Application of San Diego Gas & Electric
Company (U-902-M) for Approval of
Demand Response Programs and Budgets
for Years 2006 through 2008.

Application 05-06-___

CHAPTER IV

PREPARED DIRECT TESTIMONY

OF

BRADLEY M. BAUGH

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

JUNE 1, 2005

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PREPARED DIRECT TESTIMONY

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**INFORMATION TECHNOLOGY (IT) SYSTEM MODIFICATIONS AND
ASSOCIATED COSTS**

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PURPOSE

The purpose of my testimony is to describe SDG&E's proposed information technology System Enhancement to support the 2006-2008 proposed demand response program portfolio. The Appendix to my testimony provides projected capital and operation and maintenance ("O&M") costs.

I.   BACKGROUND

To effectively support the proposed demand response programs, significant new and enhanced automation is required. In the past, most of the data management and billing functions associated with these programs have been performed manually. For some programs, there have been small stand-alone tracking applications developed to assist the program managers in their day-to-day responsibilities; these include customer eligibility determination, program enrollment, reporting and other internal as well as customer support activities. For some programs, SDG&E's Customer Information System has been used to provide billing charges, program incentives and assess program penalties. Providing this information has required changes to the system, which have been customized to meet only a particular program's needs. To-date, this approach has been sufficient, however, the

1   expanded scope and framework of programs over a multi-year cycle, and the integration of

2   the various programs, will require expanded and enhanced automation of the data

3   management, billing system and customer support systems.

4 **II.   OVERALL SYSTEM ENHANCEMENTS TO SUPPORT ALL DEMAND**
5   **RESPONSE PROGRAMS**

6   SDG&E has identified four new specific components of the IT system infrastructure

7   that are necessary to support the proposed portfolio of programs. These components are:

8   1) Customer Relationship Management ("CRM"); 2) enhancements to the existing

9   operational systems; 3) reporting; and, 4) interfaces to external vendors. Each of these

10   components will be integrated to provide a more robust application for the demand response

11   programs. The architecture will be designed to meet most of the currently-identified needs

12   of the proposed programs; however, some programs may still require specific individual

13   changes or configurations, which are documented in the following section.

14   Below are the general infrastructure requirements:

15   1) The Customer Relationship Management CRM system will automate a number of

16   separate, manual processes tailored to the needs of each program, including program

17   traits, customer enrollments and event performance. These controls will facilitate

18   targeting accounts and performing account setup. Customer communications such as

19   program mailings, emails, paging and phone messages will be conducted, monitored

20   and tracked through this tool.

21   2) Enhancements to the existing operational systems include three main functional

22   areas all included in the Customer Information System. The functional areas are

23   billing, customer information and customer service orders. To support SDG&E's

24   proposed portfolio of demand response programs, the SDG&E customer information

system requires a flexible, centralized function that controls and displays program characteristics as well as a customer's current and historical enrollment status for demand reduction programs. This information will then be used by the billing and service order functions to determine how to process the customer's bills as well as service orders specific to the program. The customer information system will be modified to use the centralized data to inform organizations within SDG&E of a customer's participation in demand reduction programs.

3) Reporting will be conducted using a data warehouse approach. The warehouse will collect data from the CRM as well as the existing operational systems. Internal operations will be in a position to automate reporting of demand usage behavior, customer trends and tracking as well as monitor the success of demand reduction programs for the individual customer and how they perform against regulatory requirements.

4) Interfaces to and from third party subcontractors will be managed through the CRM. As programs are outsourced for third-party administration (i.e., SDG&E's current COMVERGE program), implementing secure, automated interfaces with subcontractors becomes very important in order to ensure that customer-specific information and data necessary for billing and other functions is not compromised. Providing customer information to the third party implementers and receiving updates on customer participation will be necessary for SDG&E to accurately manage the programs. Interfaces with SDG&E's existing current contractors must also be modified to work within the new architecture.

1 **III. BILLING SYSTEM COMMON ARCHITECTURE TO SUPPORT ALL**
2 **DEMAND RESPONSE PROGRAMS**

3 The SDG&E billing system requires modifications to create a common architecture

4 to process customer specific usage information and to evaluate customer response to the

5 various demand response programs notification and activation events. These customer

6 performance records will be stored and maintained within the SDG&E billing system and

7 used to calculate program specific charges, incentives, and penalties. In addition, these

8 performance records will be made available to the CRM system for program performance

9 monitoring and reporting. These proposed billing system enhancements are required to

10 support the following demand response programs:

11 **A. C&I Peak Day 20/20**

12 C&I Peak Day 20/20 is an existing SDG&E program. Billing system enhancements

13 will be needed to support the implementation of the new billing common system

14 architecture.

15 **B. Voluntary CPP & CPP-E**

16 Voluntary CPP & CPP-E are existing SDG&E programs. Billing system

17 enhancements will be needed to support the implementation of the new billing system

18 common architecture.

19 **C. DBP**

20 The Demand Bidding Program is an existing program. Due to the expected increase

21 in program participation, system enhancements will be needed to automate the incentive

22 calculation, bill presentment, and financial reporting. In addition, billing system

23 enhancements will be needed to support the implementation of the new billing system

24 common architecture.

D.   DBP -E

The Demand Bidding Program DBP-E is the re-instatement of a previous program. Due to expected program participation, system enhancements will be needed to automate the incentive calculation, bill presentment, and financial reporting. In addition, billing system enhancements will be needed to support the implementation of the new billing system common architecture.

E.   BIP

The Base Interruptible Program is an existing program. Due to expected program participation, system enhancements will be needed to automate the incentive and penalty calculations, aggregator processing, bill presentment, and financial reporting. In addition, billing system enhancements will be needed to support the implementation of the new billing system common architecture.

This concludes my prepared direct testimony.

QUALIFICATIONS

My name is Bradley M. Baugh and I am currently employed by San Diego Gas & Electric Company (SDG&E). My business address is 8335 Century Park Court, San Diego, CA 92123-1569.

My present position is Manager in the Information Technology Customer Care Department of SDG&E. I have been employed by SDG&E since 2003. Previous positions relevant to my testimony include Utility Customer Care Practice Manger with Accenture from 1992 – 1997, Customer Information Systems Architect with GS Lyons Consulting from 1998 – 2000, and Senior Consultant with Sierra Systems Consulting Group from 2000 – 2002.

I received a Bachelor's Degree in Business Administration (Finance & Banking), a Bachelor's Degree in Business Administration (Economics), and a Bachelor's Degree in Accountancy from the University of Missouri – Columbia in 1992.

I have not previously testified before the California Public Utilities Commission.

APPENDIX

| Cost Type | Cost Element | Non Labor | | | | Labor OH | Non Labor OH | TOTAL |
		Labor	Contract Labor	Hardware				
Capital	DRP Program Management System Development	$297,791	$752,019	$180,000		$193,416	$34,578	$1,457,804
Capital	Operational System Enhancements	$116,966	$409,379	$0		$75,969	$15,188	$617,502
Subtotal - Capital		**$414,757**	**$1,161,398**	**$180,000**		**$269,385**	**$49,766**	**$2,075,306**
O&M	System's Implementation Support	$82,879	$0	$0		$53,830	$0	$136,709
TOTAL		**$497,636**	**$1,161,398**	**$180,000**		**$323,215**	**$49,766**	**$2,212,015**