

# SOUTHERN CALIFORNIA GAS COMPANY ADVANCED METERING INFRASTRUCTURE

Application No. 08-09-\_\_\_\_\_

September 29, 2008



## **SOCALGAS ADVANCED METERING INFRASTRUCTURE**

The following serves as the prepared direct testimony of Southern California Gas Company (“SoCalGas”) in support of its application to the California Public Utilities Commission for deployment of a SoCalGas advanced metering infrastructure (“AMI”) system.

### **CHAPTER I – SOCALGAS AMI VISION AND POLICY**

This chapter highlights the policy foundation and SoCalGas’ vision for enabling its customers to better manage their natural gas consumption through the use of AMI technology. It also provides an overview of SoCalGas’ proposed strategy for deploying AMI. The witness sponsoring this chapter is Michelle M. Mueller.

### **CHAPTER II – SUMMARY OF AMI BUSINESS CASE**

This chapter presents SoCalGas’ business case in support of its AMI Application and testifies to funds required to timely deploy SoCalGas’ AMI system during the 2009-2015 deployment period. It also explains that the estimated AMI deployment costs of \$1.09 billion, of which \$903 million are capital expenses and \$187 million are O&M expenses, are based on AMI vendor responses to requests for AMI proposals issued by SoCalGas in May of 2008. The witness sponsoring this chapter is Edward Fong.

### **CHAPTER III – SOCALGAS AMI DEPLOYMENT PLAN, COSTS, AND OPERATIONAL BENEFITS**

This chapter describes SoCalGas’ AMI requirements, deployment plan, assumptions regarding the base case AMI technology, estimated initial deployment costs for gas modules, meter replacements and other program management office activities and on-going operating costs and benefits. The cost and benefit estimates are depicted in direct dollars (i.e., non-escalated, unloaded and non-taxed). The witness sponsoring this chapter is Mark L. Serrano.

### **CHAPTER IV - INFORMATION SYSTEMS, APPLICATION DEVELOPMENT AND INTEGRATION, AND AMI TECHNOLOGY**

This chapter describes SoCalGas’ IT systems development and integration plans, including the IT architecture that will process and validate AMI gas meter reads, the AMI network communications technology, and the meter data management system that interfaces with SoCalGas legacy systems for customer billing and asset management. Cost and benefit estimates are depicted in direct dollars. The witness sponsoring this chapter is Christopher R. Olmsted.

### **CHAPTER V – ESTIMATED CONSERVATION IMPACT OF PROVIDING DAILY GAS INFORMATION TO CUSTOMERS**

This chapter provides an analysis of existing studies to estimate the conservation impact from providing hourly gas usage information to customers in a timely fashion (at least once a day). The witness sponsoring this chapter is Sarah J. Darby.

## **CHAPTER VI – SOCALGAS AMI CONSERVATION IMPACTS AND BENEFITS**

This chapter provides estimates of reductions in gas usage as a result of Dr. Darby’s analysis and research regarding the impact of timely gas usage information available to customers and the corresponding benefits. The witness sponsoring this chapter is John C. Martin.

## **CHAPTER VII – SOCALGAS AMI BUSINESS CASE MODELING METHODOLOGY AND REVENUE REQUIREMENT**

This chapter describes in greater detail the financial assumptions and business financial modeling methodology used to calculate the AMI cash flow and revenue requirement estimates. It also explains adjustments for overhead loaders, annual escalation and sales taxes applied to the various types of direct costs and benefits described in Messrs. Serrano, Olmsted and Martin’s testimonies. The witness sponsoring this chapter is Michael W. Foster.

## **CHAPTER VIII – SOCALGAS AMI COST RECOVERY AND RATE IMPACTS**

This chapter proposes a balancing account cost recovery structure for estimated SoCalGas AMI expenses and a method to net the operating benefits in the balancing account as the AMI gas modules are deployed. The witness sponsoring this chapter is Allison F. Smith.

# **SOCALGAS ADVANCED METERING INFRASTRUCTURE**

## **EXECUTIVE SUMMARY**

Southern California Gas Company (“SoCalGas”) proposes to deploy a gas advanced metering infrastructure (“AMI”) for 6 million meters in its service territory over the 2009-2015 timeframe. The estimated deployment cost for the SoCalGas AMI is approximately \$1.09 billion, of which \$903 million is capital expenses and \$187 million is operating and maintenance (“O&M”) expenses.

In the testimony chapters that follow, SoCalGas demonstrates that there are four compelling reasons for the California Public Utilities Commission (“Commission”) to adopt SoCalGas’ proposed gas AMI system. First, the proposal is consistent with and supportive of the State’s Energy Action Plan’s endorsement of energy conservation. SoCalGas’ AMI system will provide individual customers with access to energy usage information to manage their energy bills by changing their energy consumption behavior as it relates to real time energy usage and costs. Second, the proposal provides substantial operational efficiencies that will benefit SoCalGas customers. These operational benefits offset approximately 84.5% of the cost of the AMI system. Together with the reasonable demand side conservation benefits, the proposal is cost-effective for SoCalGas’ customers. Third, the proposal provides significant environmental benefits. Upon full implementation, AMI will eliminate, annually, over 6.3 million vehicle miles from California’s roads and highways and remove 3,000 tons of greenhouse gas (CO<sub>2</sub>) emissions from California’s air. And finally, the proposal offers the potential for a communications network capable of being used by water agencies and companies to promote water conservation and better water management.

SoCalGas has identified pre-deployment activities that must occur in advance of implementing SoCalGas' AMI program such as initiating pre-deployment information systems work and program management set-up activities. In order to expedite the implementation of an AMI system so that customers can begin to realize the benefits sooner, SoCalGas requests expedited approval to spend up to \$12.4 million of pre-deployment AMI funding during 2009 for these pre-deployment activities. This pre-deployment amount is not an amount in addition to SoCalGas' total AMI budget request, but an integral part thereof. Spending the requested \$12.4 million in pre-deployment funding will be accounted for as part of the total AMI project budget authorized and approved by the Commission.

To proceed with implementation of a gas AMI system in its service territory during the 2009 – 2015 period including installation of AMI technology on 6 million gas meters, SoCalGas requests the following:

- Approval by year-end 2008 for initial funding of \$12.4 million to begin pre-deployment activities.
- Approval by June 2009 for full deployment of an AMI system, including installation of natural gas AMI modules and meters, an AMI communications network and implementation of information technology systems beginning in 2011.
- Authority to establish a balancing account to record the difference between the authorized revenue requirement and actual O&M and capital-related costs associated with an investment of \$1.09 billion for full deployment of the proposed SoCalGas AMI.