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Witness: Cheryl Shepherd

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AMENDED PREPARED REBUTTAL TESTIMONY OF

CHERYL A. SHEPHERD

ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

SEPTEMBER 12, 2012

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I. INTRODUCTION

The purpose of my rebuttal testimony is to respond to certain issues raised in the prepared direct testimonies of:

- Dr. J. Randall Woolridge and Jerry Oh on behalf of the Division of Ratepayer Advocates ("DRA");
- William B. Marcus and Daniel Lawton on behalf of The Utility Reform Network ("TURN"); and
- Stephen G. Hill on behalf of the Federal Executive Agencies ("FEA").

In general terms, this rebuttal testimony addresses the common issues raised by DRA, TURN, and FEA regarding Southern California Gas Company's ("SoCalGas") business and regulatory risks. Specifically:

- To explain why equity investors' relative risk perception is critical in the determination of an appropriate return on equity ("ROE"), Section II discusses relative risk valuation and why quantitative risk assessment is not always feasible so qualitative assessment must be used.
- In Section III, I rebut claims that the improving economy has eliminated SoCalGas' business risks, and that investors recognize that SoCalGas faces numerous business risks related to current macroeconomic challenges, an unprecedented capital investment plan, competitive forces, uncertain environmental compliance requirements, and other business risks, for which investors require reasonable compensation.

- Section IV focuses on arguments that SoCalGas lacks any regulatory risks because it benefits from certain regulatory mechanisms, and because California's regulatory environment is currently viewed as generally constructive and supportive. In this section, I demonstrate that investors have not reduced their return requirements because SoCalGas, like the majority of the natural gas proxy group companies, benefits from regulatory mechanisms, which do not eliminate all risk. In addition, I discuss how SoCalGas' continued access to reasonably-priced capital is dependent on the continuation of a supportive California regulatory climate.
- In Section V, I analyze intervenors' proposed return on equities ("ROE") to assess how these return recommendations compare to investor expectations.

II. RELATIVE RISK ASSESSMENT

When the Commission is determining the appropriate ROE to authorize, investors' perception of a company's risk profile is key. Risk valuation is an inextricable mixture of qualitative and quantitative factors. Qualitative analysis offers the perspective of investors at a high-level by explaining the general view of the industry. Qualitative analysis also provides investor viewpoints on specific company issues, such as the company's risk profile and its business and regulatory environments. Quantitative analysis attempts to capture these same factors from a numerical perspective of likelihood and impact of potential events. Quantitative analyses are not always feasible because of data limitations. In my

direct testimony, and where information was available, I provided qualitative comparisons to peer natural gas utilities in order to give a holistic view of SoCalGas' risks.[1]

By contrast, neither TURN nor any other intervenor used SoCalGas' natural gas proxy group to benchmark SoCalGas' relative risk profile. The Commission should recognize that when setting SoCalGas' ROE, it is appropriate to take into consideration SoCalGas' risk profile relative to its peers.

III. BUSINESS RISK

A. The Current Macroeconomic Environment Presents Distinct Challenges.

DRA, TURN, and FEA agree that "the economy is still on an uncertain path,"[2] that economic forecasts recently "have become less optimistic,"[3] and that "the current expectation for the U.S. economy is that recovery from the recent economic recession is likely to continue at a moderate pace."[4] However, they dispute that these macroeconomic concerns pose a risk to SoCalGas because the financial markets are showing signs of improvement compared to the financial crisis of 2008-2009.[5] The parties accurately observe that market access has improved since the financial crisis peaked.

However, the intervening parties fail to observe that despite financial market improvements, investors are still mindful of the fallout from the financial crisis. At most, investors are cautiously optimistic about the future course of the overall economy. Yet, the European sovereign debt and banking crises, large federal deficit, domestic politics, the

[1] Notwithstanding these efforts, TURN witness Mr. Marcus claims that "the utilities have described all of the potential risk-increasing factors in qualitative terms and have not provided any quantitative evidence describing the impact that any one factor might have on investors' risk assessments." Prepared Direct Testimony of William Marcus at 5. This statement is obviously untrue.
[2] Prepared Direct Testimony of J. Randall Woolridge at 2-9.
[3] Prepared Direct Testimony of Daniel Lawton at 12, line 257.
[4] Prepared Direct Testimony of Stephen Hill at 26, lines 25-27.
[5] Prepared Direct of Daniel Lawton at 14, lines 318-326; Prepared Direct Testimony of J. Randall Woolridge at 2-6; Prepared Direct Testimony of Stephen Hill at 19-20.

slow-growing Gross Domestic Product, continued problems in the housing sector, as well as other domestic and international issues still hang over the market.[6] Because of these uncertainties, circumstances or events could thrust the financial markets back into a crisis at any time, and on short notice. The current macroeconomic climate presents a challenge for SoCalGas because it must compete for capital on reasonable terms during this period of heightened investor risk aversion. In order to provide safe and reliable service to customers, SoCalGas must retain access to capital on reasonable terms during this period of weak and sluggish economic growth.

B. SoCalGas Faces Considerable Construction Risks.

SoCalGas is commencing extensive and expensive investments to maintain and upgrade existing facilities in its service territory and to meet changes in technology. As discussed in my direct testimony, SoCalGas anticipates that, in the next five years, it will require $5 billion in investment to fund its capital investment projects. Both TURN and FEA argue that SoCalGas' aggressive capital investment program does not pose a risk because SoCalGas' program is no different from investment programs of other utilities and because SoCalGas benefits from pre-approval of construction work.[7] These claims should be rejected for numerous reasons.

First, intervenors have not conducted any analyses to support their claims that SoCalGas' capital investment plan is less risky than the capital investment plans of its peer companies. Conversely, in my direct testimony, I show that although SoCalGas has average

[6] A recent survey by Wells Fargo and Gallup found that overall U.S. investor optimism has continued to decline sharply and the decline is driven by increased investor pessimism about the future course of the overall economy. The Study reports that U.S. investor optimism declined to +16 in July, down from +24 in May and +40 in February. The decline was driven by increased investor pessimism about the future course of the overall economy. *See* Wells Fargo-Gallup Investor and Retirement Optimism Index (August 1, 2012).
[7] *See* Prepared Direct Testimony of William Marcus at 28; Direct Prepared Testimony of Stephen Hill at 79.

2011 construction risk, its average annual investment levels in 2012-2016 are expected to exceed the proxy companies' maximum 2011 investments levels.

Second, investors recognize, even if intervenors do not, that SoCalGas' extensive capital investment plan involves inherent business risks.[8] For example, while noting SoCalGas' historically strong financial metrics, Moody's projects that SoCalGas' strong metrics will "weaken somewhat over the next several years as SCG undertakes a large capital spending program that aims to improve its distribution system along with an advanced metering infrastructure."[9] Equity investors are also aware of the pressure on cash flows associated with a utility's elevated capital investments and the resultant effect on cost of capital.

Third, a pre-approval mechanism of construction work does not eliminate construction risk because pre-approval is not a *guarantee* that a utility will receive full cost recovery for its investment. Mechanisms may be subject to caps and/or after-the-fact reviews that could result in disallowances.[10] In addition, the pre-approval mechanism does not reduce SoCalGas' construction risk because pre-approvals are becoming more common as utilities are expanding and enhancing their infrastructures.[11] Further, the majority of the

[8] Fitch reports that it "expects PG&E, SCE, SDG&E, and SCG to invest approximately $11 billion–$12 billion in 2012 and capex to remain elevated for several years, underscoring the need for the California utilities to be able to access capital markets at reasonable rates," Fitch Ratings Ltd., "California Regulation: Still Waiting," August 23, 2012 at 2.

[9] Moody's Investors Service, "Credit Opinion: Southern California Gas," June 26, 2012.

[10] The Honor Rancho Storage Expansion Project was subject to a cap but SoCalGas is pursuing recovery of costs in excess of the cap in its 2013 TCAP.

[11] The National Regulatory Research Institute explains:

> Some state commissions, based on traditional statutes or recent amendments, are breaking from this traditional approach, thereby providing some level or form of cost recovery assurance prior to commercial operation (and sometimes prior to commencement of construction). Stimulating these new approaches are multiple factors: growing demand, aging infrastructure, environmental requirements, an increasing call for the construction of renewable projects, and shrinking credit markets. These considerations have led utilities to

proxy companies benefit from infrastructure cost recovery mechanisms, which also reduce those companies' risk of under recovery.[12]

Additionally, Mr. Marcus highlights that capital projects seem to be marketed by Sempra Energy as positives because a recent analyst conference slide listed the "major investments" forthcoming at the utilities. Sempra Energy has sophisticated investors who are aware of the safe harbor statements made and risks that are highlighted in Sempra Energy's SEC filings. As Mr. Marcus mentions in his testimony, an authorized ROE only gives "the utility the *opportunity* to earn a rate of return… it is up to the management to manage the company soundly and in such a manner that it provides safe and reliable service to its customers at a cost that will allow it to provide the rate of return to its investors."[13] Any utility investor understands this and is aware of both the opportunities *and* challenges that capital investments impose.

C. SoCalGas is Vulnerable to Competition.

In my direct testimony, I describe the numerous forms of competition that SoCalGas faces.[14] Intervenors disagree, arguing SoCalGas is essentially without competitive risk.[15] Mr. Marcus' arguments should be given minimal consideration, as they ignore portions of my direct testimony and make unsupported assertions.

Mr. Marcus suggests that bypass risk is not a credible concern for SoCalGas because the last imminent threat was in 1992. This assertion is incorrect. As recently as 2008

> seek upfront regulatory commitments before expressing a willingness to pursue even much needed major capital projects.

National Regulatory Research Institute, "Pre-Approval Commitments: When And Under What Conditions Should Regulators Commit Ratepayer Dollars to Utility-Proposed Capital Projects?" November 2008 at iii.

[12] *See* Attachment A.

[13] Prepared Direct Testimony of Marcus at 12.

[14] Prepared Direct Testimony of Cheryl Shepherd at 7-8.

[15] Prepared Direct Testimony of William Marcus at 47-51. Neither DRA nor FEA seem to rebut SoCalGas' discussion of its competitive risks.

through 2010, SoCalGas lost another sizeable portion of its EOR load, approximately 70 MMcfd, to the Kern/Mojave pipeline as the last of the EOR customers' long-term transportation contracts with SoCalGas terminated. Also as I included in my direct testimony, one of SoCalGas' major customers in the Imperial Valley signed a precedent agreement in 2005 to anchor and take long-term service off a proposed new lateral off of the North Baja Pipeline; however, the lateral was not built. The passage of time has not alleviated the threat of these or other pipeline bypass opportunities.

Mr. Marcus further states "if SoCalGas is concerned about bypass because of high rates, it ought to consider reducing its ROE request in order to provide its customers' with rate relief."[16] Mr. Marcus fails to consider that SoCalGas' current authorized ROE is already lower than those of the pipelines located in or near SoCalGas' service territory suggesting that his representation that ROE alone will change the competitive situation is incorrect.

D. California's Business Environment is Unfavorable for Business Operations.

1. Investors require sufficient returns to invest in California.

As mentioned in my direct testimony, California is viewed as a challenging state in which to operate a business.[17] Investors recognize that SoCalGas, as a regulated industry, must continue to provide safe and reliable service to its customers, while operating in a state which is struggling with shrinking revenue bases, a high unemployment rate of 10.1% (third highest in the nation),[18] housing woes, and budget deficit issues. To see how investors have assessed and valued the risks associated with investments in California, observe how the

[16] Prepared Direct Testimony of William Marcus at 51.
[17] *See* Prepared Direct Testimony of Cheryl Shepherd at 8-14.
[18] *See* http://www.bls.gov/web/laus/laumstrk.htm. The State's unemployment rate of 10.1% is significantly above the national unemployment rate of 8.3%.

credit spread between 30-year US Treasury bonds and 30-year California general obligation bonds has widened.[19]

Figure 1: Credit Spread Between 30-year California Bonds and 30-year Treasury Bonds

	July 31, 2012	July 29, 2011 (One Year Ago)	Pre-Recession (Jan'06-Nov'07)
Credit Spreads 30-year CA General Obligation Bond to 30-year US Treasury Bond	1.83%	1.12%	-0.32%

Wells Capital Management explains that recent "changes in [CA GO bond] spreads highlight negative investor assessment specific to the state, including: underperforming cash flows; persistent, large budget deficits; delayed budget passage due to political impasse; and prolonged economic weakness."[20]

2. SoCalGas faces environmental regulation risks.

Market participants also recognize that another business risk for SoCalGas is California's rising environmental requirements such as more stringent carbon regulations and combustion limitations.[21] The market recognizes that SoCalGas' operations and properties are subject to extensive environmental regulations pursuant to a variety of federal, state and municipal laws and regulations.

[19] This is even more pronounced when one notes that general obligation bonds are tax-exempt securities, meaning that in a theoretically normal world, their yield should always be lower than that on taxable US Treasury securities. Thus, an inversion of this relationship is actually more meaningful than, say, the inversion of taxable swap rates and taxable Treasury yields (currently seen elsewhere in the capital markets).
[20] Wells Fargo Capital Management "California's Budget Deficit Crisis: Improving Conditions for Bondholders," April 2012.
[21] Moody's notes that "the prospect for new environmental emission legislation – particularly concerning carbon dioxide – represents the biggest emerging issue for utilities." Moody's Investors Service, "U.S. Investor-Owned Electric Utilities," Jan. 2009.

Mr. Marcus does not agree that any of these regulations pose a risk to SoCalGas,[22] insisting that any risks associated with environmental regulatory requirements are imaginary because "the Commission approves rate recovery to address new laws and regulations."[23] While SoCalGas hopes that Mr. Marcus is correct and the Commission will approve rate recovery of environmental costs, risks of under recovery still exist. For example, while the Commission has approved memorandum accounts for the utilities to record Assembly Bill 32 fees imposed by the California Air Resources Board ("CARB") on utilities related to their customers' production of greenhouse gases ("GHG"), the application to recover the costs is still pending a decision, and DRA recommends no recovery.[24] SoCalGas expects to recover these costs, but there is still a risk of under-recovery. Additionally, there remains uncertainty about how GHG allowance costs related to Phase II of the California cap-and-trade program will be recovered since it has not yet been addressed by the Commission, and there are lingering concerns whether gas customers will be burdened with additional costs for their purchase of natural gas. While the Commission and CARB have addressed these issues for electric utilities, they have not addressed them for gas utilities. SoCalGas is hopeful that it will eventually obtain approval for full cost recovery. At this time, however, because there has yet to be established clear rules on how/when/where allowances and/or offsets can be procured, it is unknown how much risk SoCalGas is exposed to via GHG market issues and reasonableness reviews of GHG allowance and offset purchases.

[22] Neither DRA nor FEA provide an analysis regarding SoCalGas' risk exposure to environment regulation compliance, which merits consideration.
[23] Prepared Direct Testimony of William Marcus at 23.
[24] In A.10-08-002, SoCalGas seeks interim cost recovery in between rate cases. SoCalGas has requested cost recovery on a going forward basis in its 2012 GRC.

There is also the potential economic impact on customers if the CARB does not provide an allocation of allowances to gas utilities on behalf of their customers. There could be significant customer bill increases resulting from GHG allowance costs, which in turn may result in "leakage," the loss of business to other states or countries.[25] While not reducing GHG emissions globally, it would reduce combustion and natural gas usage in SoCalGas' service area.

TURN's witness also dismisses investor concerns that combustion limitations in the South Coast Air Basin are a risk to SoCalGas.[26] As explained in my direct testimony, air quality regulatory risks are real and based on the requirements of the US Clean Air Act that the LA and SJV Basins come into attainment with defined air quality standards.[27] This has resulted in an ardent move in California to promote zero-emission technologies, such as electrification.[28] This move promotes the reduction of combustion, and thus natural gas usage.[29] A recent CCST study,[30] which relies heavily upon key actions to attain greater electrification, further demonstrates that investors' concerns regarding combustion limitations risks are valid. As the study details, action items in the state's 2050 list of goals focus on "aggressive electrification," "decarbonizing electricity supply while doubling

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[25] It is called "leakage" because while GHG emissions in California are reduced when firms leave, there is no real reduction of GHG emissions, only a relocation of the GHG emissions. GHG is not reduced, but "leaked" to other states or countries.

[26] Prepared Direct Testimony of William Marcus at 40.

[27] See Prepared Direct Testimony of Cheryl Shepherd at 12.

[28] See page 12 of my direct testimony: "AB 32 *and the Governor's Executive Order* requires the 19 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 below 1990 levels by 2050.27"

[29] The South Coast Air Quality Management District's Draft 2012 Air Quality Management Plan, at page ES-13, states:

> California's success in reducing smog has largely relied on technology and fuel advances, and as health-based air quality standards are tightened, the introduction of cleaner technologies must keep pace. More broadly, a transition to zero- and near-zero emission technologies is necessary to meet 2023 and 2032 air quality standards and 2050 climate goals. Many of the same technologies will address air quality, climate and energy goals.

[30] California Council on Science and Technology, "California's Energy Future: The View to 2050," May 2011.

electricity production," "developing zero-emissions load balancing approaches," and "decarbonizing the remaining required fuel supply where electrification is not feasible."[31]

IV. REGULATORY RISK

The intervenors claim that SoCalGas essentially faces no regulatory risks because it has regulatory mechanisms such as decoupling, future test years, balancing and memorandum accounts, and incentive mechanisms.[32] The intervenors also suggest that SoCalGas' regulatory risks are significantly, if not completely, mitigated because California is perceived as a generally supportive and positive regulatory environment.[33]

As discussed below, although SoCalGas benefits from various regulatory mechanisms, SoCalGas is no less risky than its peers. Moreover, intervenors fail to provide evidence to support their suggestion that investors have reduced their return expectations because of the regulatory mechanisms, or that the regulatory mechanisms reduce SoCalGas' cost of capital. Further, California's reputation, as a supportive regulatory climate, does not eliminate regulatory risk, and could be compromised if the Commission adopts a decision in this proceeding that disappoints markets.

A. Adjusting SoCalGas' ROE to Reflect Regulatory Mechanisms Is Unwarranted.

SoCalGas has various regulatory ratemaking mechanisms designed to reduce variability in revenues. The parties argue that SoCalGas' regulatory mechanisms have risk-mitigating properties,[34] and hence, require a reduction to the ROE. However, this argument

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[31] *Id*. at 3.
[32] *See* Prepared Direct Testimony of Daniel Lawton at 17; Prepared Direct Testimony of Jerry Oh at 1-3; Prepared Direct Testimony of Stephen Hill at 68-71; Prepared Direct Testimony of William Marcus at 14-22.
[33] *See* Prepared Direct Testimony of Daniel Lawton at 18; Prepared Direct Testimony of Stephen Hill at 71; Prepared Direct Testimony of William Marcus at 24.
[34] Prepared Direct Testimony of William B. Marcus at 3; Prepared Direct Testimony of Daniel Lawton at 28-29; Prepared Direct Testimony of Stephen Hill at 70-71; Prepared Direct Testimony of Jerry Oh at 1-2.

should be rejected for three important reasons. First, SoCalGas' regulatory mechanisms do not make SoCalGas any less risky than its natural gas proxy group. Second, intervenors' arguments incorrectly assume that investors consider companies with these mechanisms to be less risky and require a lower return. Third, the intervenors fail to provide any empirical evidence to support the position that regulatory mechanisms eliminate risk and thus reduce SoCalGas' cost of capital.

1. SoCalGas' regulatory mechanisms do not reduce its risk relative to its proxy group.

Intervenors argue that SoCalGas' regulatory mechanisms render it dramatically less risky than the rest of the industry.[35] Intervenors apply the incorrect measure of risk. When an ROE is set by reference to a proxy group, the relevant assessment is not whether the company's regulatory mechanisms reduce risk, but whether the company's regulatory mechanisms reduce its risk relative to the proxy group.

A review of SoCalGas' natural gas proxy companies shows that the majority of the proxy companies benefit from numerous forms of regulatory mechanisms that are similar to SoCalGas' mechanisms. My direct testimony shows that the majority of jurisdictions authorize natural gas utilities some form of decoupling mechanisms or other revenue stabilizing mechanisms designed to decouple forecast revenues from variations in sales related to usage due to weather, economic conditions, energy efficiency efforts and other factors. Moreover, all of the companies in the natural gas proxy group have some form of rate stabilizing mechanism.

[35] *See* Prepared Direct Testimony of Daniel Lawton at 18; Prepared Direct Testimony of Stephen Hill at 71; Prepared Direct Testimony of Jerry Oh at 1.

A review of SoCalGas' natural gas proxy group also demonstrates that the majority of the companies benefit from other cost recovery methods used to track over- or under-collections of revenue from one period to the next.[36] As Attachment A demonstrates, the majority of the proxy companies benefit from similar cost recovery mechanisms, such as gas recovery mechanisms and cost trackers. In addition, many of the proxy companies also benefit from cost recovery mechanisms which SoCalGas does not; such as bad debt trackers.[37] The majority of the natural gas proxy group companies already benefit from infrastructure recovery mechanisms.[38]

TURN and DRA also argue SoCalGas faces fewer business risks because it uses future test years.[39] Mr. Marcus describes that future test years "dramatically reduces risk."[40] However, they do not completely eliminate it. Because there is a delay between when a forecast is developed and a decision is rendered, the authorized amounts vary from actuals. It is thus incumbent on the utility to manage within the revenues authorized. Furthermore, Mr. Marcus and Mr. Lawton fail to acknowledge that future test years are becoming more common place. To buttress his argument, Mr. Marcus also cites a 2009 NARUC study which found that "60% of utilities use a historic test year…only 5% of regulators use a projected test year…the other 35% use hybrid or flexible methods."[41] TURN and DRA are

[36] Although SoCalGas was unable to determine how much of the proxy's utilities' revenues are covered by balancing accounts, a list of many of the proxy companies' mechanisms are available in Attachment A.
[37] *See* Attachment A. In addition, a June 2012 study conducted by the American Gas Association reports that use of infrastructure recovery mechanisms have increased in the natural gas utility industry, with 47 utilities in 22 states using full or limited special rate mechanisms to recover their replacement infrastructure investments, and 5 utilities have mechanisms pending in another state and the District of Columbia. American Gas Association, "Infrastructure Cost Recovery Mechanisms," June 2012.
[38] Of the seven proxy companies, only Piedmont Natural Gas and Southwest Gas do not have infrastructure replacement cost recovery mechanisms.
[39] Prepared Direct Testimony of William B. Marcus at 14-17; Prepared Direct Testimony of Daniel Lawton at 21, line 479.
[40] Prepared Direct Testimony of William Marcus at 14-17.
[41] Prepared Direct Testimony of William B. Marcus at 14.

correct that future test years do provide some risk mitigation, and are favorably viewed by market participants.[42] Nonetheless, they overlook the fact that the use of future test years is not unique to California utilities. The use of future test years, like other regulatory mechanisms, is becoming more prevalent, as evidenced in a recent Edison Electric Institute ("EEI") report.[43] According to the 2011 EEI report, less than 40% of jurisdictions use a historic test year, as 62% of jurisdictions use future test years or some hybrid or varying method that incorporates some future test year information.[44] Moreover, of the 22 jurisdictions in which the natural gas proxy companies operate, all but four of the jurisdictions use alternatives to historical test years.[45] EEI indicates that of the states that authorize future test years "many of these states are in the West, where comparatively rapid economic growth has required more rapid buildout of utility infrastructure.[46]

To test intervenors' assertions that regulatory mechanisms have essentially eliminated SoCalGas' risk, I assessed a key factor used by Moody's to evaluate a utility's "ability to recover costs and earn returns."[47] Moody's states that the "ability to recover prudently incurred costs in a timely manner is perhaps the single most important credit consideration for regulated utilities, as the lack of timely recovery of such costs has caused

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[42] Moody's reports:

> In situations where industry conditions are changing rapidly, such as when costs are increasing or capital expenditures growing, historical test years are generally less useful as an accurate data point for setting future rates. In addition, the use of historical test years can contribute to regulatory lag in that a utility must usually file another rate case to recover those costs not accurately predicted with the use of the historical test year. As a result, utilities that use historical test years typically do not earn their allowed rate of return on an ongoing basis and experience persistent regulatory lag in the recovery of costs.

Moody's Investors Service, "Special Comment: Cost Recovery Provisions Key To Investor Owned Utility Ratings And Credit Quality," June 18, 2010 at 8.

[43] Edison Electric Institute, "Innovative Regulation: A Survey of Remedies for Regulatory Lag," April 2011.

[44] *Id.* at 33.

[45] Edison Electric Institute, "Innovative Regulation: A Survey of Remedies for Regulatory Lag," April 2011 at 33.

[46] *Id.* at 31.

[47] Moody's Investor Service, "Rating Methodology: Regulated Electric and Gas Utilities," August 2009.

financial stress for utilities on several occasions."[48] If intervenors' assumptions were correct, then SoCalGas would be in the minority of companies receiving an "A" rating from Moody's with respect to its "ability to recover costs and earn returns." As the table below demonstrates, this is not the case.

Figure 2: Moody's Factor 2 Rating

A	Baa
Southern California Gas Company	Atmos Energy
Atlanta Gas Light Company	Laclede Gas Company
Northwest Natural Gas Company	Southwest Gas Corporation
Piedmont Natural Gas Company	
South Jersey Gas Company	

As shown above, of the seven companies in SoCalGas' proxy group, four are rated "A" and three are rated a notch below at "Baa." This rating agency data demonstrates that the regulatory mechanisms have not materially reduced SoCalGas' regulatory risk vis-à-vis its peers.

The appropriate issue for the Commission to consider is not the risk-mitigating effect of SoCalGas' regulatory mechanisms, but rather if, and how, SoCalGas' risk ranks relative to its natural gas proxy group. Based on the pervasiveness of these regulatory mechanisms in place within the natural gas proxy group companies, there is no basis to assume that investors consider SoCalGas to be any less risky than the proxy group companies. Since the cost of equity of those proxy companies already reflect any perceived risk reducing benefits of the regulatory mechanisms, no further adjustment is necessary for SoCalGas. To do otherwise would be unfair double-counting.

[48] *Id.*

2. Intervenors fail to prove that investors have reduced their return requirements because of SoCalGas' regulatory mechanisms.

Although, there clearly is some measure of risk reduction associated with regulatory mechanisms, intervenors do not provide any evidence to demonstrate that investors are willing to accept lower returns in exchange for SoCalGas' enhanced ability to earn its authorized rate of return. While Brean Murray Carret & Co. notes the positive aspects of revenue stabilization features in recent rate proceedings, it continues to consider the gas distribution utility to be exposed to significant operating risks even after the approval of these regulatory mechanisms:

> We have been impressed with the willingness of regulators to consider and authorize gas utilities weather normalization riders, performance-based rate freezes, bad-debt trackers and most recently conservation or "decoupling" mechanisms without forcing gas utilities to undergo base rate cases that are expensive and put gas utilities in a bad public light. Allowed returns on equity are typically still above 10% despite risk-free interest rates near 5%, and gas utilities have typically been able to earn near or above their authorized return. Notwithstanding the spread of these positive mechanisms, we would expect a continuation of rate increase filings in future years, as the aforementioned rate mechanisms offer only modest protection against a generally rising operating cost environment.[49]

Likewise, Moody's notes that regulatory mechanism, such as decoupling mechanisms have "become a nationwide phenomenon."[50] Despite the prevalence of such regulatory mechanisms by natural gas utilities, market analysts and natural gas utility executives expressed unease that some regulatory commissions overemphasize the risk impact of regulatory mechanisms when determining utility returns.

> Various rate-design changes, in particular "decoupling," can provide some stabilization of LDC revenues, if properly applied. However, there is concern that regulators accord inordinate weight to these mechanisms' impact on risk when setting returns. Further, it is believed that many times there is a potential double-

[49] Brean Murray Carret & Co., "Gas Utilities Quarterly Review," April 24, 2008.
[50] Moody's Investor Service, "Local Gas Distribution Companies: Updates on Revenue Decoupling and Implications for Credit Ratings," June 2006 at 6.

> counting of the effect, since the regulators apply a decrement to returns developed by reference to proxy companies that have similar de-risking mechanisms. Uniformly, the interviewees believed such decrements were ill-advised and unfair.[51]

Likewise, SoCalGas believes a reduction to its ROE to reflect its regulatory mechanisms is ill-advised and unfair because the majority of SoCalGas' peers have similar regulatory mechanisms in place so any potential risk reduction is already reflected in the proxy companies' averages.

3. Regulatory mechanisms do not eliminate risk.

The intervenors contend that SoCalGas' memorandum and balancing accounts essentially eliminate risk because the accounts reduce earnings volatility.[52] Intervenors' assertions that a large portion of SoCalGas' revenue and expenses are fully protected are misleading. Although it is true that SoCalGas (and customers) are protected from sales volume variances, and regulatory balancing accounts provide SoCalGas with the opportunity to recover the costs of certain programs outside the normal GRC mechanism, there are many nuances to this that put much of these costs at risk.

Many accounts serve as one-way balancing accounts that are subject to caps where SoCalGas is authorized to recover expenses only up to a certain limit but is not allowed to recover any spending above that cap. For example, the SoCalGas Advanced Metering Infrastructure Balancing Account is a one-way balancing account where there is a cap on spending and any underspending will be refunded, in part, to ratepayers. Importantly, all regulatory accounts are subject to Commission review and potential future disallowance. In the case of memorandum accounts, while the existence of these accounts permit SoCalGas

[51] American Gas Foundation, "Regulatory Policy of Return on Equity," December 9, 2008 at 17.
[52] *See* Prepared Direct Testimony of Daniel Lawton at 18; Prepared Direct Testimony of Stephen Hill at 71; Prepared Direct Testimony of William Marcus at 24.

to track costs, SoCalGas still must seek formal approval of these costs in a separate application. While some mechanisms have been designed to protect utility finances by eliminating elements of revenue variability over which utility management has no control, SoCalGas is still at risk for operating expenses and managing capital spending within levels authorized in rate cases. Memorandum and balancing accounts stabilize revenues but they do not protect against expense variability that is inherent in the natural gas utility business and the associated business risks.

Mr. Marcus also describes incentive mechanisms for utilities as "positive aspects of California regulation that reduce their risk of underearnings" which "must be seen as reducing the real business and regulatory risk."[53] What Mr. Marcus fails to mention is that these mechanisms are intentionally designed to align the interests of ratepayers and shareholders: while good behavior is rewarded, utilities can be penalized for failure to manage their businesses well. Additionally, performing consistently well with these mechanisms sets up investor earnings expectations which cannot always be met.

Furthermore, Mr. Marcus incorrectly refers to SoCalGas' Performance-Based Ratemaking mechanism as reducing SoCalGas' risk.[54] SoCalGas has not been on a margin-per-customer mechanism for three rate case cycles.[55] However, SoCalGas still has balancing accounts to account for throughput variations.

B. Regulatory Certainty and Predictability Are Critical Components in Investors' Risk Evaluation of Utilities.

Perception of a state's regulatory climate is important to investors as investors place a high value on consistent, constructive, and timely regulation. Any perceived change in a

[53] Prepared Direct Testimony of William Marcus at 22-23.
[54] Prepared Direct Testimony of William Marcus at 20.
[55] SoCalGas' PBR mechanism ended in 2003.

utility's regulatory climate could affect an investor's investment opinion. A key factor that investors use to evaluate the quality of a regulatory environment is the consistency and predictability of a commission's decisions.

The intervenors are correct that investors' opinions of California's regulation of utilities are currently positive.[56] The Commission is viewed as having generally provided supportive and constructive regulation because historically it has authorized reasonable ROEs and approved regulatory mechanisms, leading investors to expect a continuation of a constructive regulatory environment in the state prospectively.[57] However, intervenors are incorrect that the Commission's favorable view materially reduces SoCalGas' regulatory risk. Investors are aware of the fact that the Commission could render a decision in this proceeding that may not be supportive of SoCalGas' credit and financial metrics.

- Morgan Stanley reports that "in terms of regulatory items in California, we are most focused on the cost of capital proceedings." And warns investors of a "risk for a large ROE cut at SoCalGas."[58]
- S&P cautions that "SoCalGas' credit metrics are at risk from current base-rate and cost-of-capital reviews."[59]
- Bank of America Merrill Lynch quantifies this uncertainty in their valuation of SRE stock by explaining "we apply a modest discount multiple of 13.5x 2014E

[56] Prepared Direct Testimony of William Marcus at 24-25; Prepared Direct Testimony of Daniel Lawton at 21; Prepared Direct Testimony of Stephen Hill at 68.
[57] Moody's notes as much, stating the "CPUC's regulatory treatment of natural gas utilities has historically been consistent and stable." Moody's Investor Services, "Credit Opinion: Southern California Gas Company," June 26, 2012.
[58] Morgan Stanley, "Regulated Utilities," June 26, 2012.
[59] Standard & Poor's RatingsDirect, "Southern California Gas Company" June 1, 2012.

US utility earnings for SDG&E and SoCalGas (versus a regulated average multiple of 14x) to reflect rate case and cost of capital risk."[60]

- Fitch's warns "an unexpectedly large adjustment downward to authorized ROEs by the commission would be an adverse development, in Fitch's opinion."[61]

Although the market is encouraged by past COC and GRC decisions,[62] it is imperative that the Commission continue the constructive trend evidenced in the past. The financial markets' fairly positive view regarding California regulation could deteriorate if the Commission adopts an ROE for SoCalGas that disappoints market expectations. If the Commission adopts any of the ROEs proposed by intervenors, then the market will be dissatisfied because intervenors' recommended returns for SoCalGas are lower than the ROE levels granted by state commissions that are currently considered less constructive than California. As described in my direct testimony, such action could alter the financial market's current positive perception of the regulatory climate in California. The Commission should also expect that SoCalGas, and the other IOUs in the state, will face a significant deterioration in their financial position as a consequence. As in the past, SoCalGas, as well as the markets, expects the Commission to authorize SoCalGas an overall COC that is supportive of its unprecedented future capital investment needs that will enable the Company to continue to provide safe and reliable service to ratepayers at fair and reasonable rates.

[60] Bank of America Merrill Lynch, "Stay Classy San Diego; Upgrading to Buy," May 4, 2012.
[61] Fitch Ratings Ltd., "California Regulation: Still Waiting," August 23, 2012 at 4.
[62] Morgan Stanley Research, "Regulated Utilities," June 26, 2012.

V. INTERVENORS' PROPOSED ROES DO NOT MEET INVESTORS' EXPECTATIONS

ROEs of 8.5%, 8.75%, or 9.25%, as suggested by DRA, FEA and TURN, respectively, are significantly below market expectations. The intervenors' proposed ROEs are based on mechanical academic analysis, which although useful, do not reflect investors' relative risk assessments. Consequently, intervenors' ROE recommendations fall significantly short of meeting investors' reasonable expectations for a fair rate of return for SoCalGas.

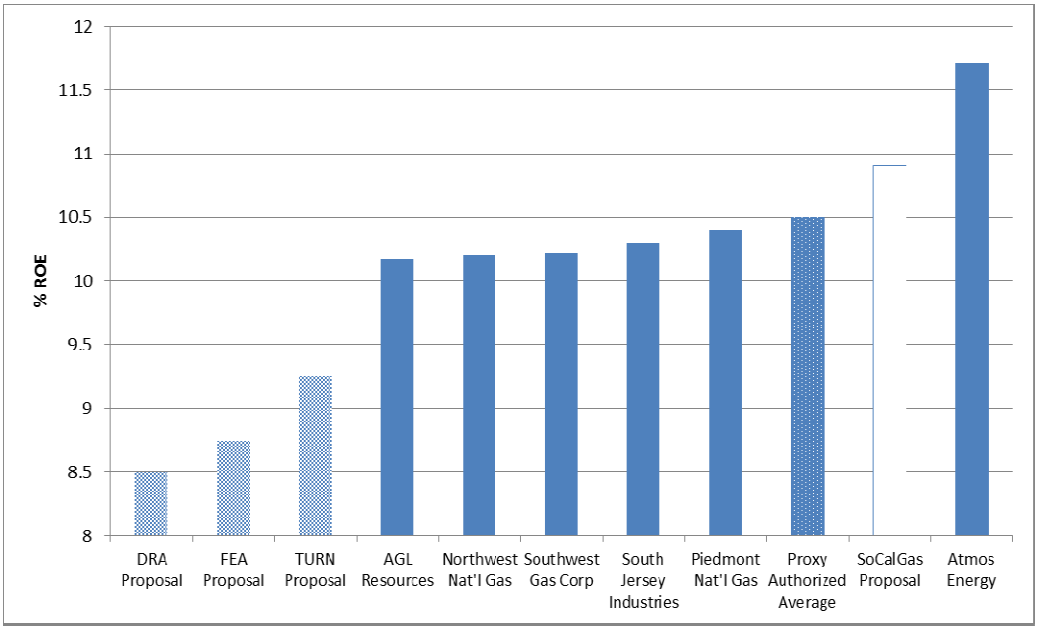
This is evidenced by the fact that Morgan Stanley advised investors to expect ROEs to "settle around 10.7% as a result of this proceeding."[63] Similarly, Morgan Stanley reports "regulators also appear to be interested in keeping ROEs at or above 10% since there is concern that investors will view single-digit returns unfavorable."[64] And Fitch "expects authorized returns at the end of the COC proceeding to remain well above the industry average authorized ROE of approximately 10.1%. An unexpectedly large adjustment downward to authorized ROEs by the commission would be an adverse development, in Fitch's opinion."[65] These projections are consistent with a study prepared for the American Gas Foundation ("AGF"), which noted that in general "allowed returns had to be above the 10.5% range to avoid causing major concern."[66] The AGF study found that allowed equity returns below the level required by investors may lessen the utility's ability to maintain and develop systems that are necessary to provide natural gas service efficiently. Furthermore,

[63] Morgan Stanley Research, "Regulated Utilities," June 26, 2012 at 4.
[64] Morgan Stanley Research, "Regulated Utilities," Jan. 7, 2012 at 11.
[65] Fitch Ratings Ltd., "California Regulation: Still Waiting," August 23, 2012.
[66] American Gas Foundation, "Regulatory Policy of Return on Equity," December 9, 2008 at 17.

the report specifically found that returns below 10% would trigger broad disenchantment with natural gas utility investments.[67]

In addition, intervenors' proposed ROEs would disappoint investor expectations because they are unreasonably low compared to ROEs recently authorized for other natural gas utilities. The chart below shows the authorized ROEs for SoCalGas' natural gas proxy group as well as the proposed ROEs in this proceeding for SoCalGas.

Figure 3: SoCalGas and Intervenor ROE Proposals Compared to the Natural Gas Proxy Group's Authorized ROEs



VI. CONCLUSION

This is currently a precarious time for SoCalGas because it faces continued high levels of capital investment, environmental and other costs. SoCalGas requires reasonable access to capital markets to fund these obligations, and supportive regulation is vital. Investors recognize these factors and expect that the Commission will make a decision in light of these factors that will enable SoCalGas to continue to meet its investments and other

[67] American Gas Foundation, "Regulatory Policy of Return on Equity," December 9, 2008 at 17.

requirements. If the Commission were to adopt the intervenors' recommended ROEs, it would signal to investors that the Commission may be altering its previous supportive approach. Instead, the Commission should recognize that because of the current market conditions and SoCalGas' business and regulatory risks, SoCalGas merits an ROE that will allow it to continue to provide safe and reliable service to customers at reasonable and fair rates.

This concludes my prepared rebuttal testimony.

ERRATA/AMENDMENTS TO THE PREPARED REBUTTAL TESTIMONY OF SOUTHERN CALIFORNIA GAS COMPANY WITNESS CHERYL SHEPHERD[68]

PAGE	LINE	CURRENTLY READS	CHANGED TO
1	16-19	To explain why equity investor perception is key in the determination of an appropriate return on equity ("ROE"), Section II discusses the differences between a utility's debt risk profile and equity risk profile, and how debt investors and equity investors have different risk exposures and risk tolerances.	To explain why equity investors' relative risk perception is critical in the determination of an appropriate return on equity ("ROE"), Section II discusses relative risk valuation and why quantitative risk assessment is not always feasible so qualitative assessment must be used.
3	3-5	In my direct testimony, and where information was available, I provided both qualitative and quantitative comparisons to peer natural gas utilities in order to give a holistic view of SoCalGas' risks.	In my direct testimony, and where information was available, I provided qualitative comparisons to peer natural gas utilities in order to give a holistic view of SoCalGas' risks.
6	5-8	Sempra Energy has sophisticated investors who only have a limited amount of time to receive company information. Even so, these investors are aware of the safe harbor statements made and risks that are highlighted in Sempra Energy's SEC filings.	Sempra Energy has sophisticated investors who are aware of the safe harbor statements made and risks that are highlighted in Sempra Energy's SEC filings.
7	5-8	Also as I included in my direct testimony, one of SoCalGas' major customers in the Imperial Valley signed a precedent agreement in 2005 to anchor and take long-term service off a proposed new lateral off of the North Baja Pipeline.	Also as I included in my direct testimony, one of SoCalGas' major customers in the Imperial Valley signed a precedent agreement in 2005 to anchor and take long-term service off a proposed new lateral off of the North Baja Pipeline; however, the lateral was not built.
12	20-21	Moreover, all but one of the	Moreover, all of the companies in

[68] All page and line references are to Cheryl Shepherd's original prepared Rebuttal Testimony.

		companies in the natural gas proxy group has some form of rate stabilizing mechanism.[36]	the natural gas proxy group have some form of rate stabilizing mechanism.
13	11-13	In addition, many of the proxy companies also benefit from cost recovery mechanisms which SoCalGas does not; such as bad debt trackers and infrastructure recovery mechanisms.	In addition, many of the proxy companies also benefit from cost recovery mechanisms which SoCalGas does not; such as bad debt trackers.
16	14-17	While AG Edwards notes the positive aspects of revenue stabilization features in recent rate proceedings, it continues to consider the gas distribution utility to be exposed to significant operating risks even after the approval of these regulatory mechanisms:	While Brean Murray Carret & Co. notes the positive aspects of revenue stabilization features in recent rate proceedings, it continues to consider the gas distribution utility to be exposed to significant operating risks even after the approval of these regulatory mechanisms:
16	FN 50	A.G. Edwards Service, "Gas Utilities Quarterly Review," April 6, 2006.	Brean Murray Carret & Co., "Gas Utilities Quarterly Review," April 24, 2008.
22	10-11	The chart below shows the distribution of authorized ROEs for natural gas over the last three years and where the intervenor proposals rank.	The chart below shows the authorized ROEs for SoCalGas' natural gas proxy group as well as the proposed ROEs in this proceeding for SoCalGas.
Attachment A – see redlined changes			

ATTACHMENT A

COMPARISON OF SOME CURRENT AND PROPOSED ADJUSTMENT MECHANISMS GAS PROXY GROUP COMPANIES TO SOUTHERN CALIFORNIA GAS COMPANY

	~~GAS~~AGL	A~~TO~~tmos Gas	Laclede Gas	Northwest ~~W~~Natural Gas	Piedmont Natural Gas~~Y~~	~~SJ~~South Jersey Gas	~~SWX~~Southwest Gas
Gas Supply Recovery	• Purchased Gas Adjustment (FL, MD, TN)	• Purchased Gas Adjustment	• Purchased Gas Adjustment	• Purchased Gas Adjustment	• Purchased Gas Adjustment	• Basic Gas Supply Service Clause	• Purchased Gas Adjustment • Gas Cost Incentive Mechanism (CA)
General Cost Recovery Mechanisms	• Adj. for Municipal, Local Gov't Unit and State Utility Tax (IL) • Energy Conservation Cost Recovery Adjustment (FL) • Energy Efficiency Plan Cost Recovery (IL) • Environmental Cost Recovery (GA, IL) • Franchise Cost Adjustment (GA, IL) • Pipeline Replacement Program Cost Recovery Rider (GA) • Storage Service Cost Recovery (IL) • Societal Benefit Charge (NJ) • Uncollectible Expense Adjustment (IL) • Weather Normalization Adjustment Rider (TN, VA)	• DSM Cost Recovery (CO, KY) • Conservation and Energy Efficiency Rider (IA, TX) • Weather Normalization Adjustment (GA, KS, KY, LA, MS, TN, TX, VA) • Pipe Replacement Program Rider (GA, KY) • Pipeline Safety Fee (TX) • Local Taxes (CO, GA, IL, KS, TN, TX) • Transportation Gas Cost Adjustment (CO) • Take or Pay Adjustment (IA)	• Billing of License, Occupation, or Other Similar Charges or Taxes • Infrastructure System Replacement Surcharge	• Adjustment to Rates Energy Conservation Programs (WA) • Automated Meter Reading Rate Adjustment (OR) • Industrial DSM Program Cost Recovery (OR) • Public Purpose Funding Surcharge (OR) • System Integrity Program Rate Adjustment (OR) • Weather Adjusted Rate Mechanism (OR)	• Weather Normalization Adjustment Rider (TN)	• Capital Investment Recovery Tracker • Energy Efficiency Tracker • Societal Benefits Clause • SUT Clause • Temperature Adjustment Clause • Transportation Initiation Clause	• Low Income Rate Assistance Rate Adjustment Provision (AZ) • Intrastate Transportation Cost Adjustment Mechanism (CA) • Catastrophic Event Memorandum Account (CA) • Transportation Franchise Fee Surcharge Provision (CA) • Facilities Surcharge (CA) • Public Purpose Program Balancing Accounts (CA) • Unrecovered Gas Cost Expense Provision (NV)
Decoupling Methods[1]	• Decoupling Tariff (VA, TN, NJ) • Straight Fixed Variable Rate Design (GA, IL) •	• Margin Loss Recovery (GA, TN) • Rate Review Mechanism (TX) • ~~Stable~~ Rate Stabilization Adjustment (GA, KS, LA, MS, TX)	• Straight Fixed Variable Rate Design	• Partial Decoupling Mechanism (OR)	• Margin Decoupling Mechanism (NC) • Rate Stabilization Adjustment (SC)	• Decoupling Tariff • ~~Conservation Incentive Program~~	• ~~Fixed Cost Adjustment Mechanism (CA)~~ • ~~General Revenue Adjustment Provision (NV)~~Decoupling Tariff (AZ, CA, NV)

[1] There are numerous methods to decouple gas volumes sold from utility cost recovery. Such methods include: Revenue Decoupling; Automatic Adjustments (partial decoupling); Rate Stabilization Tariffs; Flat Monthly Fee and Variants (e.g., Fixed Monthly Distribution Charge, Two-Tier Customer Charge, Straight Fixed Variable, Modified Rate Blocks.

PBR		• Experimental Performance Base Rate Mechanism (KY)					

Sources: Company information and AGA, "Innovative Rates, Non-Volumetric Rates, and Tracking Mechanisms: Current List (March 2012).

Attachment A

AGL Resources

~~Straight-Fixed Variable Rate Design~~	~~Recovery of the Company's fixed delivery service costs through the monthly customer charge, plus a volumetric charge for commodity.~~
Florida	
Purchased Gas Adjustment	Recover the cost of purchased gas or fuel used as a substitute for or supplemental to purchased gas
Energy Conservation Cost Recovery Adjustment	Recovers the cost of energy efficiency programs.
Georgia	
Straight-Fixed Variable Rate Design	Recovery of the Company's fixed delivery service costs through the monthly customer charge, plus a volumetric charge for commodity.
Environmental Cost Recovery	Recovery of Environmental Response Costs include investigation, testing, remediation and litigation costs and expenses or other liabilities relating to or arising from Manufactured Gas Plant sites.
Franchise Cost Adjustment	Estimated annual amounts payable by the Company to municipalities or other governmental bodies for franchise rights.
Pipeline Replacement Program Cost Recovery Rider	Recover certain costs associated with the replacement of bare steel and cast iron pipe on the Company's system.
Illinois	
Straight-Fixed Variable Rate Design	Recovery of the Company's fixed delivery service costs through the monthly customer charge, plus a volumetric charge for commodity.
Franchise Cost Adjustment	Recovers the cost of reduced rate service or other monetary contribution provided to local governmental units under a franchise agreement or other similar agreement with the company.
Storage Service Cost Recovery	Recovery of storage service costs and carrying costs of the company's additional inventory with annual true-up of per therm charge.
Adjustments for Municipal, Local Governmental Unit and State Utility Taxes	Recovers the following additional charges: municipal tax on gross receipts levied on the company, local governmental unit tax on gross receipts levied on the company, municipal or local governmental unit tax based on a charge per unit of energy, and state tax based on a percentage of gross receipts or a charge per unit of energy.
Environmental Cost Recovery	Automatic recovery of forecasted environmental survey, investigation, sampling, removal, disposal storage and remediation costs with respect to legacy manufactured gas operations.
Uncollectible Expense Adjustment	Recovers or refunds the amount by which the company's actual annual uncollectible expense in a calendar year exceeds or is less than the uncollectible amount included in the company's delivery service rates in effect for the reporting year.

Energy Efficiency Plan	The Energy Efficiency Plan recovers the actual costs to fund energy efficiency programs. Active for a four year period, unless reauthorized, the plan recovers the budgeted amount for each Plan Year and allows for carryover of budgeted amounts into subsequent years. Reconciliation period recovers deficiencies from the previous twelve month budgetary period over an eight month period.
Maryland	
Purchased Gas Adjustment	Recover the cost of purchased gas or fuel used as a substitute for or supplemental to purchased gas
New Jersey	
Decoupling Tariff	Decouples base revenue recoveries and customer throughput.
Weather Normalization Adjustment Rider	The weather normalization charge applied in each winter period (October through May) shall be based on the differences between actual and normal weather during the preceding winter period.
Societal Benefit Charge	To recover the (1) cost of Comprehensive Resource Analysis Programs that were approved by the Board pursuant to its Comprehensive Resource Analysis regulations prior to April 30, 1997, (2) cost of Manufactured Gas Plant Remediation, and (3) cost of Consumer Education and any other new programs which the Board determines should be recovered through the Societal Benefits Charge.
Tennessee	
Decoupling Tariff	Decouples revenues from the amount of natural gas used by customers.
Purchased Gas Adjustment	Recovery of the total cost of gas purchased for delivery to Customers and to assure that the Company does not over-collect or under-collect Gas Costs from its Customers.
Weather Normalization Adjustment Rider	WNA rider partially offsets the impact of colder- or warmer-than-normal weather on bills rendered November through April for multi-family housing services and commercial/industrial customers.
Virginia	
Decoupling Tariff	Also called a Revenue Normalization Adjustment Rider, which discourages increased natural gas sales and encourage energy efficiency and conservation.
Weather Normalization Adjustment Rider	WNA rider partially offsets the impact of colder- or warmer-than-normal weather for each billing cycle. The WNA formula calculates the actual weather variance from normal, using 30 years of history.

Attachment A

Atmos Energy Corp.

Colorado	
Gas Cost Adjustment ("GCA")	The annual GCA reflects appropriate gas costs including Forecasted Gas Commodity Costs and Forecasted Upstream Service Costs incurred by the company. Includes collection of the gas cost portion of uncollectible accounts.
Transportation Gas Cost Adjustment ("TGCA")	Applicable to end users who receive service under a transportation rate schedule and who opt for AMR Electronic Metering Equipment.
Gas Demand-Side Management Cost Adjustment ("G-DSMCA")	Designed to prospectively recover prudently incurred costs of Demand-Side Management Programs.
Franchise Fee Surcharge	Percentage surcharge applied to the bill of each customer residing within a municipality that imposes a franchise fee / occupation tax upon the Company.
Georgia	
Purchased Gas Adjustment Rider	Intended to recover all of the company's Purchased Gas Costs incurred pursuant to an applicable Gas Supply Plan as well as any Gas Costs required to supply the demands of the company's customers.
Franchise Tax Recovery	Franchise fees imposed on the company will be assessed to each customer based on the customer's actual monthly bill.
Weather Normalization Adjustment Rider	Adjusts rates for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective October through May.
Pipe Replacement Surcharge	Increment of $3.04 per residential customer, $9.11 per commercial customer and $75.91 per industrial customer per month will be applied to customer charges effective October 1, 2009.
Rate Stabilization Clause	Increases or decreases rates so that earned ROE equals allowed ROE.
Margin Loss Recovery Rider	Recovers 40% of margin loss from firm customers, 35% from interruptible customers, and the company must absorb the remaining 25%.
Illinois	
Purchased Gas Cost Adjustment	Costs recoverable through the Gas Charge include costs of natural gas, costs for storage services, transportation costs, and any other out-of-pocket direct non-commodity costs.
Adjustment for State of Illinois Gross Receipts Tax	Tax rate of 0.1% net charge is applicable to all charges, including charges for gas service; service disconnections and reconnections; line extensions, relocations, installations, and replacements; meter relocation and jobbing. Tax rate of the lesser of 2.4 cents per Ccf or 5% of gross receipts received from each customer will apply to each customer

Attachment A

Iowa	
Purchased Gas Adjustment	Recovers the costs to the company for purchasing gas for delivery to its customers.
Take or Pay Adjustment	Recovers or refunds any changes in the cost of take or pay charges from suppliers.
Energy Efficiency Cost Recovery	Recovers the cost of energy efficiency programs.
Kansas	
Purchased Gas Adjustment	Recovers the average cost of gas from all sources of supply. The gas cost portion of uncollectible accounts is recoverable through the Actual Cost Adjustment.
Weather Normalization Adjustment	Adjusts rates for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective October through May
Rate Stabilization Clause	Increases or decreases rates so that earned ROE equals allowed ROE.
Ad Valorem Tax Surcharge	Recovers charges resulting from real estate and personal property taxes
Kentucky	
Gas Cost Adjustment	Recovers expected commodity costs and non-commodity costs including pipeline demand charges and gas supplier reservation charges.
Weather Normalization Adjustment	Adjusts revenues for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective November through April.
Experimental Performance Based Rate Mechanism	Provides sharing of gas commodity costs, gas transportation costs, and capacity release revenues that vary from established benchmarks.
Demand Side Management	Recovers costs of DSM programs as well as annual lost sales attributable to customer conservation/efficiency created as a result of the DSM programs.
Pipe Replacement Program Rider	Recovers PRP-related revenue requirement including plant in-service not included in base gas rates less accumulated depreciation and accumulated deferred income taxes, retirement and removal of plant-related PRP construction, rate of return on net rate base, depreciation expense, reduction for savings in O&M expenses, and adjustment for ad valorem taxes.
Louisiana	
Purchased Gas Adjustment	Provides monthly adjustment for the fluctuations in cost of gas purchased by the company
Rate Stabilization Clause	Increases or decreases rates so that earned ROE equals allowed ROE.
Weather Normalization Adjustment	Adjusts rates for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective December through March.

Attachment A

Mississippi	
Weather Normalization Adjustment Rider	Adjusts rates for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective November through April.
Stable Rate Adjustment Rider	Adjusts rates for the difference between the company's expected ROE and performance-based benchmark ROE. No adjustment for difference less than or equal to 100 basis points.
Purchased Gas Adjustment Rider	Recovers commodity costs and demand charges associated with the procurement of gas.
Missouri	
Purchased Gas Adjustment	Recovers costs associated with the procurement of gas including commodity, transportation and storage costs.
Tennessee	
Purchased Gas Adjustment Rider	Recovers costs associated with the procurement of gas including commodity, transportation and storage costs. Includes collection of the gas cost portion of uncollectible accounts.
Margin Loss Recovery Rider	Recovers not more than 90% of the gross profit margin losses that results from rates negotiated under Rate Schedule 291 or from customers who transfer from Rate Schedule 240 to optional service.
Weather Normalization Adjustment (WNA) Rider	Adjusts revenues for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective November through April.
Franchise Tax	Any franchise taxes imposed upon the company are collected by an addition to customers' bills.

Attachment A

Texas (West)	
Rate Stabilization Clause	Increases or decreases rates so that earned ROE equals allowed ROE.
Gas Cost Adjustment Rider	Recovers costs associated with the procurement of gas. Includes collection of the gas cost portion of uncollectible accounts.
Weather Normalization Adjustment	Adjusts revenues for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective October through May.
Rider RRM Rate Review Mechanism *(select jurisdictions)*	Adjusts rates for the difference between the company's authorized ROE and actual earned ROE.
Energy Efficiency Program Rider *(select jurisdictions)*	25% of energy efficiency expenditures will be considered in determining the company's annual earnings for RRM rate adjustment purposes.
Conservation and Energy Efficiency Rider *(select jurisdictions)*	50% of energy efficiency expenditures will be considered in determining the company's annual earnings for RRM rate adjustment purposes.
Pipeline Safety Program Fees	Recovers costs associated with the pipeline safety inspection program
Mid-Texas (Central/East)	
Weather Normalization Adjustment (WNA) Rider	Adjusts revenues for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective November through April
Gas Cost Recovery (GCR) Rider	Recovers gas costs and upstream transportation costs. Includes collection of the gas cost portion of uncollectible accounts.
Franchise Fee Adjustment (FF) Rider	Recovers municipal franchise fees imposed on the company by select municipalities.
Pipeline Safety Program Fees	Recovers costs associated with the pipeline safety inspection program
Conservation and Energy Efficiency (CEE) Rider	One million dollars provided by ratepayers to fund conservation and energy efficiency programs (one million dollars to be contributed by shareholders)
Rate Review Mechanism *(city groups A & B)*	Adjusts rates for the difference between the company's authorized ROE and actual earned ROE.
Tax Adjustment Rider	Recovers state gross receipts taxes imposed on the company.
Virginia	
Purchased Gas Adjustment	Recovers costs associated with the procurement of gas. Includes collection of the gas cost portion of uncollectible accounts.
Weather Normalization Adjustment	Adjusts revenues for the difference between Commission-authorized weather normalized revenues and actual revenues. Effective January through December.

Laclede Group, Inc.

Missouri	
Straight Fixed Variable Rate Design	Fixed costs are recovered through fixed customer charges and variable costs are recovered through volumetric prices.
Infrastructure System Replacement Surcharge ("ISRS")	The ISRS recovers eligible infrastructure replacements on a fixed monthly basis.
Purchased Gas Adjustment Clause ("PGAC")	The PGAC automatically recovers commodity and non-commodity costs of delivered natural gas with a monthly reconciliation of actual as compared to projected eligible gas costs. The PGAC also incorporates a Gas Supply Incentive Plan, whereby the company will share in savings obtained through hedging activities if the actual commodity cost of natural gas for a given year meets certain benchmarks. The PGAC also recovers the carrying cost of natural gas inventory. All adjustments incorporated into the PGAC are reconciled on a monthly basis by comparing the previous months' actual gas costs with the revenue collected from the PGAC. Any balances incur carrying costs at the current prime rate minus two percent.
Billing of License, Occupation, or Other Similar Charges or Taxes	Any license, occupation, or other similar charge or tax imposed upon the company is added to the customers' bills as a separate item.

Northwest Natural Gas Company

Purchased Gas Adjustment	Rate changes are established each year under PGA mechanisms in both Oregon and Washington to reflect changes in the expected cost of natural gas commodity purchases, including gas storage, gas purchases hedged with financial derivatives, interstate pipeline demand charges, the application of temporary rate adjustments to amortize balances in deferred regulatory accounts, increases in bad debt expense and the removal of temporary rate adjustments effective for the previous year.
Oregon	
Conservation Tariff (Partial Decoupling Mechanism)	Rate mechanism designed to adjust margin for changes in consumption patterns due to residential and commercial customers' conservation efforts. The decoupling mechanism that is intended to break the link between utility earnings and the quantity of gas consumed by customers, removing any financial incentive by the utility to discourage customers' conservation efforts. The conservation tariff includes a price elasticity adjustment and a conservation adjustment. The price elasticity adjustment adjusts rates annually for increases or decreases from expected customer volumes due to annual changes in commodity costs or periodic changes in general rates. The conservation adjustment is calculated on a monthly basis to account for the difference between actual and expected customer volumes.
Weather Normalization	Approved weather normalization through October 2012. This mechanism is designed to help stabilize the collection of fixed costs by adjusting residential and commercial customer billings based on temperature variances from average weather, with rate decreases when the weather is colder than average and rate increases when the weather is warmer than average. The mechanism is applied to residential and commercial customers' bills between December 1 and May 15 of each heating season. The mechanism adjusts the margin component of customers' rates to reflect average weather, which uses the 25-year average temperature for each day of the billing period.
System Integrity Program	In 2004, the OPUC approved specific accounting treatment and cost recovery for a transmission pipeline integrity management program. The Company records these costs as either capital expenditures or regulatory assets, accumulates the costs over a 12-month period, and recovers the revenue requirement associated with the costs, subject to audit, through rate changes effective with the annual PGA. In February 2009, the OPUC approved a stipulated agreement to create a new, consolidated system integrity program (SIP). The SIP integrates the existing transmission pipeline and proposed distribution integrity management programs. The company's SIP costs are tracked into rates annually, with rate recovery after the first $3.3 million of capital costs. An annual cap for expenditures has been set at $12 million, but extraordinary costs above the cap may be approved with written consent of the OPUC and other interested parties.
Industrial Demand Side Management (DSM) Program Cost Recovery	Recovers the costs of the Company's Industrial Energy Efficiency Program. Effective November 1, 2010.
AMR Deferral	In February 2010, the OPUC approved a stipulation that allows the company to defer the revenue requirement associated with the AMR project and amortize that

	deferral subject to an annual earnings test. The company is permitted to recover the deferral amount as long as their ROE during the earnings review period does not exceed their authorized ROE. Recovery of any deferred amounts will begin in November 2010 as part of the annual PGA rate adjustment.
Public Purpose Funding Surcharge	Public Purposes surcharge that is to fund public purposes activities to be administered through one or more independent entities
Washington	
Energy Conservation Programs Adjustment	Recover costs associated with providing energy conservation services offered under Residential High-Efficiency Furnace Program, Residential Weatherization and Energy Conservation Services Program, and Residential Low-Income Energy Assistance Program

Piedmont Natural Gas Company, Inc.

Purchased Gas Adjustment	Gas costs in all three jurisdictions are recoverable through PGA procedures and are not affected by the WNA or the margin decoupling mechanism. The company has incentive mechanisms for gas supply management whereby it retains 25% of secondary market margins generated through off-system sales and capacity release activity in all jurisdictions, with 75% credited to customers through the incentive plans. North Carolina - Purchased gas costs include all commodity/gas charges, demand charges, peaking charges, surcharges, emergency gas purchases, over-run charges, capacity charges, take-or-pay charges, or other similar charges in connection with the purchase, storage or transportation of gas. These costs are passed through to customers in the gas cost. In North Carolina and South Carolina, gas costs related to uncollectible accounts are recovered through the PGA. Tennessee - Adjustment is intended to permit the Company to recover the total cost of gas purchased for customers including costs incurred in connection with the purchase, transportation and/or storage of gas purchased for general system supply, including, natural gas purchased from interstate pipeline transmission companies, producers, brokers, marketers, associations, intrastate pipeline transmission companies, joint ventures, providers of liquefied natural gas (LNG). The gas cost portion of net write-offs for a fiscal year that exceed the gas cost portion included in base rates is recovered through PGA procedures.
North Carolina	
Margin Decoupling Mechanism	The margin decoupling mechanism provides for the recovery of the Company's approved margin from residential and commercial customers independent of consumption patterns. The margin decoupling mechanism was experimental for a three-year period, subject to semi-annual reviews and approval for extension in a future general rate case proceeding. In October 2008, the NCUC approved a settlement including the continuation of the margin decoupling mechanism.
South Carolina	
Rate Stabilization Clause	Increases or decreases rates so that earned ROE equals allowed ROE.
Tennessee	
Weather Normalization	WNA mechanism in South Carolina and Tennessee partially offsets the impact of colder- or warmer-than-normal weather on bills rendered in November through March for residential and commercial customers. The WNA formula calculates the actual weather variance from normal, using 30 years of history.

Attachment A

South Jersey Industries, Inc.

New Jersey	
Basic Gas Supply Service Clause ("BGSSC")	BGSSC is calculated and trued-up annually and is designed to recover all gas costs including commodity costs, storage costs, interstate transportation costs (including the costs and results of any supplies set by hedges), fuel and line loss costs, and non-commodity gas-related costs. Non-commodity costs include fixed pipeline costs, fixed supplier costs, fixed storage costs, pipeline refunds and similar credits. At its discretion, the company may file for two self-implementing rate increases, effective December 1st and February 1st.
Capital Investment Recovery Tracker ("CIRT")	Utilized to adjust the company's monthly revenues in cases wherein the actual recoveries experienced vary from the calculated revenue requirement. It shall be utilized to earn a return on and a return of incremental infrastructure investments, including the capitalized costs related to CIRT projects. The revenue requirement will be calculated using projected data and be subject to a true-up at the end of the year. The CIRT will be applied through a volumetric rate and will be adjusted on or about each January 1st.
Transportation Initiation Clause ("TIC")	The purpose of the TIC is to enable the Company to recover both capital expenditures and operating costs associated with Electronic Data Interchange (EDI), including consulting costs and transaction costs. The TIC filing will be based upon the costs and expenditures incurred during the previous August 1 through July 31. The TIC is collected on a per therm basis.
Societal Benefits Clause ("SBC") (Encompasses NJCEP and USF)	The purpose of SBC is to enable the Company to recover the costs of the company's Clean Energy Program, manufactured gas plant remediation, Universal Service Fund Permanent and Lifeline Credits and Tenants Assistance program, and other allowed costs. Trued-up at the end of the year.
Temperature Adjustment Clause ("TAC")	(Replaced by the CIP, but still included in the Tariff). Utilized to adjust the company's revenues for unexpected fluctuations in temperature. This rider is utilized if the number of annual degree days in a year varies from the average by more than 0.5% of the 20 year cumulative normal degree days to adjust customers' bills. The degree day adjustment is multiplied by a degree day consumption factor to derive the volumetric adjustment. Allocated to customers on a volumetric basis. Only applies to October through May.
SUT Clause ("SUTC")	The New Jersey Sales and Use Tax ("SUT") is included in all rates by multiplying the charges that would have applied before application of the SUT by a factor of 1.07.
Conservation Incentive Program ("CIP")	CIP includes a decoupling mechanism and is ~~U~~utilized to adjust the company's revenues in cases wherein actual usage per customer experienced during an annual period varies from the baseline usage per customer. This adjustment is applied through a credit or surcharge to customers' bills during the adjustment period and incorporates under recoveries or over recoveries from the previous year. Baseline use per customer is set during base rate case proceedings.
Energy Efficiency Tracker ("EET")	The company shall record a return on and a return of investments in energy efficiency programs and recover all incremental operating and maintenance expenses of the programs. The EET rate will be calculated annually using projected data and subject to a true-up at the end of the EET year (September 30th). The EET is applied through a volumetric rate on customers' bills.

Southwest Gas Corp.

Arizona	
Decoupling Tariff	Eliminates the link between utility sales and recovery of fixed costs.
Purchased Gas Cost Adjustment	Purchased Gas Cost Adjustment Provision adjusts a balancing account monthly to account for under- or over-collection of purchased gas costs. The balance of the account incurs interest at the one-year constant maturity U.S. Treasury rate. Monthly gas cost is based on the rolling twelve-month average purchased gas rate.
Low Income Rate Assistance Rate Adjustment Provision ("LIRA")	The LIRA is intended to recover the difference between projected low-income assistance costs and actual revenues received for such identified costs. The LIRA amount is updated annually, on May 1, following the peak winter heating season.
California	
Decoupling Tariff	Eliminates the link between utility sales and recovery of fixed costs.
Purchased Gas Cost Balancing Account	Purchased Gas Cost Balancing Account adjusts monthly to account for under- or over-collection of actual purchased gas costs. The account incurs interest at the rate of 1/12 of the most recent month's interest rate on commercial paper (prime, 3-month). Includes adjustments for franchise taxes and uncollectible accounts expense.
Intrastate Transportation Cost Adjustment Mechanism ("ITCAM")	ITCAM Balancing Account balances recorded upstream intrastate variable transportation cost recovery with the actual costs incurred by the company for upstream transportation of gas on Southern California Gas' system. The company files to adjust the ITCAM as often as necessary so that effective rates reflect projected costs. The balancing account accrues interest at the same rate as the Purchased Gas Cost Balancing Account. Includes adjustments for franchise taxes and uncollectible accounts expense.
Fixed Cost Adjustment Mechanism ("FCAM")	FCAM is a balancing account that includes a margin balancing component to clear over- and under- recoveries of authorized margin due to declining use per customer or changes in weather. ~~The FCAM is intended to recover the difference between the authorized level of margin, upstream storage charges, and interstate reservations/firm access charges and the actual recorded revenues intended to recover those costs.~~ The FCAM adjusts annually based on monthly accounting for the differences as noted above. The adjustment is based on the balance of the account at the end of the yearly period and the projected volumes of natural gas to be delivered to customers in the succeeding annual forecast period. Includes adjustments for franchise taxes and uncollectible accounts expense.
Catastrophic Event Memorandum Account ("CEMA")	All costs incurred by the company as a result of a catastrophic event are recorded in the CEMA. Costs recorded in the CEMA may be recovered in rates only after a request by the company and approval by the Commission.
Transportation Franchise Fee Surcharge Provision	This provision provides for the calculation and collection of a Franchise Fee Surcharge on behalf of local municipalities for energy transported by utilities, but procured from other sources by customers. The volumetric surcharge is updated monthly.
Facilities Surcharge	This provision provides for the collection of construction costs incurred in the utility's Northern California Expansion Areas. Interest accrues monthly on the

	recovery amount at a rate of 8.2%. The surcharge includes franchise fees and uncollectible accounts expense.
Public Purpose Program Balancing Accounts ("PPP")	The PPP accounts are intended to recover any differences between the authorized recovery of the costs of low-income assistance, energy efficiency, and public interest research and development with the actual PPP revenues received in any given month. The surcharge is adjusted annually.
Gas Cost Incentive Mechanism ("GCIM")	The GCIM incentivizes the company to procure natural gas effectively by sharing savings in the actual cost of gas on a varying scale between the company and ratepayers. The GCIM is recorded separately in the company's Purchased Gas Cost Balancing Account and is flowed through to rate payers through that adjustment.
Nevada	
Decoupling Tariff	Eliminates the link between utility sales and recovery of fixed costs.
Base Tariff Energy Rate ("BTER") and Deferred Energy Account Adjustment ("DEAA")	Purchased gas costs recovered pursuant to Nevada State Utilities Code. Recovered costs include the carrying cost of any unrecovered balances. These balances are reconciled monthly and rates are adjusted quarterly.
General Revenues Adjustment Provision	The GRA Provision allows the utility to recover its authorized Base Tariff General Rate revenues without regard to the difference in the quantity of natural gas delivered. GRA deferrals are tracked monthly and the volumetric rate is updated annually.
Unrecovered Gas Cost Expense Provision	Recovers bad debt expense associated with gas costs.