Application: A.12-04-_____

Exhibit No: _____________

Witness: Sandra K. Hrna

PREPARED DIRECT TESTIMONY OF

SANDRA K. HRNA

ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

APRIL 20, 2012

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PREPARED DIRECT TESTIMONY OF
SANDRA HRNA
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

I. INTRODUCTION

The purpose of my testimony is to provide a forecast of the embedded costs of long-term debt[1] and preferred stock for San Diego Gas & Electric Company ("SDG&E" or "Company") for test year 2013 and to recommend a new authorized capital structure for SDG&E. The Company recommends setting the embedded cost of debt and preferred stock at 5.09% and 6.35%, respectively, based upon updated figures and shifting market conditions. Further, SDG&E recommends an authorized capital structure of 45.25% long-term debt, 2.75% preferred stock, and 52.00% common equity. This new capital structure is necessary for SDG&E to maintain its strong credit profile for access to debt and equity markets, to fund its ongoing large capital investment program and to withstand the credit profile impact of both imputed debt equivalence from power purchase agreements and financial statement consolidation under Accounting Standards Codification 810 ("ASC 810"), formerly referred to as Fin 46 (R).[2] These proposals are addressed in the following testimony.

A. Summary of Embedded Costs Recommendation

Table 1 summarizes the currently authorized and the forecasted embedded costs for SDG&E.

Table 1
Embedded Costs of Debt and Preferred Stock

	Current Authorized	2013 Forecast
Long-Term Debt	5.62%	5.09%
Preferred Stock	7.25%	6.35%

[1] The terms "debt" and "long-term debt" are used interchangeably, unless specifically noted otherwise.
[2] ASC 810, effective January 1, 2010, amended Financial Accounting Standards Board ("FASB") Interpretation No. 46 (R).

The forecasted cost of debt is 5.09%, or 53 basis points lower than the Company's currently authorized amount. This debt forecast takes into account $1.9 billion of low interest first mortgage bonds that SDG&E has issued since the last cost of capital proceeding was conducted in 2007. The forecasted cost of preferred stock is 6.35% or 90 basis points lower than SDG&E's currently authorized rate.

B. Summary of Capital Structure Recommendation

Table 2 summarizes the currently authorized and recommended capital structure for SDG&E. There are three major influences contributing to SDG&E's recommended capital structure, as further described in section IV: (i) a large ongoing capital investment program, (ii) financial statement consolidation under ASC 810, and (iii) imputed debt equivalence from power purchase agreements.

Table 2
SDG&E Recommended Capital Structure

	Authorized	2013 Proposed
Long-Term Debt	45.25%	45.25%
Preferred Stock	5.75%	2.75%
Common Equity	49.00%	52.00%

The Commission has previously indicated its desire to maintain Rate of Return ("ROR") stability in the long-term by considering Return on Equity ("ROE") and capital structure collectively. As the Commission acknowledged in the 2008 Cost of Capital Phase 2 Decision ("D.") 08-05-035, capital structure is one component of determining a fair and reasonable ROE and should not be assessed independently.[3] SDG&E requests that the Commission consider the impact of the factors discussed in Section IV as part of the capital structure determination, along

[3] D.08-05-035, *mimeo*, pp. 7-8.

with the ROE assessments as described in the testimony of Dr. Roger Morin, Mr. Robert Schlax, and Mr. Don Widjaja, when determining an overall authorized ROR.

The following sections and the appendices detail my calculations and recommendations.

II. FORECAST OF 2013 EMBEDDED COST OF DEBT

The embedded cost of debt represents all the costs associated with the issuance and servicing of debt, expressed as a percentage of the net proceeds received from debt issuances. SDG&E's proposed embedded cost of long-term debt is 5.09%. Attachment A shows the derivation of this figure. This recommendation represents a 53 basis point reduction in the Company's currently authorized embedded cost of debt. Consistent with previous cost of capital proceedings, SDG&E recommends setting the authorized cost of debt equal to the forecasted embedded cost of debt during test year 2013.

SDG&E's capital expenditure budget is expected to average over $1.1 billion per year during the proposed 2013 – 2015 cost of capital cycle.[4] The Company plans to make capital expenditures over the next five years of $5.8 billion ranging from $900 million to $1.9 billion per year. As a result, the Company plans to raise at least $250 million in 2013 of new long-term debt. Since the precise timing and terms of these financings have not yet been determined, my calculations assume a mid-year debt issuance.

The embedded cost of debt calculations use the April 2012 Global Insight forecast of the 30-year Treasury bond yield for 2013 plus the actual SDG&E-specific credit spread of 0.88%, which is the rounded average from SDG&E's most recent 30-year debt issuances in November 2011 and March 2012.

Historically, including in the most recent cost of capital proceeding, the Commission has directed that "the latest available interest rate forecast should be used to determine embedded

[4] See testimony of SDG&E witness Mr. Deremer who sponsors this proposal.

long-term debt and preferred stock costs in ROE proceedings."[5] Accordingly, in September 2012, SDG&E will submit an embedded-cost update that will reflect the latest Global Insight forecast as well as any changes to the Company's debt forecast that may take place between the preparation of this testimony and the submittal of the update.

III. FORECAST OF 2013 EMBEDDED COST OF PREFERRED STOCK

The embedded cost of preferred stock represents all the costs associated with the issuance and servicing of preferred stock, expressed as a percentage of the net proceeds received from preferred stock issuances. The Company's estimated and recommended embedded cost of preferred stock is 6.35% for test year 2013. This is equivalent to the Company's current actual embedded cost of outstanding preferred stock and the estimated cost of issuing new preferred stock. Attachment B shows the derivation of this figure. This proposal represents a 90 basis point decrease from the current authorized embedded cost of preferred stock. Consistent with previous cost of capital proceedings, SDG&E recommends setting the authorized cost of preferred stock equal to the forecasted embedded cost of preferred stock during test year 2013.

As discussed above, SDG&E has identified the need for external sources of cash to support its capital program, which will come from a blend of funds from operations, long-term debt, and preferred stock issuances. Based on its current assessment, the Company anticipates issuing approximately $80 million of preferred stock in 2013, with an additional $80 million to be issued during the cost of capital term. The decision to issue preferred stock versus long-term debt will be based on market conditions at the time of issuance. Similar to the planned debt offerings, the exact terms and timing of new preferred stock are still undefined, so a mid-year issuance is assumed for the new series.

[5] D.07-12-049, *mimeo*, Conclusion of Law No. 33.

This forecast utilizes the April 2012 Global Insight forecast of the thirty-year Treasury bond yield for 2013 plus a recent spread provided by the Company's investment banks to determine the new preferred securities' dividend rates. As with the debt calculations, updated interest-rate and preferred-issuance forecasts will be provided in September 2012 update testimony.

IV. RATEMAKING CAPITAL STRUCTURE RECOMMENDATION

As noted in Table 2 above, SDG&E proposes a test year 2013 capital structure comprised of 45.25% debt, 2.75% preferred stock, and 52.00% common equity. The Company's currently authorized capital structure of 45.25% debt, 5.75% preferred stock, and 49.00% common equity was established initially in D.99-06-057 and has not changed in 12 years (the capital structure was reconfirmed in D.02-11-027, D.05-12-043, and D.07-12-049). The Company's recommendation is designed to preserve SDG&E's creditworthiness given the increasing financial risk of the credit profile (as described in the testimony of SDG&E witness Mr. Don Widjaja), and maintain financial strength for the long-term management of the capital investment program. Each component of the capital structure is described below.

A. Long-Term Debt

The long-term debt component of a utility's authorized ratemaking capital structure represents a measurement of a company's financial leverage. A high debt ratio increases the risk of debt repayment to lenders and, other things being equal, will result in higher costs of capital over the long-term. Alternatively, a low debt ratio is similarly not efficient, in that it may not represent sufficient use of a tax deductible source of financing that is priced lower than the cost of equity. SDG&E recommends a level of debt that supports its current credit ratings (as shown at Appendix C) to attract debt capital at low costs and therefore proposes a 45.25% authorized debt component. This proposal represents no change to the currently authorized debt ratio. For

1 the past 12 years, the Company has successfully accessed debt capital markets to grow
2 infrastructure and meet mandates of the state and the Commission.
3 SDG&E's strong credit rating is a result of effective and proactive capital structure
4 management. In order to maintain its high credit rating and issue over $1.9 billion of long-term
5 debt since the last cost of capital proceeding, the company has retained earnings in common
6 equity to balance the capital structure above its authorized common equity ratio of 49.00%.
7 While this strategy has proven successful in the past, continued retained earnings will not by
8 themselves preserve the strong credit profile in the future. SDG&E's credit profile will degrade
9 as the Company takes on more debt for its large capital program, as well as when it takes on debt
10 in the form of ASC 810 consolidation and imputed debt equivalence by credit rating agencies.
11 Table 3 and the following sections represent and describe the impact of these factors on
12 SDG&E's capital structure, which are estimated to increase the level of debt in financial profile
13 assessments from approximately 45 to 55 percent. SDG&E recommends the Commission
14 realign the capital structure to partially offset the increasing debt ratio resulting from these
15 significantly increasing financial risk factors.

16 **Table 3**
17 **Capital Structure Impact Due to Increasing Leverage Levels**
18

	2012 CPUC Authorized Capital Structure (%)	(1) Estimated YE 2012 Capital Structure ($)	(2) Pio Pico & Quail Brush Consolidation	S&P PPA Debt Equivalence	(3) Imputed Capital $	Adjusted Capital %s	Change in Capital %s
Debt	45.25%	$ 3,832	$ 294	$ 1,578	$ 5,704	54.76%	9.51%
Preferred Stock	5.75%	487	-	-	487	4.68%	-1.07%
Common Equity	49.00%	4,150	75	-	4,225	40.56%	-8.44%
Totals	100.00%	$ 8,470	$ 369	$ 1,578	$ 10,416	100.00%	0.00%

(1) Assumes total capital is spread at authorized capital percentages which are different from actual dollar amounts and actual percentages.
(2) Actual consolidation on SDG&E's consolidated balance sheet in accordance with ASC 810.
19 *(3) Excludes other S&P adjustments.*
20
21

1. Capital Investment Program

SDG&E's five-year $5.8 billion ongoing capital investment program will require substantial funding. The company's capital program reflects significant investments in base business capital infrastructure, renewable investments, and new technology. These investments support the State's energy policy, as implemented by the Commission, enable access to renewable energy, and reinforce SDG&E's commitment to provide safe and reliable service to its customers. SDG&E may fund the program through a combination of debt and preferred stock issuances, internally generated cash flow, and retained earnings by suspending dividend payments.

2. ASC 810

a) ASC 810 Consolidation Background

Power Purchase Agreements ("PPAs"), are legal contracts wherein SDG&E (the power purchaser) enters into an agreement with a third party electricity producer to procure power to meet customer energy demands. Because SDG&E's energy demand exceeds output from its own generation assets, the Company must procure energy through PPAs with third parties. The debt component of the capital structure is negatively impacted by financial statement consolidation of PPA contracts under FASB ASC 810 consolidation requirements. ASC 810 accounting rules require SDG&E to consolidate financial statements of certain counterparties, meaning that the financial statements of the other party to the PPA contract will be included in SDG&E's financial statements for reporting purposes. Refer to Appendix A for a discussion of ASC 810 accounting and financial reporting requirements and its applicability to certain PPAs.

SDG&E has found through its experience in negotiating PPAs that most of these Variable Interest Entities ("VIEs") are highly debt-leveraged, and third parties can be unwilling to negotiate a lower debt-to-equity ratio without increasing the contract prices. It is expected that SDG&E's capital structure on a consolidated basis will be misaligned with its authorized capital

structure upon consolidating the other party's financial statements, which are highly leveraged with debt, onto SDG&E's balance sheet. High debt leverage impacts SDG&E's creditworthiness, as the increase to SDG&E's debt-to-equity percentage increases financial risk. To support SDG&E's creditworthiness and realign its capital structure, an increase to SDG&E's common equity is necessary to offset the impact of the additional debt, consolidated under ASC 810, as depicted in Table 3.

b) ASC 810 Consolidation of Qualifying PPAs

In May 2011, SDG&E filed Application (A.)11-05-023 seeking Commission approval for authority to enter into Purchase Power Tolling Agreements ("PPTAs") with the Pio Pico Energy Center ("Pio Pico") and Quail Brush Power ("Quail Brush") peaker plant facilities. In that Application, SDG&E informed the Commission that SDG&E may pursue adjustments to the authorized capital structure associated with the ASC 810 requirements of the PPTAs in this Cost of Capital proceeding.[6]

Accordingly, SDG&E is seeking in this Application mitigation associated with ASC 810 consolidation for these PPTAs.[7] The Pio Pico PPTA is for approximately 305 MW gas-fired power generation for a delivery term of 20 years and is expected to commence in May 2014. The Quail Brush PPTA will provide approximately 100 MW of gas fired generation for a delivery term of 20 years and is expected to commence in June 2014. SDG&E expects a Commission Decision on these PPTAs in fourth quarter 2012.[8]

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[6] A.11-05-023, pp. 1, 2.

[7] SDG&E is not requesting the Otay Mesa Energy Center ("OMEC") as part of the capital structure proposal. OMEC is subject to a separate mechanism adopted in D.06-09-021.

[8] *See* A.11-05-023, Administrative Law Judge's Ruling Resetting the Schedule of Proceeding, issued October 17, 2011.

3. Debt Equivalence Related to Power Purchase Agreements ("PPAs")

a) Debt Equivalence Background

Debt equivalence is a concept used by credit rating agencies and constitutes the largest rating agency adjustment to the debt ratio of SDG&E. Refer to Table 3 and Table 5 for the unfavorable impact of debt equivalence on the debt ratio. Standard & Poor's ("S&P") considers the fixed financial obligations resulting from long-term purchased power agreements to be debt or debt equivalent. These PPA obligations are treated as additional debt during the financial profile assessment. Refer to Appendix B for a discussion of debt equivalence methodology and applicability.

The recent adoption of Senate Bill SB x1 2 ("SB 2") will significantly increase the debt equivalence challenge faced by SDG&E. This recently passed legislation requires each California utility to procure 33% of its annual electric energy requirements from renewable energy sources by 2020. This marks a significant increase from the prior Renewable Portfolio Standards ("RPS") program, which required 20% renewable procurement by 2010, and represents one of the highest requirements of any state's RPS legislative mandate (see Attachment B of the Business Risk Testimony of Mr. Don Widjaja for discussion of the RPS mandates, including a summary of RPS goals by state). Since SDG&E's last Cost of Capital, SDG&E has entered into a greater number of PPAs and has assumed a correspondingly larger financial commitment, as compared to past needs, in order to meet its overall load requirements and concurrently comply with the Commission's renewable procurement requirement.

Table 4 below reflects SDG&E's debt equivalence for existing, approved, and filed PPAs within the cost of capital term. The currently published debt equivalence per S&P's June 2011 report shows $182M for existing PPAs. The S&P figure, however, greatly underestimates the magnitude of SDG&E's debt equivalence impact. SDG&E expects that nearly 10 times this amount – over $1.6 billion – of debt equivalency associated with executed contracts will be

1 online during the cost of capital term and will be imputed onto SDG&E's debt ratio per S&P
2 methodology in future rating agency reports.

3 **Table 4**
4 **SDG&E PPA Debt Equivalence**
5

($MM)		2013-2015 Average
PPA - Existing Conventional Resources		14
PPA - Existing QF's		135
PPA - Existing Renewables		96
PPA - Renewable contracts have been signed and approved by CPUC		560
PPA - Renewable contracts pending CPUC Approval		772
Total Debt Equivalent	$	1,578
S&P Debt Equivalent June 2011 Report*	$	182
Increase over S&P reported DE		767%

6 *Rolling-12-months ended June 30, 2011

7 Since renewable PPAs represent a growing component of the Company's overall energy
8 portfolio, SDG&E expects its overall debt equivalent figure to continue to grow for the
9 foreseeable future. These PPAs will continue to impact SDG&E's credit profile negatively and
10 must be appropriately factored into the authorized capital structure and ROE. I note that
11 SDG&E has not included estimates of costs for any PPAs beyond those that have been approved
12 by the Commission and for which Commission approval is currently pending. SDG&E will
13 address the respective debt equivalence impact of prospective PPAs in subsequent cost of capital
14 proceedings.

15 **b) SDG&E's Experience with Debt Equivalence**

16 Debt equivalence is not a new issue presented to the Commission. As recognized in the
17 2004 cost of capital proceeding of Pacific Gas & Electric Company ("PG&E") and Southern
18 California Edison Company ("SCE"), debt equivalence has been reflected in the utilities' credit
19 ratings since at least 1990.[9] SDG&E initially made cost recovery proposals around this issue in
20 its 2004 Long Term Procurement Plan ("LTPP") proceeding, but the Commission instructed

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[9] D.04-12-047, *mimeo*, p. 7.

SDG&E to address proposals justifying debt equivalence factors for PPAs in its cost of capital proceedings.[10] In its 2005 cost of capital application, SDG&E sought a change in its authorized capital structure to mitigate the negative effects of debt equivalence for credit rating purposes. At that time, the Commission found that SDG&E had not justified a change in its authorized capital structure, but acknowledged that the impact of SDG&E's debt equivalence should be considered along with its other risks in arriving at a fair and reasonable ROE.[11] The Commission further acknowledged "that debt equivalence associated with purchased power agreements (PPA) can affect utility credit ratios, credit ratings, and capital structure."[12]

SDG&E subsequently filed its 2007 Cost of Capital, raising financial risk issues related to the utility's capital structure and citing increased PPA commitments to meet 20% Renewable goals by 2010. SDG&E sought an equity rebalancing mechanism to mitigate the adverse effect of debt equivalence and ASC 810 consolidation requirements, and argued that the financial risk related to the utility's proportion of debt impacted by the increase in PPAs and financial statement consolidation warranted adjustments to ensure the timely recovery of costs associated with the need for incremental equity capital. The Commission declined to adopt the proposed equity rebalancing mechanism, citing its hesitation to address ROE considerations on a project-by-project basis. However, the Commission reiterated its goal 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," observing further that "[w]e have no reason to change that goal. Debt equivalence is considered in arriving at an overall ROE."[13]

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[10] D.04-12-048, *mimeo*, p. 243.
[11] D.05-12-043 *mimeo*, p. 43.
[12] D.05-12-043, *mimeo*, p. 8.
[13] D.07-12-049, *mimeo*, p. 28-29.

In the instant proceeding, SDG&E provides information regarding the extent of its commitments that significantly raise the debt equivalence impact on its credit profile above historical levels. SDG&E's proposed capital structure and ROE is intended to comprehensively deal with the impact of these circumstances that should be addressed now given the magnitude these matters will have on SDG&E's increased financial risk relative to prior levels. The Commission should approach its assessment of SDG&E's credit profile with a goal of maintaining SDG&E's overall financial health.

4. Credit Ratio Analysis

In the Commission's Test Year 2005 cost of capital decision, D.04-12-047, utilities with debt equivalence were ordered to include testimony on credit ratios, credit ratings, and capital structure impacts, including mitigation recommendations, of debt equivalence on their PPAs.[14] The utilities were also invited to make recommendations for improving and maintaining their credit ratings for Commission consideration. This information is provided in the following testimony. SDG&E's recommended capital structure is made with the objective of maintaining financial indicators supporting its "A" credit rating to keep its capital costs at a reasonable level, relative to the costs associated with the authorized ratios.

As discussed above, debt equivalence is imputed on SDG&E's balance sheet per S&P's methodology. S&P's review of a company's credit profile considers the three critical ratios noted below. Table 5 represents SDG&E's adjusted financial ratios with and without PPA debt equivalence. With the $1.6 billion of average debt equivalence expected over the proposed COC term, the creditworthiness associated with SDG&E's financial ratios is degraded.

[14] *See* D.04-12-047, Ordering Paragraph 6. The decision stated that information to be provided shall include current credit ratings from Moody's and S&P; the expected impact of its credit ratings due to debt equivalence; capital structure and return on equity with and without debt equivalence; debt to capital, cash flow interest coverage, and cash flow to debt financial ratios with and without debt equivalence; and, pre and post-tax financial ratios.

1 Table 5
2 Financial Ratio Analysis
3

	Without PPA Debt Equivalence	Including **Existing and Approved** PPA Debt Equivalence ($805M)	Including **Existing, Approved, and Filed** PPA Debt Equivalence ($1.6B)
Funds From Operations (FFO) + Imputed PPA Depreciation	971	1,018	1,032
Adjusted FFO + Cash Interest Paid	1,220	1,313	1,370
Adjusted Total Debt	4,988	5,793	6,565
Total Capitalization	9,607	10,412	11,184
Net Interest Expense	254	300	343
FFO / Adjusted Debt	**19.5%**	**17.6%**	**15.7%**
Adjusted Total Debt / Total Capitalization	**51.9%**	**55.6%**	**58.7%**
Funds From Operations Interest Coverage	**4.80**	**4.38**	**3.99**

4
5
6
7
8 Table 6
9 S&P U.S. Utilities Financial Risk Ratio Matrix
10

Financial Risk Indicative Ratios - U.S. Utilities

(Fully adjusted, historically demonstrated, and expected to consistently continue)

	Cash flow		Debt leverage
	(FFO/debt) (%)	(FFO/interest) (x)	(Total debt/capital) (%)
Modest	40 - 60	4.0 - 6.0	25 - 40
Intermediate	25 - 45	3.0 - 4.5	35 - 50
Aggressive	10 - 30	2.0 - 3.5	45 - 60
Highly leveraged	Below 15	2.5 or less	Over 50

11

12 The calculations in Table 5 show that without PPA debt equivalence, the overall financial
13 ratios are in the modest to aggressive range of the S&P indicators provided in Table 6. However,
14 with $1.6 billion of debt equivalence alone, the financial ratios move towards a more highly
15 leveraged position relative to the levels used by S&P to determine credit worthiness. For
16 instance, the FFO/debt ratio moves from the middle range of aggressive towards highly
17 leveraged. The debt to capital ratio moves from aggressive toward highly leveraged (moving
18 from 51.90% to 58.70%). The FFO/interest ratio moves from modest towards intermediate risk.
19 SDG&E witness Mr. Robert Schlax explains the importance of maintaining a single-“A”
20 credit rating, which is supported by financial ratios at current levels, and illustrates why credit

deterioration is not in the best interest of the Company and its customers. Dr. Roger Morin describes the negative impact of debt equivalence on a utility's debt ratio and risk profile:

> An electric utility with long-term PPAs possesses higher financial risk than a utility without such contracts, all else remaining constant. A company's obligations pursuant to long-term PPAs are comparable to long-term debt and are treated as such by investors and bond rating agencies. The same is true for leveraged lease arrangements.
>
> The risk perceptions of the investment community and bond rating agencies are such that incremental long-term fixed obligations associated with acquiring energy through PPAs increase a utility's financial risk. Clearly, if a company's PPAs are converted to a debt equivalent, that company's effective debt ratio increases, and so does its risk.[15]

A prudent financial manager takes proactive steps to manage and mitigate financial risk. It is in the interest of ratepayers to preserve SDG&E's credit profile and maintain a solid balance sheet to support planned infrastructure growth, while entering into renewable PPAs to reach its RPS goals, and securing contracts to meet projected growth in overall energy demand. As shown by these calculations, PPA debt equivalence will degrade SDG&E's credit profile if not proactively addressed.

a) ASC 810 Consolidation and Debt Equivalence Impact to Debt Ratio

SDG&E requests that the Commission consider the debt ratio impact associated with the ASC 810 financial statement consolidation due to the Pio Pico and Quail Brush PPTA contracts and debt equivalence associated with PPAs, and grant the recommended authorized capital structure. SDG&E has requested specific treatment for debt equivalence in past proceedings, and although the Commission has acknowledged it as a consideration that should be taken into account when setting the cost of capital, as explained above, it has not granted the relief in the manner desired. Given the level of debt equivalence SDG&E must now incur to meet the

[15] Direct Testimony of Dr. Roger Morin on Behalf of SDG&E, p. 69.

Commission's RPS goals and growth in overall energy demand, SDG&E strongly advocates providing relief in the manner specifically requested.

The proposal in the instant proceeding to address the capital structure and ROE for ASC 810 consolidation and debt equivalence is consistent with the Commission's policy of considering the impacts on a comprehensive, rather than on a project-by-project basis. While SDG&E acknowledged in the 2008 cost of capital proceeding that it cannot be specifically determined in advance what will specifically cause a change in the credit rating, the rating agencies that make such decisions have provided indications of the information they review. The addition of PPA debt equivalence and ASC 810 consolidation to SDG&E's capital structure reduces the common equity percentage by 8.44%, reduces the preferred stock percentage by 1.07% and increases the debt component by 9.51%, as reflected in Table 3.[16]

SDG&E strongly believes the magnitude of the debt equivalence, over and above historical levels, required for SDG&E to comply with the RPS objectives make it imperative for the Commission to act now to grant the specific requested relief. This will allow SDG&E's financial metrics to continue to support an "A" rating, rather than degrade to a lower credit rating, which could have long-term negative impacts on the cost of debt that is passed on to rate payers. This "A" rating is beneficial for ratepayers in protecting SDG&E's credit profile and supporting a reasonable cost of capital, compared to absorbing the finance cost increases that would result from a lower credit rating.

SDG&E thus makes two recommendations. The first is a 3% increase to its authorized common equity percentage from 49.00% to 52.00%, with the offsetting decrease within the authorized preferred component as shown in Table 7.

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[16] PPAs that are consolidated under ASC 810 requirements are excluded from debt equivalence figures.

Table 7
Recommended Capital Structure Change

SDG&E Capital Structure	2012 CPUC Authorized Capital Structure	2013 Proposed Authorized %	2013 Proposed Changes	Capital Structure Debt Equivalence Mitigation %
Debt	45.25%	45.25%	0.00%	
Preferred Stock	5.75%	2.75%	-3.00%	
Common Equity	49.00%	52.00%	3.00%	3.00%
Totals	100.00%	100.00%	0.00%	

This common equity adjustment only partially mitigates SDG&E's exposure. As shown in Table 3 above, SDG&E's debt equivalence reduces SDG&E's common equity by 8.44% from an investor's perspective. However, SDG&E's recommended movement of Preferred Stock to Common Equity only mitigates 3% of SDG&E's total debt equivalence impacts; consequently, SDG&E further requests an ROE of 11.0%, as discussed in the testimonies of Dr. Roger Morin and Mr. Robert Schlax, that includes considerations related to the impact of debt equivalency not addressed by the recommended capital structure.

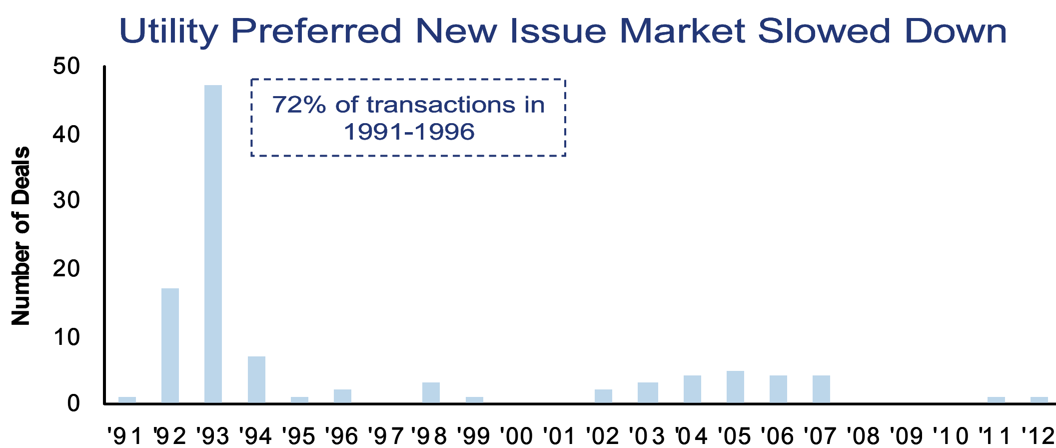
B. Preferred Stock

As noted above, SDG&E recommends reducing the preferred stock component of the capital structure from 5.75% to 2.75%. The preferred stock component of a utility's authorized ratemaking capital structure provides recognition of the company's choice of funding its capital needs through that instrument. Preferred stock is a source of capital that is issued in shares, like common equity, but comes with preferential treatment for dividends. Due to the preferred treatment on dividends, preferred stock generally has a lower cost than common equity. Credit rating agencies like S&P generally treat preferred stock as a hybrid of debt and equity, sometimes assigning it as 50% debt and 50% common equity. The reduction to 2.75% will allow

1 SDG&E the financial flexibility to issue new preferred stock when market conditions make this
2 financial instrument more cost competitive.

3 The Company has not issued preferred stock since 1993 due to a material disparity in the
4 relative cost of long-term debt as compared to preferred stock. Despite a downward trend in bond
5 rates, the relative cost of preferred stock has increased significantly over the recent years. The
6 preferred stock market has been challenged by a shrinking buyer base that has severely limited
7 demand for traditional institutional utility preferred stock. As shown in Figure 1 below,
8 issuances of traditional utility preferred stock have become infrequent, with only two
9 transactions priced over the last five years.

10 **Figure 1**[17]



11

12 At the same time, the relative cost of preferred stock has seen a steep rise. As shown in
13 Figure 2, from 1991-2000 the average utility preferred stock issuance on average priced 50 basis
14 points or more below a comparable 30-year utility bond. In today's market, the same preferred
15 would price on average at a 100 basis points or higher premium compared to a 30-year utility
16 bond.

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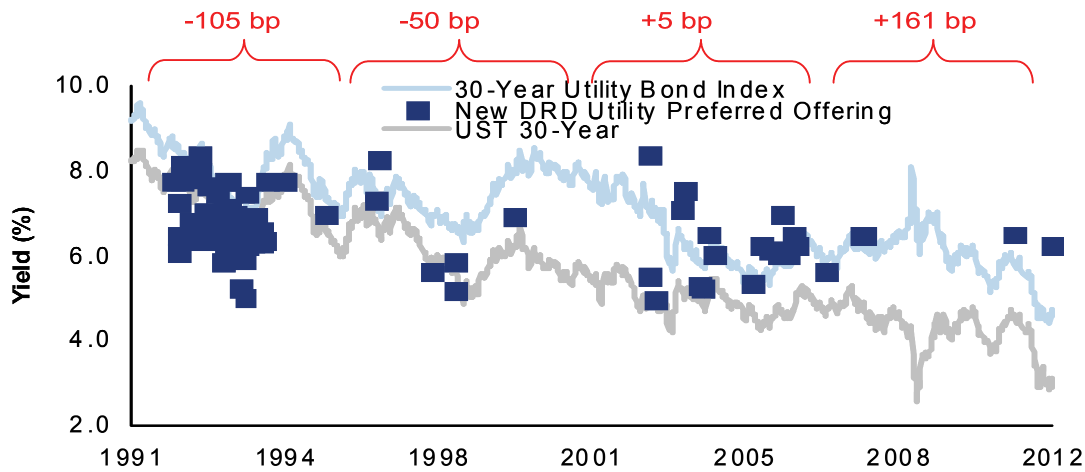
17 Source: Bloomberg Finance LP and Company research.

1 **Figure 2**[18]



2

3 The most recent utility preferred stock issuance in January of 2012 carried a non-tax
4 deductible coupon of 6.25%. In comparison, SDG&E's last bond issuance in March 2012 of
5 $250 million in 30-year, first-mortgage bonds were priced at a low coupon rate of 4.30% percent
6 or 2.60% net of tax, further demonstrating the significant divergence in relative financing costs
7 of preferred stock compared to long-term debt. SDG&E has been successful at issuing debt at
8 historically low bond rates in order to fund its large capital investment plan. Current economic
9 conditions and federal government intervention have created a window of low-cost debt.
10 SDG&E continues to monitor and evaluate the market going forward in order to optimize all
11 sources of capital to fund SDG&E's investment programs, while balancing the interests of
12 customers. SDG&E's recommendation of an authorized preferred stock ratio of 2.75% allows
13 for modest preferred stock issuances to manage the overall capital structure with debt issuances
14 and the impact of ASC 810 consolidation and debt equivalence of PPAs.
15

[18] Source: Bloomberg Finance LP and Company research.

C. Common Equity

The equity component of a utility's authorized ratemaking capital structure represents the amount of capital covered by shareholders. The common equity ratio reflects how a company is financing its cash needs and shows the percentage of assets on which the shareholders have a claim. The higher the common equity ratio, the more the shareholders have at stake and the more they would require in return. Similar to the issues with a high debt ratio, a low common equity ratio indicates higher financial risk.

SDG&E's proposal of 52.00% authorized common equity ratio represents a 3% shift from the currently authorized preferred stock component to the common equity component. As reflected above in Table 3, the impact of ASC 810 consolidations and debt equivalence of PPAs result in a 9.51% increase to SDG&E's debt ratio and an 8.44% decrease to the common equity ratio when analyzed by credit rating agencies and investors. The proposed capital structure is designed to better support the future need to raise capital in support of SDG&E's large capital spending program and to balance the accounting and credit agency impacts depicted.

SDG&E will continue to fund capital expenditures by issuing additional debt and preferred stock and by retaining earnings in common equity. To align the authorized capital structure with the business needs, SDG&E is requesting a common equity percentage of 52.00%. This percentage will signal to the capital market that SDG&E will be applying 52.00% of the needed capital from shareholders, thereby reducing financial risk, and in turn, financing costs. SDG&E's prior success in issuing historically low-cost long-term debt is partly attributable to the amount of equity held during these capital building times. Ratepayers have benefitted from the ability to issue long-term debt at all-time historical lows. The proposed 52.00% common equity component will align with SDG&E's operational needs and capital market expectations.

V. CONCLUSION

My calculations, tabulated in Attachments 1 and 2, indicate that SDG&E's embedded costs of debt and preferred stock for test year 2013 will be 5.09% and 6.35%, respectively. As described herein, SDG&E proposes a test-year 2013 capital structure composed of 45.25% debt, 2.75% preferred stock, and 52.00% common equity. SDG&E respectfully requests the Commission adopts these recommendations beginning for the 2013 test year.

This concludes my prepared direct testimony.

VI. STATEMENT OF QUALIFICATIONS

My name is Sandra K. Hrna. I am employed by SDG&E as the Assistant Treasurer and Director of Financial Analysis & Regulatory Accounts. My business address is 8330 Century Park Court, San Diego, California 92123.

I received a Bachelors of Business Administration – Accounting from The University of Texas at Austin in 1991. I also received a Masters in Professional Accounting – Tax from The University of Texas at Austin in 1991. I have been employed by SDG&E and Sempra Energy since 2001. In addition to my current position, I have held various Accounting and Finance positions within the organization, including Director of Compliance & Accounts Payable and Director of Business Planning, Budgets & Claims.

My current responsibilities include oversight of the development, analysis and implementation of financing strategies, revenue requirements, regulatory accounts, and cost recovery mechanisms for SDG&E.

I have not previously testified before this Commission.

Attachment A
SDG&E Embedded Cost of Debt
Test Year 2013
(in Thousands)

Line number	Description	A Principal	B Total discount and expense	C Net proceeds (A - B)	D Annual interest payment	E Total amortization	F Effective rate [(D + E) ÷ C]
1	SERIES KK	14,400	904	13,496	979	38	
2	SERIES OO-2	60,000	556	59,444	3,000	16	
3	SERIES OO-3	45,000	642	44,358	2,363	18	
4	SERIES OO-4	45,000	417	44,583	2,250	12	
5	SERIES RR	60,000	2,143	57,857	3,510	77	
6	SERIES VV (CV2004A)	43,615	1,509	42,106	2,562	51	
7	SERIES WW (CV2004B)	40,000	1,385	38,615	2,350	47	
8	SERIES XX (CV2004C)	35,000	1,213	33,787	2,056	41	
9	SERIES YY (CV2004D)	24,000	832	23,168	1,410	28	
10	SERIES ZZ (CV2004E)	33,650	1,166	32,484	1,977	40	
11	SERIES AAA (CV2004F)	75,000	2,612	72,388	114	75	
12	SERIES BBB	250,000	3,005	246,995	13,375	100	
13	SERIES CCC	250,000	2,586	247,414	13,250	259	
14	SERIES DDD	250,000	3,547	246,454	15,000	177	
15	SERIES EEE (CV2006)	161,240	3,553	157,687	281	301	
16	SERIES FFF	250,000	3,336	246,664	15,313	111	
17	SERIES GGG	300,000	4,438	295,562	18,000	148	
18	SERIES HHH	250,000	2,822	247,178	13,375	94	
19	SERIES III	500,000	10,559	489,441	22,500	352	
20	SERIES JJJ	350,000	4,571	345,429	10,500	457	
21	SERIES LLL	250,000	2,806	247,194	9,875	94	
24	Amortization of call premiums	-	11,609	(11,609)	-	3,388	
25	First mortgage bonds	3,286,905	66,213	3,220,692	154,040	5,923	4.97%
26	CPCFA96A	129,820	1,368	128,452	7,659	76	
27	CV96A	38,900	569	38,331	2,062	23	
28	CV96B	60,000	680	59,320	3,300	27	
29	CV97A	25,000	386	24,614	1,225	15	
30	Unsecured bonds	253,720	3,003	250,717	14,246	141	5.74%
31	Other expense and amortization	-	-	-	601	-	
32	December 31, 2011 total long-term debt	3,540,625	69,216	3,471,409	168,886	6,065	5.04%
33	Change in interest and amortization in 2012	-	(1,807)	1,807	4,789	(85)	-
34	SERIES MMM	250,000	3,485	246,515	10,750	116	-
35	December 31, 2012 total long-term debt	3,790,625	70,894	3,719,731	184,425	6,096	5.12%
36	Change in interest and amortization in 2013	-	(1,593)	1,593	-	(780)	-
37	Forecasted debt to be issued in 2013:	250,000	2,526	247,474	11,190	84	-
38	December 31, 2013 total long-term debt	4,040,625	71,826	3,968,799	195,614	5,400	5.06%
39	Average 2013 embedded cost of long-term debt						5.09%

Attachment B
SDG&E Embedded Cost of Preferred
Test Year 2013
(in Thousands)

		A	B	C	D	E	F
Line number		**Face amount**	**Expense**	**Net proceeds (A - B)**	**Dividend**	**Total amortization**	**Effective rate [(D + E) ÷ C]**
	Not subject to mandatory redemption						
1	5% Series	7,500	(196)	7,696	375	-	
2	4.5% Series	6,000	0	6,000	270	-	
3	4.4% Series	6,500	(104)	6,604	286	-	
4	4.6% Series	7,475	53	7,423	344	(0)	
5	$7.80 Series	0	0	0	0	19	
6	$7.20 Series	0	42	(42)	0	21	
7	$1.70 Series	35,000	465	34,535	2,380	-	
8	$1.82 Series	16,000	(75)	16,075	1,165	0	
9	Preferred not subject to redemption	78,475	184	78,291	4,820	40	6.21%
	Subject to mandatory redemption						
10	$7.05 Series	-	583	(583)	-	90	
11	Preferred subject to redemption	-	583	(583)	-	90	-15.38%
12	December 31, 2011 total preferred	78,475	767	77,708	4,820	130	6.37%
13	Preferred issued during 2012	-	-	-	-	-	
14	December 31, 2012 total preferred	78,475	767	77,708	4,820	130	6.37%
15	Preferred issued during 2013	80,000	2,774	77,226	4,757	92	
16	December 31, 2013 total preferred	158,475	3,542	154,934	9,576	222	6.32%
17	Average 2013 embedded cost of preferred						6.35%

Appendix A
ASC 810 Definition and Applicability

ASC 810 or Accounting Standards Codification 810[19] amended the Financial Accounting Standards Board ("FASB") issued FASB Interpretation Number ("FIN") 46(R), Consolidation of Variable Interest Entities ("VIEs"), an Interpretation of Accounting Research Bulletin No. 51, which provided guidance on the identification of and financial reporting for entities over which control is achieved through means other than voting rights. ASC 810 ensures the financial statements represent the total assets that an enterprise controls and liabilities for which an entity is responsible.

ASC 810 requires that the "primary beneficiary" of a VIEs activities consolidate the financial statements of the VIE when filing annual and quarterly reports with the Security and Exchange Commission ("SEC"). A qualitative approach is used to identify the primary beneficiary of a variable interest entity based on (1) the power to direct activities that most significantly impact the economic performance of the entity; and (2) the obligation to absorb losses or right to receive benefits that are significant to the entity. In accordance with Generally Accepted Accounting Principles ("GAAP"), the PPA contracts are to be analyzed under ASC 810. The analysis concluded that the Pio Pico Energy Center and Quail Brush Power are VIEs and that SDG&E is the primary beneficiary, which results in the requirement that SDG&E consolidate the financial statements of those companies to comply with GAAP and SEC reporting requirements.

As a result of this requirement to consolidate the financial statements with such entities, the total assets, liabilities and minority interest on SDG&E's consolidated balance sheet are expected to increase. SDG&E is required to reflect all changes in the entity's assets and liabilities on its balance sheet on an ongoing basis when reporting its financial position on a consolidated basis.

[19] Adopted January 1, 2010.

Appendix B
Debt Equivalence Methodology and Applicability

Debt equivalence is a concept used by credit rating agencies, specifically Standard & Poor ("S&P") and to a lesser extent Moody's, to describe the fixed financial obligations resulting from long-term purchased power agreements. In determining a utilities' credit rating, S&P considers the company's cash flows and its sources and uses of funds, as well as long-term fixed obligations such as PPAs, in order to conduct a meaningful comparison between utilities that build generation and utilities that enter into PPAs. PPA payments are fixed cash commitments that can affect utilities' credit quality and costs of borrowing during times of financial stress. These PPA obligations are treated as additional debt during the financial ratio assessment. As part of its credit review, S&P evaluates three ratios as critical components of a company's credit profile:

- Funds From Operations ("FFO") / Debt ratio, which measures how many years it would take for a company to repay all of its debt with internally generated cash flows;
- FFO / Interest Expense ratio, which measures the "headroom" a company has in fulfilling its current interest payments; and
- Debt / Capitalization ratio, which is a financial leverage indicator and measures how much cushion equity provides in fulfilling a company's total debt obligations.

S&P determines the debt equivalence that it will add to a utility's balance sheet as a result of entering into a PPA by calculating the net present value ("NPV") of the annual capacity payments over the life of a contract. Where the annual capacity payments are specified in the contract, S&P employs that information to calculate debt equivalence. Where the PPA contract payments are unspecified or stated as a single, all-in energy price, S&P uses a proxy capacity charge, stated in dollars per kW/yr, and multiplies that charge by the kW under contract. S&P determines the proxy capacity charge, which is based on the prevailing cost to develop and finance a combustion turbine, considered the marginal unit of energy. S&P discounts the

remaining capacity payments using the average cost of debt to determine the NPV of the remaining fixed payments. The NPV of the remaining fixed payments is multiplied by a risk factor assigned by S&P to determine the debt equivalence associated with a PPA. S&P assigns different risk factors to represent its view of the likelihood that the utility may not fully recover PPA costs on a timely basis. For purposes of evaluating SDG&E's PPA contracts, S&P uses a risk factor of 25%.

Appendix C
SDG&E Credit Ratings, Profile and Ratios

The current SDG&E credit ratings are:

	S&P	Moody's	Fitch
Long Term Issuer	A	A2	A
Unsecured Debt	A	A2	A+
Secured Debt	A+	Aa3	AA-
Preferred Stock	BBB+	Baa1	A-
Commercial Paper	A-1	P-1	F1

S&P Ratings and Credit Profile *

Business Risk Profile: Excellent

Financial Risk Profile: Intermediate

Adjusted Financial Ratios	**2010**
FFO/debt	19.3%
Debt/debt and equity	54.9%
FFO interest coverage	4.2

* Per latest S&P report dated November 16, 2011