Application of Southern California Gas Company (U904G) for Authority to: (i) Adjust its Authorized Return on Common Equity, (ii) Adjust its Authorized Embedded Costs of Debt and Preferred Stock, (iii) Decrease its Overall Rate of Return, and (iv) Revise its and Gas Rates Accordingly, and for Related Substantive and Procedural Relief.

Exhibit No.: SCG-3

PREPARED DIRECT TESTIMONY OF CHERYL A. SHEPHERD ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

APRIL 2012



TABLE OF CONTENTS

| Prepared DIRECT Testimony Of | 1 |
|---|----|
| CHERYL A. SHEPHERD | 1 |
| ON BEHALF OF Southern california GAS COMPANY | 1 |
| I. Purpose | 1 |
| II. Summary of Recommendations | 1 |
| III. Risk Profile Analysis | 2 |
| A. Business Risk | 2 |
| 1. Economic Risks | 3 |
| 2. Construction Risk | 4 |
| 3. Competition | 7 |
| 4. California Business Environment | 8 |
| a) Civil Litigation/Insurance | 9 |
| b) Tax Rates | 11 |
| c) Environmental Regulations | 11 |
| (1) GHG | 12 |
| (2) Combustion Limitations | 13 |
| 5. Changing Natural Gas Industry | 14 |
| B. Regulatory Risk | 16 |
| 1. Adequate ROE | 17 |
| 2. Cost Recovery | 19 |
| 3. Regulatory Certainty and Predictability | 21 |
| 4. Regulatory Lag | 23 |
| IV. Comparison to Other California Investor Owned Utilities | 24 |
| A. IOU Relative Risk Assessment | 25 |
| B. Historical IOU ROEs (Pre-MICAM) | 26 |
| C. IOU Bond Yields | 27 |
| V. Conclusion | 28 |
| VI. Statement of Witness Oualifications | 29 |

PREPARED DIRECT TESTIMONY OF

CHERYL A. SHEPHERD

ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

I. PURPOSE

The purpose of my direct testimony is to present an overview of Southern California Gas Company's ("SoCalGas" or "Company") business and regulatory risks. In addition, I evaluate some of these risks across a proxy group of natural gas utility companies, and compare SoCalGas' risk profile to that of the other California investor owned utilities ("IOUs").

II. SUMMARY OF RECOMMENDATIONS

SoCalGas is the nation's largest natural gas distribution utility and faces a variety of growing business and regulatory risks that have increased since the Commission last authorized SoCalGas' cost of capital ("COC") in Decision ("D.") 96-11-060. SoCalGas' increasing business and regulatory risks arise from capital investment needs, global economic uncertainty, competition, environmental compliance requirements, changes in the natural gas industry, and regulatory and state policy considerations. Because SoCalGas' business and regulatory risks significantly affect both its access to and cost of capital, SoCalGas requests that the Commission take into consideration the uncertainties and risks described herein when determining SoCalGas' Return On Equity ("ROE") and overall COC.

_

¹ Investors generally view a company's risk profile in three distinct categories: (1) business risk, (2) regulatory risk, and (3) financial risk. This testimony will cover the Company's business and regulatory risks. The testimony of Michael Foster discusses the Company's financial risk.

² The proxy group of similar natural gas utilities consists of AGL, Atmos Energy, Laclede Gas, Northwest Natural Gas, Piedmont Gas, South Jersey Industries, and Southwest Gas. *See* the Direct Testimony of Dr. Roger Morin for a detailed discussion regarding the selection of the natural gas proxy group.

³ IOUs consist of SoCalGas, San Diego Gas & Electric Company ("SDG&E"), Pacific Gas and Electric Company ("PG&E"), and Southern California Edison Company ("SCE").

⁴ In its last COC application, SoCalGas' risks arose from electric industry restructuring, municipalization, core aggregation, and customer bypass.

III. RISK PROFILE ANALYSIS

Investors are concerned with variability of the expected earnings of a company; as such, it is necessary to assess a company's net operating income risks to determine an appropriate return required by an investor. Capital markets determine the price of investor capital (i.e., the required return on stocks and bonds) based on the riskiness of a borrower in relation to other potential borrowers. Investors have many investment choices, including stocks, bonds, money funds, treasury securities, real estate, etc. In order for SoCalGas to attract reasonably-priced capital, it must offer potential investors the prospect of earning a return on their investment that is at least equal to the potential returns offered by other investments of comparable perceived risk.

SoCalGas realizes that the Commission has to balance the interests of both investors, who expect reasonable and consistent returns, and ratepayers, who want lower rates. If the Commission-adopted Rate of Return ("ROR") strikes an appropriate balance between the Company and its ratepayers, both benefit. If the Commission-adopted ROE is set too low, both the Company and its ratepayers are adversely impacted because of the increase in the cost of financing and overall COC over the long-term. It is therefore imperative that the Commission provide a competitive return to SoCalGas' investors that allows SoCalGas to raise capital at reasonable costs over the long-term, and enables SoCalGas to meet its service obligations, while maintaining reasonable rates.

A. Business Risk

Business risk is the exposure of investors' anticipated returns to the uncertainties of a company's day-to-day business activities.⁵ Business risk takes into consideration the economic

⁵ See D.0712-049 at 29 ("Business risk pertains to uncertainties resulting from competition and the economy. That is, a utility that has the most variability in operating results has the most business risk.").

and business environment of a company. DBRS, the largest credit rating agency in Canada, explains that "differing business risk profiles impact the assessment of a company's financial risk profile, and thus, it is important to understand the extraneous influences and business factors a company is or could be affected by despite its financial strength." Accordingly, business risk is an important factor in the determination of an ROE because the greater the level of risk, the greater the ROE investors will demand to fund a company's capital investment projects.

1. Economic Risks

The global economy and the way companies do business has changed since SoCalGas last filed a COC application in May 1996. This change is due in large part to the major economic events that have since occurred. Unlike other economic events, the financial crisis which began in 2007 was unique (and its aftereffects still linger) because of the severe disruptions to the financial markets.⁷ This unprecedented series of financially distressing events featured a breakdown in activity in numerous financial markets.

While the economy is showing signs of recovery, markets are still exhibiting significant volatility because investors have dramatically revised their risk perceptions. The market's level of uncertainty can be measured using the Chicago Board Options Exchange Market Volatility Index ("VIX"), which measures the implied volatility (market's perception of volatility) of the Standard & Poor's ("S&P") 500 Index options, and is often referred to as the "fear index." As

⁶ DBRS Ltd., "Rating North American Energy Utilities (Electric, Natural Gas, and Pipelines)" *Methodology* (June 2010) at 2.

⁷ See Federal Reserve Bank of St. Louis Financial Crisis Timeline, available at: http://timeline.stlouisfed.org.

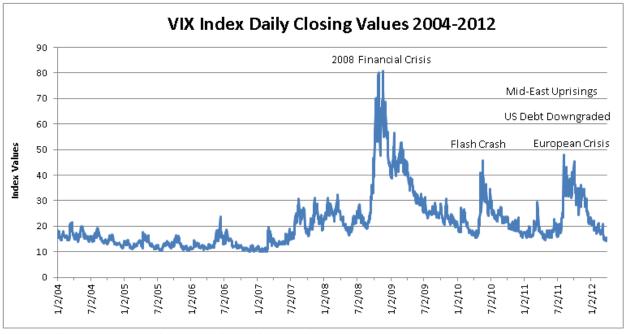
⁸ The developer of the VIX, Robert Whaley, describes:

The VIX is a forward-looking index of the expected return volatility of the S&P 500 Index over the next 30 days and is implied from the prices of the S&P 500 index options, which are predominantly used by the market as a means of insuring the value of stock portfolios. High levels of VIX reflect investor anxiety regarding a potential drop in the stock market, just as flood insurance premiums reflect homeowner anxiety about possible inclement weather.

See Robert Whaley, Understanding VIX, Journal of Portfolio Management (Spring 2009) at 98-105.

illustrated in Figure 1 below, since the financial turmoil began in 2007, the market's perception of uncertainty has become more sensitive to macroeconomic news.

Figure 1: Market Volatility and Key Events in History



Source: http://www.cboe.com/publish/ScheduledTask/MktData/datahouse/vixcurrent.csv

The frequent and recent increases in the VIX demonstrate that the current market continues to experience elevated levels of risk aversion. Because of higher perceived risks in the market, investors must be compensated in order to incent investment.

Given the market conditions and SoCalGas' significant financing requirements, the Commission should take into consideration investors' increased sensitivity to risk and future capital market trends when establishing a reasonable ROE and overall COC for SoCalGas.

2. Construction Risk

The term "construction risk" refers to the financial and operating risks caused by the magnitude and nature of a company's capital budget. SoCalGas will be embarking on its largest capital investment plan to support significant and necessary infrastructure investments and technological upgrades. In the last five years, SoCalGas' capital spending averaged \$500 million

per year. However, over the next five years SoCalGas anticipates that its capital spending will average \$1 billion per year. SoCalGas anticipates it will spend approximately \$850 million in capital expenditures to deploy the Advanced Metering Infrastructure ("AMI") project. In addition, pursuant to its proposed ten-year natural gas Pipeline Safety Enhancement Plan ("PSEP"), SoCalGas anticipates it will spend approximately \$3.1 billion in the first ten years, of which \$2.4 billion will be spent within the first five years.

SoCalGas is facing an unprecedented need for new capital over the next five years and obtaining capital at a reasonable rate and on reasonable terms in the current capital market is critical to maintaining low costs to ratepayers over the long-term. The financial community recognizes the risks associated with rising costs needed to undertake such significant capital investments. From a credit perspective, the additional pressure on cash flows associated with high levels of capital expenditures exerts corresponding pressure on credit metrics and, therefore, credit ratings. Financial rating agencies perceive SoCalGas' planned capital investments as a business risk, which could potentially impair SoCalGas' credit rating, and thus increase the cost of capital. For example, in its June 30, 2011 rating of SoCalGas, Moody's acknowledged the risks associated with SoCalGas' capital investment plans, reporting: "We expect [the Company's] strong metrics to weaken somewhat over the next several years as SCG undertakes a large capital spending program that aims to improve its distribution and transmission system along with an advanced metering infrastructure." Moody's further states, "[SoCalGas'] ratings

_

⁹ Historical capital expenditure information can be found in SoCalGas' 10K reports: http://investor.shareholder.com/sre/sec.cfm.

¹⁰ See http://files.shareholder.com/downloads/SRE/1702329117x5805029x556295/b5c9ee56-171b-42ba-99e6-ba949d5bd116/REVISED%202%202012%20Analyst%20Conference%20Presentation.pdf.

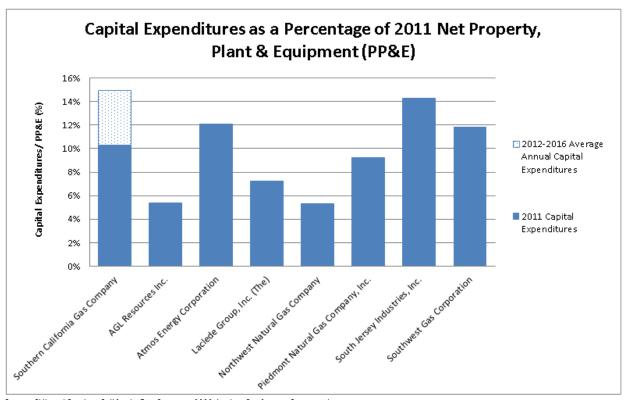
¹¹ In D.10-04-027, the Commission granted SoCalGas approval to implement AMI, which will provide a net benefit to ratepayers but requires significant capital investment in order to attain those benefits.

¹² Moody's Investors Service, "Credit Opinion: Southern California Gas Company," *Global Credit Research* (June 30, 2011).

could be downgraded if problems surface with the execution of its capital expenditure program."13

Compared to the proxy group, SoCalGas has an average level of construction risk when looking at 2011 capital investment. To reasonably compare SoCalGas' capital investment projects to the proxy group, SoCalGas calculated the ratio of actual 2011 capital investments to 2011 net assets for each company in the proxy group, as well as the 2012-2016 annual average of SoCalGas' expected capital investments as compared to 2011 net assets.

Figure 2: Capital Expenditures Relative to Net Property, Plant, & Equipment



Source: SNL and Southen California Gas Company 2012 Analyst Conference Presentation

Although SoCalGas' 2011 capital expenditures are comparable to the natural gas proxy group, SoCalGas anticipates that it will need to raise substantial capital to fund the \$5 billion investment

6

9 10

1

2

3

4

5

6

7

8

11

¹³ *Id*.

level over the next five years. As seen in the chart above, the Company's average annual investment level in 2012-2016 exceeds the proxy's maximum 2011 investment levels.

Because of the large degree to which the utility industry is dependent upon the capital markets, SoCalGas, as the nation's largest natural gas distribution utility, is especially vulnerable to credit market risks because of its current and future need to raise increased amounts of capital to fund its investment projects. Investors require a level of return that reflects SoCalGas' increased level of construction risk. As such, SoCalGas requests that the Commission authorize SoCalGas an ROE that will allow it to attract the capital needed to fund its capital investments on reasonable terms and at reasonable costs over the long-term.

3. **Competition**

SoCalGas' business risk profile is heavily influenced by competition. SoCalGas faces direct competition from electricity, propane, photovoltaic installations, and self-generation. As these technologies become more advanced and economically attractive to customers, customers may reduce their reliance on natural gas, exposing SoCalGas to possible lost revenues and stranded assets.

SoCalGas continues to be vulnerable to competition in non-core transportation markets (63% percent of throughput). Customer bypass is an on-going concern for SoCalGas because its service territory is crossed by/in close proximity to three interstate pipelines. ¹⁴ When customers bypass SoCalGas' system, SoCalGas has a diminished base to recover the revenue needed for the

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

¹⁴ Kern River and Mojave pipelines (operated jointly in some segments) are in the SoCalGas service territory. North Baja/Baja Norte is in close proximity to the SoCalGas service territory. All three have presented, and continue to present, bypass opportunities, such as in 1998 when Kern River Pipeline announced an Open Season to serve load in the LA Basin by 2001. While that bypass did not occur, the pipeline is still operating within SoCalGas' territory, serving enhanced oil recovery and electric generation load in the San Joaquin Valley that was either formerly served by SoCalGas or could have been served by SoCalGas in lieu of the interstate pipeline, and could potentially build a lateral to serve customers in the LA Basin. In 2005, a SoCalGas customer in the Imperial Valley signed a precedent agreement to take service from a new lateral off the North Baja Pipeline, however the lateral was not built, and SoCalGas continues to serve the customer.

fixed costs of its capital investment in plant and equipment. SoCalGas, in turn, is then compelled to seek higher rates from its remaining customers to recover the fixed costs, which can create an undesirable spiral as higher rates may encourage additional bypass, leading once again to more customer load losses and higher rates. In fact, bypass by SoCalGas' non-core customers has already occurred and several others have explored bypass options. For example, in the years immediately following initiation of its service in the San Joaquin Valley in 1992, the Kern/Mojave pipeline was serving approximately 400 MMcfd of enhanced oil recovery load formerly served by SoCalGas. Also prospectively, increased local gas production in the San Joaquin Valley area could provide additional bypass or fuel switching risk to SoCalGas.

The availability of additional supplies of natural gas or natural gas alternatives and gas transportation markets in or near SoCalGas' territory provides a number of large-volume, non-core customers with the opportunity to obtain their supply directly from alternative means, thereby increasing SoCalGas' risk of competitive load loss. Because bypass and competitive load loss increases rates and creates the potential for stranded assets, significant customer bypass of the system could stress the financial health of SoCalGas.

Accordingly, when determining the COC for the Company, SoCalGas asks that the Commission recognize and take into consideration the competitive environment and the risk it poses to SoCalGas.

4. California Business Environment

SoCalGas' business risk profile is increased by the perception that California is a difficult state in which to operate a business and invest capital. For the seventh year, *Chief Executive*

¹⁵ Pursuant to its tariffs, SoCalGas may seek Commission approval to discount its transportation rates to encourage non-core customers to remain on SoCalGas' pipeline system.

Magazine has found California to be the worst state in the nation in which to do business. ¹⁶ The United States Chambers of Commerce issued a report based on a survey of more than 500 American business CEOs, which stated "[California] is known for its persistent budget woes and debt, high taxes, and complex employment laws and regulations." While perceptions of doing business in California may vary, the underlying factors giving rise to the opinions and business decisions noted above are widely acknowledged. For these reasons, many investors are likely to require a higher return for investments in companies operating in California, as they face a higher level of challenges in executing business strategies.

a) Civil Litigation/Insurance

SoCalGas operates in one of the most litigious regions in the country. While the total number of civil cases has increased consistently over 2000-2009, California ranked third in terms of states with the largest number of cases. The Southern California region is particularly more aggressive with civil cases and Los Angeles County alone has litigated nearly 30% of all civil cases in the State each year from 2001-2010. Claims increase operating expenses and each incident carries a high degree of uncertainty and risk for the Company. Although SoCalGas is dedicated to the safe and reliable operation of its system, there are civil litigation risks that will exist, which are beyond the Company's control.

The risk posed by California's generally high rate of litigation is exacerbated by California's "inverse condemnation" doctrine and its application to IOUs. California courts have held that an IOU may be held strictly liable under the "inverse condemnation" doctrine for

¹⁶ More than 500 CEOs considered a wide range of criteria, from taxation and regulation to workforce quality and living environment, in our annual ranking of the best states for business. *See* "Best/Worst States for Business," *Chief Executive Magazine* (May 3, 2011) available at: http://chiefexecutive.net/best-worst-states-for-business.

¹⁷ See "The Impact of State Employment Policies on Job Growth: A 50 State Review" (2001) available at: http://www.uschamber.com/sites/default/files/reports/201103WFI StateBook.pdf.

¹⁸ See http://www.courtstatistics.org.

¹⁹ *Id*.

damage to private property when the source is a utility facility.²⁰ Under this doctrine, even if a utility is in full compliance with relevant safety regulations and/or there is no proof of negligence, if utility equipment or facilities start a fire, for example, the utility may be held strictly liable for resulting damages, even where the damage results from third party negligence or actions. In addition, successful inverse condemnation plaintiffs are entitled to attorneys' fees and pre-judgment interest, which add to the total litigation cost.

As a regulated utility, SoCalGas is required to provide natural gas distribution services to all customers residing in its service territory. Insurance carriers' negative perception of California's inverse condemnation doctrine, particularly in connection with the recent history of large wildfire claims against California's electric IOUs, have helped lead to a reduction in available liability insurance and a significant increase in price over the past few years.²¹ The current difficulty in obtaining adequate liability insurance coverage creates reasonable investor concern regarding under-insurance.

Moreover, the fact that insurance is available now is no guarantee that insurance will be available at reasonable prices in the future. As the Company's recent insurance procurement has demonstrated, the insurance market is unstable and insurance availability can change quickly. After the recent pipeline ruptures, the Company was informed that if there is another catastrophe, not just fire, insurance might become scarce, and insurance costs will be exceptionally high for third-party liability claims.

In sum, California's generally high rate of litigation, coupled with its unfavorable interpretation of the "inverse condemnation" doctrine, presents a significant business risk.

See Barham v. Southern California Edison Co., 74 Cal. App. 4th 744, 752 (1999) ("The fundamental policy underlying the concept of inverse condemnation is to spread among the benefiting community any burden disproportionately borne by a member of that community, to establish a public undertaking for the benefit of all.")

²¹ SoCalGas shares an insurance liability policy with SDG&E, and thus is tied to the electric utility liability risk.

b) Tax Rates

California's numerous and costly tax requirements increase SoCalGas' business risk profile by increasing SoCalGas' operating costs. The State's high tax rates also deter some business and investment opportunities. In fact, in an annual report, the Tax Foundation ranked California 48th in the nation in terms of state business tax environments.²² Californians are subject to many forms of taxation. Examples include: vehicle license fees, income tax surcharges, and other surcharges. Pursuant to Assembly Bill ("AB") 1002, gas utility customers are charged a Public Purpose Program surcharge, used to support state-mandated assistance programs for low-income customers and energy-efficiency efforts. Specifically, these include California Alternate Rates for Energy program and Energy Savings Assistance program for low-income customers and the Energy Efficiency program for non-low-income customers.

In addition, many California cities and counties impose a utility user tax ("UUT") on the consumption of utility services, including (but not limited to) electricity, gas, water, sewer, telephone, sanitation and cable television.²³ These additional taxes raise the overall cost of living and hence, required wages, which in turn raises the cost of doing business in California. Additionally, having entities other than government agencies collect these fees raises the perceived cost of goods and services provided by these entities to customers.

c) Environmental Regulations

Environmental requirements also affect investors' evaluation of utilities' risk profile.

Utilities are confronting increased environmental pressures that could impose significant

²² See Mark Robyn, "2012 State Business Tax Climate Index," *Tax Foundation* (January 2012) available at: http://taxfoundation.org/files/2012 tax foundation index bp62.pdf.

All residential and business SoCalGas customers with billing or service addresses in the unincorporated areas of Los Angeles County must pay the UUT. SoCalGas is responsible for the collection of the UUT and the remittance of the UUT to the Los Angeles County Treasurer and Tax Collector. *See* http://www.californiacityfinance.com/UUTfacts08.pdf.

uncertainties and costs. In general, California utilities face increasingly stringent environmental laws that regulate the operation and modification of existing facilities, the construction and operation of new facilities, and the disposal of hazardous waste and toxic substances. As a utility located in Southern California, SoCalGas is subject to numerous environmental regulations that are administered by multiple state, and local governmental agencies.²⁴ The numerous and complex California environmental regulations create uncertainty in utility operating expense forecasts, and place the Company at risk for under-recovered compliance costs as well as operating costs.

Moreover, the Company's risk profile is increased because of uncertainties surrounding the implementation and enforcement of environmental regulations, which contributes to investor perceptions that California is a risky state in which to invest. Moody's noted that "the prospect for new environmental emission legislation – particularly concerning carbon dioxide – represents the biggest emerging issue for utilities." In particular, there is great uncertainty regarding the potential impacts on the Company of greenhouse gas ("GHG") emissions' regulations and combustion-limiting regulations.

(1) **GHG**

In 2006, the California Legislature enacted AB 32, the Global Warming Solutions Act of 2006, which set the 2020 GHG emissions reduction goal into law. AB 32 requires the California Air Resources Board ("CARB") to design and implement regulations and market mechanisms to reduce California's GHG emissions to 1990 levels by 2020, and to 80 percent

²⁴ This abundance of environmental regulations is due in part to the fact that Southern California is one of the most bio diverse regions in the country, as it has oceans, mountains, and deserts as well as the largest concentration of endangered species in the nation.

Moody's Investors Service, "U.S. Investor-Owned Electric Utilities," *Industry Outlook* (Jan. 2009).

²⁶ GHG emissions are defined in AB 32 to include carbon dioxide, methane, nitrous oxide, and others.

below 1990 levels by 2050.²⁷ In phase I (2013-2014), SoCalGas will purchase allowances for GHG emissions emitted from its gas compression facilities. Under the current proposal, California natural gas utilities would have to purchase allowances for all of their residential, commercial and small industrial customers' GHG emissions, resulting from natural gas usage starting in 2015.

There are many lingering and unanswered questions regarding the mechanics of AB 32. Because customer usage varies and the science of calculating fugitive emissions is still emerging, there is uncertainty regarding how many allowances will ultimately be needed. Importantly, and likely most troubling to potential investors and rating agencies is the fact that there is continued uncertainty about whether utilities will be allowed full cost recovery of AB 32 compliance expenses from ratepayers. Due to the uncertainty regarding cost recovery, SoCalGas cannot determine the potential rate impacts or determine if rate increases will be required.

(2) Combustion Limitations

SoCalGas also faces risks due to efforts by the South Coast Air Quality Management District ("SCAQMD") to limit combustion and combustion equipment.²⁸ Since 2007, the SCAQMD has publicly stated that in order to meet the Clean Air Act's air quality standards, it must get "combustion out" of the basin and "...transition out of fossil fuel combustion and move toward zero-emission technologies." In its board-approved 2011 Energy Policy statement, SCAQMD resolves to "[p]romote zero and near-zero emission technologies through ultra clean

²⁷ See http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf.

²⁸ California, unlike any other state, has a state agency, CARB,, as well as local air districts that regulate air quality and promulgate pollutant rules.). Two of the air districts SoCalGas operates in, SJVAPCD and SCAQMD, are classified as "extreme non-attainment" areas for ozone and, are as such, subject to stringent air emission reduction regulations.

²⁹ Comments of SCAQMD to EPA regarding the Proposed National Ambient Air Quality Standards, March 19, 2010 (emphasis added).

energy strategies, to meet air quality, energy security, and climate change objectives"³⁰ In addition, SCAQMD, CARB, and the San Joaquin Valley Air Pollution Control District ("SJVAPCD") recently sponsored a joint publication, in which the agencies encouraged local governments to promote the use of electric water and space heaters.³¹

It is unclear the extent to which the SCAQMD will attempt to limit combustion, and impose further emission reduction requirements on natural gas equipment. What is certain is that SoCalGas residential customer demand will likely decrease if the SCAQMD ultimately decides to ban all combustion equipment. SoCalGas estimates suggest that even if only natural gas water heaters were restricted or prohibited, SoCalGas residential customer demand would decrease by approximately 40% over the next 20 years, which could increase rates as customers migrate to electric energy sources. The potential impacts to the Company of SCAQMD's policy to promote zero and near zero emissions are unknown, which creates investor uncertainty and increases SoCalGas' risk profile.

5. Changing Natural Gas Industry

Since 1996, natural gas regulations have changed considerably. While in 1996, the natural gas industry was concerned with gas and electric restructuring, recently because of federal and state legislation, natural gas utilities have focused increased attention on safety and reliability issues. In 2002, Congress passed the Pipeline Safety Improvement Act of 2002 ("PSIA"), which increased safety requirements for the operation of the nation's pipelines and mandated extensive inspections, monitoring, recordkeeping, and educational programs regarding

³⁰ See SCAQMD 2011 Air Quality-Related Energy Policy, available at: http://www.aqmd.gov/prdas/climate-change/EnergyPolicyFinal/EnergyPolicyAdopted090911-Clean.pdf.

³¹ See "Powering the Future: A Vision for Clean Energy, Clear Skies, and a Growing Economy in Southern California" (2011) available at: http://www.arb.ca.gov/newsrel/2011/powering_the_future.pdf.

the existence of pipelines and pipeline safety.³² More recently, in response to a series of high-profile incidents, Congress passed the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, which created tougher safety rules for the nation's vast network of pipelines. The law also doubled potential fines for violations from \$1 million to \$2 million, and allows the Secretary of Transportation to mandate automated shutoff valves on new or replaced pipelines.

On a local level, and as a result of recent pipeline ruptures in California, the California legislature enacted five laws—AB 56, Senate Bill ("SB") 44, SB 216, SB 705, and SB 879.³³ In addition, there are numerous pipeline safety and reliability bills currently pending before the California legislature, including AB 587 (implementation of NTSB recommendations and cost recovery); AB 1456 (using safety performance in cost of capital proceedings); AB 1511 (hazard disclosures in residential real estate transactions); AB 1703 (disclosure of civil filings against a utility regarding safety issues); AB 1843 (whistleblower protection); AB 2559 (noticing on pipeline integrity work); AB 2564 (California Environmental Quality Act reform); SB 1350 (penalty fine usage); AB 1541 (accident reporting); and SB 1000 (public access of accident reports). To comply with new and pending pipeline safety laws and regulations, SoCalGas must now allocate more of its resources to address these new requirements.

While the federal and state governments' increase scrutiny on gas utility pipeline safety issues, as they should, the investment community nonetheless views this process as creating a more risky business environment in which SoCalGas operates. Some investors and other market participants may perceive that all natural gas utilities, particularly in California, are riskier businesses due to recent events. In addition, investors may be wary of the uncertainties

³² The law also increased civil penalties that may be assessed for safety violations.

³³ While most of these bills focused on requiring utilities to develop enhanced emergency response plans and implement new safety-related measures, they have also increased the statutory cap on penalties from \$20,000 to \$50,000 per violation.

regarding the increased authority that regulators have to levy fines and the potential increased amount of these fines, and uncertainties regarding impending legislation. To account for these risks, SoCalGas requests an ROE and overall COC that can incent investors to continue to view the natural gas utility business as a competitive investment.

B. Regulatory Risk

Regulatory risk refers to the factor investors consider when assessing which companies or jurisdictions offer returns commensurate with the regulatory environment. The utilities, the Commission, and intervening parties undertake the important and sometimes time-consuming and resource-intensive process of determining whether capital projects serve the public interest and result in just and reasonable rates. The investment community, on the other hand, largely focuses on timely and predictable results when assessing investment options across all companies and states. They also consider stability in regulations based on whether precedent is consistently upheld, whether decisions are rendered in a timely fashion, and whether final decisions are indeed final. To an investor, uncertainty equates to risk.

In their analysis of utility debt and assessment of utility credit worthiness, credit rating agencies and investors place considerable emphasis on the regulatory environment in which companies operate. S&P notes that:

The utility business is unique, in that in no other industry (with the possible exception of government finance) do legislative and regulatory pronouncements so significantly inform rating agency opinions. Indeed, Standard & Poor's views the regulatory and political environment in which a utility operates as one of the most significant factors in assessing the creditworthiness of regulated utilities.³⁴

According to Moody's, "the predictability and supportiveness of the regulatory framework in which a regulated utility operates is a key credit consideration and the one that differentiates the

³⁴ Standard & Poor's Corp., "Influence Of Regulatory And Policy Decisions On Utility Credit Quality Deepens, Demanding Timely Assessments From Standard & Poor's," *Ratings Direct* (May 15, 2007) at 1.

industry from most other corporate sectors."³⁵ To assess a jurisdiction's regulatory environment, investors and credit agencies analyze numerous factors such as ROE adequacy, cost recovery, and regulatory certainty and predictability.

1. Adequate ROE

An adequate ROE is an important determinate of a utility's credit rating and overall investment quality. Investors pay close attention to the adequacy of authorized utility ROEs when assessing investment opportunities, and credit rating agencies pay close attention to the adequacy of authorized utility ROEs when assessing utility credit quality and assigning credit ratings. For instance, following the New York Public Service Commission's 2008 rate decision, Fitch Ratings downgraded Consolidated Edison, stating:

The outcome of yesterday's rate decision by the New York Public Service Commission (NYPSC) will not produce cash flow credit measures consistent with the prior credit ratings. The announced base rate increase of \$425 million is 35% of the amount of CECONY's requested increase and 70% of the amount that Fitch had assumed in its low case forecast....The authorized return on equity of 9.1% is below the average for utilities of comparable risk, and in Fitch's view is inconsistent with the heavy investment program and capital raising needs facing the utility. ³⁶

In an article regarding analysts' reaction to the January 2008 recommended decision by a New York administrative law judge to reduce Consolidated Edison's ROE to 9.10%, *SNL Interactive* commented:

Regulation in New York continues to be troublesome with allowed ROEs well below national levels as a relatively new commission fails to strike a reasonable balance between ratepayer and shareholder interests....Returns on equity nationally have averaged about 10.5% to 11.5%, but returns in New York have been comparatively weak....The new commission appears to lack appreciation for

³⁵ Moody's Investors Service, "Regulated Electric and Gas Utilities," *Global Infrastructure Finance* (Aug. 2009) at 6.

³⁶ Fitch Ratings Ltd., "Fitch Downgrades Con Ed of NY & Con Ed Inc. to 'A' on Rate Decision; On Watch Negative" Fitch Press Release (March 20, 2008).

the importance of access to capital (particularly in a deteriorating capital markets environment).³⁷

As such, a key determinant of a supportive regulatory climate is an authorized ROE that provides adequate compensation for the risk that investors must assume. The current exceptionally low interest rate environment, which is caused by the Federal Reserve's current low-interest rate policy, ³⁸ complicates the estimation of an adequate ROE. However, in the best interest of all parties, and as the Commission stated "We must assess utility returns against our continuing policy to not let utility ROEs be driven in lock step with the interest rate." As the Commission recognized "it would be unwise to attempt to adjust rates every time interest rates rise or fall. We must set the rate of return at the lowest level that meets the test of reasonableness."

As discussed above, SoCalGas is spending and will continue to spend substantial amounts on capital investment projects above its historical norm. To finance these projects at reasonable rates, SoCalGas requires a reasonable ROE and strong credit profile. A lower authorized ROE could potentially impair the Company's credit profile and increase the cost of capital. Fitch explains:

Lower authorized ROEs constrain profitability and limit financing flexibility, making the utilities more reliant on external financing sources and vulnerable to higher interest costs. Weak internal cash generation, higher interests costs, and weaker interest coverage measures can lead to lower credit ratings and poor market performance for utility debt.⁴⁰

SoCalGas' access to capital markets and cash flow is therefore more important now, and even more so in the future as it undergoes an extended period of capital spending during a time of

³⁷ SNL Financial, "Friday's Energy Stocks: Wall Street Tumbles; Analyst Warns about Con Edison Rate Case," *Interactive* (March 14, 2008) (citing KeyBanc Capital Markets).

³⁸ See http://online.wsj.com/article/SB10001424052970203806504577182941621926780.html.

³⁹ D.96-11-060 at *22.

⁴⁰ Fitch Ratings Ltd., "Fitch Evaluated Utility ROE Trends" *U.S. Utilities, Power, and Gas Special Report* (Aug. 17, 2011) at 3.

increased uncertainty in the capital markets. An adequate ROE is also of major significance and benefit to ratepayers. Adequate returns on SoCalGas' equity help to ensure continued, reliable services at a reasonable overall COC.

Based on SoCalGas' obligation to serve, it must finance substantial capital investments to improve and expand its infrastructure, and SoCalGas' ROE must be sufficient to assure this capability. Because the current economic situation is uncertain, and interest rates are subject to government influences, SoCalGas requests that the Commission authorize an ROE and overall COC that will allow SoCalGas, in the long-term, to attain capital, at reasonable terms. If investors perceive a supportive regulatory environment, as evidenced by an authorized ROE that compensates SoCalGas at a level commensurate with its risk, SoCalGas should be able to attract investment capital at a reasonable long-term cost to the benefit of its customers.

2. Cost Recovery

In addition to the level and adequacy of allowed ROEs, investors and credit rating agencies focus on a utility's ability to recover its costs in a timely manner. Moody's notes that timely cost recovery is an important determinant of a utility's credit quality, stating "the ability to recover prudently incurred costs in a timely manner is perhaps the single most important credit consideration for regulated utilities." As such, investors and credit rating agencies favor measures that enable a utility to timely earn that return, which fosters liquidity and cash flow. 42

SoCalGas benefits from cost recovery mechanisms, such as decoupling and balancing accounts, which provide for timely recovery of costs and provide SoCalGas reasonable

⁴¹ Moody's Investors Service, "Cost Recovery Provisions Key to Investor Owned Utility Ratings and Credit Quality," *Global Infrastructure Finance* (June 18, 2010) at 2; *see also* Fitch Ratings Ltd., "U.S. Utilities, Power, and Gas 2010," *Global Power North America Special Report* (Dec. 4, 2009); Standard & Poor's Corporation, "When Energy Efficiency Means Lower Electric Bills, How Do Utilities Cope?," *RatingsDirect* (Mar. 9, 2009).

⁴² Moody's Investors Service, "Cost Recovery Provisions Key to Investor Owned Utility Ratings and Credit Quality," *Global Infrastructure Finance* (June 18, 2010) at 2.

opportunity to earn its authorized ROE. It has been argued that such mechanisms decrease SoCalGas' business risk therefore reducing the COC, and should result in a reduction in the authorized ROE. To date, no party has provided evidence to the Commission to suggest that investors reduce their return requirements when decoupling structures are in place. A Brattle Group study affirms that decoupling does not decrease COC. "Our statistical tests do not support the position that the cost of capital is reduced by the adoption of decoupling. If decoupling decreases the cost of capital, these tests strongly suggest that the effect must be minimal because it is not detectable statistically."

A Rather than a tool to recompense investors, the recent growth in the use of decoupling mechanisms is a response to significant market changes to address declining sales, and policies to encourage utilities to promote energy efficiency.

Decoupling and balancing account mechanisms have become more prevalent in the natural gas utility industry, as across the country natural gas utilities have implemented various forms of revenue decoupling mechanisms as a means to address the financial implications of the continued declining use per customer.⁴⁵ Moody's notes:

While [Revenue Decoupling] may have originally begun as a regional concept in certain jurisdictions, it has quickly become a nationwide phenomenon that will challenge regulators and gas utilities alike, as they seek to correct a structural imbalance in their rate design that has become increasingly difficult to ignore. 46

Moreover, credit agencies have come to expect that natural gas utilities will have some form of revenue stabilization mechanisms and view the inclusion of such mechanisms to mitigate

⁴³ Joseph B. Wharton, Michael J. Vilbert, Richard E. Goldberg, and Toby Brown, "An Empirical Study of Impact of Decoupling on Cost of Capital" (March 2011) at 14.

⁴⁴ Decoupling has become more widespread since the Federal government passed the economic stimulus bill, which provides state funding to promote energy efficiency programs, but only in the event a state provides utilities incentives to encourage and promote such programs.

The use of such structures has become so widespread that the vast majority of states have adopted some form of non-volumetric rate structure. *See* Appendix A.

⁴⁶ Moody's Investors Service, "Local Gas Distribution Companies: Update on Revenue Decoupling and Implications for Credit Ratings" *Global Credit Research* (June 2006) at 6.

regulatory lags as supportive of a stronger credit profile.⁴⁷ According to S&P, "a regulatory jurisdiction that recognizes the significance of cash flow in its decision making is one that will appeal to bondholders."⁴⁸ S&P goes on to state that when assessing a regulatory environment, it takes into consideration "a decoupling mechanism that severs the direct relationship between revenues and customer usage, or other rate design features that bolster credit quality."⁴⁹

Furthermore, the majority of the natural gas proxy group has implemented some form of revenue stabilization mechanism that addresses the disparity between the sales volumes (or billing determinants) used to develop rates and the sales volumes actually realized. SoCalGas itself has 54.81% of revenues collected through balancing or memorandum accounts. Given the extent of cost recovery mechanisms in place at the proxy group companies and their prevalence throughout the natural gas industry, there is no reason to assume that SoCalGas is less risky. Rather, SoCalGas' cost recovery mechanisms simply make it more comparable to the proxy companies. SoCalGas is less risky.

3. Regulatory Certainty and Predictability

Beyond having structures and mechanisms in place, investors and credit rating agencies place value on Commission action that is predictable, fair, and consistent. For example, Fitch notes that a "utility's ability to earn a certain return on a *consistent* basis, and cash flows that

⁴⁷ Fitch Ratings Ltd., "Fitch Evaluated Utility ROE Trends" *U.S. Utilities, Power, and Gas Special Report* (Aug. 17, 2011) at 3.

⁴⁸ Standard & Poor's Corp., "Utilities: Assessing U.S. Utility Regulatory Environments" *RatingsDirect* (Nov. 7, 2007) at 3.

⁴⁹ Id.

⁵⁰ See Attachment B. SoCalGas is also insulated from throughput variations related to weather and other factors through its fixed cost margin accounts (e.g., the Core Fixed Cost Account and Non-Core Fixed Account), which are not reflected in Attachment B.

⁵¹ Because SoCalGas' ROE is referenced to the proxy companies, any effect of such cost recovery mechanisms is already reflected in the analytical results. Consequently, SoCalGas' ROE should not be reduced in connection with its revenue stabilization mechanisms.

result, are quite important to the rating process."⁵² Because, uncertainty translates into added risk for investors, and thus into higher required returns, utilities require regulatory environments that limit uncertainty regarding the recovery of a utility's investments.⁵³

Parties' recent efforts to challenge and re-litigate previously-determined Commission decisions have increased regulatory uncertainty and perceptions of California's regulatory risk. For example, just this year parties requested that the Commission indefinitely delay the deployment of SoCalGas' AMI program, which was approved in April 2010.⁵⁴ As of April 1, 2012, SoCalGas had already spent \$71 million on the AMI program and an indefinite delay was projected to cost ratepayers approximately an additional \$40 million because the ratepayer benefits would be delayed.⁵⁵ Market analysts are aware of the risks when the Commission revisits previously settled matters. In fact, *SNL* reported that the Commission was divided on the proposal.⁵⁶

It is difficult for utilities to prioritize their capital investment plans and move forward with those plans when Commission decisions, which are generally assumed to be final determinations, are challenged and often times re-litigated. This lack of regulatory certainty also creates adverse consequences for the utilities' business partners. For example, SoCalGas' AMI technology vendor, Aclara, which is owned by ESCO Technologies, was financially harmed due to the AMI delay. Immediately following the news of the potential delay to the AMI

⁵² Fitch Ratings Ltd., "Fitch Evaluated Utility ROE Trends" *U.S. Utilities, Power, and Gas Special Report* (Aug. 17, 2011) at 4 (emphasis added).

⁵³ See Standard & Poor's Corp., "Key Credit Factors: Business and Financial Risks in the Investor-Owned Utilities Industry" *RatingsDirect* (Nov. 28, 2008) at 5.

Although the Commission has a statutory 30-day period for the reconsideration of decisions, the Division of Ratepayer Advocates and The Utility Reform Network filed for reconsideration of the AMI decision 18 months after the Commission's original decision.

⁵⁵ See SoCalGas Comments on Draft Resolution G-3470 (Approving Advanced Metering Infrastructure Contracts), dated March 9, 2012.

⁵⁶ SNL Financial, "Calif. PUC Argues Over Consumer Advocates' Request to Delay SoCalGas Smart Meters" Interactive (Feb. 17, 2012).

deployment, Aclara's parent company's investment rating was lowered by at least one analyst,⁵⁷ highlighting the market's reaction to challenges made before the Commission. This example demonstrates that regulatory uncertainty can financially impair utility business partners and vendors, as well as adversely impact the economics of previously approved utility projects. Additionally, regulatory uncertainty may signal to the market that doing business with California utilities is risky and consequently California utilities may have challenges attracting quality, cost effective vendors in the future.

Regulatory policy uncertainty also occurs when the Commission sets utility returns for specific capital projects outside of COC proceedings. As an example, although SoCalGas expects that the Commission will allow SoCalGas to fully recover its PSEP costs, the Commission's Energy Division encouraged parties to submit testimony regarding whether utility shareholders should bear a portion of the costs, if different ROEs for the projects should be considered, and if there should be one-way balancing of O&M for SoCalGas and SDG&E. The expansion of these types of proposals changes the overall return for the Company's investment portfolio, which impacts investor perception of the stability of the Company's earnings.

4. Regulatory Lag

Another factor that credit agency and investors analyze to assess the riskiness of a jurisdiction's regulatory environment is regulatory lag. Regulatory lag refers to timely regulatory decision-making—both in standard rate cases as well as issue-specific proceedings such as corporate reorganizations or financing approvals. Fitch explains that this factor is likely

⁵⁷ See Attachment C.

⁵⁸ See http://docs.cpuc.ca.gov/efile/RULC/146762.pdf.

to take on added prominence in the present environment, as time (delays, protracted cases) means money (more required).⁵⁹ Likewise, S&P notes:

So in general, a ruling that enhances a utility's ability to recover costs in a timely manner will positively affect its overall credit quality. A decision that impedes timely cost recovery will usually have a negative impact on overall credit quality. As commentators on creditworthiness, we have an obligation to make either situation clear to market participants. ⁶⁰

Although SoCalGas benefits from memorandum accounts and revenue decoupling, it is nonetheless still adversely impacted by regulatory lags, because recent increases and overlaps of major proceedings have forced SoCalGas to wait to make important business decisions. It is not uncommon in California for proceedings to take more than the statutory 18 months for critical facility enhancement applications, which exposes utilities to a huge operational risk as the infrastructure they are requesting approval for may be crucial to utility operations. There may be a number of reasons contributing to the regulatory lag; however, as noted above, this regulatory lag further adds to investor perceptions of SoCalGas' regulatory risk profile by creating extended periods of uncertain outcomes.

IV. COMPARISON TO OTHER CALIFORNIA INVESTOR OWNED UTILITIES

California gas and electric IOUs face similar—although not necessarily the same—risks. For example, all IOUs are subject to similar business risks, in particular economy-related risks, capital investment risks, and environmental risks. California electric and gas IOUs are also subject to similar regulatory risks and investor risk perceptions of California's regulatory and business environments. Below, I discuss SoCalGas' relative risk position vis-à-vis all IOUs based on various quantitative and qualitative factors.

⁵⁹ Fitch Ratings Ltd., "Fitch Evaluated Utility ROE Trends" *U.S. Utilities, Power, and Gas Special Report* (Aug. 17, 2011) at 11.

⁶⁰ Standard & Poor's Corp., "Influence of Regulatory and Policy Decisions on Utility Credit Quality Deepens, Demanding Timely Assessments from Standard & Poor's" *RatingsDirect* (May 15, 2007) at 1.

A. IOU Relative Risk Assessment

When discussing the relative risk of the California utilities, the Commission has recognized: "the gas industry has changed drastically over the last 10 years. We have long recognized this fact, but we believe that today the gas and electric industries face similar competitive challenges" When assessing IOUs' relative risk, the Commission has previously utilized an approach that analyzes six factors: 1) proposed equity ratios; 2) betas; 3) bond ratings; 4) long-term interest coverage; 5) Value Line safety ratings; and 6) Value Line financial strength ratings. When adopting this relative risk assessment approach, the Commission stated "we believe there is merit in the overall approach... in ranking the relative risk of the utilities. Despite the problems associated with any one risk indicator, it is noteworthy that six separate indicators were used."

Figure 3: Key Commission Risk Indicators

| | SoCalGas | SDG&E | \$CE | PG&E |
|---|-----------------------------|--------|------|------|
| Equity Ratio | Beta ¹ 0.80 0.80 | | 48%^ | 52%^ |
| Beta 1 | | | 0.80 | 0.55 |
| Bond Rating (Moody's) 2 | | | А3 | А3 |
| Bond Rating (S&P) ² | А | А | BBB+ | ввв |
| Bond Rating (Fitch) 2 | А | A A A- | | BBB+ |
| Long-Term Interest Coverage ² | 12.04 | 8.85 | 7.85 | 6.23 |
| Value Line Safety Rating ¹ | ty Rating ¹ 2 2 | | 3 | 3 |
| Value Line Financial Strength Rating ¹ | А | А | B++ | B+++ |

¹ Source: Value Line February 3, 2012; Parent company information represented

² Source: SNL

^{*} Proposed Equity Ratio

[^] Current Equity Ratio

⁶¹ D.93-12-022 at *58

⁶² D.92-11-042 at * 143; D.89-11-068

9 10

8

12

11

Figure 3 above provides a snapshot of SoCalGas' current financial metrics, which reflects SoCalGas' efforts to maintain and improve its credit profile, in order to attract the significant capital investment costs that are anticipated. Over time and as SoCalGas funds its large capital investment plan, its metrics will likely be more aligned with the other IOUs. As demonstrated above, SoCalGas has operated its business extremely well, with strong financial strength and financial safety ratings. SoCalGas asks that the Commission continue to support SoCalGas' effective management of its business to help maintain SoCalGas' standings in the financial community.

B. Historical IOU ROEs (Pre-MICAM)

Prior to SoCalGas' last COC proceeding in 1996, SoCalGas' authorized ROE was consistent with, if not greater than, the ROEs authorized for California electric IOUs.

Figure 4: Historical Commission Authorized ROEs

| Year | Decision | SCG | PG&E | SDG&E | SCE |
|------|--------------------|----------------------|----------------|---------------|-----------|
| 1997 | D.96-11-060 | 11.60% | 11.60% | 11.60% | 11.60% |
| 1996 | D.95-11-062 | 11.60% | 11.60% 11 | 11.60% | 11.60% |
| 1995 | D.94-11-076 | 12.00% | 12.05% | 12.10% | 12.10% |
| 1994 | D.93-12-022 | 11.00% | 10.85% 11.0 | 11.00% | 0% 11.00% |
| 1993 | D.92-11-047 | .1-047 11.90% 11.85% | | 11.80% | 11.90% |
| 1992 | D.91-11-059 | 1-059 12.65% 12.65% | 12.65% | 12.65% 12.65% | 12.65% |
| 1991 | D.90-11-057 13.00% | 13.00% | 6 12.90% 12.85 | 12.85% | 12.90% |
| 1990 | D.89-11-068 | 13.00% | 12.90% | 12.85% | 12.90% |
| 1989 | D.88-12-094 | 13.00% | 13.00% | 13.00% | 13.00% |

Source: Commission Decisions

Decision 13

14

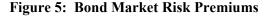
15

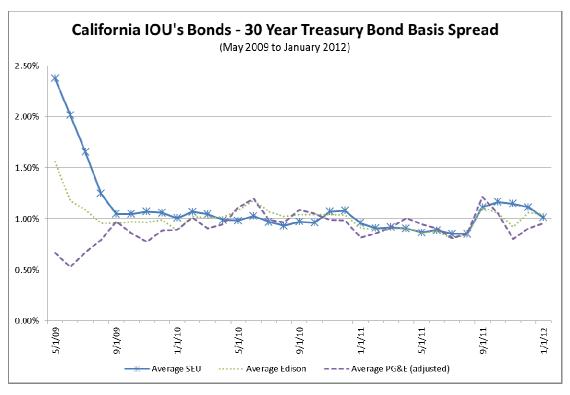
As illustrated in Figure 4 above, prior to the MICAM in 1997, SoCalGas' authorized ROE was aligned with the electric IOUs' ROEs. It seems reasonable to assume that if all

California IOUs utilized the same ROE adjustment mechanism and SoCalGas continued to file a COC application, SoCalGas' current ROE would likely be consistent with, if not greater than the ROEs for the electric IOUs.

C. IOU Bond Yields

Based on a comparison of Sempra utilities' (SoCalGas and SDG&E – "SEU's") bond yields versus the bond yields of PG&E and SCE, utility bond market investors, view SEU as having a very similar level of risk compared to the other California IOUs. This is evident based on the very narrow band in which similar long-term bonds for each company trade as shown in Figure 5 below.





During this uncertain economy, the California IOUs are challenged with attracting investment, as investors put a premium on California investments. SoCalGas competes in the same capital

market as the other IOUs. Therefore, SoCalGas requests an ROE and overall COC that is competitive to the other IOUs.

V. CONCLUSION

As discussed, SoCalGas faces increased business and regulatory risks—risks which investors assess when determining an appropriate return, and risks which credit rating agencies analyze when determining the Company's creditworthiness. SoCalGas requests that when determining an appropriate ROE and overall COC for Company the Commission take into consideration a prospective view of the risks described herein.

This concludes my prepared direct testimony.

VI. STATEMENT OF WITNESS QUALIFICATIONS

My name is Cheryl A. Shepherd. I am employed by SoCalGas as the Vice President of Accounting and Finance and Assistant Treasurer. My business address is 555 W. Fifth Street, Los Angeles, California, 90013.

I received a Bachelor of Science degree in Economics from the University of California at Los Angeles, where my area of emphasis was accounting and finance.

I have been in my current position since February, 2012. In my current position my responsibilities include overseeing financial planning and budgeting, management reporting, accounting operations, financial systems and controls, and financial and regulatory analysis for SoCalGas.

I have been employed by SoCalGas in various positions and responsibilities since 1981.

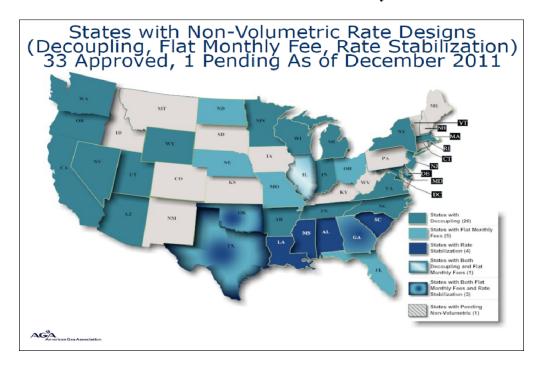
My experience is in numerous areas including Cost Accounting, Treasury, Financial Planning,

Market Services, Human Resources, Accounting Operations, Real Estate, Customer Operations,

Financial Analysis.

I have previously testified before the California Public Utilities Commission.

ATTCHMENT A: Natural Gas Cost Recovery Mechanisms



States with Non-Volumetric Rate Designs for Natural Gas as of December 2011

Approved - 77 Companies, 33 States, 45 Million Res. Customers Pending - 8 Companies, 1 State, 2 Million Res. Customers

STATES WITH DECOUPLING

- 1. Arizona
- Arkansas 2.
- 3. California 4. Colorado
- 5. Indiana
- Massachusetts 6.
- 7. Maryland
- 8. Michigan
- 9. Minnesota
- 10. New Jersey
- 11. Nevada
- 12. New York
- 13. North Carolina 14. Oregon
- 15. Tennessee
- 16. Utah
- 17. Virginia
- 18. Washington 19. Wisconsin
- 20. Wyoming

STATES WITH FLAT MONTHLY FEES

- 1. Florida
- Missouri
- 3. Nebraska
- 4. North Dakota
- 5. Ohio

STATES WITH RATE STABILIZATION

- Alabama 1.
- Mississippi
- Louisiana
- South Carolina

STATES WITH BOTH DECOUPLING AND FLAT MONTHLY FEES

1. Illinois

STATES WITH BOTH FLAT MONTHLY FEES AND RATE STABILIZATION

9

- Georgia
- Oklahoma
- Texas

http://www.aga.org/our-

AGA

issues/RatesRegulatoryIssues/ratesregpolicy/Documents/01.04.12%20Innovative%20Rates%20C urrent%20Status.pdf

ATTACHMENT B: SoCalGas Balancing/Memo Account Revenues

Southern California Gas Company
Percentage of 2012 Authorized Revenue Requirement
Recovered Through Balancing/Memorandum Accounts
(\$000)

| 1 | System Authorized Transportation Revenue Requirement | 1,951,413 |
|----|--|-----------|
| 2 | Gas Purchase Costs√ | 1,587,367 |
| 3 | PPP Revenue Requirement, net of Public Interest RDD and BOE/CPUC Admin Costs | 290,404 |
| 4 | 2012 Total System Authorized Revenue Requirement | 3,829,185 |
| 5 | | |
| 6 | | |
| 7 | Revenue Requirements Recovered through Balancing/Memo Accounts: | |
| 8 | Gas Purchase Costs | 1,587,367 |
| 9 | Public Purpose Programs, excluding California Alternate Rates for Energy (CARE)* | 159,274 |
| 10 | CARE | 131,130 |
| 11 | Firm Access and Storage Rights (Implementation Costs) | 2,212 |
| 12 | Company Use Fuel for Load Balancing | 518 |
| 13 | Hazardous Substance Cost Recovery | 9,538 |
| 14 | Self Generation* | 8,135 |
| 15 | RD&D* | 10,172 |
| 16 | Distribution Integrity Management Program* | 10,172 |
| 17 | System Reliability | 2,217 |
| 18 | California Solar Thermal Program | 2,839 |
| 19 | Pensions | 75,683 |
| 20 | PBOP | 17,369 |
| 21 | Honor Rancho Storage Expansion | 4,042 |
| 22 | Advanced Meter Infrastructure | 35,793 |
| 23 | Company Use/LUAF | 42,397 |
| 24 | Total | 2,098,858 |
| 25 | | |
| 26 | Balancing/Memo Account Recovery as % of SCG Authorized Rev. Req. | 54.81% |

* One-way balancing accounts

 $[\]sqrt{2012}$ gas purchase costs are recovered monthly through SoCalGas' core monthly procurement pricing mechanism. This amount reflects 2011 gas purchase costs recovered through SoCalGas' Purchased Gas Account.

ATTACHMENT C: ESCO Analyst Report



November 18, 2011

Lowering Rating

Industrial Equipment— Flow Control Kevin R. Maczka, CFA / (804) 782-8811 / kmaczka@bbandtcm.com Nicholas Prendergast / (804) 782-2006 / nprendergast@bbandtcm.com

ESCO Technologies Inc. (ESE-\$28.28)

Hold (2)

Company Statistics

| 12-month Price Target: | NA |
|----------------------------|-----------------|
| 52-wk Range: | \$23.75-\$43.15 |
| Market Capitalization (M): | \$761 |
| Shares Outstanding (M) fd: | 26.9 |
| Avg. Daily Vol. (000): | 174 |
| Dividend: | \$0.32 |
| Yield: | 1.10% |
| Debt/Total cap: | 13% |
| Net Debt/EBITDA: | 0.9x |
| EV/EBITDA: | 7.6x |
| Book Value/sh: | \$22.35 |

Financials

| FYE Sep | | 2009A | 2010A | 2011A | 2012E | 2013E |
|--------------|----|--------|--------|--------|--------|-------|
| P/E Ratio: | | 15.7x | 16.8x | 14.5x | 13.7x | 11.1x |
| Revenue (M): | | \$621 | \$607 | \$694 | \$714 | \$794 |
| Op Margin: | | 12.1% | 12.1% | 11.4% | 12.2% | 13.6% |
| EPS: | Q1 | \$0.22 | \$0.02 | \$0.40 | \$0.24 | |
| | Q2 | \$0.40 | \$0.22 | \$0.49 | \$0.43 | - |
| | Q3 | \$0.49 | \$0.55 | \$0.49 | \$0.63 | - |
| | Q4 | \$0.70 | \$0.89 | \$0.57 | \$0.76 | - |
| Total | | *** | ** ** | 44.05 | 82.00 | 40 55 |

Company Description

ESE is a supplier of engineered products in three segments: Utility Solutions (~50% of revenue), Test (25%), and Filtration (25%). Utility Solutions products include hardware and software systems for electric, gas, and water utilities, including advanced metering infrastructure (AMI) applications. Test products include RF testing and other equipment that is used in the development of various electronic products. Filtration and fluid flow products are used in various aerospace, space, military, and other applications.

ESE: RISK OF SOCAL GAS DELAYS INCREASING; LOWERING RATING TO HOLD

Key Points

- Lowering rating to Hold. SoCal Gas is the largest Advanced Metering Infrastructure (AMI) project in the U.S., and a key win for ESE that is central to any bullish thesis, in our view. Risks of significant project delays appear to be increasing, as the Division of Ratepayer Advocates (DRA) of the CA Public Utilities Commission (CPUC) petitioned the Commission to halt the deployment. While the eventual outcome remains unclear, this introduces a new and unwanted risk, so we are lowering our rating to Hold (2).
- Petition for "immediate stay of implementation". The DRA wants to halt
 the deployment, potentially for a few years, arguing the following in its
 petition before the CPUC:
 - The previously approved AMI deployment saddles ratepayers with a cost of ~\$1B, and the projected benefits only modestly exceed this cost.
 - 2. Since the approval of the project by the CPUC by a narrow 3-2 vote in April 2010, additional large costs to ratepayers became highly likely. Specifically, following the deadly San Bruno gas pipeline explosion in September 2010, SoCal Gas filed a new pipeline safety plan that calls for Phase 1 and 2 spending of ~\$2.5B and \$1.5B-\$3.0B, respectively, for pipeline inspection, retrofitting, auto shut-off valve installation, etc. DRA believes the combined safety and AMI costs are too great for ratepayers to shoulder in this economy, which may have some merit.
 - The project has not reached a point of no return and can still be tabled since (1) major contracts are still pending final CPUC approval (amendments were submitted 10/21/11), and (2) mass installation of smart meters is not slated to begin until 2013.
- SoCal Gas is huge for ESE. At the time of the award, the total ESE opportunity was estimated to be ~\$300M-\$350M in revenue and well over \$2.00 in EPS, spread over ~5 years, and the project has subsequently been upsized. ESE guided project revenues of ~\$25M in FY'12, ramping to \$50M+ in FY'13 and much more in FY'14, and we believe any substantial delays would certainly present risk to management's recent FY'12 and FY'13 guidance.
- Conclusion. It is not clear to us that the CPUC/DRA has the authority (legal, political, or otherwise) to halt the SoCal AMI rollout at this point, but this does introduce a risk that did not previously exist. On a scale from 'no impact at all' to 'project cancelled', the eventual outcome is likely somewhere in the middle, and any delay would be another blow to investor sentiment in our view. We are not arguing that SoCal is dead for ESE, nor are we eliminating it from our estimates, but we do believe that a more cautious stance is warranted, so we are lowering our rating to Hold (2).

FOR REQUIRED DISCLOSURES, INCLUDING ANALYST CERTIFICATION, PLEASE REFER TO THE IMPORTANT DISCLOSURES
SECTION THAT ENDS ON THE NEXT TO LAST PAGE OF THIS REPORT