

Application No.: 07-05-_____
Exhibit No.: _____
Witness: Dennis V. Arriola
Date: May 8, 2007

Application No. 07-05-_____
Exhibit No. SDGE-1

SAN DIEGO GAS & ELECTRIC COMPANY

PREPARED DIRECT TESTIMONY OF

DENNIS V. ARRIOLA

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

MAY 8, 2007

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1 metrics shows that the investment community views the California IOUs as having
2 similar risks.

3 **II. SDG&E RECOMMENDATION**

4 Based on my evaluation and understanding of the current capital markets,
5 financial modeling results, regulatory environment, and SDG&E's changing business
6 structure, which are explained fully in the testimonies of SDG&E witnesses Michael
7 Schneider, Gary Hayes, and Joanne Wang, I recommend the following:

- 8 • Approval of an authorized return on common equity of 11.60%. This return is
9 based on the financial results presented in Mr. Hayes' testimony, the business and
10 regulatory risks and business structure supported by Mr. Schneider's testimony,
11 investment risk comparison between transmission assets and integrated utilities,
12 and comparability among California utilities.
- 13 • Approval of the continuation of SDG&E's existing authorized capital structure
14 and the forecasted embedded costs of long-term debt and preferred stock.
15 SDG&E's current authorized structure, comprised of 49% common equity, 5.75%
16 preferred stock and 45.25% debt remains appropriate for CPUC ratemaking when
17 the negative credit impacts of debt equivalence and FIN46(R) are mitigated
18 through the proposed equity rebalancing mechanism described below.

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- 1 • Approval of a common equity rebalancing mechanism. The common equity
2 rebalancing mechanism adjusts SDG&E's revenue requirement on a contract-by-
3 contract basis to account for debt equivalency and FIN 46(R) impacts associated
4 with future purchase power obligations. This mechanism mitigates the negative
5 effects of highly leveraged Purchase Power Arrangements (PPAs) on SDG&E's
6 balance sheet and the debt equivalent computed by Standard & Poor's. When FIN
7 46(R) consolidation is required, the energy providers' highly leveraged balance
8 sheet must be consolidated with SDG&E's. SDG&E strongly recommends the
9 Commission adopt this equity rebalancing policy with an effective date May 8,
10 2007 as SDG&E is entering into a significant level of future PPAs to replace the
11 near-term expiration of the California Department of Water Resources (CDWR)
12 energy contracts and to support the Energy Action Plan's ambitious and critical
13 renewable standard of 20% by 2010. This mechanism is explained in more detail
14 by Mr. Schneider and has been previously approved for the Otay Mesa generation
15 project.
- 16 • Approval of a return on common equity for SDG&E's ownership percentage of its
17 investment in the San Onofre Nuclear Power Plant (SONGS) at the same
18 authorized ROE as Southern California Edison Company (SCE) as requested and
19 deferred in SDG&E's Steam Generator Replacement Project (SGRP) request.
20 SCE's current approved ROE is 11.60%, and the approved ROE for SDG&E's
21 investment in SONGS should be the same as SCE's future approved ROE as
22 applied to SONGS.

- 1 • As a result of these recommendations, the overall requested rate of return (ROR)
2 would be 8.58% for SDG&E's gas and electric utility investments under CPUC
3 jurisdiction as shown in the table below.¹

SDG&E Recommended Cost of Capital for Test Year 2008

Component	Authorized Capital Ratio	Authorized Cost	Weighted Cost
Long-Term Debt	45.25%	5.55%	2.51%
Preferred Stock	5.75%	6.77%	0.39%
Common Equity	49.00%	11.60%	5.68%
Total	100.00%		8.58%

4
5 This recommendation will result in an increased revenue requirement of
6 approximately \$19 million in 2008 based on SDG&E's CPUC recorded ratebase at
7 December 31, 2006. This equates to an estimated \$0.50 bill increase per core customer
8 per month.²

9 **III. LEGAL PRECEDENTS SUPPORT SDG&E'S RECOMMENDATION**

10 My recommended returns on capital are based on the standards, by which
11 reasonable utility rates are measured, established by the United States Supreme Court,
12 particularly in the following two cases, *Bluefield Water Works & Improvement Co. v.*
13 *Public Service Commission of West Virginia*, 262 U.S. 679 (1923) and *Federal Power*
14 *Commission v. Hope Natural Gas Company*, 320 U.S. 391 (1944).

¹ The requested capital structure does not reflect the effects of rebalancing resulting from mitigation of debt equivalence or FIN46 (R) consolidation.

² Based on SDG&E's request, a typical residential customer living in the inland climate zone using 500 kWh will see a monthly winter bill increase beginning January 1, 2008 of \$0.19, or 0.3%. A customer living in the coastal zone using the same amount of electricity would see a bill increase of \$0.29, or 0.4%. In addition, the monthly bill of an SDG&E residential customer using 40 therms a month will be \$0.21, or 0.4% higher than at present rates, beginning January 1, 2008.

1 These decisions state that a utility's rates must:

- 2 • reflect a return to the investor that is commensurate with returns on investments in
- 3 other enterprises having similar risks,
- 4 • enable the utility to maintain its financial integrity,
- 5 • permit the utility to maintain its creditworthiness, and
- 6 • allow the utility to attract new capital in the financial markets.

7 Besides the fact that my recommendations are based on extensive quantitative and
8 qualitative analysis performed by SDG&E, I also used these standards as a guideline to
9 ensure that they are fair and reasonable.

10 **IV. FINANCIAL PRINCIPLES SUPPORT SDG&E'S RECOMMENDATION**

11 The determination of an entity's ROE relies heavily on the principle that investors
12 must be compensated for the risks they bear in the business. Financial theory and
13 practice instructs us that the return required by equity investors on an investment is
14 positively related to the risk of that investment. In general, risk is defined as the
15 variability of an outcome about a mean. In a financial context, risk is the variability of
16 earnings relative to the investor's expected return.

17 Investors expect a utility's ROE to be similar to that of identical proxies, i.e.,
18 companies within the industry that engage in exactly the same set of business activities.
19 The Commission has traditionally utilized proxy groups of integrated electric utilities in
20 establishing SDG&E's rates. To this end, my evaluation begins by considering the
21 overall return for a group of companies similar to SDG&E, as calculated by Mr. Hayes
22 (Section V, below), and then addresses risks specific to the Company itself, as reported

1 by Mr. Schneider (Section VI, below). Finally, my testimony considers the relative risk
2 among the three California electric IOUs in setting a fair and reasonable ROE.

3 **V. FINANCIAL MODELING**

4 Company witness Hayes has provided an economic assessment of the risk
5 associated with SDG&E's equity and has determined the investor-required return
6 commensurate with that risk.

7 To do so, Mr. Hayes started by selecting a group of 43 proxy companies (publicly
8 traded firms that in aggregate possess a risk profile similar to SDG&E's) following
9 certain recommendations made in the January 2007 cost of capital workshop.

10 He then applied three analytical methods to the proxy companies' returns to
11 estimate an overall ROE: the discounted cash flow model, the capital asset pricing model,
12 and the Fama French three-factor model. Mr. Hayes also conducted a risk-premium
13 study based on the S&P Utilities Index.

14 In brief, Mr. Hayes' appraisal produced a range of returns between 10.4% and
15 13.9%, the average of which is 11.6%, which he concludes is a fair and reasonable ROE
16 for SDG&E. This range is very similar to how investors rely on multiple analyses and
17 data points to inform their judgment on expected investment returns.

18 **VI. COMPANY-SPECIFIC RISKS**

19 Investors typically consider company-specific risks in tandem with the results of a
20 comparable-company analysis in order to determine a firm's expected ROE. In
21 determining the level of SDG&E's company-specific risk, I rely on the testimony of Mr.
22 Schneider who, in his capacity as SDG&E's Treasurer and Director of Finance, observes
23 on a day-to-day basis the numerous business and regulatory factors that can and do affect

1 the Company's earnings and cash flows. Mr. Schneider analyzed the growing risks
2 inherent in SDG&E's unique business circumstances as the company resumes operating
3 as an integrated utility service provider. Investors are focused on SDG&E's significant
4 investments in generation as well as investments in critical new technologies, as the
5 approximately \$570 million for the Advanced Metering Infrastructure project. Moreover,
6 SDG&E's capital expenditure of approximately \$4 billion over the next five years is
7 double its historic spending level. SDG&E also faces risks associated with an uncertain
8 state regulatory and legislative energy policy environment. In addition, SDG&E's
9 business structure is riskier than other non-California utilities due to the California
10 requirement to supply 20% of SDG&E's energy portfolio with emerging renewable
11 power sources (Renewable Portfolio Standards or "RPS"). If SDG&E does not meet this
12 goal, it is potentially subject to multi-million dollar penalties. This procurement
13 requirement and the associated penalties introduce a direct risk to investors that
14 previously did not exist.

15 SDG&E is rapidly adjusting its business model with significant new investments in
16 renewables, generation, transmission and distribution infrastructure, and advanced
17 technologies. Therefore, I conclude that SDG&E's expected return is subject to greater
18 volatility than the return of a similar utility which is not required to significantly invest in
19 similar infrastructure.

20 From a financial standpoint, the volatility introduced by the business risks
21 identified above clearly support the Company's recommendation that a fair and
22 reasonable ROE should not fall below the 11.60% average of Mr. Hayes' 10.40% -
23 13.90% range of results.

1 **VII. CAPITAL MARKETS EVIDENCE**

2 The writings of Wall Street equity analysts as well as the major credit-rating
3 agencies provide useful insight into the market’s assessment of the Company’s risks.
4 Observers have noted that SDG&E’s regulatory environment has improved since the
5 2001 California Energy Crisis. Based on Mr. Schneider’s testimony, however, I conclude
6 that there continues to exist in California more uncertainty in this area than that faced by
7 other utilities in less-fluid regulatory settings. This conclusion is confirmed by equity
8 analysts who follow SDG&E’s publicly-traded parent, Sempra Energy. They identify
9 continued “California risk (political, regulatory, environmental, legislative and
10 activist.)”³ and cite risks of “unreasonable or unexpected regulatory decisions (and) the
11 uncertainty created by the deregulation of the electric and natural gas industries.”⁴ In the
12 same manner, Moody’s Investors Services lists lingering uncertainty about “the
13 regulatory framework that will surface in California”⁵ as a challenge to the Company’s
14 creditworthiness.

15 An aspect of this new California regulatory framework important to SDG&E is
16 the eventual need to replace power currently provided by the State through the CDWR.
17 As contracts between the CDWR and third-party suppliers expire between 2008 and 2012,
18 SDG&E must replace the power from these maturing contracts, which will cause
19 Standard & Poor’s to “impute debt where none is imputed currently”⁶ and which the
20 rating agency views as a looming debt-like obligation facing SDG&E’s credit outlook.

³ Johong, Lasan, “Comment: Sempra Energy,” RBC Capital Markets, March 30, 2007, p.5.

⁴ Barone, Ronald J., “UBS Investment Research: Sempra Energy,” UBS Global Equity Research, February 26, 2007, p.2.

⁵ Sabatelle, A.J., “Credit Opinion: San Diego Gas & Electric Company,” Moody’s Investors Service, January 9, 2006.

⁶ Venkataraman, Swami, “Research Summary: San Diego Gas & Electric Co.,” Standard & Poor’s, Dec. 19, 2006.

1 SDG&E's proposal to include an equity rebalancing mechanism will help to mitigate
2 S&P's concern in this regard. SDG&E's business model is becoming more generation-
3 oriented, as evidenced by the Company's recent acquisitions of over 600 megawatts
4 (MW) of new generation. Further, the Company's generation portfolio will encompass
5 varying technologies and designs. Industry experts and rating agencies have recognized
6 that each type of generation technology has its own unique risks, including the possibility
7 of stranded costs, operational uncertainties related to newer technologies, and difficulties
8 in adhering to changing environmental standards. In general, companies that have a
9 higher degree of generating assets are considered riskier and thus investors tend to expect
10 higher ROEs. Over the next 5 years, SDG&E plans to invest \$500 million to \$1 billion in
11 generation, which will benefit customers in the long run, but add to SDG&E's overall
12 business risk.

13 **VIII. UTILITY ROE COMPARABILITY**

14 SDG&E competes in the same capital markets and has a similar risk profile as the
15 other California IOUs, and as a result must have an authorized ROE commensurate with
16 those other IOUs. All three California electric IOUs share a similar risk profile because
17 they operate in the same regulatory environment and face the same aggressive RPS goals,
18 and they all have large planned capital spending programs compared to their existing
19 asset base, including large expenditures into non-traditional assets. Further, as described
20 in Mr. Schneider's testimony, the investment community views the California IOUs as
21 having similar risks. As such, investors would expect the IOUs to have comparable
22 ROEs. Otherwise, investors would naturally be attracted to the companies that had

1 higher authorized ROEs since they would be rewarded with a higher return even though
2 the risks were perceived to be comparable.

3 **IX. DETERMINATION OF RECOMMENDED ROE**

4 Taken as a whole, the evidence I discuss above allows me to reach an informed
5 conclusion about SDG&E's required ROE for utility investments. Mr. Hayes' technical
6 appraisal provides a cost of common equity equal to 11.60%. I concur with Mr. Hayes
7 analyses and the results of his recommendation. The Company-specific risk factors
8 described in the testimony of Mr. Schneider coupled with SDG&E's business, market and
9 regulatory comparability with the other two California electric IOUs (with current returns
10 on equity of 11.60% and 11.35% for SCE and PG&E, respectively), suggest that
11 SDG&E's current authorized ROE of 10.70% is neither appropriate, fair nor reasonable,
12 especially as SDG&E's business structure continues to evolve and assume additional
13 risks.

14 **X. SUMMARY**

15 In my opinion as a seasoned financial executive, a 11.60% ROE, when taken in
16 combination with the capital structure and embedded costs presented by SDG&E witness
17 Wang, will result in a 2008 revenue requirement that meets the *Bluefield* and *Hope*
18 standards for reasonable customer rates and maintains the Company's creditworthiness
19 and financial integrity.

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1 The table below summarizes SDG&E's proposed Cost of Capital for test year 2008:

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SDG&E Recommended Cost of Capital for Test Year 2008

Component	Authorized Capital Ratio	Authorized Cost	Weighted Cost
Long-Term Debt	45.25%	5.55%	2.51%
Preferred Stock	5.75%	6.77%	0.39%
Common Equity	49.00%	11.60%	5.68%
Total	100.00%		8.58%

3

4 In addition, I recommend that the CPUC adopt, effective as of the date of
5 SDG&E's cost of capital application -- May 8, 2007, the equity rebalancing proposal
6 sponsored by Mr. Schneider as a reasonable and balanced basis to protect SDG&E's
7 creditworthiness. This contract-by-contract adjustment will modify on a timely basis
8 SDG&E's capital structure to accurately reflect its credit costs and risks. SDG&E will
9 continue to operate under its MICAM. Lastly, SDG&E requests the same ROE for its
10 SONGS investment as authorized for SCE.

11 This concludes my prepared direct testimony.

1 **XI. STATEMENT OF QUALIFICATIONS**

2 My name is Dennis V. Arriola and I am the Senior Vice President and Chief
3 Financial Officer (CFO) of SDG&E and Southern California Gas Company (SoCalGas),
4 Sempra Energy's California regulated utilities. I have been in this role since 2006 and
5 oversee all of the Utilities' finance, accounting and information technology matters. My
6 business address is 8330 Century Park Court, San Diego, California 92123-1530.

7 Previously, from 2003 to 2006, I was the Vice President of Communications and
8 Investor Relations for Sempra Energy and Vice President of Investor Relations from
9 2001 to 2003. From 1998 to 2001, I served as Regional President and General Manager,
10 South American Operations, for Sempra Energy International, a subsidiary that develops,
11 operates and owns utility projects in international markets. From 1994 to 1998, I was
12 vice president and treasurer for Pacific Enterprises and SoCalGas. Before joining Pacific
13 Enterprises, I was a Vice President with Bank of America and Security Pacific National
14 Bank.

15 I hold a master's degree in business administration from Harvard University and a
16 bachelor's degree in economics from Stanford University.