DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

Report on
The Cost of Capital
for
Test Year 2013

Phase 2: Adjustment Mechanism

A.12-04-015 et al

San Francisco, California
November 30, 2012
# TABLE OF CONTENTS

I. INTRODUCTION .................................................................................................................. 1

II. SUMMARY OF RECOMMENDATIONS .............................................................................. 1

III. DISCUSSION ...................................................................................................................... 1

   A. Decision 08-05-035 Established a Multi-Year Cost of Capital Mechanism for SCE, SDG&E, and PG&E................................................................. 2

      1. SCE Recommends that the Current Cost of Capital Mechanism be Retained ............................................................... 2

      2. SDG&E Recommends that the Current Cost of Capital Mechanism Continue with Certain Modifications ......................................................... 3

      3. PG&E Proposes that the Annual Cost of Capital Adjustment Mechanism Continue for Three Years, with change to the deadband and to the averaging period. ......................................................... 4

   B. SCG Proposes a New Cost of Capital Mechanism ........................................................... 5

   C. DRA Recommends Continuation of the CCM, with Minor Modifications .......................... 6

IV. QUALIFICATIONS OF WITNESS ..................................................................................... 12
COST OF CAPITAL
ADJUSTMENT MECHANISM

I. INTRODUCTION

The Division of Ratepayer Advocates (DRA) submits its Cost of Capital (COC) testimony in response to the Cost of Capital Applications of Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), Southern California Gas Company (SCG) and Pacific Gas and Electric Company (PG&E).

II. SUMMARY OF RECOMMENDATIONS

DRA recommends the continuation of the cost of capital mechanism (CCM) with a few modifications. The CCM is meeting the Commission goal of maintaining fair and reasonable capital structures and return on equity (ROE) for the major energy utilities while reducing the number of ROE proceedings and regulatory costs and simplifying workload requirements.

DRA recommends a deadband of 125 basis points, rather than 100 basis points. The deadband is the range of change in interest rates that may occur without triggering a change in the cost of capital.

DRA does not object to SCG’s request to modify its benchmark index from the US Treasury to the Moody’s utility bond index, or SCG’s request to dispense with interest rate forecast projections as a factor in determining a triggering event.

III. DISCUSSION

On April 20, 2012, SCE, SDG&E, SCG, and PG&E filed their cost of capital applications. The Assigned Commissioner’s Scoping Memo and Ruling of June 15, 2012 (Scoping Memo) consolidated the four costs of capital applications and

bifurcated the proceedings into two phases. The first phase addressed the utilities 2013 test year cost of capital, including the appropriate capital structure, cost of long term debt, cost of preferred stock, and cost of common equity. The Scoping Memo stated that the second phase will address the CCM established in Decision (D.) 08-05-035, with the issues that impact the second phase identified as the appropriateness of continuing with the CCM, and proposed modifications to the CCM.²

The schedule for the second phase was established in the Evidentiary Hearing of October 2, 2012.³ This testimony presents DRA’s conclusion and recommendation on the second phase of the consolidated cost of capital applications.

A. Decision 08-05-035 Established a Multi-Year Cost of Capital Mechanism for SCE, SDG&E, and PG&E

Decision 08-05-035 established a uniform multi-year capital mechanism for SCE, SDG&E, and PG&E. Ordering Paragraph (OP) #1 ordered that the first complete filing under the CCM should address the parties’ experience with the CCM and whether modifications to the mechanism are warranted.⁵

1. SCE Recommends that the Current Cost of Capital Mechanism be Retained

SCE states that since inception, the CCM has worked well and that the Commission should retain it for SCE. SCE testifies that the CCM has provided certainty for SCE’s customers and investors and avoided the use of scarce Commission resources to litigate SCE’s cost of capital. SCE further states that the

² The Assigned Commissioner’s Scoping Memo and Ruling of June 15, 2012, p.3.
³ Reporter’s Transcript (R.T.) Vol. 4, pp., 769-770. Utilities filed supplemental testimony for Phase 2 on October 26, 2012.
⁴ D.08-05-035, Ordering Paragraph No. 1, pp. 20-21, stated that the first full cost of capital application shall be due on April 20, 2010 for test year 2011. Commission rulings in D.09-10-016 for SCE and PG&E and in D.10-01-017 for SDG&E modified the D.08-05-035 filing date to April 20, 2012.
⁵ D.08-05-035, Ordering Paragraph No. 1.
CCM is calibrated on the Moody’s Baa long-term utility bond yield, and that SCE’s mechanism should continue to use this index. SCE requests that the Commission reset the benchmark value of the index to the new authorized return on equity recommended by SCE of 11.10% and that the starting period for the 12-month average be from October 2011 through September 2012, consistent with the period that was used to establish the benchmark value previously. SCE also states that the Commission need not establish a uniform mechanism for all of its energy utilities. SCE cites the different mechanisms of SDG&E and SCG, and the different terms of its trigger mechanism from SDG&E and SCG in the 1990s. SCE states that it is unaware of any significant impediments created by the differences or any significant administrative problems.6

SCE filed Supplemental Phase 2 Testimony to recommend that the Commission continue to utilize a CCM over its adopted COC cycle and maintain the mechanism in its current form.7

2. SDG&E Recommends that the Current Cost of Capital Mechanism Continue with Certain Modifications

SDG&E’s testimony describes the CCM’s objectives, the history of its predecessor, the mechanics of the current CCM, and SDG&E’s recommendation for the trigger mechanism going forward. SDG&E testifies that the present CCM, with certain modifications, should continue to be the basis for ROE and Rate of Return (ROR) adjustments between full COC proceedings.8

SDG&E states that an ongoing need exists for a COC trigger mechanism and supports continuation of the uniform CCM for the California investor-owned electric

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6 Testimony Supporting Southern California Edison’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, April 20, 2012, pp. 73-75.
7 SCE 2013 Cost of Capital Supplemental Phase 2 Testimony, filed October 26, 2012.
utilities adopted in D.08-05-035. SDG&E testifies that the combination of a 12-month measurement period and 100-basis point deadband provides a level of stability between full COC proceedings occurring every third year that strikes a balance between triggering too often and triggering too infrequently.

SDG&E proposes to continue utilizing the currently authorized CCM, but that it include an off-ramp provision. SDG&E states that utilizing an off-ramp provision provides a safeguard that protects against extreme changes in interest rates and also provides the Commission latitude to suspend the mechanism. SDG&E proposes to have the option to invoke an off-ramp provision should the Single “A” Utility Bonds move by more than 250 basis points from the benchmark (upwards or downwards) during the October through September 12-month average time frame. The off-ramp modification would allow SDG&E, at its discretion, to notify the Commission’s Executive Director that it is suspending the trigger mechanism, and that it will subsequently file an application with the Commission to request, at a minimum, a full review of the CCM trigger event, and potentially a review of its overall COC. If SDG&E does not invoke the off-ramp provision, SDG&E will follow the specific guidelines of the CCM trigger and file a compliance advice letter addressing the full impacts to its COC resulting from the trigger mechanism.

3. PG&E Proposes that the Annual Cost of Capital Adjustment Mechanism Continue for Three Years, with change to the deadband and to the averaging period.

According to PG&E, the CCM has generally achieved the Commission objective to maintain a fair and reasonable cost of capital while reducing the time

9 Id., p.2.
10 Id., p. 10.
11 Id p. 10.
12 Id., p. 11.
13 Id., p. 12..
14 PG&E uses the term Annual Cost of Capital Adjustment Mechanism (ACCM) as it did in the (continued on next page)
and costs to the CPUC and all parties associated with annual cost of capital proceedings.\textsuperscript{15} PG&E proposes that the CCM be continued for three years with the next full cost of capital application for test year 2016 due April 20, 2015 with the applicable benchmark interest rate reset to the October 2011 through September 2012 monthly average.\textsuperscript{16}

PG&E proposes that the capital structure remain constant over the period the CCM is in effect, consistent with the current CCM. PG&E, however, reserves the right to file an application during the CCM period in the event PG&E must materially change its capital structure as a result of Commission decision in other proceedings.

In its Phase II Supplemental Testimony,\textsuperscript{17} PG&E recommended that if the Commission wanted to make the mechanism more sensitive to utility bond interest rate movements, the CCM could be modified to use a deadband of 75 basis points rather than the current 100 basis point deadband, and a 6-month average to compute the interest rate index rather than the current 12-month period.\textsuperscript{18}

\section*{B. SCG Proposes a New Cost of Capital Mechanism}

SCG was not a party to D.08-05-035 which established the uniform multi-year CCM. SCG has been subject to a Market-Indexed Capital Adjustment Mechanism (MICAM) adopted in D.97-07-054, which allows automatic adjustments to SCG’s ROE and ROR between COC proceedings.\textsuperscript{19}

\begin{footnotesize}(continued from previous page)\end{footnotesize}

\begin{footnotesize}2008 cost of capital proceeding. DRA uses the term Cost of Capital Mechanism (CCM) consistent with D.08-05-035 and the Scoping Memo.\textsuperscript{15}

\begin{footnotesize}Id.\textsuperscript{16}

\begin{footnotesize}See supra fn. 3.\end{footnotesize}

\begin{footnotesize}Pacific Gas and Electric Company Cost of Capital 2013 Prepared Testimony, p. 4-1.\textsuperscript{18}

\begin{footnotesize}Prepared Direct Testimony of Herbert S. Emmrich on Behalf of Southern California Gas Company, p.1.\textsuperscript{19}\end{footnotesize}\end{footnotesize}
SCG’s testimony documents the administrative history of the MICAM, discusses the mechanism’s objectives and mechanics, and describes SCG’s experience with the current MICAM. SCG recommends that the mechanism should be modified to be more consistent with the other California utilities’ CCMs (which are benchmarked against utility bond yields). SCG proposes Moody’s A utility bonds as the appropriate benchmark.

C. DRA Recommends Continuation of the CCM, with Minor Modifications

DRA recommends that the Commission retain the CCM between formal COC proceedings. The CCM is meeting its goal of streamlining the major energy utilities’ cost of capital process while providing greater predictability to the utilities’ cost of capital; and also enabling the utilities, interested parties, and Commission staff to reduce and reallocate their respective workload requirements. The CCM should continue as is, with minor modifications, as discussed below.

First, DRA recommends modifying the deadband. In a previous COC decision, the Commission has noted that the “…ROE adjustment should track but not move in lockstep with interest rate changes…” and that “…it would be unreasonable to adopt MICAM if it systematically sets SDG&E’s returns at levels higher than would result in the litigated annual cost of capital proceeding.” As such, DRA recommends that the deadband be increased from 100 basis points to 125 basis points to account for the increased difference between the 12 month average of 2011 and 2012, as shown in Table 1 below.

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20 Id., p. 1.
21 D.08-05-035, p. 16.
Increasing the deadband to 125 basis points will strike a reasonable balance between triggering too often and not triggering often enough.\(^\text{23}\)

As shown in Table 2 below, from 2008, the time of D.08-05-035, utilities using the Moody utility bond index rate of Aa and A would have triggered once, irrespective of whether the deadband was set at 100 basis point or 125 basis points.

For utilities using the Moody’s utility bond index rate of Baa, the 100 basis points deadband would have triggered three times, while the 125 basis point deadband would have triggered twice in the five year period, as shown in Table 3 below.

\(^{22}\) D.96-06-035, p. 583.

\(^{23}\) D.08-05-035, p.12.
## Table 2: Triggering Events at 100 Basis Point

### Utilities Subject to Moody’s Aa Utility Bond Index Rate

<table>
<thead>
<tr>
<th>Period</th>
<th>Benchmark Rate</th>
<th>Index Rate</th>
<th>New Benchmark Rate</th>
<th>Change at 100 bp deadband</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/07 to 9/08</td>
<td>5.87%</td>
<td>6.04%</td>
<td></td>
<td>0.17%</td>
</tr>
<tr>
<td>10/08 to 9/09</td>
<td>5.87%</td>
<td>6.05%</td>
<td></td>
<td>0.18%</td>
</tr>
<tr>
<td>10/09 to 9/10</td>
<td>5.87%</td>
<td>5.30%</td>
<td></td>
<td>-0.57%</td>
</tr>
<tr>
<td>10/10 to 9/11</td>
<td>5.87%</td>
<td>5.05%</td>
<td></td>
<td>-0.82%</td>
</tr>
<tr>
<td>10/11 to 8/12*</td>
<td>5.87%</td>
<td>3.94%</td>
<td>-1.93%</td>
<td>3.94%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 11 month average

### Utilities Subject to Moody’s A Utility Bond Index Rate

<table>
<thead>
<tr>
<th>Period</th>
<th>Benchmark Rate</th>
<th>Index Rate</th>
<th>New Benchmark Rate</th>
<th>Change at 100 bp deadband</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/07 to 9/08</td>
<td>6.02%</td>
<td>6.24%</td>
<td></td>
<td>0.22%</td>
</tr>
<tr>
<td>10/08 to 9/09</td>
<td>6.02%</td>
<td>6.43%</td>
<td></td>
<td>0.41%</td>
</tr>
<tr>
<td>10/09 to 9/10</td>
<td>6.02%</td>
<td>5.54%</td>
<td></td>
<td>-0.48%</td>
</tr>
<tr>
<td>10/10 to 9/11</td>
<td>6.02%</td>
<td>5.27%</td>
<td></td>
<td>-0.75%</td>
</tr>
<tr>
<td>10/11 to 8/12*</td>
<td>6.02%</td>
<td>4.26%</td>
<td>-1.76%</td>
<td>4.26%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 11 month average

### Utilities Subject to Moody’s Baa Utility Bond Index Rate

<table>
<thead>
<tr>
<th>Period</th>
<th>Benchmark Rate</th>
<th>Index Rate</th>
<th>New Benchmark Rate</th>
<th>Change at 100 bp deadband</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/07 to 9/08</td>
<td>6.26%</td>
<td>6.70%</td>
<td></td>
<td>0.44%</td>
</tr>
<tr>
<td>10/08 to 9/09</td>
<td>6.26%</td>
<td>7.65%</td>
<td></td>
<td>1.39%</td>
</tr>
<tr>
<td>10/09 to 9/10</td>
<td>7.65%</td>
<td>6.05%</td>
<td></td>
<td>-1.60%</td>
</tr>
<tr>
<td>10/10 to 9/11</td>
<td>6.05%</td>
<td>5.76%</td>
<td></td>
<td>-0.29%</td>
</tr>
<tr>
<td>10/11 to 8/12*</td>
<td>6.05%</td>
<td>5.02%</td>
<td>-1.03%</td>
<td>5.02%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 11 month average
Table 3: Triggering Events at 125 Basis Point

<table>
<thead>
<tr>
<th>Utilities Subject to Moody's Baa Utility Bond Index Rate</th>
<th>Benchmark Rate</th>
<th>Index Rate</th>
<th>Change at 125 bp deadband</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/07 to 9/08</td>
<td>6.26%</td>
<td>6.70%</td>
<td>0.44%</td>
</tr>
<tr>
<td>10/08 to 9/09</td>
<td>6.26%</td>
<td>7.65%</td>
<td>1.39%</td>
</tr>
<tr>
<td>10/09 to 9/10</td>
<td>7.65%</td>
<td>6.05%</td>
<td>-1.60%</td>
</tr>
<tr>
<td>10/10 to 9/11</td>
<td>6.05%</td>
<td>5.76%</td>
<td>-0.29%</td>
</tr>
<tr>
<td>10/11 to 8/12*</td>
<td>6.05%</td>
<td>5.02%</td>
<td>-1.03%</td>
</tr>
</tbody>
</table>

* 11 month average

Second, DRA agrees with SCG that the Moody’s Utility Bond index is an appropriate measure of the utility capital cost and that SCG should be allowed to change its mechanism index from the US Treasury to the Moody’s Utility Bond index. DRA does not oppose SCG’s elimination of the interest rate forecast in determining a COC triggering event.24

DRA opposes the off-ramp recommendation made by SCG and SDG&E. SCG and SDG&E both propose that it have the option to invoke an off-ramp should the Moody’s A utility bonds move by more than 250 basis points from the benchmark during the October through September 12-month average time frame.25 The proposed off-ramp is redundant and unnecessary as D.08-05-035 already includes a provision for utilities to file a cost of capital application outside of the CCM process upon an extraordinary or catastrophic event that materially impacts their respective

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24 SCG’s current MICAM utilizes two factors that must be triggered to enact a change in the COC. The first factor compares the most recent trailing 12-month average of the 30-year United States Treasury bond yield. The second factor reflects a 12-month forward forecast of the 30-year Treasury bond yield by Global Insight. Prepared Direct Testimony of Herbert S. Emmrich on Behalf of Southern California Gas Company A.12-04-017, p. 4.

cost of capital and/or capital structure and impacts them differently than the overall
financial markets.\(^{26}\)

Third, the Commission should clarify the index that each utility uses in the
CCM. In D.08-05-035, the Commission established the Moody’s Aa utility bonds for
AA credit-rated utilities or higher, and Moody’s Baa utility bonds for BBB credit-rated
utilities or lower.\(^{27}\) A credit rating of A exists between the two Standard & Poor’s
credit ratings of AA or BBB. D.08-05-035 does not specify what the index should be
if a utility falls into this intermediate credit rating. As PG&E describes in its prepared
testimony, the Commission did not prescribe which interest rate index was
appropriate for utilities with a split rating, i.e., utilities with ratings in different rating
categories. As PG&E provides in its testimony, PG&E is currently rated A3 by
Moody’s, BBB+ by Fitch, and BBB by S&P. Hence under the current mechanism it
is not evident which index applies to PG&E.\(^ {28}\) The Commission should assign a
specific index to each utility to remove any ambiguity. DRA recommends Moody’s
“A” rated utility bonds for SDG&E and SCG (as proposed by the utilities), and
Moody’s Baa rated utility bonds for PG&E and SCE.

Fourth, DRA opposes PG&E’s request for a new provision reserving the right
to file an application in the event PG&E must materially change its capital structure
as a result of Commission decisions in other proceedings. The request is vague,
open-ended and subject to interpretation regarding the need to change the capital
structure. As stated above, Commission D.08-05-035 established and adopted
appropriate provisions for utilities to file a cost of capital application outside of the
CCM process which should be retained without modification.

Finally, DRA opposes PG&E’s recommendation to modify the CCM to use a
deadband of 75 basis points and a 6-month average measurement period. The

\(^{26}\) D.08-05-035 ,Conclusion of Law No. 6, p. 19.
\(^{27}\) While D.08-05-035, Ordering Paragraph 1.e, pp. 20-21, specifies the Moody’s Baa utility bonds
for BB credit-rated utilities or lower, this is assumed to be a typographical error as there are multiple
references to the BBB credit-rated utilities.

\(^{28}\) PG&E Prepared Testimony, p. 4-2.
Commission rejected this same proposal in D.08-05-035 as the benchmark would likely trigger too frequently, and the Commission should do the same in this proceeding. As Table 4 below shows, under PG&E’s proposal, four triggering events would have resulted since D.08-05-035.

<table>
<thead>
<tr>
<th>Benchmark Period</th>
<th>Index Rate</th>
<th>New Benchmark Rate</th>
<th>Change at 75 bp deadband</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/07 to 3/08</td>
<td>6.41%</td>
<td>6.46%</td>
<td>0.05%</td>
</tr>
<tr>
<td>10/08 to 3/09</td>
<td>6.41%</td>
<td>8.22%</td>
<td>1.81%</td>
</tr>
<tr>
<td>4/09 to 9/09</td>
<td>8.22%</td>
<td>7.07%</td>
<td>-1.15%</td>
</tr>
<tr>
<td>10/09 to 3/10</td>
<td>7.07%</td>
<td>6.20%</td>
<td>-0.87%</td>
</tr>
<tr>
<td>4/10 to 9/10</td>
<td>6.20%</td>
<td>5.90%</td>
<td>-0.30%</td>
</tr>
<tr>
<td>10/10 to 3/11</td>
<td>6.20%</td>
<td>5.94%</td>
<td>-0.26%</td>
</tr>
<tr>
<td>4/11 to 9/11</td>
<td>6.20%</td>
<td>5.57%</td>
<td>-0.63%</td>
</tr>
<tr>
<td>10/11 to 3/12</td>
<td>6.20%</td>
<td>5.08%</td>
<td>-1.13%</td>
</tr>
<tr>
<td>4/12 to 8/12*</td>
<td>5.08%</td>
<td>4.94%</td>
<td>-0.14%</td>
</tr>
</tbody>
</table>

* Five month average
Assumes the initial benchmark would have been six month average of 3/7 to 9/07.
IV. QUALIFICATIONS OF WITNESS

Q.1 Please state your name and business address.
A.1 My name is Jerry Oh. My business address is 505 Van Ness Avenue, San Francisco, California, 94102.

Q.2 By whom are you employed and in what capacity?
A.2 I am employed by the California Public Utilities Commission as a Public Utilities Regulatory Analyst V in the Division of Ratepayer Advocates Energy Cost of Service and Natural Gas Branch.

Q.3 Briefly describe your educational background and work experience.
A.3 I received a Bachelor's of Arts degree in Business Economics from the University of California at Los Angeles in 1993. From 1995 to 2000, I was employed as a Bank Examiner conducting safety and soundness examination of commercial banks. The safety and soundness examination included analyzing the banks market risk and credit risk. From 2000 to 2007, I worked as a Regulatory Analyst and Financial Examiner in the Commission's Energy Division. Since 2007, I have worked on general rate cases of large water utilities as a member of DRA. I have been DRA’s expert witness in Administrative and General expense, Operations and Maintenance expense, Cost of Capital, Affiliate Transactions, Taxes, and Results of Operations. I have supported my testimony in formal Commission hearings.

Q.4 What is the purpose of your testimony?
A.4 I am responsible for Exhibit DRA-03.

Q.5 Does that complete your prepared testimony?
A.5 Yes, it does.