstrue the legal standards that apply to the Commission’s analysis in this case. For example, Cal Advocates mistakenly argues that the just and reasonable standard set forth in Public Utilities Code section 451 and 454 arose from the *Bluefield* and *Hope* cases,¹ and EPUC and IS appear to make a similar erroneous assumption.² However, the just and reasonable standard was adopted by the California Legislature in 1911, more than a decade before *Bluefield* was decided in 1923 and more than three decades before *Hope* was decided in 1944.³

The question in *Bluefield* was “whether the rates prescribed in the [Public Service Commission of West Virginia’s] order are confiscatory and therefore beyond legislative power,”⁴ a question that arose under the Takings Clause of the United States Constitution, which is applicable to the states under the Fourteenth Amendment.⁵ Here, the Utilities do not — because they could not — suggest that reduced ROEs would come anywhere close to implicating the Takings Clause.⁶

Moreover, *Hope* did not require any state “to adopt a ROR that is ‘fair’ and ‘reasonable,’”⁷ but rather addressed the fixing of just and reasonable rates under the Natural Gas

¹ Cal Advocates Opening Brief, p. 6.

² EPUC IS Opening Brief, p. 6 (conflating the confiscatory analysis with the legal standard).

³ Stats. 1911, 1st Ex. Sess., ch. 14, p. 25 (Section 13, subdivisions (a) and (c)).

⁴ *Bluefield Waterworks & Improvement Co. v. Pub. Service Com. of West Virginia* (1923) 262 U.S. 679, 690.

⁵ U.S. Const., Amend V; *id.* at Amend XIV; *see* PCF Opening Brief, p. 9.

⁶ PCF Opening Brief, pp. 13, 16-17, 21-22, 25-26.

⁷ Cal Advocates Opening Brief, p. 6.

Act and ultimately held that “there are no constitutional requirements more exacting than the standards of the Act.”⁸

Looking at the rates as a whole, *Hope* held that even “a meager return” on a utility’s rate base can be sufficient for the utility “to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risks assumed.”⁹ *Hope* upheld the Federal Power Commission’s rate reductions which were based on an analysis of the “actual operations” of Hope Natural Gas Co., and unequivocally established that reducing the value of a utility’s earnings does **not** invalidate a rate order.¹⁰ *Hope*’s review of the actual dollar value going into the pockets of the utility corporation and the operational surplus that the corporation had accumulated¹¹ highlights the fatal flaw in the Utilities’ and other parties proposals which remain divorced from any analysis of the Utilities’ actual operational needs.¹²

Although the Natural Gas Act and the Public Utilities Code both refer to “just and reasonable” rates, the language of the Natural Gas Act and Public Utilities Code sections 451 and 454 are not identical. The standard of judicial review of Commission decisions in California is much different than the standard applied in *Hope*.¹³ In California, the Commission’s duties under sections 451 and 454 must be considered in the context of the Legislature’s express intent to reduce rates to “the lowest amount possible.”¹⁴

III. UTILITIES FAILED TO DEMONSTRATE JUST AND REASONABLE RATES BECAUSE THEY FAILED TO SHOW HOW THE PROPOSALS WOULD IMPACT RATEPAYERS.

Opening briefs from the Utilities provided no additional evidence or argument that their applications support, or even consider, ratepayer impacts. As applicants, the Utilities have the burden of proof to demonstrate that their cost of capital applications—including capital structure, return on equity (ROE), and rate of return (ROR)—are “just and reasonable.”¹⁵ In the *Hope*

⁸ *Federal Power Commission v. Hope Natural Gas Co.* (1944) 320 U.S. 591, 607.

⁹ *Id.* at 605.

¹⁰ *Id.* at 593, 601, 605.

¹¹ *Federal Power Commission v. Hope Natural Gas Co.*, *supra*, 320 U.S. 591 at 603-604.

¹² PCF Opening Brief, pp. 20-22.

¹³ *Center for Biological Diversity, Inc. v. Pub. Util. Com.* (2025) 18 Cal.5th 293; Cal. Const. art. XII, § 5; Pub. Util. Code, §§ 1757, 1758; compare *Federal Power Commission v. Hope Natural Gas Co.*, *supra*, 320 U.S. 591 at 602.

¹⁴ Pub. Util. Code, § 747; see also Pub. Util. Code, § 1757, subd. (a)(2).

¹⁵ Pub. Util. Code § 454(a) (“Except as provided in Section 455, a public utility shall not change any rate or so alter any classification, contract, practice, or rule as to result in any new rate, except upon a showing before the commission and a finding by the commission that the new rate is justified.”); Pub. Util. Code, § 451.

decision, the Supreme Court makes clear that the ratemaking process of identifying “just and reasonable rates” involves “a balancing of the investor and the consumer interests.”¹⁶ California law further requires that the Commission ensure that rates for electricity and natural gas be reduced “to the lowest amount possible.”¹⁷

Just and reasonable rates thus should not include rates of return exceeding the Utilities’ costs of capital, which harm ratepayers in myriad ways beyond the immediate costs of the excess ROEs.¹⁸ As noted in opening briefs, courts, federal agencies, and the utility experts in this proceeding all endorse the goal of identifying a rate of return for the utilities that matches the cost of capital.¹⁹ As explained by former FERC Commissioner Mark Christie, “The goal of the utility regulator is to set a utility ROE that tracks as closely as possible the actual cost of equity capital in the marketplace and is consistent with the landmark Bluefield and Hope cases.”²⁰

Contrary to what SDG&E would have this Commission believe, low ROEs do not “cause investors to move to utilities with higher ROEs.”²¹ If SDG&E’s argument were true, then only utilities with the highest ROEs would be able to attract capital. But all utilities are able to attract capital. SDG&E’s and SoCalGas’s sister company, Oncor, provides an example. Oncor has a lower ROE than SDG&E and SoCalGas, but Sempra’s capital plan for Oncor exceeds even Sempra’s record-high capital plan for SDG&E and SoCalGas²² and targets dividend payout ratios of 50% to 60% “across all three platforms.”²³ A lower ROE may temporarily reduce the *price* investors are willing to pay for purchasing shares, but investors will still provide capital and be attracted to purchasing stock at the lower price – possibly even *more attracted* due to the lower price.²⁴ The Commission’s duty is to protect ratepayers, not stock prices.²⁵

¹⁶ *Fed. Power Com. v. Hope Natural Gas Co.*, *supra*, 320 U.S. 591, 603.

¹⁷ Pub. Util. Code, § 747.

¹⁸ PCF Opening Brief, p. 8, 14; *Tenn. Gas Pipeline Co. v. FERC* (1991) 926 F.2d 1206, 1208.

¹⁹ Sierra Club Opening Brief, p. 7.

²⁰ FERC Docket Nos. ER13-1508-001, et al., Item E-1: Commissioner Christie Concurring Regarding Entergy Return on Equity (ROE) (May 20, 2021), available at <https://www.ferc.gov/news-events/news/item-e-1-commissioner-christie-concurring-regarding-entergy-return-equity-roe>.

²¹ SDG&E Opening Brief at 7.

²² PCF-02, Slide 44 (pdf. p. 45; *id.* at Slide 30 (pdf. p. 31)).

²³ *Id.* at Slide 32 (pdf. p. 33).

²⁴ PCF Opening Brief, p. 12.

²⁵ *Federal Power Commission v. Hope Natural Gas Co.*, *supra*, 320 U.S. 591 at 601 (“Rate-making is indeed but one species of price-fixes. The fixing of prices, like other applications of the police power, may reduce the value of the property which is being regulated. But the fact that the value is reduced does not mean that the regulation is invalid.”) (citations omitted).

Nor does any legal or factual basis exist for SoCalGas's unsubstantiated and unsupported claim that ROE estimates below recently authorized ROEs for gas utilities somehow fails "to satisfy the *Hope* and *Bluefield* comparable return standard."²⁶

Despite the Commission's statutory obligation to protect ratepayers, the Utilities have made no attempt to consider consumer interests beyond qualitative statements that credit downgrades could raise ratepayer costs, prevent the Utilities from raising capital, and other fear mongering arguments. In opening briefs, the Utilities frequently raise concerns about credit downgrades or potential increases to the cost of debt or capital,²⁷ but the Utilities include no attempt to quantify those risks or costs or to support them with real-world examples.

The Utilities ignore the most significant source of their capital: ratepayers. SDG&E claims that in order "[t]o invest in 'rate base assets,' such as wires, poles, pipelines, and substations to deliver electricity and/or natural gas to customers, a utility raises funds" in only two ways: "issuing debt or selling equity."²⁸ But SDG&E omits the most significant source of funds that it has available to use to invest in rate base assets: funds directly provided from ratepayers, including in the form of deferred taxes, depreciation, and amortization.²⁹ The Utilities' opening briefs thus fail to provide the most basic information the Commission needs to address the fundamental question at issue in this case: how to pay for the Utilities' necessary capital investments at the lowest costs to the ratepayers.

IV. OPTIMIZING ROE, CAPITAL STRUCTURE, AND CREDIT QUALITY WILL MAINTAIN OR IMPROVE THE UTILITIES' CREDITWORTHINESS WHILE SAVING CALIFORNIA RATEPAYERS \$6.1 BILLION PER YEAR.

The Utilities' opening briefs, like their testimony, fail to acknowledge that a utility's Return on Equity (ROE) and capital structure are interconnected financial elements that directly influence its credit rating and overall cost to ratepayers. By carefully analyzing and optimizing these factors together, it is possible to achieve a balance that meets market expectations for investor returns while significantly reducing costs for ratepayers. Unfortunately, the utilities in this proceeding failed to conduct such an analysis, focusing instead on investor interests without

²⁶ SoCalGas Opening Brief, p. 30.

²⁷ SDG&E Opening Brief, p. 35; SoCalGas Opening Brief, p. 68; SCE Opening Brief, p. 46; PG&E Opening Brief, p. 59.

²⁸ SDG&E Opening Brief, p. 6.

²⁹ PCF-01, p. F-19 (pdf. p. 40), F-25 (pdf. p. 46). *See also* PCF Opening Brief, p. 22.

adequately addressing ratepayer impacts beyond qualitative assertions of “grave concern” about the ability of the utilities to raise capital in unfriendly regulatory environments.³⁰ In contrast, Sierra Club and Protect Our Communities Foundation (PCF) provided a robust analysis demonstrating how joint optimization of ROE and capital structure can achieve these goals and appropriately balance shareholder and ratepayer interests.

A. Optimizing ROE and Capital Structure Ensures Investment-Grade Credit Quality at the Lowest Cost to Ratepayers.

In opening briefs, the Utilities claim Sierra Club and PCF’s proposed rates are too low, but raise no compelling argument against the methodology of optimizing ROE and capital structure to minimize ratepayer impacts. The interaction between ROE and capital structure affects a utility’s credit quality, which in turn impacts its ability to raise capital at favorable rates.³¹ A thorough quantitative analysis of these interactions can identify the optimal combination of ROE and capital structure that maintains investment-grade credit ratings while minimizing costs to ratepayers.³² Sierra Club and PCF’s analysis shows that this approach can achieve the necessary financial stability for utilities while avoiding excessive costs to customers.

There is little doubt that a credit downgrade will increase the cost of debt and capital, but the relevant questions for the Commission to consider in balancing ratepayer interests are (1) whether the utility can still obtain capital; and (2) whether overall savings to ratepayers in avoided ROE *outweighs* the incremental cost of raising additional capital. The only evidence in this proceeding to attempt to answer these questions found that a lower ROE for each utility would still enable each utility to raise capital while providing significant ratepayer savings.

In direct testimony, Sierra Club & PCF witness Mr. Ellis described a methodology to jointly optimize ROE, capital structure, and cash flow-to-debt to propose a capital structure and rate of return for each utility that would maximize overall ratepayer savings while ensuring the utilities maintain investment-grade credit ratings.³³ Nearly all parties agree that a reduction in ROE or in equity ratio would increase the market costs of debt and equity, but the reduction in

³⁰ PGE-03, p. 2-38, lines 6-11.

³¹ SC/PCF-01 (Ellis) at 26:10-18 (overview of how to quantify and analyze tradeoffs between capital structure, ROE and capital structure).

³² *Id.*

³³ SC/PCF-01 (Ellis) at 31:9-33:3 (describing Mr. Ellis’ analysis of how customer costs vary with changes in ROE and equity ratio, using SDG&E as an example).

ROE or equity ratio does not necessarily increase *total customer costs*.³⁴ If the Commission approved lower ROEs for the Utilities, the incremental market costs of debt and equity would be passed on to consumers, but so would massive savings in lowered ROE costs on utility profits. In total, Mr. Ellis estimates that California ratepayers would save \$6.12 billion per year if the Commission adopted his rate of return compared to the utilities' proposed rates of return.

Accordingly, Sierra Club & PCF recommend that the Commission adopt the optimized ROEs and capital structures identified by Mr. Ellis.

	Sierra Club & PCF Recommendations			
	PG&E	SCE	SCG	SDG&E
Rate of return	5.62	5.47	5.64	5.42
Cost of equity	6.22	6.11	6.21	6.15
Cost of preferred equity	NA	NA	NA	NA
Cost of long-term debt	5.01	4.70	4.99	4.61
Capital structure				
Common equity	50.4	54.7	52.9	52.6
Preferred equity	0.0	0.0	0.0	0.0
Long-term debt	49.6	45.3	47.1	47.4
Annual customer savings compared to utility's requested rate of return (\$ B)	-3.33	-2.02	-0.44	-0.33
Annual customer savings (percentage)	-15.9	-17.5	-11.4	-11.9

³⁴ *Id.* at 33:7-9.

B. At Sierra Club & PCF's Recommended Rates of Return, the Utilities Will Maintain Investment-Grade Creditworthiness.

Despite repeated utility concerns in briefing that lower RORs will threaten their credit ratings,³⁵ Sierra Club and PCF recommended RORs aim to maintain investment-grade credit ratings.

All parties agree that both investors and customers share a common interest in ensuring that utilities maintain an investment-grade credit rating. Investment-grade ratings by a financial agency indicate that the utility has a strong ability to meet financial commitments. As a point of comparison, Moody's credit ratings of Baa3 or better qualify as investment-grade, whereas ratings of Ba1 or below are considered non-investment grade.³⁶

A downgrade from investment to non-investment grade would likely produce significant consequences for a utility, including the cost of debt and potentially a change in stock price.³⁷ Smaller movements, however, between investment grade credit ratings would not necessarily cause significant changes in costs of equity.³⁸

Based on joint analyses of cashflow-to-debt bands, multiple scenarios of ROE and capital structure, the optimized ROEs proposed by Sierra Club and PCF would maintain or improve credit ratings for each utility by ensuring that the utilities have sufficient cashflow-to-debt to meet their financial obligations.

³⁵ See, e.g., SDG&E Opening Brief, p. 35; SoCalGas Opening Brief, p. 68; SCE Opening Brief, p. 46; PG&E Opening Brief, p. 59.

³⁶ See, e.g., Moody's Asia Pacific, *Moody's Rating Scale and Definitions*, available at https://www.moody's.com/sites/products/productattachments/ap075378_1_1408_ki.pdf.

³⁷ Tr. (Villadsen) at 127:6-10 ("A: We do know from the academic literature, which is not in record, I do believe, that a non-invest – that a downgrade to a non-investment credit rating has significant consequences, not just for the cost of debt, but also for the stock prices.").

³⁸ Tr. at 129:17-130:7 ("Q: So is my understanding correct that what you're stating is that you are relatively capable of discussing the impact of investment grade versus non-investment grade ratings; however, kind of smaller movements within investment grade, you're not really able to easily describe those modifications on sort of any impact on the cost of equity. Is that – is my understanding correct? A: That is correct, because if you look at, for example, the difference between an A minus and a triple B plus grade, and you look at the sample companies, there's no evidence that one has higher or lower cost of equity.").

	Sierra Club & PCF Recommendations			
	PG&E	SCE	SCG	SDG&E
Sierra Club/PCF Proposed Rate of Return	5.62	5.47	5.64	5.42
Estimated Credit Rating	Baa2³⁹	A3⁴⁰	A3⁴¹	A3⁴²
Credit Rating as of July 2025	Baa3⁴³	Baa1⁴⁴	A2⁴⁵	A3⁴⁶

C. Utilities Erroneously Argue That Mr. Ellis’ Recommended ROE Is Below PG&E’s Current Cost of Debt, When Utility Evidence Demonstrates This Is Untrue.

Multiple utilities proposed summary dismissal of Mr. Ellis’ proposed rates of return because his recommended rates of return were lower than all other stakeholders. In particular, SCE witness Dr. Villadsen suggested that “the recommendations of Drs. Ellis and McCann should be ignored for being below, at, or near the cost of debt, as an ROE below the cost of Baa rated utility debt plus a premium simply is unreasonable.”⁴⁷ However, on cross-examination, Ms. Villadsen conceded that Mr. Ellis’ proposed return on equity of 6.11% for SCE was above SCE’s average embedded cost of debt for 2026 (4.75%) as described in SCE’s application⁴⁸ and above SCE’s requested 4.71% cost of long-term future debt.⁴⁹

In its opening brief, PG&E repeats the exact same mistake, claiming that “Mr. Ellis’s recommended ROE of 6.22 percent in this proceeding is 115 basis points lower than [PG&E]’s current cost of debt.”⁵⁰ However, in its application, PG&E projected its cost of long-term debt to

³⁹ SC/PCF-01 (Ellis) at 98:8.

⁴⁰ *Id.* at 96:9.

⁴¹ *Id.* at 95:11.

⁴² *Id.* at 92:9.

⁴³ SC/PCF-01 (Ellis) at 98:7.

⁴⁴ *Id.* at 96:7.

⁴⁵ *Id.* at 93:27.

⁴⁶ *Id.* at 92:9.

⁴⁷ SCE-07 (Villadsen) at 6:7-10.

⁴⁸ Tr. at 117:17-118:20 (Villadsen). *See also* SCE-01E, Appendix B at B1 (listing SCE’s average embedded cost of debt for 2026 as 4.75%).

⁴⁹ Tr. at 118:10-13 (Villadsen). *See also* SCE-06 at 1:10-11, Table 1 (listing SCE’s requested cost of long-term future debt as 4.71%).

⁵⁰ PG&E Opening Brief, p. 59 (citing PGE-03, p. 2-31, lines 26-27).

be 4.94% for 2025 and 5.16% for its 2026 forecasted long-term debt.⁵¹ For the test year 2026, PG&E is requesting a lower cost of long-term future debt: 5.04%.⁵² All of PG&E's own projections of current cost of debt are far lower than Sierra Club & PCF's proposed ROE.

The utilities' central justification for dismissing Mr. Ellis' proposal without meaningful analysis is based on an obvious error that is fully addressed simply by cross-referencing the utilities' applications. Mr. Ellis' proposed ROEs are reasonable and should be adopted by the Commission.

D. SCE's New Evidence of a Credit Downgrade Impacts Only Its Cost of New Debt, Suggests an Indirect Impact on Its Current Cost Of Equity, and Does Not Change SC/PCF's Recommendations for SCE.

SCE's recent downgrade by S&P Global Ratings suggests a limited increase to SCE's cost of new debt and a small indirect impact on its current cost of equity. In a late-filed motion to which PCF objected,⁵³ SCE produced SCE-09, an S&P Global Ratings research update demonstrating that it had downgraded Edison International and SCE to "BBB-" from its prior "BBB" rating based on the recent passage of Senate Bill 354, which creates a "smaller-than-expected" wildfire fund that provides the Utilities with access to an incremental \$18 billion for future wildfires.⁵⁴

The main probative value of a utility's credit rating is that it indicates the ability of the utility to pay its debts, and a credit downgrade can increase the cost of acquiring new debt. A credit downgrade has no impact on the utilities' embedded debts, which make up the bulk of its financial portfolio. None of the Utilities have filed any motion requesting to change their requested authorized costs of debt, and any such motion would require an opportunity for stakeholders to respond.

⁵¹ PGE-01, p. 3-6, Table 3-2.

⁵² PGE-04, p. 1.

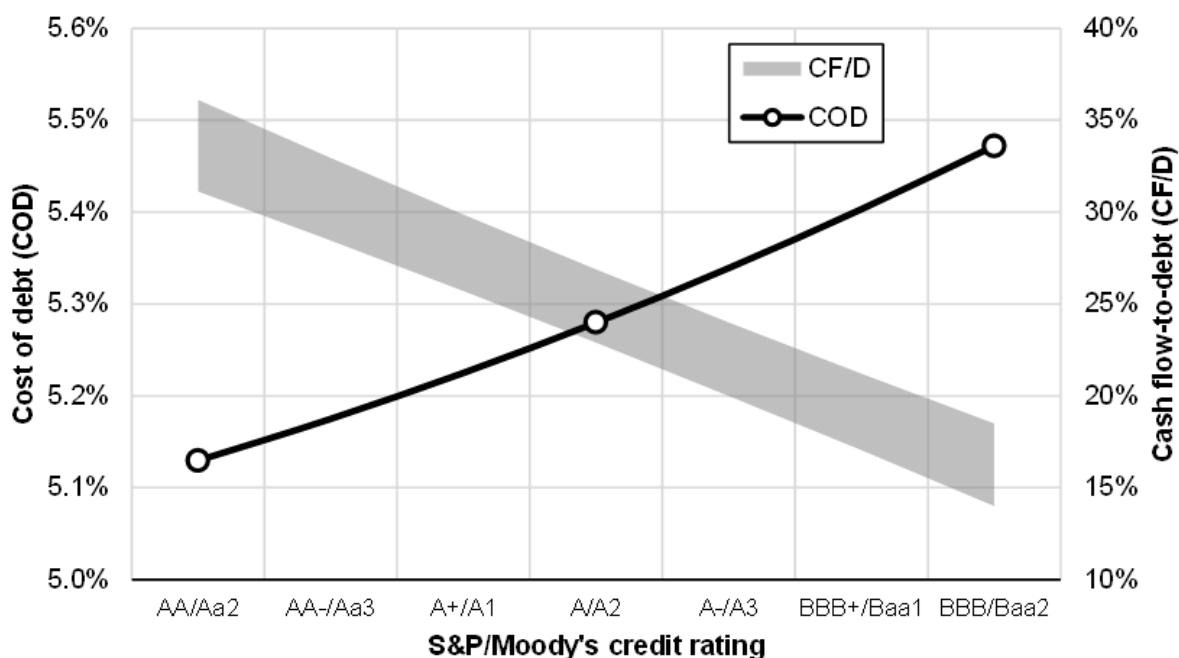
⁵³ A.25-03-010 et seq., The Protect Our Communities Foundation Opposition to Motions to Seal and Motions to Admit Confidential Exhibits (October 2, 2025); U.S. Const. Amend. XIV; Cal. Const. Art. 1, § 7; *California Trucking Assn. v. Public Utilities Com.* (1977) 19 Cal.3d 240, 244 (opportunity to present written objections fails to provide required opportunity to be heard); *Caesar's Restaurant v. Industrial Accident Com.* (1959) 175 Cal.App.2d 850, 855 ("The right to [a fair and open hearing] is one of 'the rudiments of fair play'[] assured to every litigant by the Fourteenth Amendment as a minimal requirement.[] The reasonable opportunity to meet and rebut the evidence produced by his opponent is generally recognized as one of the essentials of these minimal requirements").

⁵⁴ SCE-09, p. 1.

The impact of a credit downgrade on any utility's overall *cost of capital* is even more limited because a change in the cost of new debt would have even less impact on the overall cost of capital. Mr. Ellis provided a visual representation of this relationship between credit rating and cost of debt on 2025 credit opinions in his opening testimony.⁵⁵ Using SDG&E as an example, Mr. Ellis demonstrated that downgrades in a utility's credit rating has a relatively small increase on the cost of debt, suggesting less than one-tenth of a percentage increase on the cost of debt between credit ratings.⁵⁶ The impact on the utility's overall cost of capital would be even smaller.

Figure 1. Moody's Utility Bond Index interest rates and corresponding cash-flow-to-debt metrics by credit rating⁵⁷

June 2025 monthly average



While parties have had no opportunity to incorporate their results into their own proposals, Sierra Club and PCF's recommendations for SCE's cost of capital and proposed rate of return remain valid and applicable, despite SCE's recent downgrade. Mr. Ellis's analysis and recommendations for SCE are based on a forward-looking optimization of SCE's cash flow,

⁵⁵ See SC/PCF-01 (Ellis) at 31:9-32:11 (describing the relationship between credit rating, cash flow-to-debt ratios, and the cost of debt, using SDG&E as an example).

⁵⁶ *Id.* at 32:1-4.

⁵⁷ *Id.*

credit rating, and capital structure given the most recent credit information from Moody's.⁵⁸ Because that analysis is based on finding a cash flow that will result in SCE obtaining a A3 credit rating, it remains valid, despite SCE's recent downgrade by S&P Global.

V. NATIONAL AVERAGE UTILITY ROE FAILS TO PROVIDE A REASONABLE BENCHMARK BECAUSE UTILITY MARKET-TO-BOOK RATIOS DEMONSTRATE INDUSTRY AVERAGE ROE EXCEEDS THE COST OF CAPITAL.

The Commission should reject the Utilities' request that the Commission set ROEs higher than national averages not only because the Utilities fail to provide any link to the company's actual costs of capital or any economic theory applied to the record of this proceeding,⁵⁹ but also because national average ROEs also exceed the cost of capital. The Commission should thus reject the misguided recommendations by EDF and EPUC/IS to align the Utilities' ROEs with national averages,⁶⁰ which conflicts with EDF's own recommendation that the Commission should "align IOU ROEs with book-to-market values and capital structures which minimize overall costs to ratepayers."⁶¹ The evidence in this record conclusively establishes that authorized ROEs nationwide far exceed utilities' costs of capital nationwide.⁶² Sierra Club and PCF agree with UCAN that nationwide ROEs exceed the cost of capital and have resulted in a transfer of wealth from ratepayers to shareholders.⁶³

Utility commissions across the country have authorized utility ROEs that exceed the actual cost of capital, with California utility ROEs dramatically exceeding even the national average ROEs.

⁵⁸ SC/PCF-01 (Ellis) at 96:1-97:5.

⁵⁹ See e.g. SDG&E Opening Brief, p. 18.

⁶⁰ EDF Opening Brief, pp. 21-22; EPUC/IS Opening Brief, p. 57.

⁶¹ *Id.* at p. 14.

⁶² SC/PCF-01 (Ellis), pp. 3, 15-24.

⁶³ UCAN Opening Brief, p. 7; SC/PCF-01 (Ellis), p. 6, 100.

A. National Utility Market-To-Book Ratios Illustrate That Utility ROEs Are Far Above the Actual Cost of Capital.

The Utilities wrongly assert that high ROEs in other states support their applications,⁶⁴ when national market-to-book values show that regulatory commissions regularly award utilities with ROEs higher than the cost of capital.

Market-to-book ratios above 1.0 indicate that a utility's authorized ROEs exceed the utility's actual cost of capital.⁶⁵ When utilities trade above book value, investors are receiving more than just their investment plus a reasonable return—they receive a financial windfall.⁶⁶ As noted in opening briefs, market-to-book (M/B) ratios provide direct, observable market evidence that authorized returns on equity continually exceed utilities' actual cost of capital.⁶⁷

The national utility sector enjoys an average market-to-book ratio above 2.0, meaning authorized ROEs are more than double the value of utilities' equity investments.⁶⁸ Authorizing ROEs so far above the actual cost of capital costs utility customers over \$55 billion each year—approximately 10% of total utility revenue.⁶⁹

Multiple experts corroborate this. Wild Tree Foundation agrees that “if regulators were to authorize ROEs equal to the cost of equity, market and book values would converge.”⁷⁰ EPUC and IS witness Gorman corroborated this finding, noting that public utility stocks consistently trade above book value, suggesting that authorized ROEs were supporting market prices that exceeded book value and allowing utilities to raise capital without diluting any existing shares or other detrimental impacts on existing shareholders.⁷¹

The Commission should identify utility ROEs that will reflect a market-to-book ratio equal to 1 for each utility. Regulatory economists propose using an M/B ratio of 1.0 as a “guide for regulators” in setting the cost of capital because an equal ratio suggests that “the expected return on the book will equal the expected return on the market value of the company, which in

⁶⁴ PG&E Opening Brief, pp. 19-20 (citing PG&E-03, p. 1-2, lines 25-29; suggesting that ROEs in other states are relevant to “PG&E’s ability to compete for capital and attract investors”). *See also* SCE Opening Brief, p. 12; SDG&E Opening Brief, p. 15.

⁶⁵ SC/PCF-01 (Ellis) at 20:3-6.

⁶⁶ *Id.* at 20:8-13.

⁶⁷ Sierra Club Opening Brief, pp. 10-11 (citing SC/PCF-07 (Ellis), Alfred E. Kahn, *The Economics of Regulation: Principles and Institutions* (John Wiley & Sons: 1970), p. 50).

⁶⁸ SC/PCF-01 (Ellis), p. 19, Figure 4: Utility sector average market-to-book ratio.

⁶⁹ *Id.* at 20:18-20.

⁷⁰ Wild Tree Foundation Opening Brief, p. 21.

⁷¹ EPUC/IS Opening Brief, pp. 44-45 (citing to EIT-01 at 85:15-20, 147:18, 219:24, 274:22).

turn will equal the cost of capital for a company of that degree of risk.”⁷² Sierra Club and PCF support this approach because it aims to ensure that ROEs equal the market cost of capital and no more—protecting ratepayers from excess costs while ensuring utilities can raise needed capital.

EDF encourages the commission to set an ROE no greater than the national average to begin adjusting ROEs to levels which “[set] the market value equal to the book value plus a [10%] margin for financial management expenses” in order to arrive at the appropriate risk-adjusted rate.⁷³ Even this proposal represents an ROE that exceeds the actual cost of capital for the utilities.

In any case, national utility average ROEs are being awarded far in excess of the actual utility cost of capital, meaning national ROEs are not an effective baseline for the Commission to determine whether the utility proposals are just and reasonable.

B. Utility References to the National Average Utility ROE in Support of Their Applications Lack Basis and Should Be Disregarded.

Utility arguments that national average utility ROEs are probative to the actual cost of capital provide little to no probative value for a just and reasonable rate for California utilities.

Even compared to national averages, California’s utilities have enjoyed continually excessive ROEs. For example, EPUC/IS note that the utilities’ ROE proposals “are inconsistent with national trends in average authorized utility ROEs,”⁷⁴ demonstrating that the national average authorized ROEs for regulated electric and natural gas utilities from 2014 to early 2025 ranged from 9.39% to 9.72%, while the IOUs have maintained average ROEs in the range of 10.0 and 10.7%.⁷⁵

For example, PG&E argues that the utilities “must compete for capital with other utilities and businesses” and therefore should compare the application against ROEs for other electric utilities,⁷⁶ but it provides no quantifiable evidence to suggest that its requested ROE is the lowest rate necessary to win that competition and obtain capital. SDG&E made a similar argument, as described in Section II.⁷⁷ These qualitative arguments are aimed at raising fear for the Utilities’

⁷² SC/PCF-03 (Ellis), A. Lawrence Kolbe, James A. Read, George R. Hall, *The Cost of Capital Estimating the Rate of Return for Public Utilities* (The MIT Press: 1984), p. 25.

⁷³ EDF Opening Brief, p. 20.

⁷⁴ EPUC/IS Opening Brief, p. 3.

⁷⁵ *Id.* at p. 15 (citing TRN-01 (Dowdell) 30:9-13).

⁷⁶ PGE-01, p. 2-34, lines 17-18.

⁷⁷ SDG&E Opening Brief, p. 7.

ability to attract capital without providing anything more than an empty argument that this will be a meaningful issue. In rebuttal testimony, PG&E witness Ms. Ann Bulkley refers to rate case decisions in Illinois and Connecticut that approved “below average authorized ROEs” and details fraught investor analyst reactions of “grave concern[]” and “concerning pattern[s] of restrictive rate actions.”⁷⁸ Yet even the utilities with the lowered ROEs were ultimately able to compete for capital and raise the investment that they sought.⁷⁹ As noted in Section II above, SDG&E made a similar erroneous argument, alleging that a lower ROE would cause investors to place invest in other companies with higher ROEs.

SDG&E and SoCalGas make related arguments about why their ROEs should be higher than national averages, without providing an evidentiary link to the companies’ actual costs of capital or any economic theory applied to the record of this proceeding.⁸⁰ SDG&E and SoCalGas representatives have strong financial incentives to seek higher than average ROEs that have nothing to do with the companies’ costs of capital.⁸¹ Their compensation is directly linked to the Sempra’s total return to shareholders relative to the S&P 500 Utilities Index, as well as the S&P 500 Index and earnings per share.⁸²

SCE similarly argues that very slight increases in national average ROEs support its requested ROE, but also concedes that “the Commission must authorize SCE’s ROE based on the economic modeling and qualitative risks before it, and not based on national average ROEs.”⁸³ Here, PCF and Sierra Club recommend the Commission follow that advice and decline to base its ROE decisions on the national averages.

VI. THE UTILITIES’ OPENING BRIEFS MAKE CLAIMS ABOUT RISK THAT DO NOT AFFECT THEIR COSTS OF EQUITY.

The Utilities’ claims about their heightened risks⁸⁴ mainly involve risks that do not affect the cost of equity.⁸⁵ Nobel Prize-winning modern portfolio theory establishes that firms are

⁷⁸ PGE-03 (Bulkley), p. 2-35, lines 1-5, p. 2-37, lines 13-15.

⁷⁹ Tr. at 37:17-21 (Bulkley) (“Q: When you research the Avangrid experience, you found that Avangrid did in fact raise the capital investment that is sought; correct? A: At a higher cost; that’s correct.”).

⁸⁰ SDG&E Opening Brief, p. 5; SoCalGas Opening Brief, p. 57.

⁸¹ PCF Opening Brief, pp. 10-14.

⁸² *Id.* at p. 12.

⁸³ SCE Opening Brief, p. 12.

⁸⁴ *See e.g.* SDG&E Opening Brief, p. 1.

⁸⁵ PCF Opening Brief, p. 27.

rewarded for their systematic, non-diversifiable risk, not unique, firm-specific risks.⁸⁶ SDG&E's claims of above-average physical risk of wildfires is not a risk that is relevant to the Commission's analysis of the costs of capital, and it makes no attempt whatsoever to distinguish between ratepayer risk and shareholder risk.⁸⁷

Moreover, far from any "downgrade of the California regulatory environment" as SDG&E suggests,⁸⁸ the California regulatory environment remains uniquely *favorable* to shareholders of the Utilities' parent companies. For example, SCGC's point that SoCalGas benefits from forecast rather than historical rates⁸⁹ applies to all of the California Utilities, and supports PCF's and Sierra Club's position that the Utilities claims about their risks must be rejected.⁹⁰ PCF and Sierra Club also agree with SCGC that the Commission must reject witness Nowak's claim that the unusual regulatory structure for SoCalGas (and the other California Utilities) does not matter to the investment community.⁹¹

As TURN points out, the ratings agencies understand the shareholder benefits of forward-looking test years.⁹² As do investors, as SDG&E's and SoCalGas's parent company is well aware. In representations to the investment community, Sempra touts California's "[f]orward-looking rates" plus the cost of capital mechanism as part of its strategy to focus its capital spending on its regulated utilities⁹³ in what it describes as "some of North America's most attractive markets,"⁹⁴ "markets with above-average economic and demographic growth, supported by constructive regulatory environments,"⁹⁵ and "the right markets...to deliver[] long-term shareholder value."⁹⁶ The attractive regulatory environment in California facilitates Sempra's ability to target a dividend payout ratio of 50% to 60% for SDG&E and SoCalGas (as well as for its other platforms)⁹⁷ – dividends which come at ratepayer expense.

⁸⁶ *Id.*; SC/PCF-01 (Ellis), pp. 101-102.

⁸⁷ SDG&E Opening Brief, p. 20.

⁸⁸ *Id.* at p. 1.

⁸⁹ SCGC Opening Brief, p. 9-11.

⁹⁰ PCF Opening Brief, pp. 22-27.

⁹¹ SCGC Opening Brief, pp. 12-13.

⁹² TURN Opening Brief, p. 4.

⁹³ PCF-02, Slide 8 (pdf. p. 9); *id.* at Slide 30 (pdf. p. 31).

⁹⁴ *Id.* at Slide 38 (pdf. p. 39).

⁹⁵ *Id.* at Slide 37 (pdf. p. 38).

⁹⁶ *Id.* at Slide 41 (pdf. p. 40).

⁹⁷ PCF-02, Slide 32 (pdf. p. 33).

VI. THE UTILITIES' MODELS AND ASSUMPTIONS INCLUDE FUNDAMENTAL FLAWS THAT DO NOT REFLECT REALISTIC COST OF CAPITAL ESTIMATES.

In opening briefs, the Utilities fail to justify the problems in their modeling. The Commission specifically requires the utilities to file applications that include models and reasonable assumptions about past, present, and future states of the world, though the models presented in the Utilities' applications do that to very different degrees. The Utilities use four main models in substantiating their ROE requests. Two of those models should be categorically excluded as irrelevant to estimating the market cost of capital: the Risk Premium Analysis ("RPA"), and the Expected Earnings Analysis ("EEA"). The two other models – the Discounted Cash Flow ("DCF") and Capital Asset Pricing ("CAPM") models are conceptually valid but can be manipulated with implausible assumptions to produce inflated cost of capital estimates.

A. FERC and Federal Courts Reject the Expected Earnings and Risk Premium Models as Irrelevant to the Cost of Capital, but the Utilities Continue to Advocate for These Models.

With the exception of EPUC and IS, intervenors agree that the Risk Premium Analysis (RPA) and the Expected Earnings Analysis (EEA) should not be used.⁹⁸

All four utilities use the RPA, and two utilities (SDG&E and SCG) also use the EEA. Both models rely on returns calculated from accounting book values—meaning what investors have historically invested—instead of the market values for stock.⁹⁹ Because these models rely on book value (i.e., historical investments), they fail to estimate the market cost of capital, which is the core requirement for determining a just and reasonable rate of return.¹⁰⁰ ROE-based models like the RPA and EEA do not even purport to estimate a market-based COE,¹⁰¹ and therefore are of no use in utility regulatory proceedings. EPUC/IS err when they describe Mr. Gorman's RPA as "market-based."¹⁰² The RPA is based on book values and therefore does not measure the market cost of equity in any scenario where market values exceed book values because investors' can only invest in the market at the market price.¹⁰³

⁹⁸ See e.g., Cal Advocates Opening Brief, pp. 19-21; WTF Opening Brief, pp. 6-7.

⁹⁹ SC/PCF-01 (Ellis) at 4:20-24.

¹⁰⁰ See *id.* at 4:20-26 (explaining that models reliant on book value fail to produce reliable cost of capital estimates).

¹⁰¹ SC/PCF-08 (Ellis) at 20:9-10.

¹⁰² EPUC IS Opening Brief, p. 44.

¹⁰³ SC/PCF-01 (Ellis), p. 35; PCF Opening Brief, pp. 28-31.

Due to the fact that the RPA lacks general financial logic, does not offer “meaningful insight into investor behavior,” and has “particularly direct and acute circulatory problems,” FERC and the D.C. District Court disallowed the use of the RPA model in federal rate of return proceedings. FERC similarly rejected the EEA model because “the returns estimated by the Expected Earnings model are divorced from the returns required by investors.”¹⁰⁴ FERC specifically ruled out these models in Opinion No. 569 (November 2019) after concluding that their results “def[y] general financial logic.”¹⁰⁵

CalAdvocates agrees that the EEA fails to measure the market cost of equity, meaning that the results ignore investor return requirements.¹⁰⁶ CalAdvocates then provides additional reasons to reject the use of the EEA, noting that the EEA model is “totally dependent on the forecast of one variable ... by one analyst firm ... with the same single individual authoring most of the ... reports for various proxy companies.”¹⁰⁷

Despite these reasons and the rejections from FERC and the D.C. Circuit, every Utility in this proceeding continues to hold out these models as justification for their applications. Continued use of these models constitutes “a severe deficiency in the professional competence and diligence required of expert witnesses.”¹⁰⁸

No utility contested Mr. Ellis’ testimony explaining why these models are problematic to this proceeding, and no opening brief addressed the categorical FERC and caselaw rejections of these models. Accordingly, we urge the Commission to similarly reject any cost of capital estimates derived from the EEA or RPA models as irrelevant and not probative to the central issue in this case.

B. The Utilities Artificially Inflate Their Constant Growth Discounted Cash Flow Cost of Capital Estimates by Assuming Impossible Growth.

The DCF model estimates the required return (i.e., the cost of capital), implied by the current market price and expected future cash flows.¹⁰⁹ The Constant Growth (“CG”) DCF

¹⁰⁴ *Assn. of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569-A (May 21, 2020) 171 FERC ¶ 61,154, p. 62,201.

¹⁰⁵ *Assn. of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569 (Nov. 21, 2019) 169 FERC ¶ 61,129, p. 61,796.

¹⁰⁶ CalAdvocates Opening Brief, p. 20.

¹⁰⁷ CADV-02 at 116:11-14.

¹⁰⁸ SC/PCF-08 (Ellis) at 20:14-15.

¹⁰⁹ SC/PCF-01 (Ellis) at 40:4-5.

model assumes a single, constant rate of cash flow growth into perpetuity.¹¹⁰ The most common issue with the utilities' implementation of the CG DCF is that they assume the earnings-per-share growth rate forecasts are valid into perpetuity, whereas most sources compiling consensus forecasts make clear that they are only valid for a few years.¹¹¹

In opening briefs, PCF explained that the Utilities' economically impossible long-term growth assumptions constitute the most significant factor inflating COE estimates,¹¹² and Sierra Club provided a detailed overview of that and additional reasons EPS growth forecasts cannot reasonably be assumed to grow into perpetuity. First, the "long-term" EPS growth forecast is limited to only a few years rather than the infinite forecast horizon of the CG DCF.¹¹³ Second, analyst forecasts tend to be upwardly biased, making it unreasonable to incorporate the biased growth forecasts into perpetuity.¹¹⁴ SoCalGas criticizes the use of studies that are "over a decade old," but itself cites studies and other materials from that time period.¹¹⁵ Mr. Ellis also cites to a 2021 article that concludes that long-term EPS forecasts (i.e., growth rates) are upwardly biased relative to unbiased near-term forecasts.¹¹⁶ Long-term forecasts' upward bias relative to unbiased near-term forecasts thus also suggests that long-term forecasts are upwardly biased relative to actual earnings. SoCalGas cannot avoid the inevitable result that the 2003 Global Analysis Research Settlement did not, contrary to what SoCalGas implies, resolve the problem of upwardly biased forecasts.¹¹⁷ Even after the Settlement, "analysts have been persistently overoptimistic."¹¹⁸

But notwithstanding analysts upward bias, the factor that most significantly artificially inflates the Utilities' ROEs remains the economic impossibility of assuming utility growth

¹¹⁰ *Id.* at 40:14-20 (describing the CG DCF).

¹¹¹ *Id.* at 41:21-42:3.

¹¹² PCF Opening Brief, pp. 32-33.

¹¹³ *Id.* at 42:10-12.

¹¹⁴ SC/PCF-01 (Ellis) at 42:20-22.

¹¹⁵ SoCalGas Opening Brief, pp. 27-28.

¹¹⁶ PCF-04, pdf. pp. 24-25 ("Analysts' long-term growth forecasts are on average ... [higher than] short-term forecasts. ... Compared to short-term forecasts, long-term growth forecasts are less volatile, more persistent, and never negative."); PCF-04, pdf. p. 8 ("The optimism bias suggests that people consider negative events less likely and positive events more likely than rational. An optimism bias in financial markets would suggest that investors expect firm growth rates to be higher than they will be, on average. ... They find that the term-structure of optimism has significant time-series variation and is, on average, upward sloping.") (Cassella et al, Horizon Bias and the Term Structure of Equity Returns).

¹¹⁷ SoCalGas Opening Brief, p. 28.

¹¹⁸ PCF-04, pdf. p. 5 (Goedhart et al., Equity analysts: Still too bullish – After almost a decade of stricter regulation, analysts' earnings forecasts continue to be excessively optimistic (McKinsey on Finance).)

forecasts into perpetuity.¹¹⁹ The Utilities do not, because they cannot, address Mr. Ellis's testimony establishing the economic impossibility of extrapolating analysis' utility growth forecasts into perpetuity.¹²⁰ UCAN and Wild Tree agree that the Utilities perpetual growth assumptions do not reflect reality.¹²¹

Despite the economic reality and fundamental financial logic, the Utilities' opening briefs continue to rely on estimated average growth rate across the four utilities' proxy groups is 6.6% – significantly higher than the approximately 4% forecasted GDP growth rates forecasted by federal agencies.¹²² However, no segment of the economy can grow faster than GDP into perpetuity.¹²³

In opening briefs, the Utilities' arguments in support of their inflated EPS growth rates are unpersuasive. PG&E defended its use of an earnings growth rate above GDP over the long term,¹²⁴ yet utility witness Ms. Bulkley agreed at hearing that, in reality, long-term utility growth rate in perpetuity cannot exceed GDP.¹²⁵

C. A Multi-Stage DCF Model Produces More Realistic COE Estimates Than a Constant Growth DCF Model, But Requires Empirically Accurate Long-Term Growth Assumptions and Limits on the Upward Bias of Analysts' Earnings Forecasts.

As noted in opening briefs, a multi-stage DCF Model produces more realistic COE estimates than a continuous growth DCF model, if it uses realistic long-term growth assumptions and limits the potential for upward biases in forecasts.¹²⁶ The Utilities' opening briefs provided no persuasive responses to these issues.

¹¹⁹ *Id.* at 43:7-8.

¹²⁰ SC/PCF-01 (Ellis), p. 43; PCF Opening Brief, pp. 32-33.

¹²¹ WTF Opening Brief, pp. 49-50; UCAN Opening Brief, pp. 11-12.

¹²² See, e.g., Congressional Budget Office, The Long-Term Budget Outlook: 2025 to 2055 – Long-Term Budget Projections (CBO: March 2025), data available at <https://www.cbo.gov/publication/61187>.

¹²³ SC/PCF-01 (Ellis) at 43:13-17.

¹²⁴ PG&E Opening Brief, p. 54 (citing PGE-03, p. 2-75, lines 1-21; claiming “it is not unreasonable to assume that earnings growth for utilities could exceed GDP growth over the long term.”).

¹²⁵ Tr. at 23:15-19 (Bulkley) (“Q: Do you agree that, in reality, long-term utility growth rate in perpetuity cannot exceed GDP? A: Yes, I do. But, as we’ve just discussed, there’s a wide range of what is considered an estimate of GDP growth over the long term.”).

¹²⁶ Sierra Club Opening Brief, pp. 28-29.

1. Contrary to the Utilities' claims, utility-sector long-term growth is most accurately linked to inflation, not GDP.

The long-term utility growth rate that best reflects reality is linked to inflation, not GDP or an extrapolation of a financial analyst's inflated near-term estimate into perpetuity.

SCE critiqued Mr. Ellis' multi-stage DCF model for using the Treasury Inflation-Protected Security (TIPS) yield of 1.95% for the perpetual growth rather than the GDP growth rate of 4%.¹²⁷ SCE contends that this assumption explains why Mr. Ellis' DCF ROE estimate is the lowest of any stakeholder in this proceeding.¹²⁸

However, Mr. Ellis proactively explained in his opening testimony that 100 years of utility data show that utility-sector DPS growth has essentially tracked inflation, as demonstrated in the figure below.¹²⁹ He notes that "While there have been periods of growth and decline, the long-term trend has been essentially flat – utility dividend growth has just kept pace with inflation for nearly 100 years."¹³⁰ The reason to use inflation for long-term growth assumptions is that it is the best reflection of reality.

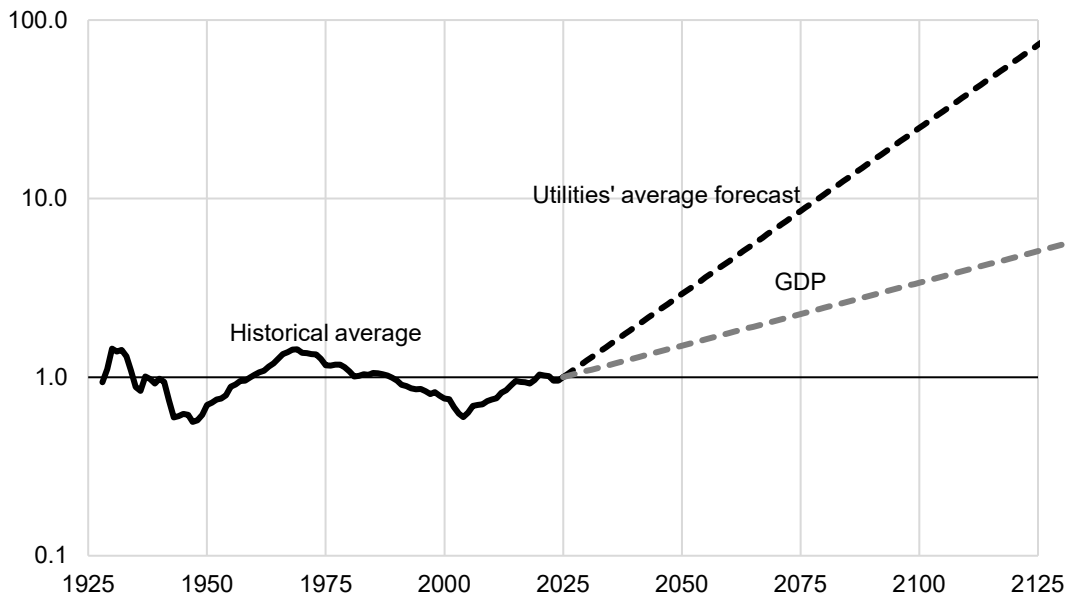
¹²⁷ SCE Opening Brief, p. 22.

¹²⁸ *Id.*

¹²⁹ SC/PCF-01 (Ellis) at 53:8-11.

¹³⁰ *Id.*

Figure 2. Utility real dividend per share, 1928-2025¹³¹
 2025 average=1.0 (logarithmic scale)



Although Wild Tree acknowledges Mr. Ellis’s criticism of Mr. Rothschild’s models, it does not provide a substantive response to those criticisms.¹³² Mr. Rothschild’s assumption that the price-to-book ratio will remain unchanged while the expected growth rate changes conflict with basic financial principles, and his use of betas that are only valid for estimating a short-term cost of equity do not relate to the question in cost of capital proceedings which attempt to estimate investors’ long-term expectations.¹³³ Wild Tree speculates about Mr. Ellis’s beliefs without citation to any record evidence.¹³⁴ But as PCF details in its opening brief, it is not only well-settled, but legally required for the Commission to reject evidence that does not use sound financial logic and empirically accurate assumptions.¹³⁵

¹³¹ *Id.* at 44:8-10 (citing M. Ellis analysis of FDL and Bureau of Labor Statistics (BLS), data available at <https://www.bls.gov/cpi/data.htm> [last accessed Jun. 9, 2025]).

¹³² WTF Opening Brief, p. 32.

¹³³ SC/PCF-08 (Ellis), pp. 23-30.

¹³⁴ Wild Tree Opening Brief, p. 33.

¹³⁵ PCF Opening Brief, p. 8.

2. Mr. Ellis's multi-stage DCF model mitigates upward bias of industry growth from financial analysts by assuming a shorter initial growth stage.

SCE also critiqued Mr. Ellis' multi-stage DCF model for limiting the initial growth stage to 3 years rather than 5 years.¹³⁶ However, this critique reflects that SCE did not read Mr. Ellis' opening testimony, which proactively explains that he chooses a short, 3-year growth stage to mitigate the effect of a demonstrated bias of financial analysts on EPS growth rate forecasts.¹³⁷ Mr. Ellis' combined long-term-trend growth rate of 10-years is consistent with all four Utility witnesses' MS DCF methodologies.¹³⁸ While SCE might not like Mr. Ellis' resulting DCF cost of capital results, they do reflect realistic assumptions that can be supported with historical data and time horizon methodology similar to that used by the Utilities.

Mr. Ellis's MS DCF model remains the only DCF model in this record to estimate the cost of capital using realistic assumptions about past, present, and future states of the word as the Commission has required, and even he notes that his model might incorporate upward bias from analysts, as his DCF analysis produced the highest results of his models.¹³⁹

PGE also takes issue with Mr. Ellis' DCF analysis by arguing that "Mr. Ellis' estimate is also less than his DCF result for his utility proxy group of 6.99 percent" and therefore his ultimate recommendation of 6.22% is too low and should be ignored.¹⁴⁰ In actuality, Mr. Ellis's direct testimony directly explains why his market return forecast is lower than his multi-stage DCF results. Mr. Ellis himself notes that his market return forecast is lower than his DCF results and he explains that this is the result of near-term analyst growth rate bias.¹⁴¹ He explains:

"The proxy group DCF results use analysts' EPS growth rates. The analysts who provide the individual stock forecasts that go into the consensus estimates reported by Bloomberg, S&P, Zacks and Yahoo! Finance, and others all come from the "sell side" of the finance sector. The sell side engages in the creation, promotion, and selling of securities offerings. Their clients are not the institutional or public investors that ultimately buy the securities, but the companies, like utilities, seeking to raise money. They are in the business of transactions, not picking the best investments. Hence the ever-present suspicion of optimism bias in their forecasts: they are trying to curry favor with their existing and potential

¹³⁶ SCE Opening Brief, p. 22.

¹³⁷ SC/PCF-01 (Ellis) at 52:6-8.

¹³⁸ *Id.* at 52:6-9.

¹³⁹ *Id.* at 79:8-26.

¹⁴⁰ PG&E Opening Brief, p. 43.

¹⁴¹ SC/PCF-01 (Ellis) at 79:8-26.

clients and to present the securities they market in the most favorable light.

The likely explanation for the relatively high proxy group MS DCF COEs is that their stock prices haven't risen commensurately with analysts' EPS growth forecasts. Investors are skeptical utilities' earnings growth targets will be met.”¹⁴²

Mr. Ellis' testimony emphasizes the risk that analysts' EPS growth rates incorporate upward biases from analysts and need to be taken with a skeptical eye and actions to limit that bias. This reality in no way undercuts his ultimate recommendation to award PG&E a lower ROE that PG&E desires.

D. The Utilities Artificially Inflate Their CAPM Cost of Capital Estimates by Overstating Utility-Specific Risk Estimates.

The capital asset pricing model (CAPM) expresses the COE in terms of the fundamental financial risk-reward trade-off: investors demand higher returns as risk increases. The model does this by identifying the risk-free rate of return (typically using a long-term U.S. Treasury bond) as well as the beta, meaning the risk of the target company relative to the risk of the market. As noted in opening briefs, two key assumptions of the CAPM determine the accuracy of the results: the choice of the risk-free rate and the calculation of the beta (meaning the risk of the target company relative to the risk of the market.).¹⁴³

A recurring problem in the Utilities' CAPM methodology is the widespread use of adjusted betas rather than raw, unmanipulated historical data. The Utilities and multiple stakeholders used utility sector betas that had been subject to the “Blume adjustment”, meaning an observation that betas, *on average*, regress toward 1.0, therefore adjusting raw betas closer to 1.0, even if the stock is relatively low-beta, such as utilities.¹⁴⁴ The Blume adjustment raises utility betas closer to 1.0, leading Mr. Ellis to explain why adjusted betas are not valid for predicting utility costs of capital.¹⁴⁵

In its opening brief, PG&E critiques Mr. Ellis' practice of deriving raw betas from trailing monthly excess returns rather than pre-calculated beta estimates with the Blume

¹⁴² *Id.* at 79:15-16.

¹⁴³ Sierra Club Opening Brief, p. 31.

¹⁴⁴ SC/PCF-01 (Ellis) at 71:5-7.

¹⁴⁵ *Id.* at 71:4-21.

adjustment.¹⁴⁶ Yet, PG&E includes no response to Mr. Ellis’ critique that these “pre-calculated” adjustments fail to reflect the relatively mature and low-risk utility sector.¹⁴⁷ The CAPM beta must reflect the long-term relationship between risk and return to be effective.¹⁴⁸ Incorporating the Blume adjustment into CAPM beta assumptions distorts the risk profile for utilities, resulting in inflated cost of capital results.¹⁴⁹

VI. UTILITY ARGUMENTS AGAINST SIERRA CLUB AND PCF PROPOSALS ARE ERRONEOUS BECAUSE THESE PROPOSALS REPRESENT THE MOST ACCURATE REFLECTION OF THE COST OF CAPITAL.

A. Sierra Club and PCF’s Proposed Rate of Return for PG&E Is Based on the Best Available Public Cash Flow Information and Beta Information and Should Be Adopted.

PG&E’s arguments against testimony from Sierra Club and PDF expert Mr. Ellis lack evidentiary support. In its opening brief, PG&E argued, without reference to evidence or testimony, that its cash flow to debt ratio is 15.4%, and suggested that adopting SC/PCF’s recommendation of a 6.22% ROE “would decrease their cash flow lower.”¹⁵⁰ Mr. Ellis’s calculations for cash flow to debt ratio are described and defended in his opening testimony. At no point did PG&E contest his underlying estimates of cash flow to debt. To the extent that PG&E wishes to contradict that, it should have included direct testimony on its cash flow. Because it declined to contribute that information to the evidentiary record, PG&E’s argument that Mr. Ellis’ cash flow to debt ratio is incorrect, lacks an evidentiary basis, and should be disregarded.

B. SoCalGas’ Capital Structure Is Within Scope of This Proceeding, and Sierra Club and PCF’s Proposed Structure for SoCalGas Should Be Adopted.

SoCalGas baselessly argues that an element of its capital structure is somehow not in scope, while simultaneously admitting that SoCalGas itself has asked the Commission to eliminate preferred equity in its capital structure.¹⁵¹ The Scoping Memo expressly identifies the

¹⁴⁶ PG&E Opening Brief, p. 40.

¹⁴⁷ *Id.*

¹⁴⁸ SC/PCF-01 (Ellis) at 57:16-19.

¹⁴⁹ *Id.* at 71:4-21.

¹⁵⁰ PGE Opening Brief, pp. 63-64.

¹⁵¹ SoCalGas Opening Brief, p. 65.

“appropriate capital structure” as scoped issue,¹⁵² and thus Mr. Ellis’s capital structure proposal is well within scope.

VII. CONCLUSION

The Utilities’ opening briefs failed to engage with any of the substantive issues in their modeling and assumptions and instead rely on qualitative and unsubstantiated arguments to discourage consideration of Sierra Club & PCF’s recommendations. However, Commission approval requires the Utilities to affirmatively show that their cost of capital estimates reflect reality, and the Utilities failed to meet that requirement here.

Ratepayers rely on the Commission to probe utility proposals for unreasonable assumptions and attempts to line the pockets of shareholders with windfall profits. As the Commission searches for antidotes to the energy affordability crisis, ensuring that utility rates of return are just and reasonable is a fair and necessary starting point.

In this proceeding, Sierra Club and PCF detailed how utility models artificially inflate cost of capital estimates with unreasonable assumptions of impossible growth, inflated market baselines and utility risks, and cherry-picked data. There is ample evidence in this proceeding—from multiple stakeholders—that lower ROEs will fairly compensate utility shareholders, keep utilities financially healthy, and deliver billions in customer savings in comparison to the utility proposals – providing necessary relief to ratepayers as utility rates increase.

The clean energy transition will require billions of dollars of utility investment in infrastructure as well as individual ratepayer investments to electrify end uses that currently rely on fossil fuels. Sierra Club and PCF aim to support the Commission in setting a pathway that ensures ratepayers provide a utility rate of return that matches the actual cost of capital—no more, and no less.

Accordingly, we urge the Commission to adopt Sierra Club and PCF proposed rates of return because they represent the most accurate reflection of reality and the right balance between shareholder and consumer interest.

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¹⁵² A.25-03-010 et seq., Assigned Commissioner’s Ruling Consolidating Four Applications and Scoping Memo and Ruling (July 16, 2025), p. 3.

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Respectfully submitted,

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