# DEMAND-SIDE MANAGEMENT PROGRAMS ANNUAL SUMMARY

Program Years 1994-1997 May 2006



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#### **EXECUTIVE SUMMARY**

SoCalGas's Demand-Side Management (DSM) activities in 2005 were limited to carryover commitments from program years 1994 through 1997.

Decision 05-10-041 adopts settlement agreements that pertain to all outstanding DSM shareholder earnings claims for Program Years ("PY") 1994, 1995, 1996, 1997, 1998 and 1999. As part of the Settlement Agreement with the Division of Ratepayer Advocates (formerly Office of Ratepayer Advocates), SoCalGas will submit the final ninth year retention studies for PY96 and PY97. SoCalGas submitted the agreed upon studies on March 1, 2006. This year, the DSM Annual Summary and Technical Appendix encompasses primarily a discussion on the Ninth Year Retention Studies for PY96 and PY97.

<u>Section II</u> would normally describe both the residential and nonresidential DSM <u>Conservation/ Energy Efficiency Programs</u>. SoCalGas did not implement any new programs in 2005, however there were minor program activities in 2005 related to prior year(s) programs (or "pre-1998" programs).

<u>Section III</u> would normally describe both the residential and nonresidential DSM <u>Load</u> <u>Management Programs.</u> There were no activities to report for 2005.

<u>Section IV</u> would normally describe the <u>Fuel Substitution Programs</u> offered, however SoCalGas did not carryover any prior years' program activities into 2005.

<u>Measurement, Forecasting and Regulatory Reporting</u> activities discussed in <u>Section VI</u> continued to play an important role in SoCalGas 's DSM efforts. Studies agreed to in past proceedings were completed or continued in 2005 to determine program achievements and successes.

<u>Section VII</u> describes <u>Other Demand-Side Management</u> activities. There were no activities to report for 2005.

<u>Section VIII</u> Not applicable since the Settlement supercedes the earnings claim. See D.05-10-041 for the final settlements.

Lastly, <u>Section IX Miscellaneous</u> discusses the financing rate program and other pre-1998 program commitments as ordered in D.97-09-117.

Note that there is no separate Technical Appendix for this report as all necessary information has been incorporated.

### **CONSERVATION/ENERGY EFFICIENCY**

### **LOAD MANAGEMENT**

### **Residential Programs**

Not applicable.

### **Nonresidential Programs**

### **FUEL SUBSTITUTION**

### LOAD RETENTION AND LOAD BUILDING

# MEASUREMENT, FORECASTING, AND REGULATORY REPORTING

#### Introduction

As a result of the M&E Phase in the DSM OIR, the CPUC adopted a comprehensive set of protocols for measuring *ex post* DSM program savings and for linking the results of those measurements to utility earnings. PY94 was the first year for which the adopted M&E Protocols were implemented. These M&E Protocols are updated during the Annual Earnings Assessment Proceeding (AEAP) as a result of recommendations made based on completed utility impact evaluations.

Decision 05-10-041 adopts settlement agreements that pertain to all outstanding DSM shareholder earnings claims for Program Years ("PY") 1994, 1995, 1996, 1997, 1998 and 1999. As part of the Settlement Agreement with the Division of Ratepayer Advocates (formerly Office of Ratepayer Advocates), SoCalGas will submit the final ninth year retention studies for PY96 and PY97. SoCalGas submitted the agreed upon studies on March 1, 2006. This year, the DSM Annual Summary and Technical Appendix encompasses primarily a discussion on the Ninth Year Retention Studies for PY96 and PY97.

#### **Program Measurement**

Program measurement is the set of activities needed to determine the load impacts, persistence, and performance of existing individual programs or groups of programs, as well as activities needed to conduct process evaluations on existing programs. Associated data collection, analysis, and management, long-run program tracking, (statewide measurement studies), and projects that study DSM program measurement methodologies are also contained in this category. Program measurement includes demand-reducing, load management, and fuel substitution.

SoCalGas is committed to the measurement and evaluation process for all of its demand-side management programs. SoCalGas conducts program evaluation for two primary reasons: (1) to capture sufficient data to estimate actual load impacts resulting from the implementation of DSM programs as mandated by the M&E Protocols, and (2) to capture information that will allow SoCalGas to improve the effectiveness and efficiency of existing programs and to develop new programs in the future (process evaluation).

The third/fourth year retention studies were completed per the schedule established in Table 8B of the M&E Protocols.

This section provides information that follows the order in which studies are presented in Tables 6.1 and TA-6.1 per the DSM Reporting Requirements Manual, Sixth Edition.

#### **Retention Studies**

Residential Weatherization Retrofit Incentives Program

#### Retention Study

There is no retention study required.

Residential Appliance Efficiency Incentives Program: High Efficiency Lighting

#### **Retention Study**

There is no retention study required.

Residential Appliance Efficiency Incentives Program: High Efficiency Refrigeration

#### **Retention Study**

There is no retention study required.

Commercial Energy Efficiency Incentives Program

#### **Retention Study**

1996 COMMERCIAL ENERGY EFFICIENCY INCENTIVES PROGRAM
Ninth Year Retention Evaluation
Study number 720A
ASW Engineering Management Consultants, Inc.
January 2006

. The California Demand Side Management Advisory Committee (CADMAC) measurement and evaluation (M&E) Protocols require Retention Studies at specific retention years depending on the program. The purpose of the Retention Study is to collect data to determine the retention and effective useful life (EUL) for the primary measures in the program. This involves measuring the proportion of measures still in place, and operational. The retention information along with considerations of time since program participation provides the basis for development of the ex post EUL. The ex post EUL is then statistically compared with the ex ante EUL.

This study is the Measure Retention Study for the 1996 Commercial Energy Efficiency Incentives (EEI) Program operated by Southern California Gas Company (SoCalGas). This report includes the tables required by the M&E Protocols.

An examination of SoCalGas' Commercial EEI program database presented clear information with regard to what measures were to be examined in accordance with protocol requirements. Cooking measures alone constituted 75% of expected therm savings. This means that the only measures to be examined in the retention study are the cooking measures.

A stratified sampling plan was utilized to ensure the sample obtained the highest precision based upon expected energy savings while also ensuring representation of the smaller saving sites. The initial sampling was then winnowed to those sites that were part of the first year load impact study, as required by the Protocols for the SoCalGas retention studies. A total of 200 sites were visited to determine the retention of the cooking measures indicated in the program database.

See the econometrics portion of the report for a description of the modeling and data methods.

The report has been posted to the CALMAC website and can be downloaded from www.calmac.org.

#### Industrial Energy Efficiency Incentives Program

#### Retention Study

There is no retention study required.

Fuel Substitution Program

#### **Retention Study**

There is no retention study required.

Agricultural Energy Efficiency Incentives Program

#### Retention Study

There is no retention study required.

Residential Energy Management Services Program

#### Retention Study

There is no retention study required.

Residential New Construction Program

#### **Retention Study**

There is no retention study required.

#### Nonresidential New Construction Program

#### Retention Study

There is no retention study required.

#### Residential Direct Assistance Program

#### Retention Study

There is no retention study required.

Commercial Energy Management Services Program

#### Retention Study

There is no retention study required.

Industrial Energy Management Services Program

Retention Study

There is no retention study required.

Agricultural Energy Management Services Program

Retention Study

There is no retention study required.

#### **Statewide Measurement Studies**

The M&E Protocols adopted in D. 93-05-063 in the DSM OIR in May 1993 made provision for CADMAC and also for CADMAC funding of nine statewide studies. To be consistent with the Interim Opinion on Measurement and Evaluation Cost Containment Rules (D.93-10-063), the four California utilities determined that CADMAC funding would come from the one percent funding allocated for CCIG since there was some duplication of statewide efforts.

SoCalGas personnel are also subcommittee members on the other seven statewide subcommittees.

#### **Retrofit Modeling Subcommittee**

The subcommittee was inactive in 2005.

#### New Construction Modeling Subcommittee

The subcommittee was inactive in 2005.

#### Persistence Subcommittee

The subcommittee was inactive in 2005.

#### **Base Efficiency Subcommittee**

The subcommittee was inactive in 2005.

#### Measure Cost Subcommittee

The subcommittee was inactive in 2005.

#### Residential High Efficiency Refrigerator Subcommittee

The subcommittee was inactive in 2005.

#### Residential High Efficiency Lighting Subcommittee

The subcommittee was inactive in 2005.

#### Market Effects Subcommittee

The subcommittee was inactive in 2005.

#### **Process Studies**

No process studies were conducted in 2005.

#### **Regulatory Compliance & Reporting**

Regulatory Compliance and Reporting is designed to capture activities that are undertaken to meet regulatory reporting oversight, and other obligations and that are not included in Program Measurement and Demand-Side Forecasting and Planning. This category has two subcategories: (1) Regulatory Reporting and Support, and (2) Regulatory Oversight.

#### Regulatory Reporting and Support

Regulatory Reporting and Support consists of those activities needed to verify, collect, and report descriptive and technical information related to the achievements and scope of all authorized DSM programs. Examples are annual DSM reports, filings for shareholder earnings and other DSM proceedings (except CADMAC) including workshop participation, testimony, hearings, and data requests and responses.

#### Regulatory Reports

SoCalGas filed its Annual Summary of DSM Activities in May 2005 as required by the Commission. SoCalGas worked with regulatory staffs in providing information as requested in an open and timely manner.

#### Shareholder Incentives

Decision 05-10-041 adopts settlement agreements that pertain to all outstanding DSM shareholder earnings claims for Program Years ("PY") 1994, 1995, 1996, 1997, 1998 and 1999. As part of the Settlement Agreement with the Division of Ratepayer Advocates (formerly Office of Ratepayer Advocates), SoCalGas will submit the final ninth year retention studies for PY96 and PY97. SoCalGas submitted the agreed upon studies on March 1, 2006. This year, the DSM Annual Summary and Technical Appendix encompasses primarily a discussion on the Ninth Year Retention Studies for PY96 and PY97.

#### Regulatory Oversight

Regulatory oversight consists of activities related to the administrative costs associated with running the California Demand-Side Management Advisory Committee (CADMAC), the costs of the Commission's Energy Division audits and analysis, and the funds devoted to the verification of utility DSM earnings managed by the Commission's Office of Ratepayer Advocates (ORA).

#### **CADMAC Administration**

The CADMAC is comprised of the four major energy utilities, ORA, the Energy Division, the California Energy Commission, California Institute for Energy Efficiency, Lawrence Berkeley Laboratory/Energy and Environment Division, and Natural Resources Defense. CADMAC responsibilities are outlined in Appendix B of the adopted M&E Protocols. The purpose of the group is to provide a forum for presentations, discussions, and review of DSM program measurement studies underway or completed, to coordinate the development and implementation of measurement studies common to all or most of the utilities, and to facilitate the development of effective, state-of-the-art protocols for measuring and evaluating the impacts of DSM programs.

In 2005, SoCalGas participated in CADMAC meetings. One informational filing was made that updated the Commission on the status of the statewide study efforts and provided summary information on unanimous retroactive waivers granted by CADMAC. In 2005, SoCalGas will continue to actively participate in the CADMAC and participating on the other subcommittees as necessary.

#### **ORA Evaluation and Analysis**

In the Collaborative Settlement Agreement adopted in 1990, SoCalGas and the other California utilities committed to contribute funding to a CPUC/ORA evaluation and analysis process. SoCalGas has participated in this activity since 1990, and will continue to do so in 2005. The ORA has ultimate discretion over the use of these funds.

#### **AEAP Settlement**

Decision 05-10-041 adopts settlement agreements that pertain to all outstanding DSM shareholder earnings claims for Program Years ("PY") 1994, 1995, 1996, 1997, 1998 and 1999. As part of the Settlement Agreement with the Division of Ratepayer Advocates (formerly Office of Ratepayer Advocates), SoCalGas will submit the final ninth year retention studies for PY96 and PY97. SoCalGas submitted the agreed upon studies on March 1, 2006. This year, the DSM Annual Summary and Technical Appendix encompasses primarily a discussion on the Ninth Year Retention Studies for PY96 and PY97.

TABLE 6.1 MEASUREMENT, FORECASTING, AND REGULATORY REPORTING EXPENDITURES (2005)

		2005	
	Authorized	Budgeted	Actual
PROGRAM MEASUREMENT			
Retention Studies			\$66,536
Statewide Measurement Studies			\$0
Process Studies			\$0
Other			\$0
Subtotal			\$66,536
DEMAND-SIDE FORECASTING & PLANNING <sup>2</sup>			
Load Metering Studies			
CEC Data Collection Plan			\$0
Other Load Metering			\$0
Subtotal			\$0
Saturation Surveys			
CEC Data Collection Plan			\$0
Other Saturation Surveys			\$0
Subtotal			\$0
Market Assessment and Other Research			\$0
New Technology Evaluation			\$0
Long Range Forescasting and Planning			\$0
Subtotal Forecasting and Planning			\$0
REGULATORY COMPLIANCE & REPORTING			
Regulatory Reporting and Support			\$0
Regulatory Oversight			\$0
Subtotal			\$0
TOTAL MFFR			\$66,536

TABLE TA-6.1 PROGRAM MEASUREMENT COSTS (2005)

	Program	Study	Exp	enditures
	Year	ID		
RETENTION STUDIES				
Residential Weather Retrofit Incentives	1995	N/A		
Residential Weather Retrofit Incentives	1996	N/A		
Residential Weather Retrofit Incentives	1997	N/A		
Residential Appliance Efficiency Incentives				
Compact Fluorescents	1994	N/A		
Compact Fluorescents	1995	N/A		
Compact Fluorescents	1996	N/A		
Compact Fluorescents	1997	N/A		
High Efficiency Refrigeration	1994	N/A		
High Efficiency Refrigeration	1995	N/A		
High Efficiency Refrigeration	1996	N/A		
High Efficiency Refrigeration	1997	N/A		
C/I/A Energy Efficiency Incentives				
Commercial EEI Programs	1994	N/A		
Commercial EEI Programs	1995	N/A		
Commercial EEI Programs	1996	720A	\$	66,536
Commercial EEI Programs	1997	N/A		
Industrial EEI Programs	1994	N/A		
Industrial EEI Programs	1995	N/A		
Industrial EEI Programs	1996	N/A		
Industrial EEI Programs	1997	N/A		
Agricultural EEI Programs	1995	N/A		
Agricultural EEI Programs	1996	N/A		
Agricultural EEI Programs	1997	N/A		
Retrofit Energy Efficiency Subtotal			\$	66,536
Fuel Substitution Program	1997	N/A		
Residential New Construction	1994	716A		
Residential New Construction	1995	N/A		
Residential New Construction	1996	N/A		
Nonresidential New Construction	1994	N/A		
Nonresidential New Construction	1995	718A		
Nonresidential New Construction	1996	N/A		
Nonresidential New Construction	1997	N/A		
New Construction Subtotal				\$0

TABLE TA-6.1 PROGRAM MEASUREMENT COSTS (2005)

	Program	Study	Expe	nditures
	Year	ID		
Residential Energy Management Services	N/A	N/A		
Commercial Energy Management Services	N/A	N/A		
Industrial Energy Management Services	N/A	N/A		
Energy Management Services Subtotal				\$0
Direct Assistance	1994-1997	N/A		
Direct Assistance Subtotal				\$0
Retention Studies Subtotal			\$	66,536
PROCESS AND OTHER				
Process and Other Studies Subtotal				
STATEWIDE STUDIES				
Modelling Standards Retrofit Programs		N/A		
Modelling Standards New Construction Programs		N/A		
Persistence Studies		N/A		
Base Efficiency Studies		N/A		
Measure Cost Study		N/A		
Residential High Efficiency Refrigerator Studies		N/A		
Residential High Efficiency Lighting Studies		N/A		
Quality Assurance Standards for Metering & Monitoring Equipment Market Effects Studies		N/A		
Statewide Study Subtotal		N/A		
TOTAL PROGRAM MEASUREMENT			\$	66,536

TABLE TA-6.1 PROGRAM MEASUREMENT COSTS (2003)

	Program	Study	Exp	enditures
	Year	ID		
RETENTION STUDIES	4005	A1/A		
Residential Weather Retrofit Incentives	1995	N/A		
Residential Weather Retrofit Incentives	1996	N/A		
Residential Weather Retrofit Incentives	1997	N/A		
Residential Appliance Efficiency Incentives				
Compact Fluorescents	1994	N/A		
Compact Fluorescents	1995	N/A		
Compact Fluorescents	1996	N/A		
Compact Fluorescents	1997	N/A		
High Efficiency Refrigeration	1994	N/A		
High Efficiency Refrigeration	1995	N/A		
High Efficiency Refrigeration	1996	N/A		
High Efficiency Refrigeration	1997	N/A		
C/I/A Energy Efficiency Incentives				
Commercial EEI Programs	1994	N/A		
Commercial EEI Programs	1995	N/A		
Commercial EEI Programs	1996	720A	\$	66,536
Commercial EEI Programs	1997	N/A		
Industrial EEI Programs	1994	N/A		
Industrial EEI Programs	1995	N/A		
Industrial EEI Programs	1996	N/A		
Industrial EEI Programs	1997	N/A		
Agricultural EEI Programs	1995	N/A		
Agricultural EEI Programs	1996	N/A		
Agricultural EEI Programs	1997	N/A		
Retrofit Energy Efficiency Subtotal				\$66,536
Fuel Substitution Program	1997	N/A		
Residential New Construction	1994	716A		
Residential New Construction	1995	N/A		
Residential New Construction	1996	N/A		
Nonresidential New Construction	1994	N/A		
Nonresidential New Construction	1995	718A		
Nonresidential New Construction	1996	N/A		
Nonresidential New Construction	1997	N/A		
New Construction Subtotal				\$0
Residential Energy Management Services	N/A	N/A		
Commercial Energy Management Services	N/A	N/A		
Industrial Energy Management Services	N/A	N/A		
Energy Management Services Subtotal	,,			\$0
Direct Assistance	1994-1997	N/A		
Direct Assistance Subtotal				\$0
Retention Studies Subtotal			\$	66,536
PROCESS AND OTHER				
Process and Other Studies Subtotal				
STATEWIDE STUDIES				
Modelling Standards Retrofit Programs		N/A		
Modelling Standards New Construction Programs		N/A		
Persistence Studies		N/A		
Base Efficiency Studies		N/A		
Measure Cost Study		N/A		
Residential High Efficiency Refrigerator Studies		N/A		
Residential High Efficiency Lighting Studies		N/A		
Quality Assurance Standards for Metering & Monitoring Equipment		N/A		
Market Effects Studies		N/A		
Statewide Study Subtotal				
TOTAL PROGRAM MEASUREMENT			\$	66,536

### TABLE TA-6.2 DEMAND-SIDE FORECASTING AND PLANNING EXPENDITURES (2005)

The CEC Data Collection and Analysis activities are documented in the Market Assessment and Evaluation section of the Energy Efficiency Programs, Annual Summary and Technical Appendix 2005 Results-2006 plans.

### **OTHER DEMAND-SIDE MANAGEMENT**

#### SHAREHOLDER EARNINGS

Decision 05-10-041 adopts settlement agreements that pertain to all outstanding DSM shareholder earnings claims for Program Years ("PY") 1994, 1995, 1996, 1997, 1998 and 1999. As part of the Settlement Agreement with the Division of Ratepayer Advocates (formerly Office of Ratepayer Advocates), SoCalGas will submit the final ninth year retention studies for PY96 and PY97. SoCalGas submitted the agreed upon studies on March 1, 2006. This year, the DSM Annual Summary and Technical Appendix encompasses primarily a discussion on the Ninth Year Retention Studies for PY96 and PY97.

#### **MISCELLANEOUS**

#### **Pre-1998 Commitments**

The Commission in Decision 97-09-117, Ordering Paragraph 12, directed PG&E, SDG&E, SCE, and SoCalGas (collectively referred to as "utilities") to modify the scope and content of their Annual DSM Reports to include a separate section identified as pre-1998 program commitments. Table 9-1 provides the 2005 expenditures associated with pre-1998 commitments. An explanation of the commitments is provided below.

#### **Residential Programs**

The pre 1998 Residential Energy Efficiency programs actual expenditures reflect payments made for activities/services related to the DSM Bidding Pilot Program.

#### **Nonresidential Programs**

No activities to report for 2005.

#### **New Construction Programs**

No activities to report for 2005.

#### **Load Management**

No activities to report for 2005.

#### Other DSM

No activities to report for 2005.

#### **Southern California Gas Company**

Year-to-Date Thru: December 2005

#### **Demand-Side Management Monthly Expenditure Report**

(Pre-1998 DSM Commitments Only)

Annual Estimated Commitments<sup>1</sup> & 2005 Year-To-Date Actuals (\$ in thousands)

		2005				
		G	ias	Total		
	Program Category	Commitments	YTD Actual	Commitments	YTD Actual	
	(a)	(b)	(c)	(b) = (d)	(c)= (e)	
1	Energy Efficiency					
2	Residential					
3	Appliance Efficiency Incentives					
4	DSM Bidding Pilot 4	4807	0	4807	0	
5	Energy Management Services					
6	New Construction					
7	Information					
8	Subtotal	4807	0	4807	0	
9	Nonresidential					
10	Energy Efficiency Incentives					
11	DSM Bidding Pilot					
12	Energy Management Services					
13	New Construction					
14	Information					
15	Subtotal					
16	Energy Efficiency Subtotal	4807	0	4807	0	
17						
18	Low Income					
19	Non-mandatory					
20	Mandatory					
21	Low Income Subtotal					
22						
23	Load Management					
24						
25	Fuel Substitution					
26						
27	Load Retention & Load Building					
28						
29	MFRR					
30	Program Measurement	30	93	30	93	
31	Demand Forecasting & Planning					
32	Market Research					
33	Reg. Compliance & Reporting <sup>3</sup>	25	0	25	0	
34	MFRR Subtotal	55	93	55	93	
35						
36	Other DSM					
37						
38	DSM Total (Pre-1998 Commitments)	4862	93	4,862	93	
39	Low Income Total Only					
40	DSM w/o Low Income Total	4862	93	4,862	93	
41	Adjusted Pre-1998 DSM B/A as of		17,375			
42	R.01-08-028 (Single Family Rebate		(1,200)			
43	R.01-08-028 (MA&E) - D.03-04-05		(585)			
44	EE Winter Program - PFM of D.03-	12-060)	(10,400)			
45	Less Total Actuals - Dec 2004		(88)			
46	Less Total Actuals - 2005		(93)			
47	Adjusted Pre-1998 DSM B/A Balan	ice 2	5,009			
48						

<sup>1 -</sup> Figures represent estimated costs associated with pre-1998 DSM activities including customer incentives, expected admin. costs, unpaid invoices and all other encumbrances.

<sup>50 2 -</sup> Preliminary, unaudited, w/ interest.

<sup>51 3 -</sup> Includes Pilot Bidding administrative costs.

<sup>52 4 -</sup> SoCalGas has updated its Pilot Bidding commitments and reviewed the funding requirements for MFRR in preparation for the 10/7/2004 Petition for Modification to D.03-12-060 in R.01-08-028.

All available and uncommitted Pre-1998 DSM funds were used to provide the additional funding for the increased gas measure incentives for selected 2004-2005 gas energy efficiency programs in this Petition for Modification.