BEFORE THE PUBLIC UTILITIES COMMISSION OF TH

STATE OF CALIFORNIA

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Application of Southern California Edison Company (U 338-E) for Authority to Establish Its Authorized Cost of Capital for Utility Operations for 2013 and to Reset the Annual Cost of Capital Adjustment Mechanism.	)	Application 12-04-015 (Filed April 20, 2012)
And Related Matters.	)	Application 12-04-016 Application 12-04-017 Application 12-04-018

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) OPENING BRIEF

FRANK A. MCNULTY
ANGELICA M. MORALES

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-4435
Facsimile: (626) 302-6962
E-mail: Angelica.Morales@sce.com

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SUBJECT INDEX

Section	Title	Page
I.	SUMMARY OF RECOMMENDATIONS	1
	1. Contested Issue – Return on Equity	2
	2. Contested Issue – Capital Structure	3
II.	DISCUSSION	4
	A. SCE's ROE Proposal Will Result In A Significant Rate Reduction And Is The Largest Reduction Proposed By A Utility In This Proceeding	4
	B. SCE's ROE Is Based On Adoption Of Its Entire Proposal	4
	C. SCE's Cost Of Capital Request Is Consistent With Supreme Court Principles	5
	1. SCE's Request Meets The Comparability Standard	5
	2. SCE's Request Meets The Creditworthiness And Financial Soundness Standards	7
	3. SCE's Request Meets The Capital Attraction Standard	9
	4. The Florida Power & Light Example Shows The Hazards Of Setting The ROE Too Low	10
	D. SCE's Recommended ROE Is Supported By Model Estimates, Market Conditions, and Investor Risk Perceptions	11
	1. SCE's Return On Equity Request Falls Within The Most Reliable Financial Model Estimate, But Model Estimates Are Only The "Starting Point"	11
	2. The CAPM Estimates Are the Most Reliable	13
	3. SCE's Application of the ATWACC Analysis is Appropriate	13
	4. The HRP Estimates Are Unreliable	14
	5. The DCF Model Estimates Are Understated	14
	6. Intervenors' ROE Recommendations, and DRA's In Particular, Are Unreasonable	14
	7. Intervenors' ROE Analyses Contain Numerous Errors	15

SUBJECT INDEX

Section	Title	Page
E.	Proper Estimation Of SCE's Return On Equity Must Account For Leverage	16
F.	The Equity Risk Premium Has Increased	17
G.	Market Conditions Demonstrate That SCE's Access To Financial Markets Requires Recognition Of Investors' Return Requirements On Higher Risk Utility Assets	18
H.	Investor Perceptions Of The Considerable Business And Regulatory Risk That Exist, Including Power Purchase Agreements And Regulatory Lag, Support SCE's Return on Equity Request	19
1.	The Record Shows That California Regulation Imposes Significant Risks Relative To Other States	19
2.	California's General Rate Case Process Is More Risky Than That Of Other States	19
3.	California's Procurement Process Is More Risky Than That Of Other States, Which Supports A Higher ROE	21
4.	Other Regulatory Risks Supporting A Higher ROE	23
I.	The Commission Should Continue Its Historic Practice Of Authorizing Electric Utility Rates Of Return That Are Greater Than Those Of Water, Gas, or Combination Utilities	23
1.	This Commission Has Consistently Maintained A Substantial Spread Between SCE's Authorized ROE And Authorized ROEs For Water Utilities	23
2.	The Record Shows That, Similar To This Commission, Other Regulatory Commissions Find It Reasonable To Adopt A Spread Between The ROEs Of Electric-Only Utilities And Those For Combination Gas-Electric Utilities	23
J.	There is No Significant Difference In The Estimated Cost of Capital For Companies With Or Without Decoupling	24
K.	SCE's Proposed Ratemaking Capital Structure Is Appropriate	25
1.	Debt Equivalence Remains Important	25
2.	FEA's Proposal to Lower SCE's Preferred Stock Ratio Should Be Rejected	27

SUBJECT INDEX

Section	Title	Page
L.	Intervenors Have Not Met Their Burden Of Demonstrating That The Commission's Decision That Returns on Equity are "Fundamentally Different" From Pension Fund Returns Should Be Revisited	28
III.	CONCLUSION	28
APPENDIX A-COMPARISON OF CPUC-AUTHORIZED SCE ROES AND WATER ROES		

TABLE OF AUTHORITIES

Section	Title	Page

Federal Authority

Federal Power Commission et al. v. Hope Natural Gas Co.,
320 U.S. 591 (1944) 2,3,5,8

Bluefield Water Works & Improvement Co. v. Public Service Comm'n of the State of Virginia,
262 U.S. 679 (1923) 2,3,5,8

Commission Decisions

D.07-12-049 ..... *passim*

D.05-12-043 26

D.04-12-048 26

D.04-12-047 26

D.82-12-055 24

California Statutes

Public Utilities Code

§399.20 6

Other Jurisdictions

In the Matter of the Application of Hawaii Electric Company, Inc. For Approval of Rate Increases And Revised Rate Schedules and Rules, Docket No. 2010-0080; Decision and Order No. 30505, 2012 Haw. PUC LEXIS 407, June 29, 2012 6

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SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) OPENING BRIEF

Pursuant to Rule 13.11 of the California Public Utilities Commission's (Commission) Rules of Practice and Procedure and the procedural schedule set by Administrative Law Judge Michael J. Galvin, Southern California Edison Company (SCE) submits its opening brief in support of its requested decrease in the cost of capital for 2013 as set forth in Application (A.)12-04-015.[1]

I. SUMMARY OF RECOMMENDATIONS

SCE's proposed cost of capital rate reduction will total about $128 million in 2013 if the capital expenditures SCE proposed in its General Rate Case are approved.[2] SCE's cost of capital request is lower than the average request that utilities are making around the country. SCE is also proposing a larger reduction in the cost of capital than the other utilities in this consolidated proceeding. SCE has shown that its requested capital costs are necessary to adequately compensate its capital investors and should enable SCE to maintain its credit worthiness, continue its financial soundness, and attract additional capital on a comparable and compensatory risk adjusted basis. Therefore, SCE recommends that the Commission adopt its proposed cost of capital and capital structure for 2013.

SCE is engaged in a capital investment program unprecedented in size and scale, exceeding $4 billion per year.[3] Those investments are necessary to maintain reliability and meet public policy goals, including the State's Renewable Portfolio Standards. This capital program has a corresponding effect

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[1] Assigned Commissioner's Scoping Memo and Ruling dated June 15, 2012, p. 3 (consolidating the cost of capital applications of San Diego Gas & Electric Company (SDG&E), A.12-04-016, Southern California Gas Company (SoCalGas), A.12-04-017, and Pacific Gas and Electric Company (PG&E), A.12-04-018; also establishing a bifurcated proceeding: Phase 1 is to consider the applicant utilities' appropriate cost of capital and capital structure for 2013; Phase 2 is to consider the continuation of the Cost of Capital Adjustment Mechanism.)

[2] SCE's Application, p. 2.

[3] Exhibit 17 (SCE-1), SCE's Direct Testimony (R.C. Boada), pp. 1, 5.

on SCE's risk. SCE requires a return on equity commensurate with that higher risk. Maintaining a strong financial profile, including an appropriate authorized cost of capital and capital structure will substantially benefit customers. SCE therefore recommends the Commission adopt the cost of capital and capital structure in the table below beginning January 1, 2013.

2013 Recommended Cost of Capital for SCE[4]

Component	Percentage	Cost	Weighted Cost
Long-Term Debt	43.00%	5.49%	2.36%
Preferred Equity	9.00%	5.79%	0.52%
Common Equity	48.00%	11.10%	5.33%
Total	100.00%		8.21%

SCE's recommendation includes a proposed decrease in rate of return, consistent with the United States Supreme Court's *Hope* and *Bluefield* opinions,[5] which set the legal standard that a public utility is entitled to earn a return on invested capital that is comparable to returns on investments of similar risk and that maintain the utility's credit quality, financial soundness, and ability to attract capital. The evidence proffered in this proceeding on market conditions, financial model results, business, financial, and regulatory risks in California, and investor perceptions of those risks, demonstrates that SCE's requested capital structure and cost of capital align fully with these standards.

In these times of critical policy and volatility risks, the Commission's past practice of strict adherence to the Supreme Court's standards is crucial. The Commission should continue to take SCE's unique business and financial risks into account in setting SCE's ROE. In addition, the Commission's continued use of model results as a "starting point," followed by the application of informed judgment should both accomplish the Supreme Court's objectives and result in the adoption of SCE's recommended capital structure and cost of capital.

The Division of Ratepayer Advocates (DRA), Energy Producers & Users Coalition (EPUC), Federal Executive Agencies (FEA), and The Utility Reform Network (TURN) (collectively, Intervenors) each oppose a portion of SCE's cost of capital application. No party opposes SCE's proposed costs of Long-Term Debt and Preferred Stock, which should be found reasonable.

1. Contested Issue – Return on Equity

Each of the Intervenors opposes SCE's requested 11.1% return on common equity, instead recommending unreasonably low and under-compensatory ROEs of 8.75% (DRA), 9.10% (EPUC),

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[4] Exhibit 150 (SCE's Update Exhibit); *See also*, Section II.B., below for discussion regarding the adoption of SCE's entire application request as the premise for SCE's ROE proposal.

[5] *Federal Power Commission et al. v. Hope Natural Gas Co.*, 320 U.S. 591, 602 (1944) and *Bluefield Water Works & Improvement Co. v. Public Service Comm'n of the State of Virginia*, 262 U.S. 679 (1923).

9.00% (FEA), and 9.40% (TURN), which would reduce SCE's ROE by 275, 240, 250, and 210 basis points, respectively. Commissions across the nation are authorizing ROEs (as of June 2012) that are an average of 35 basis points lower than those authorized in 2007-2011.[6] SCE's request is in line with this restrained reduction trend, as SCE requests an ROE that is 40 basis points lower than its 2011 authorized ROE (resulting from its 2008 test year cost of capital application).

The low ROE recommendations proposed by Intervenors are not supported by the record and would be inadequate for SCE to attract the financing needed. Intervenor proposals do not meet the *Hope* and *Bluefield* standards, reflect significant modeling errors, and disregard the considerable evidence of investor risks associated with regulatory and policy risks like renewables, market structure uncertainty, business and financial risks of power purchase agreements, and the large need for capital attraction to implement the State's aggressive energy policy goals. In addition, some Intervenors reject, without support, the Commission's well-reasoned decisions on the importance of recognizing power purchase agreement debt equivalence and non-comparability of pension fund returns to utility rates of return. Reflecting these prior decisions is critical to determining an ROE that will support SCE's system growth and improvement. The potential negative result of ignoring these facts is most egregious in the case of DRA's proposal. DRA's proposed 8.75% ROE is severely flawed and is the lowest Intervenor proposal by far. It is also out of line with its proposals in other Commission dockets and lacks oversight and policy guidance, as DRA's recommendation was deferred to its expert witness who submitted the proposal.[7] Therefore, it should be rejected out of hand by this Commission. The other Intervenor recommendations are similarly under-compensatory, risk Commission credibility if adopted, and should also be rejected.

2. <u>Contested Issue – Capital Structure</u>

Three of the four Intervenors (DRA, EPUC, and TURN) accept SCE's proposed ratemaking capital structure. FEA opposes it, arguing that SCE's preferred stock ratio should be lower, while SCE's debt ratio should be higher. FEA's alternative proposal is based on a fundamental misunderstanding about how SCE has historically been capitalized.[8] The Commission should reject FEA's baseless capital structure proposal as uneconomic to customers.

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[6] Exhibit 31, EPUC's Direct Testimony (M.P. Gorman), Table 2, p. 5.
[7] *See* Section II.D.4, below.
[8] Exhibit 19, SCE's Rebuttal Testimony (P. T. Hunt), pp. 18-20.

None of the Intervenors' alternative proposals on capital structure or return on equity are supported by compelling record evidence and, therefore, should be disregarded.

II. DISCUSSION

A. SCE's ROE Proposal Will Result In A Significant Rate Reduction And Is The Largest Reduction Proposed By A Utility In This Proceeding

SCE's proposed cost of capital components are based on our goal of providing safe, reliable and affordable power to our 4.9 million customers. Our proposal will result in a revenue requirement reduction of approximately $128 million in 2013 based on the costs estimated in SCE's pending general rate case.[9] Although much attention has been devoted in this proceeding to the ROE levels, other parties have largely ignored the evidence of SCE's overall lower rate of return, which is the number that ultimately affects customer rates. This proposal is lower than the average requested return on rate base in other jurisdictions in the United States, despite compelling evidence that SCE's risks are greater.[10] In its application and direct testimony submitted in April, SCE proposed an overall weighted cost of capital equal to 8.24%, a number that has been reduced to 8.21% based on more recent data.[11] SCE is able to achieve this lower overall ROR in part by its judicious use of more Preferred Stock in its capital structure. SCE is also able to achieve market access to debt and preferred equity capital at attractive and comparable rates based on the financial and credit soundness of SCE as supported by prior Commission decisions. This is compelling evidence that SCE's overall request, including its requested ROE, is reasonable. Finally, of the four applicant utilities, SCE's proposed ROE reflects the largest reduction relative to the rate adopted in the last cost of capital proceeding. SCE requests a 40 basis point decrease, while PG&E, SDG&E, and SoCalGas propose ROE decreases of 35 , 10, and minus 8 basis points, respectively (SoCalGas proposes an increase in its ROE). SCE urges the Commission to recognize these facts in determining an appropriate ROE.

B. SCE's ROE Is Based On Adoption Of Its Entire Proposal

SCE notes that its application proposed a return on equity that is premised on the Commission adopting its entire proposal in a single decision, including continuance of SCE's existing capital

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[9] *See* Exhibit 17, SCE's Direct Testimony (R.C. Boada), p. 3; *see also*, *id.*, footnote 3, explaining that SCE's customer notice showed a $92.8 million revenue requirement reduction based on the Commission's 2011 GRC authorization for SCE. Authorized rate base levels for 2012 or 2013 are pending in SCE's current GRC.

[10] *Id.*, p. 3.

[11] Exhibit 17 (SCE-1), SCE's Direct Testimony (R.C. Boada), pp. 1, 4; Exhibit 150 (SCE, R.C. Boada).

structure, a three-year cost of capital cycle, and the cost of capital adjustment mechanism that governs SCE's cost of capital between applications.[12] The Commission has deferred consideration of the adjustment mechanism to a separate Phase 2.[13] The bifurcation of SCE's proposal introduces greater regulatory uncertainty and is inconsistent with a key assumption underlying SCE's request. Nonetheless, the Commission's strict adherence to the longstanding legal standards that have guided it in the past may help alleviate the risks created by the after-the-fact bifurcation of SCE's proposal.

C. SCE's Cost Of Capital Request Is Consistent With Supreme Court Principles

The bedrock guidance underlying regulation of a public utility's rate of return is set forth in the longstanding Supreme Court cases, *Bluefield* and *Hope*, and should continue to guide the Commission in setting a capital structure and rate of return for SCE that:

(1) Reflects what investors demand on assets of similar risk;

(2) Maintains credit quality and ensures confidence in the utility's financial soundness; and,

(3) Allows the utility to attract the capital necessary to provide proper service to its customers.[14]

The Commission has supported these guidelines, stating: "The legal standard for setting the fair ROE has been established by the United States Supreme Court in the *Bluefield* and *Hope* cases."[15] The Commission has also elaborated: "[W]e attempt to set the ROE at a level of return commensurate with market returns on investments having corresponding risks, and adequate to enable a utility to attract investors to finance the replacement and expansion of a utility's facilities to fulfill its public utility service obligation."[16] SCE has submitted substantial evidence in this proceeding showing that its recommended cost of capital and capital structure fulfill these legal requirements. Our proposal provides for capital attraction to support SCE's capital investment needs and offers investors a comparable risk adjusted rate of return to safeguard SCE's financial soundness and credit quality for the benefit of its customers.

1. SCE's Request Meets The Comparability Standard

The record demonstrates that SCE's requested 11.1% ROE is commensurate with market returns on investments with comparable risks. As a California utility, SCE faces unique business risks, such as

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[12] *See* SCE's Application for Authority to Establish Its Authorized Cost of Capital for Utility Operations for 2013 and to Reset the Annual Cost of Capital Adjustment Mechanism and Direct Testimony, Exhibit 17.

[13] *See* footnote 1, above. SCE requested that the cost of capital mechanism be reset to a new value and that the starting value be the 12-month average of the Moody's Baa long-term utility bond yield for the period from October 2011 through September 2012. *See* Exhibit 17, SCE's Direct Testimony (P.T. Hunt), p. 75.

[14] *See* Exhibit 17, SCE's Direct Testimony (R.C. Boada), pp. 9-13, *citing Hope*, 320 U.S. 591, 602 (1944) and *Bluefield*, 262 U.S. 679 (1923).

[15] D.07-12-049, Conclusion of Law No. 2, p. 53.

[16] *See, e.g.*, Commission's decision setting last cost of capital in 2008: D.07-12-049, pp. 9-10 (discussing legal standard for setting the fair rate of return established by *Hope* and *Bluefield* cases).

direct access reopening, market structure implementation, renewable resource policy implementation (which requires increasing renewable transactions under, e.g., the California Renewable Energy Small Tariff (CREST), soon be expanded pursuant to Public Utilities Code Section 399.20 and re-named the Renewable Market Adjusting Tariff (Re-MAT)), and greenhouse gas and carbon offset policy.[17] The investment community requires an ROE that takes into account the business and regulatory risks facing SCE, the adequacy of resulting credit ratios, changes in forecasted interest rates, and SCE's financial performance while operating under the current authorized ROE.

Conversely, Intervenors fail to demonstrate that ROEs authorized in other jurisdictions are a basis for reducing SCE's authorized ROE. For example, TURN witness Lawton opined that an ROE authorized by the Hawaii Public Utilities Commission in an overall *settlement* of Hawaii Electric's general rate case should guide this Commission in setting an ROE,[18] notwithstanding that he had not reviewed Hawaii Electric's risks relative to SCE's.[19] In the Hawaii Electric decision, the Commission explicitly stated that it found the 10% ROE "reasonable and in the public interest *because* it has been agreed upon by the Parties…."[20] While Mr. Lawton did not think it was relevant to mention in his testimony that the approved ROE was a settlement,[21] such a settled-upon ROE in another Commission's jurisdiction is particularly uninformative in our proceeding when the relative risks of the other utility compared to SCE are unknown. Moreover, we are unaware of the various tradeoffs on other issues made by the parties to the settlement, and the Hawaii Electric proceeding had the necessarily varied issues that typically arise in a general rate case.

While Mr. Lawton opined on the stand that "[w]hat's relevant is that [Hawaii Electric] has a decoupling mechanism,"[22] as explained in Section II.J., below, the purported impact of decoupling is a red herring. Moreover, Mr. Lawton simply never reviewed, let alone analyzed, SCE's risks, decoupling or otherwise, in comparison to Hawaii Electric's risks.[23]

FEA's witness Stephen Hill also offered unsupported contentions in support of its ROE proposal. When Mr. Hill was asked in data requests to (1) support his testimony concerning the purported "long-term downward trend in capital costs;" (2) opine whether the Commission should consider regulatory

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17 *See* Exhibit 19, SCE's Rebuttal Testimony (R.C. Boada), p. 5, lines 12-14.

18 Exhibit 26 TURN, Direct Testimony of Daniel J. Lawton, p. 21.

19 Exhibit 71 (SCE-TURN-001, Question 3).

20 *In the Matter of the Application of Hawaii Electric Company, Inc. for Approval of Rate Increases and Revised Rate Schedules and Rules*, Docket No. 2010-0080; Decision and Order No. 30505, 2012 Haw. PUC LEXIS 407, at *156, June 29, 2012, Filed (emphasis added).

21 When asked about his failure to disclose that the Hawaii Commission approved an ROE settlement, Mr. Lawton stated: "I didn't know that it was relevant." Transcript Vol. 3 (TURN, D.J. Lawton), p. 450, lines 20-23.

22 *Id.*, p. 450, lines 24-26.

23 Exhibit 71 (SCE-TURN-001, Question 3).

risk factors when setting *SCE's* ROE; and, (3) opine whether the Commission should consider *SCE's* projected capital investment plan when setting *SCE's* ROE, Mr. Hill responded with purportedly corroborating information concerning *SDG&E*, not *SCE*.[24] Mr. Hill claimed these analytical errors were "typos," but this generous designation ignores that Mr. Hill's analysis is simply "cut and paste" and devoid of legitimate reasoning or delineation of the parties.

In addition, all Intervenors fail to recognize the precedent of granting 50 basis points to the otherwise comparable ROE for SCE to address, among other things, the business risk of power purchase agreements.[25] Given Intervenors' failure to consider SCE's unique business, financial, and regulatory risks, the comparability of their ROE proposals to those authorized in other jurisdictions, or precedent, the Commission should reject Intervenors' proposals as inconsistent with the comparability standard.

2. <u>SCE's Request Meets The Creditworthiness And Financial Soundness Standards</u>

The record demonstrates that the credit ratings published by Moody's Investors Service (Moody's), Standard & Poor's (S&P), and Fitch Ratings (Fitch) have improved "[i]n response to steady credit metrics and ongoing regulatory support from the Commission."[26] These three agencies rate SCE's first mortgage bonds (SCE's primary borrowing in the debt capital markets) in the A category and commercial paper ratings in the "A-2/P-2" category.[27] These ratings allow SCE ready access to long-term and short-term borrowing at attractive rates.

As discussed in SCE's testimony, during times of financial crisis like the 2008 failure of Lehman Brothers, the short-term credit market dries up for many less creditworthy entities.[28] In 2008, even an investment-grade company such as SCE was only able to issue commercial paper with terms of one or two days. The cash flow afforded by the Commission's prior authorized return allowed SCE alternative financing options like its available bank credit lines, so SCE was able to maintain a cash safety net to see it through the crisis. This example illustrates why a financially sound utility is crucial during tough economic times.

S&P currently rates SCE's business risk profile as "Excellent," which supports SCE's corporate rating of "BBB+." SCE's corporate rating is based on, among other things, the current regulatory environment: "SCE operates under regulatory terms that largely support credit quality and are generally constructive so that the utility has a fair opportunity to earn compensatory returns on both an earnings

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[24] Exhibit 74 (SCE-FEA-002, Responses to Questions 7, 10, and 11).
[25] D.07-12-049, Conclusion of Law. No. 23, p. 55.
[26] *See* Exhibit 17, SCE's Direct Testimony (R.C. Boada), p. 16.
[27] *Id.*
[28] *Id.*, p. 17.

basis and a cash-flow basis."[29] If S&P were to reduce SCE's business position from "Excellent" to "Strong" based upon negative action by the Commission in this proceeding (i.e., adoption of any of the low ROE Intervenor proposals), SCE's credit metrics would be predominately characterized as "BBB" instead of "A-," with its debt/capital ratio deemed "BB," that is, the debt/capital ratio would fall below investment grade.[30] Moody's also expects that SCE's credit rating could be downgraded if the current regulatory pattern is upset or if SCE's credit metrics fall appreciably.[31]

TURN witness Marcus opines that in setting the ROE the Commission should not protect against a credit rating decrease unless the revenue requirement increase from the ROE increase is less than the increase in the revenue requirement from the lower credit rating.[32] Besides contravening the *Hope* and *Bluefield* standards, Mr. Marcus ignores the reality that even investment grade customers are constrained in their access to credit during financial market upheavals such as the credit crisis arising from the Lehman Brothers bankruptcy in September 2008.[33]

SCE also demonstrated that the effect of adopting DRA's 8.75% ROE would lead to a decrease in SCE's credit ratios both when debt equivalence is factored in and when it is not.[34] Weaker credit ratios could have negative implications for SCE's credit ratings.[35] The impact of the weaker ratios would be compounded if S&P determined that the lower ROE undermined SCE's business position, as discussed above. Under this scenario, a rating downgrade would be likely. SCE's credit rating has improved in the last ten years due in part to this Commission's regulatory support. As a result, SCE's embedded cost of debt has continued to decline.[36] The Commission should not reverse course now.

No Intervenor provided credible evidence that its proposed ROE could support SCE's credit quality. Conversely, SCE demonstrated that Commission approval of an 11.1% ROE would support its credit ratings, maintain positive credit relationships with banks, and allow SCE to renew bank credit lines. This would directly support SCE's cash flow and the credit ratios used by rating agencies to assess SCE's financial risk.[37] Adopting Intervenor proposals would do just the opposite. Therefore,

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[29] Exhibit 136, Standard and Poor's, "Southern California Edison," RatingsDirect on the Global CreditPortal, July 30, 2012, p. 4.

[30] *See* Exhibit 17, SCE's Direct Testimony (R.C. Boada), p. 44.

[31] *Id.*, p. 49, *citing* Moody's Investors Service, Credit Opinion: Southern California Edison, Global Credit Research, July 7, 2011, p. 1.

[32] Exhibit 28, TURN Testimony (W.B. Marcus), pp. 6-7.

[33] Exhibit 19, SCE's Rebuttal Testimony (P.T. Hunt), pp. 36.

[34] Exhibit 17A ("Credit Ratios Calculated for SCE Proposed Return on Equity and CPUC DRA Recommendation") (R.C. Boada).

[35] Exhibit 17, SCE's Direct Testimony (R.C. Boada), p. 45.

[36] SCE's embedded cost of debt has fallen by 73 basis points since its last cost of capital application, from 6.22% to 5.49%.

[37] As explained in Section II.K.1., below, all three rating agencies consider debt equivalence in their rating determinations. As SCE's expert witness, Mr. Boada, explained "The overall effect of debt equivalence is to make the utility's balance sheet more leveraged and to reduce the quality of the utility's cash flow in credit rating calculations." See Exhibit 17

Continued on the next page

Intervenors' ROE proposals should be rejected as inconsistent with SCE's credit quality and financial soundness.

3. SCE's Request Meets The Capital Attraction Standard

In addition to helping SCE maintain its improved credit rating and credit ratios, adopting SCE's recommended ROE and capital structure would support SCE's continuing ability to attract debt and equity capital on reasonable terms for the benefit of its customers. As Mr. Boada explained: "The company is very concerned with providing safe, reliable, and affordable power to our customers. And this application is designed to enable us to do that on a just and reasonable basis."[38] Mr. Boada's rebuttal testimony explains the relationship between the authorized ROE and capital attraction:

> The authorized return on equity is crucial to capital attraction. A compensatory ROE helps provide assurance that debt can be issued at reasonable rates under a wide variety of economic condition[s], and that equity investors will support continued use of retained earnings and supply new equity capital to fund critical investments.[39]

Intervenors have not provided any evidence showing that their ROE proposals would allow SCE to attract the capital necessary to maintain access to the broader capital markets, which is necessary to fund investments needed to implement the Commission policies. Instead, the Intervenors' below-market returns would compromise investors' willingness to provide equity capital to meet SCE's investment goals and adversely impact capital attraction requirements of generators who are set to build renewable and conventional resources that rely on borrowed funds linked to SCE's financial strength. SCE's capital investment program has increased over the last five years to accommodate system needs and public policy goals.[40] For 2012-2014, SCE forecasts investments of $12 billion in utility capital projects to modernize meters, replace aging infrastructure, and expand transmission access to renewable and other generation resources.[41] SCE must be able to attract capital to finance its capital program as do generators who sign PPAs with SCE. Because of the unprecedented size of California's electric utility capital investment program, SCE must rely on external financing more than the typical electric utility in the United States. SCE has among the highest values in the ratio of capital spending to cash flow and

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(SCE-1), SCE's Direct Testimony (R.C. Boada), p. 44. The Commission affirmed its support on the importance of debt equivalence in calculating an appropriate ROE in the last proceeding: "Debt equivalence is considered in arriving at an overall ROE." D.07-12-049, pp. 28-29.

38 Transcript Vol. 5 (SCE, R.C. Boada), p. 835, lines 7-12.

39 Exhibit 19, SCE Rebuttal Testimony (R.C. Boada), p. 5, lines 19-22.

40 As explained by Mr. Boada, "[t]here are several major causes of upward cost pressures in the utility. A primary cost pressure we have right now is the integration of the costs in the renewable power. We've benefited in recent years from the downward pressure from lower gas prices, but we are seeing upward pressure on our rates from the coming on line of the renewable resources." *See* Transcript Vol. 5 (R.C. Boada), p. 829, lines 10-18.

41 Exhibit 17, SCE Direct Testimony (R.C. Boada), p. 13.

capital spending to book value compared to the 51 Value Line electric utilities.[42] Intervenors' proposed ROEs would not support SCE's ability to obtain critical external financing for this capital spending on attractive terms that benefit its customers. Thus, Intervenors' requested ROEs should be rejected as inconsistent with the capital attraction standard.

4. The Florida Power & Light Example Shows The Hazards Of Setting The ROE Too Low

Considerable time was devoted during the evidentiary hearings to the consequences of the Florida commission's decision on Florida Power and Light (FP&L), with testimony on this subject coming both from PG&E witness Avera and DRA witness Woolridge. Dr. Avera's prepared rebuttal raised this issue, commenting about a "backlash" that came within weeks of the Florida commission's initial decision, which the financial community viewed as "a dramatic shift in the [Florida commission's] traditional policy of regulatory support."[43] Dr. Avera went on state that Value Line cut FP&L's Financial Strength rating and Safety rank and that credit rating agencies downgraded it.[44]

During evidentiary hearings Commissioner Ferron asked Dr. Avera to elaborate on the FP&L experience. Dr. Avera noted that at the time (early 2010), there was a "a lot of turmoil at the commission," and that Florida's governor had appointed some new commissioners and instructed them to vote against FP&L.[45] The decision was issued in January 2010. Within three days of that decision the rating agencies put the company on credit watch and by March both Fitch and S&P had downgraded FP&L.[46] Dr. Avera explained that the Florida commission was subsequently reconstituted with mostly new members, after which a settlement was approved that increased FP&L's authorized return from 10% to 11%, after which the company was taken off credit watch and its stock price recovered.[47]

Testifying on behalf of DRA, Dr. Woolridge opined that FP&L's earnings are now up 25%, its revenues are stable, its stock price is up over 30%, and it now has the "highest rated bonds of virtually any electric utility in the United States."[48] While it is certainly good news that FP&L is now financially stable, Dr. Woolridge's testimony gives short shrift to the draconian, albeit temporary, effects of the Florida commission's initial decision. Dr. Woolridge's extremely low ROE recommendations may be based on his view that all will work out in the end. That is, if this Commission were to set ROEs too

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[42] *Id.*, pp. 15-16, See Figure I-2 ("Ratio of Capital Spending to Cash Flow, SCE and Value Line Electric Utilities (2012 Est.)" and Figure I-3("Ratio of Capital Spending to Total Book Value, SCE and Value Line Electric Utilities (2012 Est.)").

[43] Exhibit 23, p. 1-3.

[44] *Id.*

[45] Transcript Vol. 2 (PG&E, Avera), p. 278.

[46] *Id.*

[47] *Id.*, p. 279.

[48] Transcript Vol. 3 (DRA, Woolridge), p. 417.

low, perhaps he believes that it, like the Florida commission, would simply be reconstituted and a reasonable ROE ultimately set. But neither this Commission nor California utility customers can afford a Florida-like experiment. The capital needs of California's utilities require that they have continual access to the capital markets and setting the ROE too low would disrupt California energy utilities' access to those markets.

Like this Commission, the New Zealand Commerce Commission is also faced with the challenge of determining the appropriate rate of return for utilities under its jurisdiction. In a 2009 decision it set forth a number of principles to guide it in this task. Among other things, the New Zealand commission recognized that there are risks of setting the ROE too high and of setting it to low, but that the societal costs of setting allowed returns too low likely outweigh those of setting them too high:

> 58. The Commission recognizes that if the allowed rate of return is set too high, consumers and access seekers (where an access regime applies) will be charged too much, and there is a risk that the firm may over-capitalise. On the other hand, if the allowed rate of return is set too low, incentives for firms to undertake efficient, welfare-enhancing investment will be distorted.
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> 59. As a general principle, the Commission considers that the social costs of setting allowed returns too low likely outweigh the social costs of setting them too high.[49]

The New Zealand commission policy guidance is a sound one for this Commission to follow as well.

D. SCE's Recommended ROE Is Supported By Model Estimates, Market Conditions, and Investor Risk Perceptions

SCE presented compelling evidence demonstrating that Commission authorization of an 11.1% ROE is supported by financial model estimates, which range from 9.7% to 11.7%. In addition, market conditions and consideration of the business and regulatory risks facing SCE also offer meaningful support for SCE's proposed ROE.

1. SCE's Return On Equity Request Falls Within The Most Reliable Financial Model Estimate, But Model Estimates Are Only The "Starting Point"

The Commission has recognized that "[a]lthough the quantitative financial models are objective, the results are dependent on subjective inputs."[50] Therefore, the Commission appreciates that "financial

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[49] REVISED DRAFT GUIDELINES, THE COMMERCE COMMISSION'S APPROACH TO ESTIMATING THE COST OF CAPITAL, June 19, 2009, § 2.5, *The Asymmetric Costs of Errors in Rate Allowances*, p. 13, ISBN 978-1-869452-80-3. Pursuant to Rule 13.9, SCE asks the Commission to take official notice of this document (or decision) of the New Zealand Commerce Commission.

[50] D.07-12-049, Conclusion of Law No. 17, p. 55.

models are commonly used as a *starting point* to estimate a fair ROE."[51] It affirmed this view in its last cost of capital decision, stating that:

> In the final analysis, it is the application of informed judgment, not the precision of financial models, which is the key to selecting a specific ROE estimate…. [I]t is apparent that all these models have their flaws and, as we have routinely stated in past decisions, the models should not be used rigidly or as definitive proxies for the determination of the investor-required ROE…. The models are only helpful as rough gauges of the realm of reasonableness.[52]

The Commission should start its analysis with SCE's currently authorized 11.5% ROE, the market reaction to that level of return, and the changes in *forecasted* interest rates since the last cost of capital decision. As discussed elsewhere in this brief, the market has reacted favorably to SCE's currently-authorized ROE. Consequently, SCE's credit ratings and ratios have been stable. SCE has therefore been able to attract the capital necessary to maintain reliability and fund the Commission's policy objectives, notwithstanding the upheaval in the financial markets in the past several years and the significant business and regulatory risks facing the company. Further, as discussed below in Section II.F., equity risk premiums have increased, thus an ROE based solely on current low interest rates would not be compensatory because the increased risk premium offsets interest rate declines. Against this backdrop, the Commission should once again reject a mechanistic application of any of model and apply its reasoned judgment in setting the ROE.

SCE has employed three financial models estimates in this proceeding: the Capital Asset Pricing Model (CAPM), the Historical Risk Premium (HRP) Method, and the Discounted Cash Flow (DCF) Method. Both the CAPM and HRP are risk premium methods that estimate investors' required rates of return directly by adding a risk premium to observable bond yields.[53] SCE's estimate is based on the CAPM model because it is the only model that directly accounts for increased systematic risk and financial risk introduced by California policy objectives.[54] Nonetheless, when properly adjusted for appropriate risk factors, all of the model results support SCE's requested 11.1% ROE.

To begin its analyses SCE selected a proxy group that meets the Commission's standards of having "basic characteristics similar to the utility that the companies are selected to proxy."[55] SCE's

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[51] *Id.*, Finding of Fact No. 40, p. 53 (emphasis added).
[52] *Id.*, p. 28.
[53] *Id.*, p. 61.
[54] Exhibit 19, SCE's Rebuttal Testimony (P.T. Hunt), p. 53.
[55] D.07-12-049, Conclusion of Law, No. 4, p. 53. SCE's proxy group is also consistent with the selection criteria outlined elsewhere in D.07-12-049; *see* D.07-12-049, p. 15.

proxy group was then entered into each of the models,[56] along with various other inputs, to arrive at an ROE estimate.

2. The CAPM Estimates Are the Most Reliable

The CAPM calculates the return on common equity as the return on the risk-free asset (usually Treasury bills or Treasury bonds) and the company-specific risk measure (beta), multiplied by an expected market risk premium.[57] The expected market risk premium equals the difference between the expected return on the market portfolio and the risk-free rate.[58] In addition, as discussed in Section II.E., below, the CAPM analysis also accounts for the leverage difference between companies in the proxy group and SCE.[59] SCE estimated two market risk premiums: one using yield spreads on "Baa" corporate bonds above the risk-free rate and a second using the spread between the preferred equity yields and the risk-free rate.[60] SCE explains its calculated market risk premium and the Intervenors' calculation errors in the sections that follow.

3. SCE's Application of the ATWACC Analysis is Appropriate

Because the DCF and HRP analysis do not adjust for financial leverage, SCE calculates the appropriate adjustment using the after-tax weighted average cost of capital (ATWACC). The leverage adjustment captures the required ROE changes as financial risk changes.[61] A second leverage adjustment is performed to reflect the greater financial risk embodied in SCE's requested ratemaking capital structure.[62] Applying the second leverage adjustment to each of the DCF, CAPM and HRP models results in the below estimates:

Cost of Equity Estimates With ATWACC Adjustments[63]		
Model	**First Leverage Adjustment**	**Second Leverage Adjustment**
Discounted Cash Flow (DCF)	10.1% – 10.7%	10.7% - 11.3%
Capital Asset Pricing Model (CAPM)	9.7% - 11.7% (not adjusted)	10.2% - 12.4%
Historical Risk Premium (HRP)	9.3%	9.8%

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56 As discussed in the HRP Estimate section, the comparable group for the HRP analysis was different due to the model's requirements, but includes some of the same companies.

57 Exhibit 17, SCE's Direct Testimony (P.T. Hunt), p. 62.

58 *Id.*

59 *Id.*, p. 68.

60 *Id.*, p. 54.

61 *Id.*, p. 69.

62 *Id.*, p. 70.

63 This table reflects information from two tables in Exhibit 17, SCE's Direct Testimony, Table IV-9 on p. 70 ("Cost of Equity Estimates Adjusted for Financial Risk Differences Between Comparable Group and SCE") and Table IV-10 ("Cost of Equity Estimates Adjusted For Financial Risk Differences Between Market Capital Structure and Regulatory Capital Structure").

As explained by SCE witness, Dr. Hunt, these estimates demonstrate "that applying market-based cost of capital estimates to a book-value based capital structure can result in an authorized return on equity that is substantially deficient."[64] The principles underlying these adjustments are discussed in more detail in Section II.E below.

4. The HRP Estimates Are Unreliable

The HRP model uses historical returns of utilities included in S&P's Electric Utility group, which overlaps somewhat with SCE's proxy group for the other models. While both the HRP and CAPM estimate the rate of return for invested capital by adding up the benchmark interest rate plus the equity risk premium above that interest rate, the HRP model is unreliable due to the assumption that relative risk is unchanged between electric utility stocks and "Aa" public utility bonds. This assumed constant historical risk premium does not recognize the electric utility industry's increasing risks or changes in financial market conditions.[65]

5. The DCF Model Estimates Are Understated

SCE's DCF model used the Institutional Brokers' Estimate System (IBES) growth rate and the sustainable growth rate for each company within SCE's proxy group. Each estimate was compared to bond yields measured by the Moody's long term utility bond yield with the same rating as each individual company.[66] The DCF model is based on the unrealistic assumptions that electric utilities have a stable price/earnings (P/E) ratio and a stable market-to-book (M/B) ratio, both of which have been unstable over time for the electric industry as a whole.[67] Therefore, the DCF model understates the required ROE for the proxy group and for SCE.[68]

6. Intervenors' ROE Recommendations, and DRA's In Particular, Are Unreasonable

As explained in SCE's testimony, the witnesses for EPUC (Mr. Gorman), FEA (Mr. Hill), TURN (Mr. Lawton), and DRA (Dr. Woolridge), estimate returns on equities from their model results that would undermine SCE's ability to attract capital, weaken its credit quality and financial soundness, and are not compensatory. This is particularly true of DRA's 8.75% ROE recommendation, which is by far the lowest ROE proposed for SCE in this proceeding and significantly lower than DRA's other recent proposals of 9.25% for California Pacific Electric Company, a small distribution-only electric utility and 9.35% for Bear Valley Electric Service Division.[69] As SDG&E witness Dr. Morin noted: "It is very puzzling as to why DRA recommends ROEs of 15 9.25% - 9.35% for contemporaneous

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[64] *Id.*, p. 71, lines 5-7.
[65] *Id.*, p. 54.
[66] *Id.*, p. 58.
[67] *Id.*
[68] *Id.*, p. 60.
[69] Exhibit 6, SDG&E's Amended Rebuttal Testimony (R.A. Morin), p. 2.

electricity distribution utility proceedings while Mr. Woolridge on behalf of DRA recommends only 8.50% in this proceeding [for SDG&E], involving a riskier, vertically integrated electric utility."[70]

When DRA's project manager, Jerry Oh, was asked about the discrepancy between DRA's ROE proposals, he stated his belief that the difference stemmed from different expert witnesses, the timing of the input data, and different variables the experts "might have used."[71] When Mr. Oh was asked whether he or anyone else at DRA provided any policy guidance to Mr. Woolridge, he responded: "No, he had his task. We asked him to be our expert witness and provide his recommendation for the return of equity on the energy utility companies."[72]

Whatever the reason for Mr. Wooldridge's leftfield ROE proposal, DRA apparently did not see fit to investigate the matter. While Mr. Oh had a brief conversation with the expert witness for the CalPeco and Bear Valley proceedings, he did not specifically inquire into the reasons for the differences in ROE proposals.[73] DRA also did not coordinate or even discuss its recommendations in this proceeding with the other Intervenors.[74] By failing to do so, DRA abdicated its responsibility in this proceeding to an expert who did not receive any policy guidance or even the benefit of a discussion about DRA's other recent ROE recommendations. Therefore, the Commission's reliance on DRA's analysis or proposal would be detrimental to SCE and California regulation as a whole. As Dr. Morin opined:

> The quality of regulation, the reasonableness of rate of return awards, and the consistency of regulation in a given jurisdiction clearly have implications for regulatory climate, economic development and job creation in a given territory. It is my belief that inconsistencies in DRA's recommended returns for electric utilities have negative implications on these grounds and are not consistent with the economic well-being of the State of California.[75]

7. <u>Intervenors' ROE Analyses Contain Numerous Errors</u>

In rebuttal testimony, SCE demonstrated that Intervenors' ROE analyses contain numerous errors:

- SCE's DCF dividend yield calculation is correct; Intervenors is not.[76]
- Intervenors' criticisms of SCE's market risk premium calculation are incorrect.[77]

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[70] *Id.*, p. 2.
[71] Transcript Vol. 4 (DRA, J. Oh), p. 759, lines 7-12.
[72] *Id.*, p. 755, line 26 to 756, line 3.
[73] *Id.*, p. 758.
[74] *Id.*, p. 757, lines 12-21.
[75] Exhibit 6, SDG&E's Amended Rebuttal Testimony (R.A. Morin), p. 2, lines 18-23.
[76] Exhibit 19, p. 26.
[77] *Id.*, pp. 28-30. Exhibit 20, pp. 3-15.

- SCE's use of arithmetic averages for calculation of risk premia are correct; the geometric averages used by Intervenors are not. [78]
- Contrary to Intervenors' claims, SCE's calculations of beta are correct.[79]
- Intervenors' criticisms of the Empirical CAPM are incorrect.[80]
- Intervenors' arguments against using analyst earnings growth estimates as the DCF growth rate are without merit.[81]
- Contrary to Intervenors' claims, SCE's removal of outlier DCF estimates is reasonable.[82]
- Intervenors' use of the market-to-book ratio test cannot be right.[83]
- DRA's regression analysis does not support the claimed relationship between earned return, cost of equity, and the market-to-book ratio.[84]

Given all these flaws, the Commission cannot rely on Intervenors' ROE analyses.

E. Proper Estimation Of SCE's Return On Equity Must Account For Leverage

One of the key elements of equity risk is the leverage of the company. Here, we mean financial leverage,[85] which is the relative share of debt and preferred equity in the financing of the company. Financial leverage matters for return on equity because higher financial leverage amplifies the volatility of earned equity returns, all other factors equal.[86] As such, it is a critical factor in determining the required return on equity that investors demand.

Financial leverage must be based on market values of debt, preferred equity, and common equity. It is not appropriate to measure financial leverage on a book value basis.[87]

SCE made two adjustments for financial risk. The first adjustment accounted for the difference in leverage between SCE and the comparable group of companies used in SCE's financial models,[88] while the second accounted for the difference between SCE's market capital structure and SCE's

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[78] Exhibit 19, p. 28.
[79] *Id.*, pp. 30-31.
[80] *Id.*, p. 31.
[81] *Id.*, pp. 26-27.
[82] *Id.*, pp. 27-28.
[83] Exhibit 20, pp. 26-35.
[84] Exhibit 19, pp. 25-26.
[85] In its simplest form, financial leverage refers to the relative shares of debt and equity, measured on a market basis, in the financing of the company. In SCE's case, its financing also includes preferred equity, which complicates the measurement of financial leverage but does not change any of the important implications of it. Another form of leverage which can be relevant for equity risk is operating leverage. Operating leverage is the extent to which a firm's operating costs are fixed or variable. An electric utility such as SCE has high operating leverage because a relatively large share of its costs are fixed costs. Capacity costs in power purchase agreements contribute to operating leverage.
[86] Exhibit 20, Dr. Vilbert's Rebuttal Testimony, pp. 22-25.
[87] *Id.*, pp. 16-18, 21-26.
[88] Exhibit 17, SCE's Direct Testimony (P.T. Hunt), pp. 68-70.

proposed regulatory capital structure.[89] Both adjustments are required to properly estimate SCE's authorized cost of capital by properly reflecting financial risk in that calculation.[90]

Dr. Hunt's leverage adjustments are based on the same financial principles that support the un-levering and re-levering of betas in the CAPM analysis.[91] Dr. Hunt has employed this analysis for over ten years before this Commission.[92]

F. The Equity Risk Premium Has Increased

One of the key metrics to estimate return on Common Equity is the premium that equity investors require over the return on bonds in order to hold equity investments in their portfolios. In technical terms, particularly in the context of the CAPM, this metric is known as the market risk premium or equity risk premium.

SCE's direct testimony provided clear and convincing evidence that the financial crisis of 2008, and particularly the collapse of Lehman Brothers in September 2008, increased the market risk premium, an increase not captured by historical market risk premium estimates.[93] The market risk premium currently ranges from 7.50% to 9.06%, with an average of 8.28%. The 7.50% market risk premium is based on an analysis of yield spreads between Baa-rated corporate bond yields and the risk-free rate (measured by yields on long Treasury bonds),[94] while the 9.06% market risk premium is based on a similar analysis of rates for preferred equity issues with similar credit ratings.[95]

SCE's direct testimony is corroborated by the analysis presented by PG&E witness Dr. Avera, who estimated a market risk premium of 9.7% based on a DCF analysis of dividend-paying firms in the Standard & Poor's 500 Index.[96] In addition, the behavior of the Chicago Board Options Exchange Volatility Index®, or VIX®, supports SCE's analysis of the market risk premium.[97]

Intervenor witnesses employed a mix of historical and forward-looking estimates of the market risk premium, but these estimates are seriously deficient and considerably understate the correct value. As discussed by SCE witness Dr. Vilbert the historical estimates used by Intervenors are downward-biased and based on incorrect geometric averages.[98] Regarding the forward-looking estimates of the

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[89] *Id.*, pp. 70-71.
[90] Exhibit 20, Dr. Vilbert's Rebuttal Testimony, p. 26.
[91] Transcript Vol. 5 (SCE, P.T. Hunt), p. 871, lines 9-15. Also see Exhibit 140, Response to Question 38c and Exhibit 138, Response to Question 31a.
[92] *Id.*
[93] *Id.*, pp. 36-37.
[94] *Id.*, pp. 65-66.
[95] *Id.*
[96] Exhibit 21, PG&E's Direct Testimony (W. Avera), pp. 2-31, 2A-11.
[97] Exhibit 19, SCE's Rebuttal Testimony (P.T. Hunt), pp. 24-25.
[98] Exhibit 20, Dr. Vilbert's Rebuttal Testimony, pp. 2-10. Regarding the incorrect use of the geometric average, also see Exhibit 21, SCE's Rebuttal Testimony (P.T. Hunt), p. 28.

market risk premium employed by Intervenor witnesses, (particularly Dr. Woolridge), SCE witness, Dr. Vilbert, points out that "surveys are difficult to perform and interpret reliably …"[99]

Finally, Dr. Vilbert shows that none of the Intervenors' market risk premium estimates adjust for current market conditions,[100] a serious flaw that compromises all of Intervenors' CAPM estimates.

That the market risk premium has increased should not be a surprise, as it is entirely consistent with a "flight to quality," in which investors seek to flee riskier equity investments for the relative safety of investment-grade bonds and risk-free assets such as Treasury bills and bonds. Increased demand for bonds increases their prices and depresses their yield, while decreased demand for equities increases the required return on equities and the market risk premium. SCE's estimates of the market risk premium are solidly supported, whereas Intervenors' are not.

G. Market Conditions Demonstrate That SCE's Access To Financial Markets Requires Recognition Of Investors' Return Requirements On Higher Risk Utility Assets

As explained in direct and rebuttal testimony, SCE's market experience with issuing preferred equity shows that the current low interest rate environment has not led to equivalent reductions in SCE's cost of preferred equity capital. While it is clear that the cost of capital has declined from the height of the 2008 economic crisis, the cost of equity capital has not fallen as much as Treasury yields would indicate. Setting an ROE based solely on low current interest rates would be "'below-market' and would not provide sufficient compensation or incentives to investors for SCE to attract and properly reward the capital needed to serve [its] customers."[101] The economy's slow economic growth rate means that there is continued risk and uncertainty in the market, which justifies a higher ROE than indicated by mere implementation of the financial models – a mechanical practice which this Commission appropriately does not support.[102]

As discussed in Section II.F., Intervenors' reliance on low Treasury rates is misguided because the widening of the risk premium between utility equity costs and Treasury securities do not adequately show trends in utility equity costs. Instead, the spread "is evidence of an increase in the market risk premium above long-run historical values."[103] As explained in SCE's testimony, the modest changes in SCE's preferred equity rates compared to treasury rates show: (1) that investors' flight to quality has succeeded in substantially reducing long-term Treasury rates; and, (2) these reductions have not reduced investors' return requirements on higher-risk assets like utility preferred and more subordinated common

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[99] Exhibit 20, Dr. Vilbert's Rebuttal Testimony, p. 7.
[100] *Id.*, pp. 10-15.
[101] Exhibit 17, SCE's Direct Testimony (R.C. Boada), p. 5, lines 3-5.
[102] Exhibit 19, SCE's Rebuttal Testimony (P.T. Hunt), p. 10.
[103] *See* Exhibit 17, SCE's Direct Testimony (R.C. Boada), p. 64, lines 10-11.

equity.[104] In the last cost of capital proceeding, the Commission agreed that "[a]bsent evidence justifying the use of either treasury or utility bonds… adjusted utility bond results should be used in considering a reasonable ROE range…."[105]

H. Investor Perceptions Of The Considerable Business And Regulatory Risk That Exist, Including Power Purchase Agreements And Regulatory Lag, Support SCE's Return on Equity Request

1. The Record Shows That California Regulation Imposes Significant Risks Relative To Other States

TURN witness Marcus generally acknowledges that the risk faced by a utility relative to that faced by other comparable utilities influences the setting of the adopted ROE:

> To the extent that the applicant faces by and large more risk than its comparison group, a case can be made to set its ROEs on the higher end of the range of reasonableness, and vice versa.[106]

SCE agrees with this observation. However, the remainder of Mr. Marcus' testimony is devoted to opining that California regulation reduces the risks SCE faces relative to those faced by utilities in other jurisdictions. Here we part company. As discussed below, SCE witnesses Worden and Ulrich thoroughly rebutted Mr. Marcus' excessively rosy view of the risks of California utility regulation.[107]

2. California's General Rate Case Process Is More Risky Than That Of Other States

Rebutting Mr. Marcus' opinions on the risks of California's general rate case process relative to other states, SCE witness Worden testified: "Contrary to Mr. Marcus' assertion, California's regulatory structure actually *increases* regulatory risk."[108] First, California takes longer to process general rate cases than other states.[109] And the time it takes for California to process general rate cases has been increasing. As Mr. Worden testified, between 1983 and 1992, 367 days elapsed between the filing of a general rate case and adoption of a final decision, while during the period since 1999, it has taken 589 days.[110] SCE's 2012 general rate case is a particularly egregious example of delay. The application was filed in November 2010. As of the date this brief is being filed, more than 10 months into the test year and nearly two years after the application was filed, SCE still does not have a proposed decision on that application, much less a final decision from the Commission. The two Sempra utilities are in a similar situation, with no final general rate case decision, though they filed their 2012 general rate case applications about a month after SCE's.

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[104] *Id.*, p. 7, lines 1-10.
[105] D.07-12-049, Conclusion of Law No. 15, p. 54 – While the Commission made this statement when discussing the use of treasury or utility bonds in the Historical Risk Premium financial model estimate, the reasoning is transferable here.
[106] Exhibit 28, p. 2 (*emphasis in original*).
[107] PG&E witness Smith also rebutted Mr. Marcus' testimony on the relative risks of California utility regulation.
[108] Exhibit 19, p. 38.
[109] Exhibit 19, p. 39.
[110] *Id.*

TURN witness Lawton testified that the delay in SCE's 2012 is not a significant regulatory lag: "Because, as I understand the California process, once the decision is rendered, whatever decision is made relates back to the application date."[111] This view is at best naïve. First, Commission general rate case decision-making does not "relate back" to the application date. Mr. Lawton may have been referring to the fact that with a memorandum account, the revenue requirement ultimately approved by the Commission will be computed as of the start of the test year, January 1, 2012 in SCE's case. However, while the memorandum account preserves the utility's opportunity to recover a full year's revenue requirement it does not cure all the problems that arise from a delayed decision. For example, SCE has had to budget its 2012 capital expenditures and expenses and incur most of the associated costs without knowing what the Commission will ultimately authorize for the year. If SCE "guesses wrong" on the overall spending the Commission ultimately approves in the 2012 general rate case decision, there will be little, if any, time for course corrections. This means investors are at risk for the spending decisions SCE has had to make in the absence of Commission authorization. Investing billions in capital without budgetary guidance from a GRC is an example of both regulatory lag and regulatory risk.[112]

The financial significance of the delay in the general rate case decision was highlighted during the cross-examination of SCE witness Hunt. EPUC introduced Exhibit 146, an excerpt from a Value Line report on SCE and its parent company. Included in that document was the statement: "Management won't provide earnings guidance until the [Commission] issues its final decision [on the 2012 general rate case]." Dr. Hunt explained the significance of this statement: "It means there's much less information than investors would ordinarily have about what the company's expectations are for 2012 financial results."[113] The absence of such information obviously means that those considering investing in SCE must take a larger risk. That is, the delay in processing SCE's 2012 general rate case has increased SCE's risk, which results in a higher authorized ROE requirement.

Mr. Worden also debunked the canard put forward by Mr. Marcus that "the future test year used in California … dramatically reduces risk."[114] For example, Mr. Worden showed that the percentage of the utility's overall requested increase approved in California is about 50%, the same as other states, and that the "known and measurable" approach followed in other states is not more risky than the hyper litigious general rate case process followed in California.[115]

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[111] Transcript Vol. 3 (TURN, Lawton), p. 455.
[112] Exhibit 19, SCE's Rebuttal Testimony (R.G. Worden), pp. 38-39. Transcript Vol. 5 (SCE, R.G. Worden), pp. 953-954.
[113] Transcript Vol. 5, (SCE, P.T. Hunt), p. 902.
[114] Exhibit 28, p. 17.
[115] Exhibit 19, p. 41.

Mr. Worden also debunked Mr. Marcus' misplaced reliance on an incomplete NARUC survey to claim that "California is virtually alone in in North America in having a future test year three years after a base year."[116] Mr. Worden showed that this survey relied on responses from only 20 of 51 jurisdictions in the U.S., and did not include any of the other regulatory commissions in North America.[117]

Finally, Mr. Worden's rebuttal provided examples of specific cost adjustments proposed by TURN and others in SCE's 2012 general rate cases that are at risk of cost recovery even though they are "known and measurable."[118] In sum, TURN's claim that California's approach to general rate case litigation renders SCE less risky than comparable utilities in other states cannot stand.

3. California's Procurement Process Is More Risky Than That Of Other States, Which Supports A Higher ROE

Since California implemented electric utility industry restructuring in the late 1990s, SCE has transitioned from a regulatory regime in which it owned and operated most of the electric generation it provides its customers to one in which it purchases most of that generation from other parties under power purchase agreements (PPAs). Under the previous regime, SCE had the opportunity to earn a rate of return on the capital invested in those generating assets and the incentive to operate them more efficiently than what was assumed when the revenue requirement was set. In short, SCE had both upside and downside risks. In contrast, in the current regulatory regime most generation is provided through PPAs, which have only downside risk. SCE's direct testimony pointed out these risks.[119] TURN witness Marcus argued that SCE's "concern regarding its long-term procurement contracts is unfounded."[120] In rebuttal, Dr. Ulrich showed that, contrary to Mr. Marcus' opinions, SCE "continues to face the risk of disallowance on contract administration or compliance with upfront standards for procurement from both conventional and renewable generation and faces an increased risk of litigation," risks that are exacerbated by the sheer number of transactions and their complexity.[121]

Dr. Ulrich then testified that, contrary to Mr. Marcus' opinion, cost recovery risk is not eliminated by entering into PPAs.[122] SCE's administration of such contracts is subject to Commission review in future Energy Resource Recovery Account (ERRA) proceedings. As Dr. Urich pointed out: "So I'll get a contract signed. I'll put it to the Commission for approval. The Commission says yes, you

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[116] Exhibit 28, p. 13.
[117] Exhibit 19, p. 42.
[118] Exhibit 19, pp. 44-45.
[119] Exhibit 17, pp. 23-24.
[120] Exhibit 28, p. 29.
[121] Exhibit 19, p. 48.
[122] Exhibit 19, p. 49.

can approve it. And now I [get] 20 chances over the next 20 years to prove that how I administered this contract was reasonable."[123]

Next, Dr. Ulrich provided specific examples of recent disallowance proposals, including DRA's $12 million disallowance proposal for the 2009 record year, their $25 million disallowance proposal for 2010, and their $11 million disallowance proposal for 2011.[124] And those considering investing in SCE cannot ignore the risks of such disallowances, as Dr. Ulrich testified: "I think it would be naïve to assume that if somebody makes a recommendation for disallowance that as an investor to Edison I should ignore whether the Commission accepts that or doesn't."[125] These facets of the current California regulatory regime (e.g., PPAs) introduce more risk relative to other states, where utilities continue to own substantial generation, thus justifying a "California premium" or "spread."

In addition, Dr. Ulrich testified about the tradeoffs between fewer large-scale contracts versus more smaller-scale contracts, noting that while the large contracts have more precise terms, the terms of the smaller scale contracts have less descriptive language and does not address all of the risks to the extent larger contracts do, which increases SCE's risk.[126]

Further, Dr. Ulrich also testified that increased litigation risk is another consequence of the move from utility-owned generation to PPAs. Although SCE can terminate a PPA if a project fails, the other party can seek suspension or claim force majeure and commence litigation, which adds to SCE's risk.[127]

Another PPA-related risk that TURN witness Marcus dismissed SCE's responsibility for meeting renewable targets. Contrary to TURN, Dr. Ulrich testified that "SCE could face consequences if the renewable generators it has contracted with do not perform."[128] Dr. Ulrich also provided rebuttal to TURN's testimony on least-cost dispatch, the use of SCE's planning assumptions in procurement planning, and the risks of the solar photovoltaic program.[129]

Finally, Dr. Ulrich also testified about the risks of "feed-in" tariffs, such as CREST, the Renewables Auction Mechanism, and the Solar Photovoltaic Program.[130] In sum, the record contains overwhelming evidence of the risks SCE faces from PPAs, risks that must ultimately translate to the authorized ROE.

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[123] Transcript Vol. 5 (SCE, M.L. Ulrich), p. 926.
[124] *Id.*, p. 921.
[125] *Id.*, p. 933.
[126] *Id.*, p. 936.
[127] Exhibit 19, p. 50.
[128] *Id.*, p. 51.
[129] *Id*, pp. 52-54.
[130] Exhibit 19, SCE's Direct Testimony (M.L. Ulrich), p. 49.

4. Other Regulatory Risks Supporting A Higher ROE

In addition to the general rate case and PPA issues discussed in the preceding sections, SCE's direct testimony addressed other risks stemming from California regulation – the Legislature's reinstitution of direct access, which leaves SCE responsible for system resource adequacy, community choice aggregation, and municipalization, which adds to SCE's risk by affecting our ability to predict the size of the customer base, and self-generation and emerging technologies, which also adds to risk by creating uncertainty regarding the size of the customer base.[131]

I. The Commission Should Continue Its Historic Practice Of Authorizing Electric Utility Rates Of Return That Are Greater Than Those Of Water, Gas, or Combination Utilities

1. This Commission Has Consistently Maintained A Substantial Spread Between SCE's Authorized ROE And Authorized ROEs For Water Utilities

The Commission has consistently maintained a substantial spread between SCE's authorized ROE and authorized ROEs for large water utilities (Class A water utilities). As shown in Appendix A, since 2006 this spread has ranged from 1.30% to 1.75%.[132] This spread should be maintained in the ROE that the Commission adopts for SCE in this application.

2. The Record Shows That, Similar To This Commission, Other Regulatory Commissions Find It Reasonable To Adopt A Spread Between The ROEs Of Electric-Only Utilities And Those For Combination Gas-Electric Utilities

Testifying on behalf of SDG&E and SoCalGas, Dr. Morin presented evidence showing that the average of the ROEs recently adopted by other U.S. regulatory commissions for electric-only utilities is 10.54%, while that for combination gas and electric utilities is 10.34%, a 20 basis point spread.[133] As discussed in Section IX of this brief, California should continue its practice of adopting an ROE premium relative to other states due to the higher risk of California regulation, so the absolute values of the Dr. Morin's average would need to be adjusted. However, with that adjustment it is also appropriate to maintain a spread between the ROE adopted for SCE, an electric-only utility[134] and that for combination gas and electric utilities. For example, in the last energy utility cost of capital proceeding, the Commission approved a 11.5% ROE for SCE, 11.1% for SDG&E, and a 11.35% ROE for PG&E, an

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[131] *See* Exhibit 17, pp. 24-28.

[132] In Appendix A, we have indicated where water company ROEs resulted from a stipulation or settlement. While stipulations and settlements do not ordinarily set precedent for later cases before the Commission, the stipulations and settlements do show what authorized ROEs the Commission found to be in the public interest. When stipulations and settlements are excluded, the range of spreads does not change appreciably. We also note that for 2008 and earlier, water companies filed cases for individual districts or groups of districts. This does not invalidate the data for those years, but it greatly complicates the task of computing an average or other similar summary statistic from the data. For that reason, we have not computed an average spread.

[133] Exhibit 6 (SDG&E, R.A. Morin), p. 68.

[134] As noted during the oral testimony of SCE witness Vilbert, SCE also provides propane gas service to a relatively small percentage of its overall customer base on Santa Catalina Island.

average spread of about 27 basis points, which is in line with the spread cited by Dr. Morin. Dr. Morin's spread is supported by other evidence. For example, DRA witness Woolridge found the the median beta for electric companies exceeded the median beta for gas companies by 0.05 (0.73 minus 0.68).[135] At another place in his testimony, Woolridge presents betas for Western electric utilities and national natural gas utilities; the electric utility beta is higher by 0.09.[136] Based on the market risk premiums employed by SCE,[137] these beta differences imply an ROE difference ranging from 38 to 82 basis points.

J. There is No Significant Difference In The Estimated Cost of Capital For Companies With Or Without Decoupling

Decoupling is the regulatory practice of separating authorized base rate revenues from the actual revenues of the company. With the exception of the period from 1997 through 2002 when SCE operated under performance-based ratemaking, SCE's authorized base rate revenues have been decoupled. For SCE, decoupling began in 1983.[138] One of the key reasons for establishing decoupling for SCE was to eliminate "disincentives for the utility to promote the conservation and rate design policies enunciated by this Commission."[139] Decoupling has been reflected in SCE's authorized cost of capital for nearly 30 years.

Despite the fact that decoupling has been a feature of California energy utility regulation for nearly 30 years, Intervenors claim that it requires a reduction to SCE's proposed ROE. Intervenors are mistaken. SCE witness Vilbert presented an extensive study of decoupling in the natural gas industry,[140] concluding: "Our statistical tests do *not* support the position that the cost of capital is reduced by adoption of decoupling."[141]

Aside from Dr. Vilbert's statistical analysis, there are two important reasons why decoupling does not cause the cost of equity capital to decline: (1) its effect on earnings, apart from its effect on base revenues, and (2) increases in regulatory risk that result from decoupling.

Regarding the first item, the interests of bondholders must be distinguished from those of equity holders.[142] Because decoupling stabilizes revenues (all else equal), it is attractive to bondholders who hold a senior claim on revenues (relative to equity holders). However, while decoupling can stabilize revenues, it can destabilize earnings. The classic example is a summer heat wave, such as SCE's system regularly experiences. All other things equal, the summer heat wave will cause revenues to increase as

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[135] Exhibit 24, p. 4-40.
[136] Exhibit 24, Attachment JRW-8.
[137] SCE's market risk premiums range from 7.50% to 9.06%. See Exhibit 17, pp. 64.67.
[138] D.82-12-055, 1982 Cal. PUC LEXIS 1209; 10 CPUC 2d 155. (SCE's 1983 General Rate Case decision.)
[139] *Id.*
[140] Exhibit 20 (SCE-4), Dr. Vilbert's Rebuttal Testimony, pp. 35-39, Appendix B.
[141] *Id.*, Appendix B, p. 19 (emphasis in original).
[142] *Id.*, p. 39.

customers consume more electricity for air conditioning and other cooling needs. At the same time, the increased stress on the electric system will cause an increase in operating cost due to increased outages. Without decoupling, the increased revenue would serve to offset the increased operating cost. However, with decoupling, the increased revenue will eventually be returned to customers while the increased cost will be the responsibility of shareholders as earnings are lower than they would otherwise be.

Decoupling increases regulatory risk because a decoupled utility does not keep increased revenue from increased sales. This inevitably leads to more frequent rate cases to recover increased costs, increasing regulatory risk. For California energy utilities, this situation is exacerbated by the long period required to decide general rate case applications.[143]

K. SCE's Proposed Ratemaking Capital Structure Is Appropriate

SCE requests continuation of its currently authorized capital structure of 48% common equity, 9% preferred equity, and 43% long-term debt based on its assessment of debt equivalence, its credit ratios, and its current credit ratings. DRA accepts SCE's proposed capital structure, but does not agree with the "role" of debt equivalence "in the determination of the appropriate structure for ratemaking purposes."[144] FEA opposes SCE's capital structure and recommends that SCE's preferred stock be decreased to 7% preferred equity and long-term debt increased to 45%.[145]

1. Debt Equivalence Remains Important

As discussed in Section II.H.3., SCE is required to enter into PPAs to supply stable power to its customers. These contracts are perceived by the financial community to be the equivalent of debt for purposes of credit ratings.[146] SCE's projected debt equivalents are $2,520 million in 2013.[147] All three rating agencies currently consider debt equivalence in their credit rating determinations. As the Commission noted in the last cost of capital decision, "[d]ebt equivalence has been reflected in the utilities' credit ratings since at least 1990."[148] Based upon SCE's requested cost of capital and its current depreciation methodology,[149] the imputation of debt equivalence reduces SCE's projected credit

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[143] Exhibit 19, SCE's Rebuttal Testimony (R. G. Worden), pp. 39-40.
[144] Exhibit 24, DRA Report (J. Randall Woolridge), p. 3-23.
[145] Exhibit 30, FEA's Direct Testimony (Stephen G. Hill), p. 86.
[146] Exhibit 17, SCE's Direct Testimony (R.C. Boada), p. 12 and D.07-12-049, p. 39, footnote 54 ("Debt equivalence is a term used by credit analysts for treating long-term obligations which are perceived as analogous to the long-term debt, such as purchased power agreements, leases, or other contracts, as if they were debt in assessing an entity's credit rating.")
[147] Exhibit 17, SCE's Direct Testimony (R.C. Boada), p. 43.
[148] D.07-12-049, Finding of Fact, No. 24, p. 51.
[149] As discussed in SCE's testimony, SCE's current depreciation rates were set in D.09-03-025 and are at issue in the 2012 GRC, which has not yet been decided.

ratios substantially.[150] This reduction is even more significant if DRA's below-market ROE is adopted.[151] Intervenors have not offered any compelling evidence that counters SCE's showing. Notwithstanding the fact that this issue has been decided by this Commission in past cost of capital and long term procurement plan proceedings, DRA challenges the importance of debt equivalence in determining an appropriate capital structure for SCE.[152]

Once debt equivalence is calculated, it is imputed to the utility's balance sheet. The overall effect of debt equivalence is to increase the utility's leverage and reduce the quality of its cash flow.[153] The Commission has acknowledged that "debt equivalence has an impact on the financial risk of SCE…."[154] As the Commission has recognized, that risk not only impacts SCE's capital structure, but necessarily impacts SCE's ROE:

> In D.05-12-043, we affirmed that debt equivalence would be assessed on a case-by-case basis along with other financial, regulatory and operational risks in setting a balanced capital structure and fair ROE. Our goal in doing so was, and continues to be, to provide reasonable confidence in the utilities' financial soundness, maintain and support investment-grade credit ratings, and provide utilities the ability to raise money necessary for the proper discharge of their public duty. We have no reason to change that goal. Debt equivalence is considered in arriving at an overall ROE.[155]

Rather than provide a utility-specific argument about why SCE's PPAs should not be construed as debt equivalence here, DRA broadly argues points that are at odds with the Commission's policy and that are otherwise unsupported. For example, DRA argues that debt equivalence should not be considered in determining an appropriate capital structure because it is inconsistent with Generally Accepted Accounting Principles. It is beyond dispute that debt equivalence is an economic cost, not an accounting cost.[156] Nonetheless rating agencies take account of power purchase obligations because they are relevant to determining credit quality and overall investor risk. While DRA is correct that a diversified portfolio can mitigate some risks associated with PPAs, rating agencies understand that limited risk mitigation does not negate the long-term obligations and, thus, risks, created by PPA

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[150] Exhibit 17, SCE's Direct Testimony (R.C. Boada), p. 46, 47 Figure III-5 ("S&P Credit Metrics with and without Debt Equivalence, Part 1 (Criteria Based on "Excellent" Business Position) – showing SCE's projected ratios for Debt/EBITDA calculation) and Figure III-6 ("S&P Credit Metrics with and without Debt Equivalence, Part 2 (Criteria Based on "Excellent" Business Position" – showing SCE's projected 2013 ratios for FFO/Debt and Debt/Capital); see also, Exhibit 17A (R.C. Boada) ("Credit Ratios Calculated for SCE Proposed Return on Equity and CPUC DRA Recommendation").

[151] Exhibit 17A (R.C. Boada) ("Credit Ratios Calculated for SCE Proposed Return on Equity and CPUC DRA Recommendation").

[152] *See, e.g.*, D.04-12-047 (finding that the Commission "will continue to reflect the impact of such [debt equivalence] risk in establishing a fair and reasonable ROE and in approving a balanced ratemaking capital structure.") and D.04-12-048 (2004 LTTP decision) (concluding that debt equivalence "is a real cost that needs to be considered."), pp. 163-166.

[153] *Id.*

[154] D.07-12-049, pp. 28.

[155] *Id.*, pp. 28-29.

[156] "Debt equivalence and FIN 46 costs are economic costs." *Id.*, Finding of Fact No. 32, p. 52.

capacity payments.

DRA also complains that S&P's imputation of debt equivalence is based on judgment. This argument ignores the fact that the application of judgment is the Commission's bedrock of assessing risk in a cost of capital proceeding. The ratemaking capital structure proposed by SCE relies on sound judgment that considers SCE's credit rating outlook, including the rating agencies' views on SCE's regulatory and other business risks. DRA provides no legitimate reason why the Commission should change its longstanding and well-reasoned debt equivalence policies. The Commission should reject DRA's recommendation.

2. FEA's Proposal to Lower SCE's Preferred Stock Ratio Should Be Rejected

FEA's proposal to reduce SCE's preferred stock ratio to 7% and debt ratio to 45% is premised on its belief that the proportion of preferred stock in SCE's recorded capital structure has been lower than the amount in SCE's authorized capital structure. FEA's proposal is based on a misunderstanding of the manner in which SCE has actually been capitalized. FEA's calculations have not been adjusted for long-term debt used to finance SCE's nuclear fuel inventories, which by Commission policy is excluded from rate base and recovered in ERRA proceedings.[157] Further, FEA did not adjust for debt issuance expense and refinancing costs, which causes FEA to overstate the amount of debt available to invest in rate base.[158] After these adjustments, SCE's debt ratio matches its authorized level (subject to rounding error) both in the first quarter of 2011 and in the most recent quarter, and is at most 1.3 percentage points higher at interim quarters.[159]

Market conditions limited SCE's ability to issue preferred stock at reasonable rates following the 2008 financial crisis. SCE would have had to pay a higher coupon than the preferred equity coupon of 6.5% (a substantial spread over U.S. treasury rates), which would have been detrimental to customers.[160] When the markets recovered in 2012, SCE was able to issue $350 million in preferred stock at a coupon rate of 6.25% in January and $475 million at a rate of 5.625% in May.[161] By delaying issuance until conditions improved, SCE has reduced customer costs. Given that the basis of FEA's proposed capital structure is premised on its misunderstandings, it should be rejected outright.

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[157] Exhibit 19, SCE Rebuttal Testimony (P.T. Hunt), p. 19.
[158] *Id.*, p. 18.
[159] *Id.*, p. 20, Table V-2; *see* Exhibit 19A, Errata to Direct and Rebuttal Testimony, showing corrected Table V-2.
[160] Exhibit 19, SCE Rebuttal Testimony (P.T. Hunt), p. 21.
[161] *Id.*

L. Intervenors Have Not Met Their Burden Of Demonstrating That The Commission's Decision That Returns on Equity are "Fundamentally Different" From Pension Fund Returns Should Be Revisited

In the last cost of capital decision, the Commission rejected the comparability of equity returns on pension funds to the authorized returns on equity of the utilities.[162] FEA and TURN have disputed this view, but have not offered any compelling reason why the Commission should change its policy. In deciding this issue, the Commission explained its well-reasoned decision:

> First, the pension ROE is not equivalent to a specific benchmark for investors' forward-looking required ROE. Second, the pension projection applies to equity investments made in the pension portfolio selected by pension managers. Third, the pension plan projection used some, but not all, of the same historical information referenced in its ROE analysis.[163]

As discussed in SCE's testimony, "an assumed pension fund return is an estimate of the expected rate of return on plan assets over a long period of time."[164] Therefore, the geometric mean estimated return is appropriate for estimating the market risk premium for pension fund returns. On the other hand, the arithmetic mean return is appropriate in determining ROE, and the difference in the calculation between the two means can be substantial.[165] Dr. Morin presented a compelling argument on why the arithmetic mean is the most appropriate measure to use when setting the cost of capital – it reflects volatility of returns while the geometric mean does not.[166] The Commission recognizes that "[t]he objectives of a pension fund are fundamentally different from that of an equity investor in a single utility and the risk profiles are not comparable."[167] FEA and TURN have not shown any compelling reason for the Commission to depart from its determination that return assumptions are not comparable to ratemaking ROEs.

III. CONCLUSION

For all of the foregoing reasons, as well as other record evidence in this consolidated proceeding, SCE respectfully requests the following:

1) Find reasonable and authorize SCE to maintain a capital structure for 2013 of 48% common equity, 43% long-term debt, and 9% preferred equity;
2) Find reasonable and authorize SCE a return on common equity of 11.10% for 2013, an embedded cost of debt of 5.49% for 2013, and an embedded cost of preferred equity of 5.79% for 2013;

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[162] D.07-12-049.
[163] *Id.*, p. 44.
[164] Exhibit 19, SCE Rebuttal Testimony (R.C. Boada), pp. 22-23.
[165] *Id.*
[166] Exhibit 6 SDG&E Amended Rebuttal (R.A. Morin), p. 49.
[167] D.07-12-049, p. 44.

3) Approve SCE's request for a final oral argument; and, [168]

4) And, issue any other orders it deems proper, consistent with the foregoing request.

Respectfully submitted,
FRANK A. MCNULTY
ANGELICA M. MORALES

/s/ Angelica M. Morales
By: Angelica M. Morales

Attorneys for
SOUTHERN CALIFORNIA EDISON COMPANY

2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770
Telephone: (626) 302-4435
Facsimile: (626) 302-6962
E-mail: Angelica.Morales@sce.com

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[168] Assigned Commissioner's Scoping Memo and Ruling dated June 15, 2012, p. 5.

Appendix A

COMPARISON OF CPUC-AUTHORIZED SCE ROES AND WATER ROES

COMPARISON OF CPUC-AUTHORIZED SCE ROES AND WATER ROES

Test Year	SCE Authorized ROE	Notes Regarding SCE ROE	Water Companies' Authorized ROE	Notes Regarding Water Companies' ROE	Spread (SCE - Water)	Spread (SCE - Water), Litigated Case
2012	11.50%	D.09-10-016	9.99%	D.12-07-009 (settlement); four Class A companies	1.51%	N/A
2011	11.50%	D.09-10-016	10.20%	D.10-10-035; six Class A companies; ROE continued from 2010	1.30%	1.30%
2010	11.50%	D.09-10-016	10.20%	D.10-10-035; six Class A companies	1.30%	1.30%
2009	11.50%	D.08-05-035	10.20%	D.09-05-019; three Class A companies	1.30%	1.30%
	11.50%	D.08-05-035	10.00%	D.07-08-030; California-American; continued from 2007	1.50%	1.50%
	11.50%	D.08-05-035	10.13%	D.06-11-015 (settlement); San Jose Water; continued from 2007	1.37%	N/A

COMPARISON OF CPUC-AUTHORIZED SCE ROES AND WATER ROES

Test Year	SCE Authorized ROE	Notes Regarding SCE ROE	Water Companies' Authorized ROE	Notes Regarding Water Companies' ROE	Spread (SCE - Water)	Spread (SCE - Water), Litigated Case
2008	11.50%	D.07-12-049	10.10%	D.07-10-034 (stipulation); Golden State Water; continued from 2006	1.40%	N/A
	11.50%	D.07-12-049	10.00%	D.07-08-030; California-American; continued from 2007	1.50%	1.50%
	11.50%	D.07-12-049	9.90%	D.07-04-046 (stipulation); San Gabriel Valley; continued from 2006-2007	1.60%	N/A
	11.50%	D.07-12-049	10.10%	D.06-11-050 (settlement); California-American; continued from 2006; lower ROE adopted for Felton District	1.40%	N/A
	11.50%	D.07-12-049	10.13%	D.06-11-015 (settlement); San Jose Water; continued from 2007	1.37%	N/A

COMPARISON OF CPUC-AUTHORIZED SCE ROES AND WATER ROES

Test Year	SCE Authorized ROE	Notes Regarding SCE ROE	Water Companies' Authorized ROE	Notes Regarding Water Companies' ROE	Spread (SCE - Water)	Spread (SCE - Water), Litigated Case
	11.50%	D.07-12-049	9.90%	D.06-01-025; Southern California Water (now Golden State Water); continued from 2006; ROE is before 0.10% negative adjustment	1.60%	1.60%
	11.50%	D.07-12-049	10.15%	D.05-12-020; Apple Valley Ranchos (subsidiary of Park); continued from 2006	1.35%	1.35%

COMPARISON OF CPUC-AUTHORIZED SCE ROES AND WATER ROES

Test Year	SCE Authorized ROE	Notes Regarding SCE ROE	Water Companies' Authorized ROE	Notes Regarding Water Companies' ROE	Spread (SCE - Water)	Spread (SCE - Water), Litigated Case
2007	11.60%	D.06-08-026 (waiving 2007 application)	10.10%	D.07-10-034 (stipulation); Golden State Water; continued from 2006	1.50%	N/A
	11.60%	D.06-08-026 (waiving 2007 application)	10.00%	D.07-08-030; California-American	1.60%	1.60%
	11.60%	D.06-08-026 (waiving 2007 application)	9.90%	D.07-04-046 (stipulation); San Gabriel Valley; continued from 2006-2007	1.70%	N/A
	11.60%	D.06-08-026 (waiving 2007 application)	10.10%	D.06-11-050 (settlement); California-American; continued from 2006; lower ROE adopted for Felton District	1.50%	N/A
	11.60%	D.06-08-026 (waiving 2007 application)	10.13%	D.06-11-015 (settlement); San Jose Water	1.47%	N/A
	11.60%	D.06-08-026 (waiving 2007 application)	9.90%	D.06-01-025; Southern California Water (now Golden State Water); continued from 2006; ROE is before 0.10% negative adjustment	1.70%	1.70%

COMPARISON OF CPUC-AUTHORIZED SCE ROES AND WATER ROES

Test Year	SCE Authorized ROE	Notes Regarding SCE ROE	Water Companies' Authorized ROE	Notes Regarding Water Companies' ROE	Spread (SCE - Water)	Spread (SCE - Water), Litigated Case
	11.60%	D.06-08-026 (waiving 2007 application)	10.15%	D.05-12-020; Apple Valley Ranchos (subsidiary of Park); continued from 2006	1.45%	1.45%
	11.60%	D.06-08-026 (waiving 2007 application)	9.85%	D.05-09-020 (settlement); California-American; continued from 2005	1.75%	N/A
	11.60%	D.06-08-026 (waiving 2007 application)	10.10%	D.05-07-044 (settlement); San Gabriel Valley; continued from 2005-2006	1.50%	N/A
	11.60%	D.06-08-026 (waiving 2007 application)	10.10%	D.05-07-022 (settlement); California Water Service; continued from 2005-2006	1.50%	N/A
	11.60%	D.06-08-026 (waiving 2007 application)	10.10%	D.04-12-055 (settlement); California-American; continued from 2005	1.50%	N/A

COMPARISON OF CPUC-AUTHORIZED SCE ROES AND WATER ROES

Test Year	SCE Authorized ROE	Notes Regarding SCE ROE	Water Companies' Authorized ROE	Notes Regarding Water Companies' ROE	Spread (SCE - Water)	Spread (SCE - Water), Litigated Case
2006	11.60%	D.05-12-043, D.06-02-042	9.90%	D.07-04-046 (stipulation); San Gabriel Valley; 2006-2007	1.70%	N/A
	11.60%	D.05-12-043, D.06-02-042	10.10%	D.06-11-050 (settlement); California-American; lower ROE adopted for Felton District	1.50%	N/A
	11.60%	D.05-12-043, D.06-02-042	9.90%	D.06-01-025; Southern California Water (now Golden State Water); ROE is before 0.10% negative adjustment	1.70%	1.70%
	11.60%	D.05-12-043, D.06-02-042	10.15%	D.05-12-020; Apple Valley Ranchos (subsidiary of Park)	1.45%	1.45%
	11.60%	D.05-12-043, D.06-02-042	9.85%	D.05-09-020 (settlement); California-American; continued from 2005	1.75%	N/A
	11.60%	D.05-12-043, D.06-02-042	10.10%	D.05-07-044 (settlement); San Gabriel Valley; continued from 2005-2006	1.50%	N/A

COMPARISON OF CPUC-AUTHORIZED SCE ROES AND WATER ROES

Test Year	SCE Authorized ROE	Notes Regarding SCE ROE	Water Companies' Authorized ROE	Notes Regarding Water Companies' ROE	Spread (SCE - Water)	Spread (SCE - Water), Litigated Case
	11.60%	D.05-12-043, D.06-02-042	10.10%	D.05-07-022 (settlement); California Water Service; continued from 2005-2006	1.50%	N/A
	11.60%	D.05-12-043, D.06-02-042	10.10%	D.04-12-055 (settlement); California-American; continued from 2005	1.50%	N/A
	11.60%	D.05-12-043, D.06-02-042	10.10%	D.04-07-034; San Gabriel Valley; continued from 2003	1.50%	1.50%
	11.60%	D.05-12-043, D.06-02-042	10.15%	D.03-12-040 (settlement); Park; continued from 2004	1.45%	N/A
Minimum					1.30%	1.30%
Maximum					1.75%	1.70%