## PACIFIC GAS AND ELECTRIC COMPANY General Rate Case 2011 Phase I Application 09-12-020 Data Response

PG&E Data Request No .:	DRA_164-02			
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#### SUBJECT: INFORMATION TECHNOLOGY

#### QUESTION 2

The savings and/or benefit which quantify why the technology projects being requested will be more efficient than current operations in terms of dollar saving to ratepayers (show \$ savings).

Although the Commission may have approved a mandated project, the original requests, savings estimates and justifications most likely did not emanate from the CPUC. Show the savings timeline associated with AM/FM, AMI and other projects.

There are 377 capital projects in the RO model. Address each of the projects with capital costs in the 2010 through 2013 time frame.

#### ANSWER 2

PG&E understands this question to seek: (i) the savings timeline associated with AM/FM, AMI and other projects mandated by the CPUC and (ii) the projected savings associated with the IT projects in the RO model with capital costs for 2010 through 2013. Each of these issues is addressed, in turn, below.

# <u>Issue 1:</u> Savings associated with AM/FM, AMI and other projects mandated by the CPUC.

The expected savings associated with the SmartMeter program, otherwise known as Advanced Metering Infrastructure (AMI), were addressed in the detailed cost/benefit analyses prepared by PG&E and evaluated as part of the proceedings before the CPUC to address the SmartMeter program. The cost/benefit information for these programs can be found in the original program applications:

 Application 05-06-028, Exhibit (PG&E-5), Chapter 1, Business Case Results and Present Value Model Methodology; and • Application 07-12-009, Exhibit (PG&E-3), SmartMeter Program Upgrade, Project Costs and Benefits.

Ultimately, the CPUC addressed the cost/benefit of the SmartMeter program in Decisions 06-07-027 and 09-03-026. (See, e.g., D.06-07-027, pp. 28-30, and D.09-03-026, pp. 152-154.)

The projects (or types of projects) mentioned in this request (e.g., AM/FM and other projects mandated by the CPUC) are addressed in response to issue 2 below. As will be explained below, the primary driver on these mandatory projects is to comply with regulatory directives and not to drive cost savings.

# <u>Issue 2:</u> Savings associated with the IT projects in the RO model with capital costs for 2010 through 2013.

As a point of clarification, this question suggests that there are 377 IT projects with capital in the RO model. For the reasons explained in Attachment GRC2011\_Ph-1\_DR\_DRA\_164-Q02Atch01 to this response, PG&E believes this question should refer to 138 IT programs. The remainder of this response concerns these 138 programs.

# ISTS Projects in the RO Model

The 138 programs/projects aligned to the ISTS organization include programs/projects associated with the different IT Portfolios: the IT Baseline Portfolio; the IT Lifecycle Portfolio; the IT Optimization Portfolio; and, the Functional Area IT Portfolio. The breakdown of these programs/projects by portfolio is reflected in the Table below.

Line No.	IT Portfolio	No. of Programs/Projects
1	IT Baseline	16
2	IT Lifecycle	16
3	IT Optimization	2
4	Functional Area IT Programs	102
5	Unknown	2
6	Total	138

# Number of Programs/Projects by IT Portfolio

The drivers behind the technology work requested in the 2011GRC projects vary among the different IT portfolios and among the different IT programs. While cost savings is an important driver for many of these programs, it is by no means the only driver or even the most important driver. Rather, the programs included in the GRC provide significant

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benefits to PG&E and its customers in areas other than cost savings, such as improving customer service, improving or expanding business operations, increasing worker and customer safety, improving regulatory responsiveness, maintaining gas and electric systems reliability, and improving environmental stewardship. (How these other drivers affect PG&E's IT forecast is discussed below and shown on Attachment GRC2011\_Ph-I\_DR\_DRA\_164-Q02Atch02.) Accordingly, PG&E cannot quantify savings associated with all of the technology programs requested in this GRC because not all of the programs will result in cost savings.

PG&E's business and IT professionals work together to develop technology programs that will deliver important, tangible benefits to PG&E and their customers and that will help PG&E remain competitive. The utility industry is increasingly driven by and reliant upon technology in order to efficiently and effectively deliver the products and services required by a leading utility. The projects included in the GRC represent PG&E's efforts to develop and maintain the technology that enable PG&E to deliver products and services in an increasingly complex technical and business environment. The technology projects included in the GRC request are a reflection of what PG&E believes that a leading utility needs to do today in order to successfully operate in a complex, competitive environment.

Following is a discussion of the different program drivers, organized by IT portfolio.

## IT Baseline Portfolio

The IT Baseline projects are the technology projects related to ongoing maintenance, operations and break/repair for PG&E's technology systems and infrastructure. These are the technology projects required to maintain the "status quo" operations. Thus, the primary driver behind the IT Baseline projects is not to achieve cost savings. Rather, this portfolio of work is driven by the need to maintain PG&E's technology environment and support the technology needs of all PG&E employees.

# IT Lifecycle Portfolio

The IT Lifecycle projects are the technology projects focused on replacing physical assets in order to maintain the status quo operational and reliability targets for all of PG&E's computing, networking and Supervisory Control and Data Acquisition (SCADA) systems.

Like baseline projects, the primary driver behind the Lifecycle projects is not to achieve cost savings. Rather, as described above, this portfolio of work is driven by the need to replace assets that are at the end of their useful life or that have otherwise have depleted value. While it is possible that PG&E may avoid some costs related to some of the IT Lifecycle projects (e.g., PG&E may replace an aging printer that is expensive to repair with a new device with lower maintenance costs), such avoided costs are not the primary driver of this work and PG&E has not quantified such avoided costs.

# IT Optimization Portfolio

IT Optimization projects are driven by PG&E's desire to continuously improve IT services within the organization and the overall IT environment. The IT Optimization projects are driven by better internal and external customer service, improved levels of IT reliability and availability, more efficient operations of IT related systems and processes, more streamlined operations,

Cost savings is often a result of the IT Optimization projects. In 2009, PG&E recognized approximately \$4.5 million in savings by replacing higher priced contract employees with lower cost full-time employees and, in 2010, PG&E expects approximately \$4.4 million in savings from other cost optimization efforts. PG&E's 2011 GRC forecasts for 2009 and 2010 reflect the savings generated by the IT Optimization projects.

#### Functional Area IT Portfolio

The diverse programs reflected in the Functional Area IT (FAIT) portfolio have a similarly diverse set of drivers. To reflect these different drivers, PG&E has prepared a matrix laying out the FAIT programs included in the RO model and the key drivers for each of those programs. The matrix is Attachment GRC2011-Ph-I\_DR\_DRA\_164-Q02Atch02.

PG&E has identified cost savings associated with 21, approximately 28%, of the FAIT programs that appear on the matrix. A description of the cost savings for each of these programs is included on Attachment GRC2011-Ph-I\_DR\_DRA\_164-Q02Atch03.

Of the 102 FAIT programs included in the RO model, 74 programs are included on the matrix. An accounting of the programs included in the matrix is shown in the Table below.

Accounting of the Programs in the RO Model and on the FAIT Project Driver Matrix

Line No.	Project Category	No. of Projects in RO Model	No. of Projects on Matrix
1	Projects in the RO model and on the matrix	70	70
2	Projects with no capital forecasts 2010- 2013	18	0
3	Projects listed individually in the RO model that have been combined in the ISTS request and on the matrix	9	4
4	Miscellaneous small technology projects	5	0
5	Total	102	74

The projects with no capital forecasts for 2010-2013 (line 2 above) have not been included on the matrix because this data request from DRA explicitly excluded them. The five miscellaneous small technology projects (line 5 above) are not included on the attached matrix, they are addressed below.

The key drivers included on the matrix are described as follows.

Mandatory Program / Improved Regulatory Responsiveness (Column F) -

Technology programs that PG&E will undertake in order to generate data, create reports, or otherwise provide information to comply with existing or forthcoming regulations. Additionally, implementing these technology programs is expected to help PG&E's business groups provide more accurate, complete and timely information in complying with regulatory and other legal requirements.

**Better Service for PG&E Customers (Column G)** - Technology programs that PG&E will undertake to help PG&E provide better service to PG&E customers.

**Improved or Expanded Operations (Column H)** - Technology programs that PG&E will undertake to lead to better, more effective business processes and operations. . For example, once the Business Intelligence program is implemented, PG&E project managers will be able to access project financial information themselves, freeing finance resources for higher level analysis and business support activities. **Improved Safety or Maintain Reliability (Column I)** - Technology programs intended to enhance the provision of safe gas and electric service to PG&E customers and programs designed to improve safety for PG&E's crews. This category also includes technology programs developed in order to maintain current levels of system reliability.

Keep Pace with Industry Changes / Replace Obsolete Systems or Equipment (Column J) - Technology programs required to keep pace with technological advancements or new business and operational developments in the utility industry. These programs also include initiatives to replace technology systems or equipment that no longer provides the functionality required by the business or that relies on equipment or applications that are no longer supported by the vendor.

**Improve Management Effectiveness (Column K)** - Technology programs designed to help PG&E better manage its business by giving employees access to better information and additional sources of information to drive more informed decisions, enhance business functions, and improve service within PG&E.

**Improve Environmental Stewardship (Column L)** - Technology programs that will be implemented to support PG&E's continuing commitment to protecting the environment and to help customers manage their energy usage.

**Cost Optimization (Column M)** - Technology programs that will result in cost savings or avoided costs, including programs designed to increase productivity and lower costs.

For those technology programs that list "Cost Optimization" as a primary driver, PG&E provides additional detail relative to the cost savings on Attachment GRC2011-Ph-I\_DR\_DRA\_164-Q02\_Atch03.

### Miscellaneous small technology projects

The miscellaneous small technology projects are included in the RO model but are not included on the program driver matrix. The miscellaneous small technology projects are minor enhancement projects to existing programs or systems and generally require fewer than 100 hours to complete. These minor enhancement efforts are an on-going part of PG&E's technology efforts and, as such, are implemented to address minor, specific technology needs that arise during regular business operations. Historically, these small technology projects have delivered high-value to the business for a relatively modest investment in time and materials.

Due to the nature of these projects, the specific requirements driving the small technology projects is not known at this time. These projects are developed and implemented to meet specific business needs as they arise and, therefore, PG&E cannot now predict the specific project drivers associated with these projects.