Application of San Diego Gas & Electric Company (U902M) for Authority, Among Other Things, to Increase Rates and Charges for Electric and Gas Service Effective on January 1, 2012.

Application of Southern California Gas Company (U904G) for authority to update its gas revenue requirement and base rates effective on January 1, 2012.

A.10-12-005 (Filed December 15, 2010)

A.10-12-006 (Filed December 15, 2010)

Application: A.10-12-006 Exhibit No.: SCG-214

PREPARED REBUTTAL TESTIMONY OF JAMES C. SEIFERT ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

OCTOBER 2011



SCG Doc#260232 Rebuttal: October 2011

TABLE OF CONTENTS

I. IN	FRODUCTION	1
II. O&	M – REBUTTAL TO DRA	1
A.	Overview	1
B.	Non-Shared Services	3
1.	2RE001 – Facility Operations and Rents	3
2.	2RE003 – Transportation Program	4
C.	Shared Services – Rents and Facility Operations	5
III. CA	PITAL EXPENDITURES	6
A.	Budget Code 653 – Redlands Headquarters Parking Lot	9
B.	Budget Code 653 – Monterey Park Data Center Master Plan	10
C.	Budget Code 653 – Facilities Energy Efficiency Projects	11
D.	Budget Code 7728 – NGV Refueling Stations	11
E.	Other Proposed Capital Projects	12
IV. SU	MMARY AND CONCLUSION	12
V. WI	TNESS QUALIFICATIONS	13

PREPARED REBUTTAL TESTIMONY OF

JAMES C. SEIFERT

ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

I. INTRODUCTION

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

The following rebuttal testimony regarding Real Estate, Land & Facilities ("REL&F") addresses the intervenor testimony dated September 2011 of:

- Division of Ratepayer Advocates ("DRA") in Exhibit DRA-23, and
- The Utility Reform Network ("TURN") in the Prepared Testimony of Jeffrey A. Nahigian.

DRA proposes adjustments to Southern California Gas Company's ("SCG's") Test Year 2012 forecasts for operations and maintenance ("O&M") expenses and capital expenditures. TURN presents its own analysis of capital expenditures. Section II addresses DRA's specific proposals for O&M in non-shared and shared service areas. Section III addresses both DRA's and TURN's specific proposals for capital expenditures.

II. O&M – REBUTTAL TO DRA

A. Overview

SCG requests a 2012 Total O&M forecast of \$42.064 million, which is a \$5.615 million reduction from base year 2009 cost levels, reflecting O&M cost savings generated primarily through the reduction in the Gas Company Tower lease. DRA proposes a 2012 Total O&M forecast of \$37.843 million, or reduction of \$4.221 million (10% decrease).

¹ See Exhibit SCG-14, p. 1, Table SCG-DGT-1.
² See Exhibit DRA-23, p. 6.

and known incremental needs because O&M costs are tied to things such as rents (which are often negotiated) and maintenance of existing and new facilities. Capital expenditures are also tied to predictable or known projects, such as parking lot safety enhancements or improvements and repairs for existing and new facilities, handled under blanket budget codes. These cost drivers and incremental needs are documented in direct testimony (Exhibit SCG-14) and supporting workpapers (Exhibits SCG-14-WP and SCG-14-CWP-R).

REL&F forecasts are generally tied to cost drivers (whether upward or downward)

In reviewing DRA's testimony, there was an absence of any discussions about SCG's explanations of cost drivers or incremental needs; therefore, it is difficult to understand whether DRA disputes any of the contextual support behind SCG's forecasts or whether DRA was simply focused on reducing the 2012 forecasts through alternate forecasting. The latter seems to be the case.

While DRA has 2010 recorded information from which to point discrepancies in 2010 forecasts versus 2010 recorded, SCG's forecasts were appropriately developed with information up to and including base year 2009. SCG's operational needs in REL&F are more reasonably supported by its 2012 forecasts, while DRA's forecasts, which have no contextual support, significantly underfund REL&F's ability to meet the O&M and capital needs to maintain and repair its offices, data center, customer payment centers, and operating bases, among other facilities used in the provision of service to its customers and territory. These are necessary and important costs, the funding for which should be based on the underlying specific needs as explained in testimony and workpapers, or an analysis of why those needs are not justified. DRA's forecasts do not reflect that approach and

therefore lack support. DRA's proposed reductions to SCG's O&M forecasts are addressed below.

B. Non-Shared Services

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

SCG proposes a 2012 forecast of \$17.682 million³ for non-shared O&M, whereas DRA recommends \$16.832 million,⁴ an \$850K reduction (or 4.8%). DRA recommends adjustments to three categories of non-shared costs: (1) 2RE001 (Facility Operations and Rents); (2) 2RE003 (Transportation Program). DRA bases its adjustments by noting that "2005 to 2010 total recorded expenses show fluctuations for the past three years."⁵

1. **2RE001 – Facility Operations and Rents**

SCG's forecast of \$17.167 million was based on forecasting described in workpapers. DRA proposes a 3-year average (2008-2010) to derive a forecast of \$16.697 million.

SCG's Rents forecast was based upon all contractual rent and right-of-way agreements in place as of 2009 with fixed contractual escalations for base rents.

Historically, these increases have been about 5% for facility leases. Right-of-way easement costs have gone up dramatically in recent years, as rates are set by various agencies such as the Bureau of Land Management. Increases for these easements was also estimated at 5% per year based on what was seen from 2008-2009. Facilities Operations forecasts

SCG Doc#260232 JCS - 3 Rebuttal: October 2011

³ See Exhibit SCG-14 at 1.

⁴ See Exhibit DRA-23 at 6.

See Id. at 15.

⁶ See Exhibit SCG-14-WP, p. 5.

⁷ See Exhibit DRA-23 at 14.

⁸ See Exhibit SCG-14 at 3.

⁹ See Id. at 3.

incremental costs in 2011 and 2012 for maintenance on five emission vapor recovery systems and water and energy conservation projects. ¹⁰

DRA's methodology of a 3-year average is not the better approach to forecasting costs for known fixed contractual obligations, rising easements costs, and the specific incremental facilities projects.

2. **2RE003 – Transportation Program**

The SCG's forecast of \$515K was based on forecasting described in workpapers (5-year average). DRA proposes a 3-year average (2008-2010) to derive a forecast of \$135K. 12

SCG's Transportation Program expansion has three main cost drivers:

- increasing the transportation subsidy offered to each employee from \$60 per month to \$75 per month;
- expanding the current rideshare program into the various SCG regions; and
- increasing the downtown Los Angeles parking subsidy, which is no longer part
 of the lease agreement at the Gas Company Tower.

A detailed description and itemization of all cost increases was provided to DRA in a data request response (see Attachment 1). SCG encourages employee participation in commuter programs aimed at reducing traffic, which is extremely heavy in Southern California. Further, the increase in parking subsidy is directly related to the new Gas Company Tower lease which was signed in 2010, which resulted in changes in parking terms and availability for employees.

1

2

3

4

5

6

8

9

10

11

12

13

14

15

16

17

18

19

20

21

SCG Doc#260232 JCS - 4 Rebuttal: October 2011

¹⁰ See Exhibit SCG-14-WP at 6.

¹¹ See Id. at 13

¹² See Exhibit DRA-23 at 15.

DRA's methodology of a 3-year average is not the better approach to forecasting costs in this area, as described above. Further, DRA's forecast will significantly underfund SCG's Transportation Program.

C. **Shared Services – Rents and Facility Operations**

SCG requests \$24.382 million for 2012 on a Book Expense basis, a reduction of \$6.438 million from the 2009 recorded cost ¹³ primarily due to the renegotiation of the lease at the Gas Company Tower. DRA disputes SCG's forecast for cost center 2200-2260 of \$750K (Total Incurred Cost basis), and proposes an alternate forecast of \$379K. Further, DRA disputes SCG's forecast for several cost centers under Facilities Operations, proposing to reduce SCG's forecast of \$4.467 million to \$3.226 million on a Total Incurred Cost basis. However, aside from deriving a lower forecast using a three-year average (2008-2010), DRA provides no specific arguments against the services housed in Shared Rents and Shared Facilities Operations.

SCG's direct testimony and workpapers describe the key cost drivers behind its 2012 forecasts: (1) reduction of Gas Company Tower lease costs (-\$10.6 million), (2) transfer of janitorial costs from Rents to Facilities Operations (\$800K offsetting between these two areas), (3) O&M increases for Monterey Park Data Center expansion (\$240K), and (4) transfer of REL&F management position from SDG&E to SCG (\$170K). 14 These are all captured in SCG's forecasts and support the necessary O&M labor and non-labor associated with providing workspace for employees and related equipment as well as to maintain those facilities, and to oversee these operations. Contrary to DRA's contention, SCG's forecasts are supported in this case and should be adopted.

1

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

See Exhibit SCG-14 at 1.
 See Exhibit SCG-14-WP at 24, 61, 53, and 86.

3

4

1

Both DRA and TURN propose significant decreases to SCG's capital expenditures forecasts for 2010, 2011, and 2012. The following compares the total capital expenditures forecasts proposed by each party:

5

(\$000)

	SCG	
2010	2011	2012
27,162	43,991	22,876
	DRA	
2010	2011	2012
21,644	25,587	11,163
	TURN	
2010 ¹	2011	2012
1,922	21,063	6,327
(5,518)	(18,404)	(11,713)
-20%	-42%	-51%
(25,240)	(22,928)	(16,549)
-93%	-52%	-72%

¹ But see Att. 3 (infrastructure & improvements blanket rec. 2010 data)

6

7

DRA proposes reductions to the following budget codes:

8

• 653 - Compton parking lot,

9

• 653 - Monterey Park Data Center master plan,

10

• 653 - Monterey Park exterior site improvements,

11

• 653 - Redlands headquarters parking lot,

12

• 653 - Spence St. remodel,

² TURN's Table 3 shows the 2011 reduction as \$21,063, but Table 1 shows \$22,929

3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

2

- 643 branch office ADA and ergonomics,
- 697 Gas Company Tower ("GCT") restack,
- 734 natural gas vehicles ("NGV") refueling stations,
- miscellaneous projects (<\$1 million). 15

DRA provides no analysis beyond general assertions that it received inadequate data request responses or that SCG failed to provide supportive documentation and justification for its capital expenditures requests. ¹⁶ SCG disagrees.

TURN proposes reductions to all of SCG's capital projects, but only provides specific analysis on four particular projects. TURN recommends using 2010 recorded amounts for the 2010 forecast for all budget codes. For 2011 and 2012, UCAN makes specific reductions or zeros out the capital forecasts for the following budget codes:

- 653 infrastructure and improvements blanket,
- 653 Anaheim building A chiller,
- 653 Compton parking lot,
- 653 Downey ERC chiller replacement,
- 653 facilities energy efficiency projects,
- 653 Monterey Park Data Center master plan,
- 653 Monterey Park Data Center generators,
- 653 Monterey Park exterior site improvements,
- 653 Redlands headquarters parking lot,
- 653 703 environmental/safety blanket,

SCG Doc#260232 JCS - 7 Rebuttal: October 2011

¹⁵ See Exhibit SCG-14 at 13

¹⁶ See e.g., Exhibit DRA-23 at 25-29.

- 643 branch office ADA and ergonomics,
- 2
- 697 GCT restack,
- 3
- 734 NGV refueling stations,
- 4
- miscellaneous projects (<\$1 million).¹⁷
- 5
- 6 testimony, and the forecasts were supported by the capital workpapers. Each capital project

Each of SCG's capital expenditures budget codes were fully explained in direct

- 7 was supported by its own detailed "Capital Project Workpaper," with the exception of
- 8
- miscellaneous projects under \$1 million. See Exhibit SCG-14-CWP-R. Each Capital
- 9
- Project Workpaper contains the following information beneath its forecasts:
- 10
- Business Purpose,
- 11
- Physical Description,
- 12
- Project Justification,
- 13
- Forecast Methodology, and

adequate funding for necessary capital projects.

- 14
- Schedule.
- 15
- 16
- 17
- 18
- 19
- 20 21
- 22
- ¹⁷ See Exhibit SCG-14 at 13.

Further, SCG responded in good faith to data requests seeking additional information

on its capital projects (see Attachment 1). Therefore, DRA's blanket statements regarding

the lack of sufficiency in SCG's case have no factual basis. In fact, DRA does not raise a

Workpapers. This further demonstrates that DRA was singularly focused on deriving lower

forecasts. Thus, SCG rejects the DRA's proposed capital forecast disallowances in total, as

DRA's alternate forecasts are not based on a better methodology and do not result in

single specific issue with respect to any detail contained in SCG's Capital Project

TURN likewise does not raise specific concerns with SCG's proposed capital expenditures, with the exception of four, which does not provide SCG with enough information to address the merits of the TURN's position regarding the remaining capital projects. Therefore, SCG maintains that its capital expenditures projects are justified and that its forecasts are reasonable compared to TURN's forecasts, which were derived by making an across-the-board 50% reduction to SCG's forecasts (net of the four projects TURN specifically disputes). There is no rational basis for this type of arbitrary methodology. SCG addresses the four specific projects which TURN disputes.

A. Budget Code 653 – Redlands Headquarters Parking Lot

SCG forecasts \$0 in 2010, \$0 in 2011, and \$2.290 million in 2012. ¹⁹ Both TURN and DRA propose no funding for this project. DRA provides no arguments why this project is not justified. TURN contends the economics of this capital project are "entirely imprudent," suggesting that paying for additional parking O&M expense (at \$84,000/year) is more prudent than spending \$2.290 million in capital. ²⁰

Regarding the forecast, this is a specific budget code which addresses one large project scheduled for 2012, as supported by its Capital Project Workpaper. ²¹ The amount of the forecast itself should not be in dispute. As to TURN's suggestion that SCG should continue to lease off-site parking facilities instead of investing in a dedicated parking lot, SCG rejects the merits of that idea. This expenditure is justified as it addresses the safety and security needs of its employees who work at the Redlands facilities (approximately 450-

SCG Doc#260232 JCS - 9 Rebuttal: October 2011

¹⁸ See Errata to Testimony of TURN (Jeffrey Nahigian), p. 3.

¹⁹ See Exhibit SCG-14-CWP, p. 17.

²⁰ See Nahigian at 4.

²¹ See Exhibit SCG-14-CWP at 17.

500 employees). ²² Redlands has been reestablished as a regional headquarters facility and centralized meeting/training location which has significantly increasing daily employee visitation, including vehicle count. The current parking lot being used does not reside on SCG property, and is the only parking option within a city block of headquarters. That parking lot has no controlled entry and limited lot lighting, over which employees have expressed safety concerns especially in the evening hours. Redlands operates 19 hours a day from 5:30 am to midnight, while the leased parking structure operates from 9 am to 6 pm. The lack of secured parking for employees is therefore best addressed through this capital project.

B. Budget Code 653 – Monterey Park Data Center Master Plan

SCG forecasts \$0 in 2010, \$359K in 2011, and \$6.141 million in 2012.²³ Both UCAN and DRA propose no funding for this project. DRA provides no arguments why this project is not justified. TURN contends funding should be denied because the project will not be complete until the end of 2013.²⁴ SCG's project schedule has been moved up, completion to occur by November 2012 instead of at the end of 2013.²⁵ The data center serves a critical function in SCG's provision of services. The project schedule reflects the pressing need to address the reduction in office space at the Gas Company Tower, which requires several SCG's information technology employees and computer servers to be relocated to Monterey Park. SCG's current capital forecast as shown in Exhibit SCG-14-CWP has been replaced with a slightly higher forecast; however, SCG is not seeking an adjustment to its originally-submitted forecast.

²² See Id.

²³ See Id. at 22.

²⁴ See Nahigian at 4.

²⁵ See Attachment 2 (Capital Project Workpaper).

C. Budget Code 653 – Facilities Energy Efficiency Projects

SCG forecasts \$0 in 2010, \$1 million in 2011, and \$1 million in 2012. As described in its Capital Project Workpaper, this is a blanket budget to support the installation of rooftop photovoltaic systems at various sites to support federal, state, and company renewable energy initiatives, and ease electricity demand from the electricity grid. TURN opposes any funding because it contends this project has "poor economics." Whether TURN's assessment of the economics of this energy efficiency effort is credible, SCG maintains that these expenditures are justified, and in furtherance of the State's goals, policies and programs for energy efficiency and development of renewable energy. This project is in furtherance of this statewide effort. SCG also expects improvements to the operational characteristics at project sites, cost reduction, and a reduction in demand for electricity from the grid, especially during peak demand periods.

D. Budget Code 7728 – NGV Refueling Stations

SCG forecasts \$1.510 million in 2010, \$1.935 million in 2011, and \$2.220 million in 2012.²⁹ This project is fully documented in testimony and capital workpapers. TURN proposes some funding but argues that SCG's forecast is expensive compared to recorded costs.³⁰ Although SCG only spent half of its estimated project costs for 2010, it is on track to complete the upgrades and enhancements to the NGV fueling stations by 2012. Many of SCG's NGV fueling stations are over 20 years old and in need of replacement or equipment upgrades to support basic customer fueling expectations, including time to fuel and ability to

²⁶ See Exhibit SCG-14-CWP at 10.

²⁷ See Id.

²⁸ See Nahigian at 5.

²⁹ See Exhibit SCG-14-CWP at 30.

³⁰ See Nahigian at 5.

provide full tank fills along with reliability by providing secondary fueling capability in the event of compressor failures. While our natural gas fueling infrastructure has aged, our customer load has increased, which has resulted in increased service interruptions. These funds are essential to maintain reliable and effective natural gas fueling stations. Therefore, SCG's forecasts are reasonable and will allow SCG to meet its specific project targets as reflected in the Capital Project Workpaper.

E. Other Proposed Capital Projects

Because SCG has already provided support for its capital expenditures forecasts in testimony and capital workpapers, and because DRA and TURN provide no specific points of contention regarding all other capital projects for which they proposed lower forecasts (many at zero levels), SCG does not provide any specific rebuttal arguments addressing those projects. However, because adjustments were proposed for blanket capital budget codes, SCG provides a table of historical costs for its capital blankets which shows the recorded amounts that are significantly higher than what TURN reflects in its testimony Table 2 for infrastructures and improvements (see Attachment 3).

IV. SUMMARY AND CONCLUSION

SCG maintains the validity of its O&M and capital forecasts to fund anticipated needs. SCG provided evidence on its incremental needs and known cost drivers in its shared and non-shared O&M activities. SCG also provided specific Capital Project Workpapers to justify its capital expenditures. Therefore, SCG requests that its O&M and capital forecasts be adopted.

This concludes my prepared rebuttal testimony.

SCG Doc#260232 JCS - 12 Rebuttal: October 2011

V. WITNESS QUALIFICATIONS

My name is James C. Seifert, Manager of Corporate Real Estate and Planning. I am replacing the previous witness, David G. Taylor. The combined departments of my organization are responsible for managing the entire real estate portfolio, including acquisition and disposition of property, rents, move management and forward planning of space.

I attended the University of Colorado, Boulder majoring in Economics. I have a broad background in real estate and asset management, including 15 years of experience with SCG and Sempra Energy, five years with CB Richard Ellis, and seven years with Rancon Real Estate. At Sempra Energy, I have held a number of key technical and managerial positions with increasing responsibility in Corporate Real Estate. In these positions, I was responsible for acquisitions, dispositions and other roles with respect to the real property portfolio. I have held my current position as the Manager of Corporate Real Estate and Planning since January, 2011.

I have not previously testified before the Commission.

SCG Doc#260232 JCS - 13 Rebuttal: October 2011

ATTACHMENT 1

Data Request Responses to DRA

SCG Doc#260232 Rebuttal: October 2011

Exhibit Reference: SCG-14, Volume, Chapter DGT

Subject: Real Estate, Land and Facilities

Please provide the following: For data & formulas use excel format please & provide an electronic copy via email and a CD.

- 1. Referring to testimony page DGT-1 non-shared and shared rents, please provide the following in a spread sheet for each lease:
 - a) Address
 - b) Annual rent
 - c) Years left in the contract
 - d) Specify yearly dollar amount increase or decrease
 - e) Site description

SoCalGas Response:

CONFIDENTIAL RESPONSE PROVIDED UNDER PUB. UTIL. CODE §583 AND GENERAL ORDER 66-C

Please see attached file.

DRA-SCG-067 Q1 (confidential).xlsx

- 2. Referring to testimony page DGT-10, line 5 "An additional real estate advisor"
 - a) Provide supporting documentation for the additional real estate advisor
 - b) Provide a detailed description of the duties for this position
 - c) Provide 5 years of recorded yearly salary and bonus for the current real estate advisor and detailed description of duties.

SoCalGas Response:

- a. The real estate advisor conducts acquisitions of real property and acquires leasehold interests such as land for operational needs and leased properties such as office space and branch offices. The real estate advisor prepares budgets for review by business planning and the Corporate Real Estate Manager. The position coordinates activity across many departments including operations, legal and risk management. The added position was needed due to increased workload associated primarily with numerous branch office projects that need to be evaluated from the settlement with Disability Rights Advocates in the 2008 GRC among other activity
- b. See response to Question 2A.
- c. See response to Question 2A. This is a newly-created position at SoCalGas and there is no recorded data.

- 3. Referring to testimony page DGT-13, for all of the budget codes in table SCG –DGT-5 Capital expenditure:
 - a) Explain in detail the forecast methodology.
 - b) Provide a cost benefit analysis.
 - c) Provide a copy of all bids submitted per project.
 - d) Provide detail description list of all completed parts under the table.
 - e) Provide estimated dollar amount on maintenance savings for the next 5 years

SoCalGas Response:

- a. SoCalGas Facilities Planning group conducts an annual solicitation process for the purpose of receiving, evaluating and prioritizing capital project requests for implementation in coming years. The prioritization of projects is conducted by the Facilities Capital Committee, which includes Director Representation from key SoCalGas business units. Depending on the priority level, certain project requests require scope documentation to communicate expected project business objectives, scope of work, estimated budget requirement, risks and constraints.
- b. SoCalGas Facilities project solicitation, prioritization and approval process, as well as its Commitment and Approval Policy, do not require cost benefit analyses as the basis for facilities capital project approvals.
- c. As much of the work planned for 2011 is being designed, there has been limited bidding activity for work planned in 2011. Bidding is not a requirement for scope document preparation or the project planning and approval processes. Budgets for these processes are determined through either direct estimate by Facilities Planning and Capital Committee resources or with consulting assistance to these resources provided by design professionals and contractors under master service agreement with the Company.

4. Referring to testimony page DGT-14, line 8-10:

a) Provide a detailed list of the other scenarios and the respective cost for each.

SoCalGas Response:

SoCalGas' testimony explains a process under which, among other things, alternative options or scenarios are considered when undertaking projects under this blanket budget code. As such, there is no such list which is responsive to the question.

DRA DATA REQUEST DRA-SCG-067-MPS SOCALGAS 2012 GRC – A.10-12-006 SOCALGAS RESPONSE

DATE RECEIVED: MARCH 30, 2011 DATE RESPONDED: APRIL 14, 2011

- 5. Referring to page DGT-CWP-1, capital workpapers budget code 653:
 - a) What specific Safety concerns will emerge from not implementing this project?
 - b) How old are the roofs that need to be replaced and what kind of material?
 - c) Provide a detailed description (names brands) list of all items included in this blanket including how old the items are.

SoCalGas Response:

- a. The following are examples of specific safety concerns:
 - i. Water intrusion from roof leaks can short out employee computers and other support equipment. Water intrusion can also cause persistent slip hazards if leaks are not fixed.
 - ii. HVAC equipment failure can create unsafe temperatures within the work area. Computers, lighting and even employee body heat can elevate the temperatures far above the comfort range.
 - iii. Generators, hoists, UPS can fail to work, placing operators at risk of injury.
- b. Age of roofs within the SoCalGas support area vary in age. Properly maintained roofs can last 18 to 25 years depending on material used at the last installation. Presently in the company the bulk of SoCalGas' facilities have an asphalt membrane built up composition. With new title 24 codes coming into effect in late 2007 we are now required to by code to replace roofs with a single ply PVC type application that conforms to title 24 energy conservation codes. We can also install a built up, asphalt membrane type roof with an "Energy Star" coating. SoCalGas decided to install PVC single ply as our replacement standard because of its long life, minimal maintenance, and ease of patching/ repairing, in addition to this type of roofing not requiring reapplication of the Energy Star coating every 5 years to maintain factory warranty.
- c. There is no available detailed description list regarding the actual age of most equipment under this code. Some are new installations as directed by the need of the clients. Roof surveys show locations have roof installations that are at least 20 + years old. Surveys estimate actual age of roofs based on time of inspections completed in 2003. Projects included in this blanket include hoist replacements in fleet garages, Diesel Particulate Filter (DPF) equipment installations at fleet garages. Storm water improvement projects. Generator replacements. Security installations. Gas Awning installations. Roof Replacements. Air conditioning unit replacements. Parking lot replacements.

- 6. Referring to page DGT-CWP-10, capital workpapers budget code 653.
 - a) Provide supporting documentation for this project.

SoCalGas Response:

PV projects can help mitigate the increasing electric use of the data centers. However, at a program level, the PV systems do not necessarily have to be installed at the data centers themselves. Facilities considered the best locations for PV systems, in terms of roof age, quality (ability to support a PV array), sun exposure and availability of roof space. The table below represents the maximum savings potential (based on similar installed projects). Actual scoping would still be required.

SCG Solar PV Project	Scoped or Estimate	Elec Demand Savings (kW)	Elec Energy Savings (kWh/yr)	Cost Savings (\$/yr)	Total Cost Estimate (\$)	Capital Cost (\$)	O&M Cost (\$)	Payback (years)	Est. % SEU Energy Savings
Chatsw orth	Estimate	300	465,000	60,450	4,008,300	4,008,300	0	66.3	0.8%
Redlands	Estimate	300	465,000	60,450	4,008,300	4,008,300	0	66.3	0.8%
San Dimas	Estimate	240	372,000	48,360	3,206,640	3,206,640	0	66.3	0.7%
Downey ERC	Estimate	90	139,500	18,135	1,202,490	1,202,490	0	66.3	0.3%
MPK - Bldg D	Estimate	75	116,250	15,113	1,002,075	1,002,075	0	66.3	0.2%
Palm Desert	Estimate	50	77,500	10,075	668,050	668,050	0	66.3	0.1%
Pico - Bldg H	Estimate	40	62,000	8,060	534,440	534,440	0	66.3	0.1%
Total		1,095	1,697,250	220,643	14,630,295	14,630,295	0	66.3	3.1%

- 7. Referring to page DGT- CWP-17&18, capital workpapers budget code 653
 - a) Provide supporting documentation for this project.
 - b) What specific safety concerns will emerge from not implementing this project?

SoCalGas Response:

a. Supporting documents for these two parking lot projects are part of our Solicitation process for new projects.

The **Redlands Parking** lot expansion request indicates: The current amount of parking stalls does not meet the current needs of the HQ Facility. To offset the parking stall need, the Gas Company leases additional parking stalls at the business next to the facility.

The **Compton parking** lot is over 30 years old. Over time the parking lot has developed cracks and low spots that water can puddle. The headcount at the facility is at its maximum making repairs difficult and not very productive.

b. **Redlands parking** lot is at its maximum capacity, and is unable to accommodate all employees, who are spending time looking for available spots that do not exist. Employees are now parking on the street and in public areas where their personal security and the security of their vehicles are being compromised.

Compton parking lot is also at its maximum. The employees who park in the lot are susceptible to risk of trip and fall on the cracks that are starting to increase in size and volume. The cracks are a trip hazard and cracks also allow rain water to seep in under the asphalt causing the sub-surface to break down, larger low points for water to gather and increase the possibility for employee injury.

- 8. Referring to page DGT- CWP-3-5, capital workpapers budget code 653
 - a) What specific safety concerns will emerge from not implementing this project?
 - b) Provide supporting documentation for this project.

SoCalGas Response:

- a. Existing equipment at the Energy Resource Center (or ERC) has had certain pieces of equipment failing to operate over the past few years. The Facility manager has been has been working to maintain a comfortable work environment for all support staff located at the facility. The safety concern is primarily that with the condition of the failing equipment, we are not providing a comfortable work environment for our employees and customers that depend on the facility for their continuing education.
- b. Please see attached documents.



2008-10-24 ERC Master Plan 11X17.pc

9797 Elec-vs-Gas Final.xls

INFRASTOUTURE	アなってつび	CONSULTED INC
	10000	3
	ಪ್ರಭಾಗು ಉಪಂಡ	

			ŕ	5 Year Canital (Fet)	+17		1				WWW.150.000
Item	Description	Year 1	Year 2	Year 3	Year 4	Year 5	Est. Affected Points	Pre-Req.	Schedule	Payback ¹	Comments
-	Chiller Plant Replacement-Phase 1	\$400K	,	,	,		м	Yes	6-9 Mos.	Yes	Note 2, 9
7	Chiller Plant Replacement-Phase 2	,	\$350K				м	Yes	6-9 Mos.	Yes	Note 2
ဗ	Chiller Plant Replacement-Phase 3	•	•	\$400K			м	Yes	6-9 Mos.	Yes	Note 2
4	Heating Hot Water Boiler Replacement	\$275K		1		,	-	8	6-9 Mos.	Yes	Note 11
5	Air Handling Unit (AHU-2) Replacement (Serving 2 nd Floor Admin Space)	\$250K					ю	Yes	6-9 Mos.	Marginal	Note 10
9	BAS Upgrade	\$100K	,			•	т	Yes	6-9 Mos.	Marginal	
7	Retro Commissioning - Phase 1	\$50K	,			•	7	o N	6-9 Mos.	Marginal	
ω	Retro Commissioning – Phase 2		\$75K	•			-	o.N	6-9 Mos.	Marginal	
တ	Air Handling Unit (PAH-1) Replacement (Serving Main Hall)		\$450K	,	•		4	Yes	6-9 Mos.	Yes	Note 4
10	Kitchen Air Handling Unit Replacement	•		\$200K			ю	o _N	4-6 Mos.	Yes	
11	Air Handling Unit (DC-1) Replacement (Serving Multipurpose Room)	•	1	\$75K		•	т	S S	4-6 Mos.	Marginal	
12	Air Conditioning Unit (AC-1) Replacement	1	•		\$50K		4	Yes	3-6 Mos.	Yes	Note 3
13	Air Conditioning Unit (AC-2) Replacement	•		•	\$50K		4	Yes	3-6 Mos.	Yes	Note 3
14	Air Conditioning Unit (AC-3) Replacement (Serving Bake Lab)	•	1			\$50K	4	Yes	3-6 Mos.	Yes	Note 3
15	Bake Lab Office AC Unit Replacement	•	•	ı		\$50K	4	Yes	3-6 Mos.	S.	Note 3
16	Lighting Retrofits	•	1	,		•	-	Yes	,		Note 5
17	ERC Solar		•		•	-	-	Yes	,		Note 5
•	Total	\$1,125K	\$875K	\$675K	\$100K	\$100K	,				
See notes	See notes on next page										



Notes

- 1. Potential payback from energy or efficiency improvements. Marginal times may yelid payback, however, savings may not be significant on energy savings alone.
 - 2. May be divided into distinct phases for capital spending and schedule flexibility.
- 3. LEED allows phase out planning, so capital plan can be implemented as a part of a phase out plan. Chiller replacement (Item 1) allows for CFC phase out utilizing more energy efficient chilled water strategy.
 - 4. Requires Chiller Plant Replacement (Item 1) for implementation.
- Development by Others.
- 6. All budget values are probable statements of cost in rough order of magnitude (ROM) values (+/- 30). All values are provided as hard costs only. Internal overhead and associated soft costs are not included.
 - 7. Although some items do not fall under pre-requisite categories, the points associated (credits) may be required to meet minimum LEED certification criteria.
 - 8. Schedules indicated will vary based on available lead time of equipment. The schedules indicated do not take into consideration long lead time items.
 - 9. Requires AHU upgrade prior to planned implementation.
- 10. May require structural upgrades. Budget values include minor structural upgrades only.
- 11. Payback from assumed gas savings. Actual payback may vary based on Sempra cost model for gas consumption.

High-Level Comparison of Electric vs Natural Gas Central Plants at SEU

Point c	of Consideration	Natural Gas	Electric	High Impact?	Recom- mendation
	Cost for initial equipment and labor	On average, \$350-\$800 per ton (2003 industry data).	On average, \$200 - \$400 per ton. With the needed utility service upgrade, it's \$600/ton.	✓	Electric
	Availability of manufacturers of initial equipment (equip lead time)	10 to 14 week lead time, unless distributor has systems in stock.	6 to 8 week lead time, unless distributor has systems in stock.		Electric
	Availability of installers of initial equpment	Any vendor may install the gas-fired chillers, but requires a certification to commission. Less contractors are familiar with gas chillers.	Any vendor can install and commission lectric systems. Many contractors are familiar with electric chillers.		Electric
Installation	Cost of new/modified electric service	None.	Electrical distribution infrastructure can be costly (tens to hundreds of thousands of dollars).	✓	Gas
Instal	Cost of new/modified natural gas service	Existing infrastructure will be used.	None.		i Leanisett.
	Cost of new/modified backup generators	None.	Costs could increase by 15%. At Anaheim, this could be \$300k to \$400k.	✓	Gas
1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Cost of new/modified control systems	System can be tied into existing EMS.	System can be tied into existing EMS.	,	Simi
	Changes to existing conditions (ie, roof penetrations)	New layout for cooling towers. Some roof and slab work.	Electric systems require additional footprint for equal capacity. Some roof and slab work.	✓	Gas
	Cost for maintenance equipment and labor	Anaheim \$6,600/yr ERC \$9,300/yr (vendor supplied maintenance)	Historical data is unavailable at SoCalGas.		1.07
ance	Lead time for maintenance equipment	Depends on manufacturer - shipping can add 2-4 weeks to receive parts (less common to buy).	Maintenance equipment is usually more readily available - less need for international shipping.	✓	Electric
Warranties of system components to the system components of the system	Typically only one year. Standard warranty not likely to exceed two years.	Typically only one year. Standard warranty not likely to exceed two years.		r cilor	
rations &		Can troubleshoot smaller issues (ie, blown fuses).	Can troubleshoot smaller issues (ie, blown fuses).		Sahii
Cost for and lake Lead the equipm Warran Was Ability labor. Availate mainte Ongoir Potenti	Ability to troubleshoot with external labor.	1-5 days (because major issues will require certified maintenance companies).	Typically 1-2 days.		Electric
	Availability of installers of maintenance equpment	Less vendors are "certified" to work on specfic gas systems.	More vendors are licensed to work on electric systems.		Electric
	Ongoing utility (O&M) costs	Not significant (about 5%-10% electric consumption of an electric chiller)	Significant, and likely to increase with rates. Load calculations needed to estimate (project cost will increase by 15%).	✓	Gas
	Potential for utility rebates	None.	Probable, but not likely to be significant. More research is required. Depends on ability to exceed Title 24. Best case, about \$10k.		Electric
tions	System reliability	Generally LESS reliable, but how much depends on many factors. Generally on par with electric systems. At Anaheim, the absorber is single cirtuit and more susceptible to malfunction.	Generally MORE reliable, but how much depends on many factors. VFD capability; life of system about the same as gas. At Anahiem, electric chiller system has dual circuits and more stable.	✓	Electric
Other Considerations	Noise and noise abatement costs	80 - 89 decibels	93 - 98 decibels		Gas
Other C	Old EE/RCx projects are no longer required.	None, due to the new system.	None, unless some electric-related system components remain.		Gas
	Internal showcase/demonstration potential	Potential to showcase gas technologies for both companies.	EE and (potential) DR would benefit SDG&E.	✓	Gas
	Occupant impacts	Comfort and quality is increased from exisiting system.	Comfort and quality is increased from exisiting system.		SXmi
	Internal Energy Program impacts	Little to no impacts on electric energy consumption.	Significant impacts since existing system is gas. More calcuations are required.	✓	Gas

DRA DATA REQUEST DRA-SCG-067-MPS SOCALGAS 2012 GRC – A.10-12-006 SOCALGAS RESPONSE DATE RECEIVED: MARCH 30, 2011

DATE RESPONDED: APRIL 14, 2011

- 9. Referring to page DGT- CWP-10, capital workpapers budget code 653
 - a) Provide a cost benefit analysis of the Facilities Renewable Energy Efficiency Projects.
 - b) Provide supporting documentation for this project.

SoCalGas Response:

9797 Downey ERC Site Mechanical Improvements: Gas v. Electric Chiller Analysis

SUMMARY:

Since both facilities are currently equipped with gas chillers, the "savings" figure in the analyses represents the additional Annual Energy Cost the facilities would bear if the systems were converted to water cooled electric screw chillers.

For Anaheim, that would be \$32,038 per year. For the ERC, it would be \$38,516.

NOTES:

- 1) Generally there is no estimate of first costs for either system and these are not included.
- 2) Gas costs are shown to be zero; however, the gas chillers in both analyses are debited for "parasitic" electric power. That is due to the fact the absorption chillers do require more cooling tower water which results in higher pump and fan costs.
- 3) The absorption chiller efficiency (COP) associated with machine sizes in the 80 to 100 Ton range were used. Considering larger single body chillers over 100 Tons, the COP does increase moderately.

OTHER BENEFITS

Gas Fired Absorption Chillers still qualify for an additional LEED point since they do not use refrigerants other than water in a sealed closed loop. This was a strong point when the ERC was constructed and remains a strong draw for this technology with our environmentally conscious customers.

Gas Cooling also permanently eliminates Peak Electrical Demand while not disrupting critical operations. Installing Electric chillers at either of these sites would actually INCREASE Peak Electric Demand! My estimate would be at least 120 kW in Anaheim and nearly 100 kW at the ERC. This increase in electrical demand may also cause additional capital expense in retrofit by creating the need for an upgraded electrical service.

DRA DATA REQUEST DRA-SCG-067-MPS SOCALGAS 2012 GRC - A.10-12-006 SOCALGAS RESPONSE

DATE RECEIVED: MARCH 30, 2011 DATE RESPONDED: APRIL 14, 2011

- 10. Referring to page DGT- CWP-15-16, capital workpapers budget code 653
 - a) The amount in Table SCG-DGT-5 does not match capital workpapers page DGT-CWP-15-16. Please reconcile and explain the difference.

SoCalGas Response:

	2010
653 MPK Bldg A Server Room Air Handler	1,516
Add: MPK Chillers #3 & #4	<u>898</u> (A)
Total	2,414

(A) Various other projects less than \$1 mil

MPK Chillers #3 & #4	898 (A)
Fleet tools/ Equip	100
NGV Refueling Stations	<u>118</u>
Total Various projects less than \$1 mil	1,116

(A) The MPK Chiller #3 & #4 of \$898K was included in the total of the Various other projects less than \$1 million of \$1.116 million.

DRA DATA REQUEST **DRA-SCG-067-MPS SOCALGAS 2012 GRC - A.10-12-006 SOCALGAS RESPONSE** DATE RECEIVED: MARCH 30, 2011

DATE RESPONDED: APRIL 14, 2011

- 11. Referring to page DGT- CWP-21, capital workpapers budget code 653.
 - a) Provide an explanation of the forecast methodology for this project.
 - b) Provide supporting data for the 5-10% ordinary business growth.
 - c) If in 2004 MPK was experiencing major growth of ~24% why did it just become an issue now?

SoCalGas Response:

Please see attached document

GRC question 11 & backup.pdf

SCG Question #11

Referring to testimony page DGT- CWP-21, capital work papers budget code 653.

- a. Explain in detail the forecast methodology.
- b. Provide a cost benefit analysis.
- c. Provide a copy of all bids submitted per project.

SCG Response:

- a. SCG Facilities Planning group conducts an annual solicitation process for the purpose of receiving, evaluating and prioritizing capital project requests for implementation in coming years. The prioritization of projects is conducted by the Facilities Capital Committee, which includes Director Representation from key SCG business units. Depending on the priority level, certain project requests require scope documentation to communicate expected project business objectives, scope of work, estimated budget requirement, risks and constraints.
- b. See attached business case.
- c. With the increasing technological demands on our business, the Data Center at Monterey Park is under pressure to stay ahead of the growth. Currant projections indicate that Monterey Park Data Center will out-grow its space by Q1-2013. The business absolutely requires additional floor space to continue to provide the primary functions associated with the Monterey Park Data Center, and to support natural growth as well as Known/specific large scale capital projects. With out expansion as described, business needs will not be met.

Business	Case	Summary
----------	------	---------

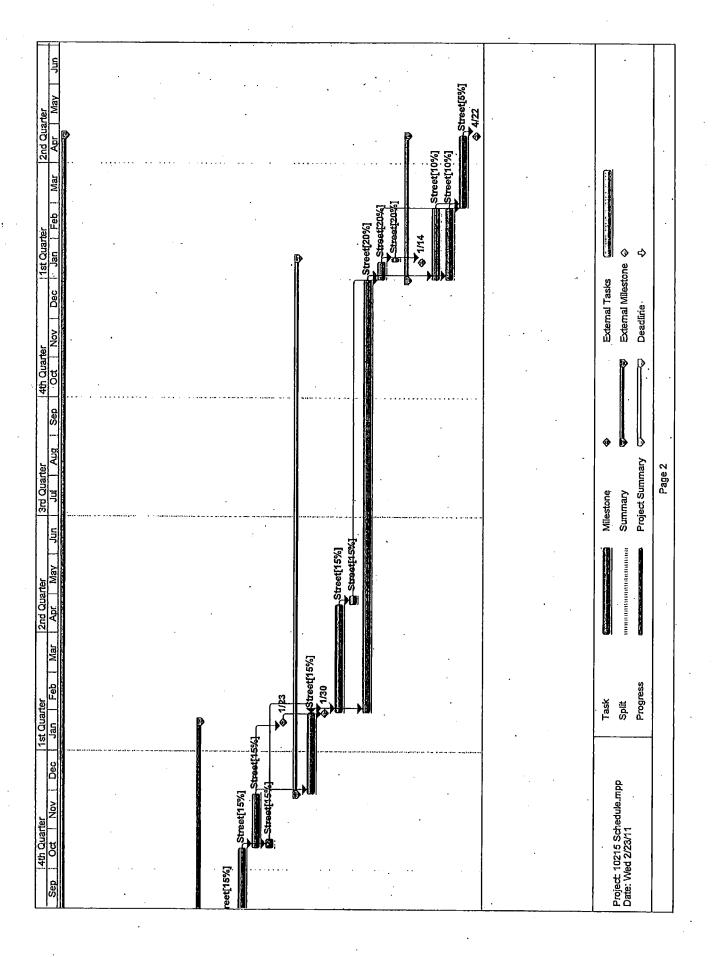
Project Name

Business Unit Name		
1) Project 10317 MPK Data Center Expansion	3) Submission Date	5-Jan-10
Title:	7, 22, 11, 22, 22, 22, 22, 22, 22, 22, 22	, 5 Jun 15
2) Department: Information Technology	6) Original Amount:	· \$ 9,140,731
4) Project New Business [] Mandatory [] :y/Expansion [:	x] 7) Supplemental Amount:	\$
Reliability/Improvements [X] Strategic [x] RD&D (] 8) Revised Total:	\$ 9,140,731
5) Project Budgeted [X] Budget Year: 2011 Unbudgeted [] 9) Est. Start Date:	1-Apr-11
Funding Type: Budget Addition [] it Substitution [] Project No. 10	317 10) Est. Completion Date:	31-Mar-13
EKON DATAPUNAN EKSUSTAN MANAMPENAN MENINDA BANKETEN BANKEN		
11A) Project Description, Justification and Key Drivers		The state of the s
Monterey Park is a Reciaim Facility and only recently has been removed from Title V, require increase in particulate matter release, and AQMD reconsideration of the Title V status. The Monterey Park Data Center has experienced a significant level of business growth in resothers. Since 2004 the Data Center has seen an annual growth rate of 24%. At this growth space by Q1-2013. Beneficial occupancy for expanded space must be targeted for Q4-2012 Disaster Recovery Service is the primary use of the Monterey Park Data Center, and it's cap support new business programs including Advance Meter, Smart Grid, and others. Ever incit the Monterey Park facility for additional raised floor space. As further described below, expanding Building A to included a total of 6,000 SF of Data Censupport space for the unloaded budgeted cost of \$7.1 million will provided the best alternative contents.	sponse programs such as Advance Met rate the Monterey Park Data Center w , even if final construction cosmetics ar acity must be able to accommodate na reasing demand for backup data storag	er, Smart Grid and several vill be out of raised floor re completed by mid 2013, itural growth as well as se also places pressure on
11B) Project Alternatives / Upside Potential / Downside Risks:		
To address the rapid growth of the Data Center at Monterey Park, IT has been working closel requirements, as well as our future needs to the year 2020. The most pressing need is to pro infrastructure to address the impending growth limitations by the end of 2012, Two options the executive management team.	Nilde additional mised floor eness and .	augustina (
12) Financial and Business Benefits (include discussion on soft benefits, if any):	•	. •••
With the Increasing technological demands on our business, Data Centers at Rancho Bernardo the growth. Current projections indicate that the Monterey Park Data Center will out-grow its flo additional floor space to continue to provide the primary functions associated with the Monterey known/specific large scale capital projects. Without the expansion as described in section 11B, with multiple alternatives are described above.	or space by Q1-2013. The business ab:	solutely requires
1) Declark 40347 MDV 5		
1) Project 10317 MPK Data Center Expansion		
		, <u> </u>
13) Discount Rate, % Prior Years Current Year Year 2	Year 3 Year 4	Vone E Tatal
14) NPV, \$K \$ - 19) Capital Spending, \$K	Tear 4	Year 5 Total
15) RR: %	450 4	

	7			•	<u> </u>			•				·				
3) Discount Rate, %	1	Prior Yo			ent Year	Г	Year 2		Year	3	Τ-	Year 4	Year!	3	Total	_
) NPV, \$K \$ · · -	1.	19) Capli	al Spe	ending	, \$K			,			•	•		.		.
5) IRR; %	1	\$		\$	412,850	\$	7,062,150	\$	1,66	5,731	\$. T	Īš.	9,140,	.73
\$			lng O	&M,\$	К '					· · · · ·	·	,		L.T.	-/- ,-,	/
	1	\$	-			\$	-	\$			\$	-	S-	Ts		_
') Profitability Index	l	21) Incre	ment	al Savi	ngs or Reve	nde	s, \$K	<u> </u>			•			 -		_
<u> </u>	1	\$	•	\$.		\$		\$		-	S		١ŝ٠	1 31	***	_
8) Revenue Requirements PV, \$K	l	22) Net /	After 1	ax Cas	h Flow, \$K					-						-
]	\$	-	\$		\$		\$		-	Ś		15-	l s		Ŧ
NATE OF THE PROPERTY OF THE PR	CHANGO (AND HILES	HEVAL	Hank	VAN VAN VAN VAN	Wini	ili di Tiladi) 	in luncidir	11916/2016/6	OU ARANI	HIPKKKKTULATU	unsasmonis	ang Jupan	area mesana	Har
) Project initiator (Signature & Nan Illiam Stewart				<u> </u>	Daté,	26 /	A) Sr. Direct Nichols	or ii	Infras	tructi	1,6 Mabiya		eniko festarak		Date	##
) Director infrastructure Eng & Ops lie Sculi			•			26B) Other: (As	App	propria	ite)						

100	19 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	A. to	V 3/3/15 / 3/15	C & Marie 1978 Marie 1974 (1974)	IERGY UTILITIES		COMPANY CODE	Work Order No:		
TITLE	10317 MPK Bldg A	Data C	ilh ALL CAPITAL letters (antar Evnansion	re required, W. Co. 1. 1993	SCG	ririn turini ili	2200 Thomas Bros.	CAPITAL 🖸		O&M 🔲 ·
	1801 S. Atlantic Bi		lonterey Park, C					WRIDPSS Numbe		
DAT		1/2011	EST. START DATE:	3/21/2011	EST. COMPLETION D	DATE:	12/31/2013	BILLING CODE:	652 NC	0% Billable
	- ((- () () () () () () ()	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	LOT GIART DATE:	ure neoti	1231. COMPLETION L	/A I Si	~~		Prelim Eng	
							Phase 1	Phase 2	Survey (Fero 183)	Shared Asset
	RESPONSIBLE COST	CENTED.	2200-0696		Danulata - Danging		. 🗖			
	ORGANIZATION: Facilities		2200-0090	J	Regulatory Prg/UDF	•	_			
<u> </u>			•	•	ATING AREA/DISTRICT		- ·	ERATING REGION:		Receiving
TECHN	COUNTY: Los An			Monterey Park	Billable to: Affiliate		Third Party	Sending Order	O CONTRACTOR	Order 🔲
	Legal Review	By:			Date	7	Comments re	garding Technicave	conomic Pro	ect Review: 1845
	Accounting	By:			. Date				•	
	Tax	By:			Date					·
□ •Requin	Finance ed for any and all Calegory 1	By: & Calegory	2 commitments over \$30	million & \$10 million res	Date	and annough by the	Refere	nçe Approyal and C	ommitment P	olloyt唯基础而成为
jutillues'	CEO or COO, as appropriate.	All lechnic	al reviews & contracts in	itially totaling \$30 million	or more must be evidence	ed by a completed	. –			Ц
	Review Checklist (IRC). OPE SUMMARY	经常可以消费	STATE STATE	Solida (Solida ISBN)	a Joseph Market and C	erika errupakini dibi	CATEGORY 1	TANGE ASSESSED	aran ana	CATEGORY 2
Expan	MPK Data Center with	the addition	on of 6,000 SF of nev	w space and the rend	vation of 2,000 SF of	existing	-intro Malific or Wiffil	Andreas Andreas Andreas Ages	Observati Park (1984)	una satti data gapitale
Bulldin	g A office area. Approxin	nalely 20	workstations will be i	ost with this option.		.•	1			
ł									•	
, e.;						•				
					•					•
				•			l	•		
CODE	edys Zovene see see see	BANKHE	AND DETAIL EN DES	CRIPTION OF WORKS	hio and control of the se	er olka tide distributan	perioda do office (40)	a line de la companya	100000000000000000000000000000000000000	t:Use (Enter//Os):
R	Demolish approximately	2200 SF	of Interior office spa	ce and adlacent exter	for walls	CAND CHARLES	PERC ACCOON (SEE	AND WEST	Accig Dep	ruse (EnternOs)
1	Excavate and re-grade t	he landsc	aping area (NE com	er) adjacent to Buildi				<u> </u>		
- 1	Expand the 2nd Floor of							1		
	Renovate 2200 SF of B							<u>'</u>		
'	Install all necessary Dat related equipment by off	a Center i	Infrastructure to supp	ort the installation of	seervers, racks, and	computer				
	Totalca equipment by Off	iicis	•	•			·			
			Project Managen	nent (Company Labo	ი 30,000		ļ	 		
				r (Other Departments			 	 		
		Project	t MgmVConstruction	Mgmt (Outside Labo					***************************************	
		Project A		C,PA) (Outside Labor			《基础管理》(A	arging Cost Center	s to this orde	的經過網絡開始
				I & Engineering Fee	,					
			۲	lan Checks & Permit Testing & Inspectio	•					
				Constructio			Receiver N	MEDIE CARRENT	anson and	Miles of the order
				Equipmer			29/97/15/48 19/1/2015	1 - 25 de l'une et déclarie	re Amount a	OUR WEST STATE
				Tenant Improvement	s 62,500					:
			-	Furnitur	•					
			E	nvironmental Service Othe			SANTE CONTRACT		Latin	學的特別
				Remova	•		Project Approved	up to/on order		
				Contingency @ 5%			Preparer	Eleanor Candler	Mall Loc: Date	SC720F 2/11/2011
			•			_	, , , , , , , , , , , , , , , , , , , ,	Tionioi calinid	Mall Loc;	SC720J
				Total	\$ 7,071,969		Project Manager	Don Goldsberry	Dale	2/11/2011
CHILDREN.	Matiniese iorske	THE WEST	adan ekan ekan kan kan kan kan kan kan kan kan kan	Sandal Cantal Canada	The Manager of the Manager	Edition restrictions			Mall Loc;	RB2000
	ESTIMATED COSTS	對際	Capilal Installations	Capital Removal	OBM	Total Total	Cilent	Jeff Nichols	Dale	
Compan			\$ 31,200	\$ -	\$ -	\$ - 31,200		•	Mail Loc:	•
Contract Material	COSIS		6,504,550	110,620	-	3 6,615,170	·		Dale	
	ect Charges		425,600	 	 	425,600	Facilities Ops and	Don Goldshaw:	Mall Loc;	SC720J
Total Di	ecl Cost and Cost of	福祥縣	6,961,349	110,620	Tarket Co.	7,071,969	Capital Prgs Mgr. Director - RE &	Don Goldsberry	Date Mall Loc;	GT 26F1
Affiliate 7	ransfer in Costs		-			洲的胸膜含染	Land Svcs	Cannon Herrera	Date	
<u>Labor In</u>			889,67,7	45-24-3-11,427		53 (901;104	VP Envtl Sfty &		Mall Loc:	CP 33C
<u>Maledal</u> Olher Inc			131,458	of the solution		化型型物理	Facs	Pam Fair	Date	
Olner Inc	ALOCIS		1,034,176	APPER APP 2 024		学》。 1,034,175	LIMITE C E C		Mail Loc;	
	liect Cost 2 - 2 - 2	***	2,055,310	3728 FE 13,461		2,068,761	Utility C. E. O.		Date	
Gross E	xpenditures - we have		9,016,660	124,071		5, 9,140,731	Acig Ops			Date
	Yo.N. Manual Indian	0.00%	N			SE HOUSE		lok Pril		Sial Map. %
	ing/Part Contract					<u> </u>	GH KeY	Csi Sheet	*************	Siel Map: %
	r Estimated Costs	2016年	用把附下割料消费的	EXTRA PLANT		9,140,731.	User Status Total Commitment	PERC Ind	***************************************	Stal Map %
Gross E by year:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	011 412,850	2012 7,062,150	2013 4 7 1,665,731	2014	2015	Tolel Commitment Accumulated			SIAI Map, 🔏
, , , , , , , , ,				RE LOCATED ON THE	"MANUALS & FORMS"	PAGE OF THE AC	COUNTING & FINAN	CE INTRANET WEB	SITE	Sijal Mago yk

	က္က	İ		,	•		•	_				•			Ě	9					_							-	•				•	"					-						Γ
3.5	Aug							•				,			Street[1																				. •										
3rd Quarter	ا ا									•	•				- Control of the Cont	. •															•				-										
3	Jun											•		\$treet[10%]	and sections						4		;					•	-	٠										•		. നി			
	/ay.					Ð	,				ئىر	9	1	Stre																			٠		•					٠					-
2nd Quarter	Apr				,		eef[5%]	-						-		•		•			•				•				•							•	•						^	⇔	
2nc	Mar . A			treet[5%]	Á	10	Þ	M		村田			-				•••	<u>.</u> .	 -													.										sks	stone 💠	-	
and the second	eb i M	_		TE Str			-;			<u></u> .			B		 			~~	,		<u></u>			•••	• • • •		. pa pa "					~ -, -,-		·=-1+4						-		External Tasks	External Milestone	Deadline	
Juarter		16 7	167 <u>.</u>																			•							•													ă	Z.	. Dea	
1st Qua	la la		•	T	•	<u>.</u>	•	i				:			:	:	Ι.	;	i i	·	15			.			ays		-				:	:	·			•							
Predecessors		:			5 days						20 days, f	10 days		ĮL,	:	:			+40 days		+30 days		:	;	•		rs+40 days		- :				,24,25	! : : :											
Prede	_	3.	7	11	11 3FS+	11:	7.7	: :9 : : : :	ή Έ	4	11 8FS+	11 gFS+	12	11 ⁵ 3,10F	11:12	11,13	1174	1174	12/15FS	13;	12,16FF	12,17,19	12119	200		40.00	13.23,22	13:24	13	13:24	1323	13/23	1328,29	13.30								- ♦	₿		
Finish		Mon 4/22/13	Mon 3/21/11	Mon 2/28/11	Mon 3/21/11 3FS+5 days	Mon 5/16/11	Mon 3/28/11		Mon 4/4/11 j	Mon 3/28/11	Mon 5/2/11 8FS+20 days,6	Mon 5/16/11 9FS+10 days	Mon 1/23/12	Mon 5/23/11/3,10FF	Mon 8/15/11:12	Mon 10/17/11 13	Mon 11/28/11/14	Mon 10/24/11/14	Mon 1/23/12/15FS+40 days	Thu 1/17/13	Mon 1/30/12 16FF+30 days,15	Mon 1/30/12:17,19	Mon 4/23/12/19	Mon 4/30/12/21	Mon 12/21/12:19	11 1631	722,62,61,471 HOIM	Thu 1/17/13;24	Mon 4/22/13	Mon 1/14/13:24	Mon 2/25/13/23	Mon 2/25/13 23	Mon 4/22/13/28,29,24,	Mon 4/22/13/30			•			•		Milestone	Summary	Project Summary	0000
-	_				٠,	٠٠.		- (ļ			ļ	j	Ł	i	j J.	ĺ.,	٠		ا مدان		٠.	≥ . ,			<u>i</u>				ĺ			·						Mile		Proj	
Start		Tue 2/15/11	Tue 2/15/11	Tue 2/15/11	Tue 3/8/11	Tue 3/22/11	Tire 3/22/41		Tue 3/29/11	Tue 3/22/11	Tue 4/26/11	Mon 5/16/11	Tue 3/1/11	Tue 3/1/11	Tue 5/24/11	Tue 8/16/11	ue 10/18/11	Tue 10/18/11	Mon 1/23/12	ue 11/29/11	rue 11/29/11	Mon 1/30/12	Tue 1/31/12	Tile 4124/12	Trie 1/31/17	27	106 7/7/13	Tue 1/15/13	Tue 1/1/13	Mon 1/14/13	Tue 1/1/13	Tue 1/1/13	Tue 2/26/13	Mon 4/22/13					·		•				
uo uo	_			0.days	days	davs	7 daye.	iays.	5 days:	5 days		0 days.	5 days	. 60 days	days	45 days	. 30 days. T	ï.		Γ.		i		5 days:	240 daye	uays	o days:	3 days.	į	_	O days	o days;		0 days											
Duration		270	25 (10	.0) . ! !	ιΩ	ີ່ເກ : :	ιO	0	235 (9.	9	45	8	5	0	298 days	. 45	; o ;		3	270	₹ ⁴	2 ::	n	8	0	4	4	4	0				•							
		r Expan					:			! !						1						!	. sievona		•		:						-											ress	
		ta Cente					: -) dal	wed	!	74						mittal		proval		·	tion	A letting	i	·.			ing		upancy		nents	seo	1								Task	Split	Progress	
		10317 - MPK Bidg A Data Center Expans		Prepare Scope	Scope Approved		Description Description	e Propo	Proposal Approved	Prepare WOA	WOA Approved	WOA Funded		g.: AE:Contracting	50% Submittal	100% Submitta	Plan check Submittal	Prepare RFP	Plan Check Approva		GC Contracting	Permit/Mobilization	Franchist Submittal Approvals	Equipment Order	10 10	Construction	<u></u>	Testing & Training		Beneficial Occupancy	O&M Manuals	As-Built Documents	Retention Invoices	lete .									•	·	
me		MPKBI	Scope	Prenar	Scope	Proposal	2	repar	Propos	Prepar	WOA	WOA	Design	AE Co	50% S	100%	Plan c	Prepar	Plan C	mplement	90.00	Permit	1		1	Const	. Punch List	Testin	Closeout	Benefi	O&M	As-Bu	Reten	Complete									le.mpp		
Task Name		10317 -	S		1.	0							å						-	E	-						•	: :	ช	· 				-									Schedu	<u>.</u>	
	0			-	· .			.			, . 		,	-1-	-	-		1	-			!	<u> </u>	-	•			: : 	<u> </u>	 												,	Project: 10215 Schedule.mpp		
0	!	۲-	7	6	4	·	,	اه	7	∞	0	92	1	12	13	4	15	19	17	180	5	2 5	16	- 66	1	3	24	25	56	27	28	29	30	3								<u> </u>	Projec	į	



10317 MPK Bldg A Data Center Expansion - Preliminary Action Plan Removal - Interior Demolition - 93,620 | 1.00 | 1.00 | 93,620

Budget

10317 MPK Bldg A Data Center Expansion - Preliminary Action Plan

Project Definition and Budget Asssumptions FY 2011 Project Plan 31,200

	FY 2011 P	FY 2011 Project Plan					
	<u> </u>	CAPITAL			O&M		
	Unit Cost			Unit Cost			
Item Description/	(or Lump	Quantity		(or Lump	Quantity	_	
or Phase of Work	Smm)	(or One)	Subtotal	Sum)	(or One)	Subtotal	
Project Management Labor	经验的证券				新工作的工作。	原際語の語を記る	
The Property of the Section (Compatibility)		100166	30000				
Project Management (Outside Labor)							
्रा प्रस्कार का क्षेत्रकार हैं। क्षित तह में कि प्रकृतिकार के			著語 がある またい	原がある。			
Project Engineer (Outside Labor)							
in Project Good distribute (Operational)		20000	1,00,000,1				
Construction Management (Outside Labor)		は一個ない。				The state of the s	•
Internal Labor							
formt						(Care de la company)	
	では、大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大	方法のとはないという					
Land Mgmt						1	
	が対象を対象を						
Safety Mgmt - Environmental Compliance Prgm	75	8.00	009				
Architectural and Engineering							
The first of the construction of the construct		TOTAL TRANSPORT				家等等的发展	
Architectural Services		造成を言葉を					
Civil Engineering				Salah Sa			
Eliquestes (Bristance file)							
Estimating Services						,	
a. Geetsenstankingutesaalag.							
Interior Design							
Mechanical Engineering		なる。最近は一個ないでは、	100000000000000000000000000000000000000				
Wife Representations							
Structural Engineering					٠	ı	
Permitting Planning Inspections							
Testing & Instantions	ののはないというないのでは、これでは、これでは、これでは、これでは、これでは、これでは、これでは、これ	とのないのではなり、					
Construction							
Construction SVCS Design Build							
Wolfsmann Architectural Communication (1997)							
PRE CONSTRUCTION :	•						

10317 MPK Bldg A Data Center Expansion - Preliminary Action Plan Project Definition and Scope Assumptions FY 2011 Project Plan

0.	Who completed this worksheet?
1	Name
	Ken Street
	Date Prepared
	2/11/2011
T	Project Identification
<u> </u>	Project Name: Reference title for project
	MPK Bldg A Data Center Expansion
	Project Number: Unique Identifier, (will be assigned by capital programs group).
	10317
α.	
	Owner: Person accountable for the business result supported by this project.
	Goldsberry, Don
	Sponsor: Supports business case and funding to senior management for owner.
	Baker, Chris
α.	Business Purpose
	Purpose: If known, identify underlying business case and requirement.
	Current IT projections indicate (business requirements)server room demand will exceed available real estate at Monterey Park by the end of 2013.
٧.	Job Scope Summary
	Description: for Job Scope Summary on WOA
	Expand MPK Data Center with the addition of 6,000 SF of new space and the renovation of 2,000 SF of existing Building A office area. Approximately 20 workstations will be lost with this option.
V.	Proposed Action Plan
	PAP: Detailed description of work to be performed
	Development of fully functional Data Center Annex in accordance with cuurent IT design direction: disaster recovery site requriements and minimum N+1 redundancy. New Data Center will be stand alone, but inter-connected via redundant power and network serv
	, ,
v	Who Benefits
1.	Beneficiaries: List of Business Groups (including Owner's) which will benefit from
	this project.
	Company

10317 MPK Bldg A Data Center Expansion - Preliminary Action Plan Project Definition and Scope Assumptions FY 2011 Project Plan

VI. Constraints

Constraints: List of known risks, requirements, or pre-requisites beyond the <u>scope</u> of this project or beyond the <u>control</u> of this project team.

Business

VII. Assumptions

Assumptions: List of known risks, critical pre-requisites, or limitations within the scope and control of this project or which have been represented by the Owner to be met in a satisfactory way.

All non-abatement work will occur during normal business hours. The site will provide all necessary utilities to complete the work. Abatement will be requried, and all hazardous materials are intended to be removed prior to any removal or construction act

VIII. Acceptance

Acceptance: Owner(s) of projects shall sign below, acknowleging receipt of this Scope & Preliminary Budget Document. Signature also provides acceptance of the contents and releases the PM to continue developing the project in preparation for the Project Proposal.

NΑ

Business Case Summary

Business Unit Name

1) Project	10317 MPK Data Center Expansion	3) Submission Date	5-Jan-10
Title:		1	<u> </u>
2) Departme	nt: Information Technology	6) Original Amount:	\$ 9,140,731
4) Project Category:	New Business [] Mandatory [] :y/Expansion [x]	7) Supplemental Amount:	\$
"'	Reliability/improvements [X] Strategic [x] RD&D []	8) Revised Total:	\$ 9,140,731
5) Project	Budgeted (X) Budget Year; 2011 Unbudgeted ()	9) Est. Start Date:	1-Apr-11
Funding Typ	e: Budget Addition [] it Substitution [] Project No. 10317	10) Est. Completion Date:	31-Mar-13
	ISPUNITARIA KAHARISH MARKEMININ MUMININ MUMININ MARKAMARIN MARKEMIN MARKAMIN MARKAMIN MARKAMIN MUMININ MUMININ		

11A) Project Description, Justification and Key Drivers

Monterey Park is a Reciaim Facility and only recently has been removed from Title V requirements. The Data Center expansion must be designed to avoid an increase in particulate matter release, and AQMD reconsideration of the Title V status.

The Monterey Park Data Center has experienced a significant level of business growth in response programs such as Advance Meter, Smart Grid and several others. Since 2004 the Data Center has seen an annual growth rate of 24%. At this growth rate the Monterey Park Data Center will be out of raised floor space by Q1-2013. Beneficial occupancy for expanded space must be targeted for Q4-2012, even if final construction cosmetics are completed by mid 2013. Disaster Recovery Service is the primary use of the Monterey Park Data Center, and it's capacity must be able to accommodate natural growth as well as support new business programs including Advance Meter, Smart Grid, and others. Ever increasing demand for backup data storage also places pressure on the Monterey Park facility for additional raised floor space.

As further described below, expanding Building A to included a total of 6,000 SF of Data Center raised floor space, and an additional 2,000 SF of infrastructure support space for the unloaded budgeted cost of \$7.1 million will provided the best alternative to meet the scheduled needs.

11B) Project Alternatives / Upside Potential / Downside Risks:

To address the rapid growth of the Data Center at Monterey Park, IT has been working closely with the Capital Programs group to meet the immediate requirements, as well as our future needs to the year 2020. The most pressing need is to provide additional raised floor space and supporting infrastructure to address the impending growth limitations by the end of 2012. Two options were reviewed before a recommendation was provided to the executive management team.

12) Financial and Business Benefits (include discussion on soft benefits, if any):

With the Increasing technological demands on our business, Data Centers at Rancho Bernardo and Monterey Park are under pressure to stay ahead of the growth. Current projections indicate that the Monterey Park Data Center will out-grow its' floor space by Q1-2013. The business absolutely requires additional floor space to continue to provide the primary functions associated with the Monterey Park Data Center, and to support natural growth as well as known/specific large scale capital projects. Without the expansion as described in section 11B, business needs will not be able to met. Costs associated with multiple afternatives are described above.

1) Project 10317 MPK Data Cent	er Ex	pansio	n			_				_				
13) Discount Rate, %		Prio	r Years	Cı	irrent Year	Ė	Year 2		Year 3		Year 4	Year 5		Total
14) NPV, \$K \$ -		19) C	apital S	endi	ng, \$K			•						
15) IRR, %		\$		\$	412,850	\$	7,062,150	\$	1,665,731	\$.		\$.	9,140,731
16) Discounted Payback, Years		20) O	ngoing	08M	\$K						•			
		\$	•			\$	-	\$	· -	\$	-	\$-	\$	
17) Profitability Index		21) Incremental Savings or Revenues, \$K												
		\$	-	\$		\$	-	\$		\$	÷ .	\$-	\$1	-
18) Revenue Requirements PV, \$K		22) N	et After	Tax (Cash Flow, \$K									
		\$	•	\$	•	\$		\$	-	\$	-	\$-	\$	
			Endbr	emei	its Vasianno	Bill	terana App	řάγ	BOARD HONORAL					
23) Project Initiator (Signature & Nam	e)			1	Date	26	A) Sr. Direct	or l	T Infrastructi	ıre		٠.	П	Date
William Stewart						Jef	f Nichols						l.,	
24) Director Infrastructure Eng & Ops						26	B) Other: (As	: Ар	propriate)					
Julie Sculi						l						,	<u> </u>	
25) Vice President or Senior Vice Presi	lden	t			•	26	C) Other: (As	Ар	propriate)				-	

Monterey Park Building A

Project 10317 Data Center Expansion

Background

There is currently approximately 12,000 SF of raised floor space within the Monterey Park Data Center. A multi-year program to harden the site is currently in the implementation phase, with several improvement projects already completed. The last project scheduled as part of that program is the Diesel Generator Replacement project, which will be completed this year.

The Information Technology Department established a 2 site Data Center strategy in 2002, and reaffirmed that policy in 2006, as a means to manage the technological growth requirements of our business. It is typical for ordinary business (organic) growth to advance at a rate of 5-10% annually; varying on a year-to-year basis. Project related growth, in addition to the organic growth, at MPK is specific to company implemented programs such as Smart Meter, SCG AMI, continuing OpEx deployments, Customer Care service improvements, Network-Perimeter and WAN, GridComm, etc. These and other programs have increased the capacity requirements at MPK, which require additional floor space for equipment housing, increased Stand-by Emergency Power Systems, and increased cooling systems capacity in order to maintain business operations at acceptable levels.

The Monterey Park Data Center has experienced a greater level of business growth in response the programs listed above. Since 2004 the Data Center has seen an annual growth rate of 24%. The maximum UPS capacity, which dictates the total allowable energy load for the Data Center, is limited at 600 kW. At the current growth rate the Data Center will surpass that limitation before the end of this year.

The Proposed Project

To address the rapid growth of the Data Center at Monterey Park, IT has been working hand-in-hand with the Capital Programs group to meet the immediate requirements as well as our future needs out to the year 2020. The problem: provide additional floor space and supporting infrastructure to address the impending growth limitations by the end of 2012. Two options were reviewed before a recommendation was provided to the executive management team.

The first option was renovation of MPK Building C from an office/training use into a Data Center Annex. Preliminary cost estimates set the budget for this option at approximately \$7.8 million unloaded. The second alternative was to expand Building A to meet the expected program requirements (approximately 6,000 SF of Data Center floor space). Concerns regarding Seismic Improvement requirements and the campus CUP limitations led us to assume it to be the more expensive of the two. Further investigation, however, indicated that a large Seismic Upgrade to Building A would not be required and that our plans were consistent with the CUP limitations indicated that this could be the better option.

Comparing the two alternatives it was determined that the Building A option provided future site growth compatible to the many business units at the site. The Building A options also shortened infrastructure connection runs which would reduce its' overall costs. Factoring in these, and other, strong points to the Building A option resulted in a total unloaded project budget of approximately \$7.1 million.

Expanding Building A to included a total of 6,000 SF of Data Center raised floor space, and an additional 2,000 SF of infrastructure support space for the unloaded budgeted cost of \$7.1 million will provided the best opportunity to the company to meet the scheduled the scheduled need.

Pre-design Activities:

Review load growth projections developed by IT and historical load trends.

Determine electrical and mechanical loads that need a 2N standby power in DR program.

Confirm actual floor space requirements through calculations of current and expected growth plans.

Determine impact of project on current office space and identify any necessary relocation requirements.

Design Activities:

Identify highly qualified design teams, specializing in Data Center projects, for competitive design RFP. Complete required design service Design expansion of Building A for purpose of Data Center expansion within a maximum 6-month schedule.

Initiate construction RFP process with highly qualified vendors specializing in Data Center construction.

Construction Activities:

Complete GC contracting process before the end of 2011.

Obtain construction permit by January 2012.

Complete construction by December 2012, including Beneficial Occupancy

Drivers and Objectives

Who's there?

There are three primary tenants for the space: Information Technology (IT), Remittance Processing, and Logistics. This project impacts IT most directly, by improving the reliability of the Data Center. Information Technology Services (Network Engineering and Operations, and Infrastructure Engineering and Operations) provides service to the Company in the following areas: LAN/WAN, Voice; LAN/WAN; Voice Field; Carrier; and Network/Telecom.

Project Cost Summary (all costs unloaded)

The project has been budgeted for \$7,071,969.00, and is scheduled to take place between March 2011 and March 2013.

Project Manager (Company Labor)	30,000
Internal Labor (Other Departments)	1,200 ·
Project Management (Outside Labor)	
Project Coordinator (Outside Labor)	10,000
Architectural & Engineering Fees	473,809
Plan Checks & Permits	88,839
Testing & Inspection	•
Construction	5,828,991
Equipment	,
Pre-Construction	
Tenant Improvements	62,500
Environmental Services	21,250
Other	99,000
Removal	93,620
Contingency (@5%)	336,760
Total	7,071,969



Project Action Plan

Capital Budget Planning; Scope Confirmation Project Planning; Design Cost Approval Project Planning; Implementation Approval

To: Pam Fair, VP Environmental, Safety and Support Services

From: Ken Street

Date: February 23, 2011

CC: Don Goldsberry, Tom Souders, Robert Ruiter, Eleanor Candler, William Stewart, Julie Scull, Jeff

Nichols,

RE: 10317 MPK Building A Data Center Expansion

The following reflects our understanding of your objectives for the above referenced effort, the requirements/deliverables that will be met as part of this project, and our project plan, including;

- Project schedule
- Projected costs
- Assumptions and clarifications

Objective: With the increasing technological demands on our business, Data Centers at Rancho Bernardo and Monterey Park are under pressure to stay ahead of the growth. Current projections indicate that the Data Center will out-grow its' floor space by Q1-2013. Without acceptable space to grow with the business, Data Center needs will not be met in-house. Expensive off-site options (exceeding \$1 million per year) could be incurred as well as greater operating risks to the company. Should the Data Center be unable to respond the company's loss would be incalculable. To address the rapid growth of the Data Center at Monterey Park, IT has been working hand-in-hand with the Capital Programs group to meet the immediate requirements as well as our future needs out to the year 2020. The problem: provide additional floor space and supporting infrastructure to address the impending growth limitations by the end of 2012.

Scope: Expanding Building A to Include a total of 6,000 SF of Data Center raised floor space, and an additional 2,000 SF of infrastructure support space for the unloaded budgeted cost of \$7,071,969.00. The project has been scheduled to take place between March 2011 and March 2013.

Project Action Plan Page 1 of 3 February 21, 2011

Building A will be expanded from the North East corner toward the Atlantic Blvd property line to the east and the emergency access lane to the north. The expansion will include all necessary infrastructure installed in accordance with accepted Disaster Recovery guidelines with the exception of FEMA Immediate Occupancy standards. The expansion will provide an additional 6,000 SF of Data Center floor space and will renovate approximately 2,000 SF of existing office space. Relocation of as many as 20 workstations will be required.

Pre-design Activities:

Review load growth projections developed by IT and historical load trends.

Determine electrical and mechanical loads that need a 2N standby power in DR program.

Confirm actual floor space requirements through calculations of current and expected growth plans.

Determine impact of project on current office space and identify any necessary relocation requirements.

Design Activities:

Identify highly qualified design teams, specializing in Data Center projects, for competitive design RFP. Complete required design service Design expansion of Building A for purpose of Data Center expansion within a maximum 6-month schedule.

Initiate construction RFP process with highly qualified vendors specializing in Data Center construction.

Construction Activities:

Complete GC contracting process before the end of 2011.

Obtain construction permit by January 2012.

Complete construction by December 2012, including Beneficial Occupancy.

Assumptions and Clarifications:

This total does not include seismic upgrades over and above those required by the applicable building codes for the expansion scope of work or the existing building.

Your approval in the space provided below will serve as our authorization to proceed with this work

Don Goldsberry, Fac Ops and Cap Programs Mgr Approved		Date	·
William Stewart, Infrastructure Tech Mgr Approved	• •.	Date	
Carmen Herrera, Dir Facs and Lands Svcs Approved	-	Date	

Julie Scull, Dir Infrastructure Eng and Ops Approved	Date	
, , , , , , , , , , , , , , , , , , ,		
Jeffrey Nichols, Sr Dir IT Infrastructure Approved	Date	
Pam Fair, VP Envr, Safety, and Support Svcs Approved	Date	•

DRA DATA REQUEST DRA-SCG-067-MPS SOCALGAS 2012 GRC – A.10-12-006 SOCALGAS RESPONSE DATE RECEIVED: MARCH 30, 2011 DATE RESPONDED: APRIL 14, 2011

12. Referring to page DGT- CWP-11, capital workpapers budget code 653

- a) Provide pictures of the exterior site, sewer line and parking lighting on a CD.
- b) If these improvements will improve site security and will eliminate a potential health hazard, why is this requested now and not in a previous GRC?

SoCalGas Response:

- a. Please see the CD provided with Parking lot replacement, Site lighting installation and sewer line replacement.
- b. Site improvements have always been an issue, facility manager was able to correct any sewer line concerns in the past. With the growth of the site, the increase head count and new datacenter HVAC equipment will put a strain on the existing sewer line possible backing up into the other buildings. Security at the site will be improved as the increase in lighting throughout will support security cameras visibility and laminate a safer walk path for those who work in the evening hours after dark.

DRA DATA REQUEST DRA-SCG-067-MPS SOCALGAS 2012 GRC – A.10-12-006 SOCALGAS RESPONSE DATE RECEIVED: MARCH 30, 2011 DATE RESPONDED: APRIL 14, 2011

- 13. Provide 2010 recorded amounts for the following tables:
 - a) Table SCG-DGT-1, page DGT-1.
 - b) Table SCG-DGT-2, page DGT-2.
 - c) Table SCG-DGT-4, page DGT-4.
 - d) Table SCG-DGT-5, page DGT-13 (include 2008-2010 recorded and 2011-2015 forecasted).

SoCalGas Response:

This information is not maintained in the format specifically requested. However, detailed 2010 data for REL&F shared and non-shared O&M costs as well as capital expenditures was provided to DRA under separate cover on April 11, 2011.

ATTACHMENT 2

Revised Capital Project Workpaper for Budget Code 653, Monterey Park Data Center Master Plan

SCG Doc#260232 Rebuttal: October 2011

CAPITAL PROJECT WORKPAPER

Page 1 of 2

PROJECT TITLE MPK Data Center Master Plan - Bldg C Server Room Expansion	BUDGET NO. 00653.0
WITNESS Jim Seifert	IN SERVICE DATE Q4 2012

PROJECT COST (\$000 in 2009\$)	PRIOR YEARS	2009	2010	2011	2012	REMAINING YEARS	TOTAL
DIRECT LABOR	0	0	0	29	73	0	102
DIRECT NONLABOR	0	0	0	330	6268	0	6598
TOTAL DIRECT CAPITAL	0	0	0	359	6341	0	6700
COLLECTIBLE							
NET CAPITAL	0	0	0	359	6341	0	6700
FTE	0	0	0	.30	.80	0	1.10

Business Purpose

MPK has experienced major growth in last 5 years

- MPK ~ 24% annually since 2004
- Growth is expected at similar rate for next few years
 - o Ordinary Business ("organic") growth typically 5-10% annually; varies year to year
 - o Projects/Programs require increased facilities resources at both data centers including:
 - Network Perimeter and WAN
 - SCG AMI
 - Continuing OpEx deployments
 - Smart Grid
 - Data Center Network Refresh

Physical Description - REVISED

The current plan to expand the Data Center is to construct a new addition that adjoins the current Data Center. With the reduction of approximately 150,000 square feet of our downtown Headquarters building we have no surplus space to house these employees. Costs for adding new construction to the existing Data Center building and demolishing the interior of Building C to expand it were almost even. Plus we would incur costs of trying to house dislodged employees.

We are anticipating project costs of \$6.7 million and Design and Construction will go through competitive bid process. The current plan has our construction being complete in November of 2012. Our IT Department has established this as a critical date or they will be at capacity. They have projected during fourth quarter 2012 the MPK data center server room will be completely out of floor space capacity to house any additional server, storage, network, security equipment. This will impact our business requirements to continue to provide IT Disaster Recovery services. Our IT Department has implemented numerous upgrades over several years that has automated systems and allowed for labor reductions that would otherwise be passed on to our customers.

Project Justification

Capacity:

Increased capacity will be required in order to: Provide additional floor space for equipment housing; Increase capacity of Stand-by Emergency Power (SEP) systems; Increase cooling systems capacity; and Maintain site availability at business acceptable levels.

CAPITAL PROJECT WORKPAPER

Page 2 of 2

PROJECT TITLE MPK Data Center Master Plan - Bldg C Server Room Expansion	BUDGET NO. 00653.0
WITNESS Jim Seifert	IN SERVICE DATE Q4 2012

Growth projections

- Assumes continued 5-10% annual growth rate for "ordinary business" this is the typical long term planning figure
- Estimated loads for project related growth are based on best available information from the projects. Only major projects that are in planning, have been approved, or are presently underway have been considered when estimating future loads
- Major initiatives such as SCG AMI and Smart Grid will require space in the Data Centers

Access and security

 Increased requirements for controls on physical access to sections of the Data Centers are expected; these will be needed to comply with regulations such as NERC-CIP and will significantly impact space planning at both sites

Reliability and availability

Improvements to the electrical distribution system are needed to ensure full 24/7 capabilities

Schedule

- 2010 Executive approval
- 2011 2nd Qtr Pre-design, planning and programming to commence.
- 2012 Construction completion by 4th Qtr

ATTACHMENT 3

Recorded Capital Expenditures (Blanket Codes)

SCG (Capital Blankets (000)	2005	2006	2007	2008	2009	2010
653	Infrastructure Improvements	7,062	11,854	7,307	6,078	9,047	6,816
654	Safety/Environmental	154	1,379	1,035	634	200	186
664	Miscellaneous Equipment	0	46	(12)	50	0	0
712	Facilities Equipment	(2)	0	0	0	0	0
716	Fleet Equipment	778	13	86	70	318	44
		7,991	13,291	8,417	6,832	9,565	7,045

SCG Doc#260232 Rebuttal: October 2011