

Application of San Diego Gas & Electric Company
(U-902-E) for Adoption of an Advanced Metering
Infrastructure Deployment Scenario and Associated Cost
Recovery and Rate Design.

Application 05-03-015
Exhibit No.: _____

**CHAPTER 1
AMI BUSINESS POLICY**

**Prepared Supplemental, Consolidating,
Superseding and Replacement Testimony
of
ANNE S. SMITH**

SAN DIEGO GAS & ELECTRIC COMPANY

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

March 28, 2006

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8 **I. INTRODUCTION**

9 The purpose of my testimony is to present San Diego Gas & Electric Company's
10 (SDG&E's) policy perspectives regarding implementation of advanced metering
11 infrastructure (AMI). Having thoroughly evaluated the benefits, costs, and short and long
12 term impacts of AMI, SDG&E strongly supports implementation of AMI. In testimony
13 following this chapter, SDG&E provides a proposal containing the financial, engineering,
14 and planning details necessary to install AMI technology for the 2.3 million gas and
15 electric meters throughout its service territory by year-end, 2010.

16 The guiding principles in SDG&E's consideration of an AMI strategy are that the
17 solution must: 1) support the State's energy policy goals, 2) provide customers with long-
18 term positive benefits, 3), be cost effective and viable. SDG&E believes the proposal
19 being put forth here adheres to these principles, and urges the Commission to grant
20 approval to move forward. The proposal also contains a commitment that there will be
21 no layoffs of the employees impacted by the AMI deployment.

22 This testimony consolidates, supersedes, and replaces all previous direct and
23 supplemental testimony filed by SDG&E witness testifying in this docket, on the topics
24 covered herein.

25 **II. AMI SUPPORTS CALIFORNIA'S ENERGY POLICY GOALS**

26 The State's energy policy goals, as articulated in the Energy Action Plan (EAP),
27 state a clear policy preference in the "loading order" of resource additions to meet the
28 future energy needs of California. It calls for aggressive pursuit of energy efficiency and
29 demand response as the State's preferred means of meeting growing energy needs, prior
30 to consideration of supply-side resources.

1 SDG&E’s AMI strategy not only perpetuates, but significantly accelerates,
2 California’s momentum towards achieving ever more meaningful demand response. A
3 long time and ardent supporter of demand response initiatives, SDG&E believes AMI is a
4 necessary cornerstone upon which all future demand response policy and programs will
5 build, and upon which attainment of the State’s policy goals will rely. Absent AMI,
6 California will not be able to achieve the maximum potential for demand reduction over
7 the long-run.

8 Knowledge of time differentiated energy usage and cost, and real-time system
9 conditions, combined with pricing incentives and energy management tools, will
10 facilitate changes in energy consumption behavior that can lead to avoidance of adding
11 very costly resources needed to serve those few hours of peak demand. A critical
12 component to capturing this demand reduction potential presented by AMI is the
13 availability of accurate price signals. SDG&E believes that the State should move
14 towards more time-based pricing that reflect the true cost of energy.

15 **III. AMI WILL BENEFIT SDG&E’s CUSTOMERS**

16 The overriding objectives of SDG&E’s AMI strategy is to enhance services,
17 improve reliability, and lower costs to customers, and to lay the foundation for additional
18 customer benefits over the long-run. One of the most promising areas of improvement is
19 outage response, an area that is of utmost importance to all customers. AMI enables
20 advanced metering and communication capabilities that will allow SDG&E to further
21 improve its response to service disruptions. Outages and power service problems can be
22 proactively isolated and more quickly resolved with minimal inconvenience to customers.

23 Through automation of meter reading activities, AMI will improve the accuracy,
24 timeliness, and cost efficiency of billing information. Customers can have greater
25 confidence in the bills they receive, and be provided with current energy usage
26 information on demand. Availability of “real time” usage information will enable
27 SDG&E to much more expediently handle bill inquiries, which comprise a large
28 percentage of customers’ calls.

29 Customers will be empowered to make more intelligent energy decisions and
30 have greater control over their energy use and costs. On-line energy use information will
31 be available to them in making choices to install various in-premise energy management

1 tools. These tools will allow customers to take greater advantage of energy efficiency,
2 load management and distributed energy technologies.

3 SDG&E can better optimize its electric distribution system with the localized load
4 profile information that AMI provides. Upgrades and expansions can be more efficiently
5 planned and designed to address local and regional infrastructure needs. In the long-run
6 this more precise planning will result in a lower cost system and better service reliability.

7 In addition, SDG&E believes that, over the next 10-15 years, significant advances
8 will occur in the deployment of technologies such that the electrical system will be
9 operated at much higher levels of automation and reliability than today. A greater
10 number of intelligent communicating assets will be available in the future in addition to
11 AMI, including sensors on the electric and gas networks and intelligent appliances within
12 homes and businesses. Customers will avail themselves to a greater number of self-
13 service channels and access information through an integrated data environment.

14 AMI provides customer premise endpoint energy usage information that is at the
15 farthest downstream point of the electric distribution system. This information will
16 enable smarter ways of real-time monitoring and control of the system. The detailed
17 customer specific usage information captured by AMI will be essential to building a
18 framework that is capable of providing intelligent customer interactions and care. This
19 capability could also introduce opportunities for new service offerings.

20 **IV. AMI IS COST EFFECTIVE AND VIABLE**

21 In determining whether to move forward with AMI implementation, SDG&E had
22 to answer the critical questions of: is AMI cost effective, and will it reliably perform the
23 functions for which it is designed? In order to recommend moving forward with a project
24 of this scope and magnitude, the project must show substantial benefits to ratepayers, be a
25 sound business decision for SDG&E, and not pose unmanageable risk. The proposed
26 deployment described in this filing meets these hurdles.

27 AMI deployment results in net benefit for customers and society with a positive
28 net presence for revenue requirements and societal cost benefits methodologies. The
29 peak impact on the average residential customer bill occurs in 2010. The increase is less
30 than \$3.00 per month on an average electrical and gas bill.

1 SDG&E’s customers will realize a net benefit from implementation of AMI both
2 in terms of a positive net present revenue requirement and a positive societal net benefit.
3 The projected impact to an average residential bill will peak in 2010 and will result in an
4 increase under \$3.00 per month.

5 A very rigorous Request for Proposal (RFP) process was conducted to solicit
6 proposals from the market place. Results of that process convinced SDG&E that viable
7 solutions are available for moving forward with AMI deployment today. SDG&E has
8 contemplated whether there’s value in waiting for the “ultimate” solution. Given the
9 constant evolution in technologies. After careful assessment, SDG&E believes that
10 significant customer benefits will be forfeited if it were to engage in chasing technology
11 rather than acting now. Diligence will be exercised, and SDG&E will remain open to
12 future changes should technologies emerge that present significantly superior AMI
13 solutions to those currently planned.

14 The following chapters contain the “nuts and bolts” aspects of ensuring a
15 successful implementation of AMI, along with the plans to mitigate risks associated with
16 the project.

17 **V. SUMMARY**

18 Over the past several years, considerable time and effort has been devoted by this
19 Commission, the California Energy Commission (CEC), and other stakeholders in
20 consideration of AMI. This, coupled with the countless hours invested by SDG&E, has
21 culminated in SDG&E’s decision to deploy AMI in its territory by 2010 - and to do so in
22 a cost-effective manner resulting in positive net benefits to ratepayers. SDG&E presents
23 for the Commission’s approval a well researched and supported proposal to immediately
24 and fully implement AMI. The proposal lays the groundwork for transforming the way
25 in which energy services will be delivered to customers. SDG&E believes the time is
26 *now* to move forward with AMI.

27 This concludes my prepared direct testimony.

1 **VI. QUALIFICATIONS OF ANNE SHEN SMITH**

2 My name is Anne Shen Smith and my business address is 8330 Century Park
3 Court, San Diego, California 92123

4 I am employed as Senior Vice President of Customer Services for San Diego Gas
5 & Electric and Southern California Gas. I am responsible for all customer related
6 activities for the two utilities, including call centers, in-home appliance services, revenue
7 cycle services, energy efficiency and demand reduction programs, and special customer
8 assistance programs.

9 Previously, I was Vice President of Customer Services, Mass Markets; Vice
10 President of Support Services and Vice President of Environment and Safety. I have held
11 various positions in public affairs, strategic planning, demand
12 forecasting and market research. I have testified before this Commission on previous
13 occasions.

14 I graduated from the University of Michigan in 1976 with a Bachelor's degree in
15 industrial engineering and in 1977 received my Master's degree in industrial engineering
16 and operations research from the University of California at Berkeley.