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PUBLIC UTILITIES COMMISSION OF CALIFORNIA

ENERGY DIVISION

RESOLUTION E-3550  
FEBRUARY 18, 1999

RESOLUTION

RESOLUTION E-3550. PACIFIC GAS AND ELECTRIC COMPANY REQUESTS APPROVAL OF A TWO-PHASE REORGANIZATION OF ITS RESEARCH, DEVELOPMENT AND DEMONSTRATION PROGRAM. APPROVED.

BY ADVICE LETTER 2076-G/1759-E FILED APRIL 1, 1998  
BY ADVICE LETTER 2076-G-A/1759-E-A FILED NOVEMBER 16, 1998

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SUMMARY

In Advice Letter (A.L.) 2076-G/1759-E Pacific Gas and Electric Company (PG&E) requests approval of its two phase reorganization of its Research Development and Demonstration (RD&D) Program and its transfer of RD&D functions from its centralized management to its decentralized business units.

PG&E filed A.L. 2076-G-A/1759-E-A, dated November 16, 1998 to request authority to shift RD&D spending between programs in excess of 20 percent. This filing replaced A.L. 2076-G/1759-E in its entirety.

This resolution grants PG&E authority for a two-phase reorganization of its RD&D Program and transfer of RD&D functions from PG&E's centralized management to its decentralized business units.

This resolution also grants PG&E authority to shift funding between RD&D programs.

PG&E's reorganization and shift of funds was necessitated by the transfer of RD&D funding to the California Energy Commission (CEC) and Commission decisions on restructuring of the electric industry in California.

Enron filed a protest on December 7, 1998 taking issue with use of the RD&D funds, fund shifting, and separation of gas and electric RD&D.

BACKGROUND

This filing is made pursuant to Resolution E-3405, dated January 24, 1995, which ordered PG&E to file an advice letter "requesting approval before merging, deleting, or

adding program areas to its existing Research Development & Demonstration portfolio." The two-phase reorganization consists of 1) a regrouping of project categories occurring in January 1997, and 2) a disbanding of the formal Research and Development department, with disbursement of RD&D functions into various business unit organizations, occurring in August 1997.

Phase I

Phase I of the reorganization regrouped research to reflect PG&E's lines of business and changed internal reporting relationships. Decision (D.)92-12-057, Part 18.3, Shifting of Funds Within the RD&D Programs states: "...PG&E could direct 20 percent of its program funding without further Commission authority, 20 to 50 percent if the Commission grants an advice letter request, and above 50 percent if the Commission grants a request by application", (47 CPUC 2d 143, at 242). The proposed new organization consists of four research areas and one business area, whereas the proposal approved by D.95-12-055, PG&E's 1996 General Rate Case(GRC), consisted of three research areas and a business area with a slightly different definition. PG&E is requesting that new benchmarks be acceptable shifts within the fund-shifting guidelines and be accepted as new benchmarks established for any future fund-shifting review, as shown in Table 1 which shows total expenditures over the three year period 1996, 1997 and 1998.

**Table 1: Old and New Structure**

<b>1996 GRC Approved Structure</b>	<b>Total Three Year Authorization (\$ in millions)</b>	<b>Proposed New Structure</b>	<b>Total Three Year Estimate (\$ in millions)</b>
Cost Reduction Projects	39.3	Electric Distribution	21.5
Customer Systems	20.7	Customer Services	23.3
Grid & Merchant systems	26.4	Power Transmission	21.3
		Gas supply & Distribution	15.1
Planning & Business Services	28.7	Planning & Business Services	33.9
<b>Totals</b>	<b>115.1</b>		<b>115.1</b>

Table 2 below is reproduced from a data response from PG&E. Comparison of projects in the old and the new organizations shows that Cost Reduction Projects include Power Transmission and part of Electric and Gas Distribution. Grid and Merchant Systems include Power Transmission and part of Electric and Gas Distribution. Customer Systems include Customer Services with the addition of a meter reading project and exclude a test facility. Planning and Business Services include the old projects plus the Corporate Center Research. New spending levels are lower or equal to those under the old organization. Table 2 shows a more detailed comparison.

**Table 2: Detailed Differences Between Old and New Categories**

Old Category	New Category	Work Transferred
Cost Reduction Projects	Power Transmission	Transfers electric transmission projects from old to new category. Spending level is lower.
	Electric Distribution	Transfers electric distribution projects from old to new category; work continues in new category at a lower level of spending in 1997 and 1998.
	Gas Supply & Distribution	Transfers gas transmission and distribution projects from old to new category at similar level of spending in 1997 and 1998.
Grid & Merchant	Power Transmission	Transfers electric transmission and merchant projects from old to new category; work continues in new category at a lower level of spending in 1997 and 1998.
	Electric Distribution	Transfers electric distribution projects from old to new category;

		work continues on new category at a lower level of spending in 1997 and 1998.
	Gas Supply & Distribution	Transfers gas transmission projects from old to new category at similar level of spending.
Customer Services	Customer Services	Transfers Customer Services projects from old to new category in addition to the following: add advanced meter reading project to new category from Cost Reduction Projects; transfer power quality/power electronics work and Modular Generation Test Facility from old Customer Services category to new Electric Distribution.
Planning and Business services	Planning and Business services	Transfers planning and business services function from the old to the new category, in conjunction with the addition of Corporate Center Research to the new category.

Table 3, below, shows the spending estimates for the proposed new structure at the time of the Phase I reorganization recast back into the old organization. Table 3 demonstrates that the reorganization did not breach the 20 percent threshold for fund-shifting purposes, and, therefore, does not trigger the requirement for an advice letter filing. Table 3 shows total amounts estimated for a three year period.

**Table 3: Recasting New Categories into 1996 GRC Categories**  
**Total Three Year Authorization**

	1996 GRC \$ (millions)	January '97 Update	\$ Change (millions)	Percent Change
Cost Reduction Projects	39.3	44.4	5.1	13.0
Customer Systems	20.7	17.1	(3.6)	(17.0)
Grid & Merchant Systems	26.4	25.0	(1.4)	(5.0)
Planning & Business Services	28.7	28.6	(0.1)	0
<b>Totals</b>	<b>115.1</b>	<b>115.1</b>	<b>0</b>	<b>0</b>

(Negative)

At the present time, much closer to the end of the three-year cycle, PG&E has re-estimated the expected expenditures recast, as much as possible, back to the old categories.<sup>1</sup> Assembly Bill (AB) 1890, statutes of 1996, Chapter 854, as codified in P.U. Code sec.381 (b)2, (c)2, and (f) and allocated by D.97-10-014, Ordering Paragraph 2(c), mandated the shift of funds to the CEC. Some of the funds shifted beyond the 20 percent threshold, into the 20 to 50 percent category that, under D.92-12-057, requires approval to do so through an advice letter filing. Therefore PG&E requests the authority to shift funds. The fundamental reason behind the downward shifts was to implement the Public Interest RD&D program administered by the CEC. The amounts shown in Table 4 are total expenditures in the three year period of 1996, 1997 and 1998.

<sup>1</sup> An additional new category is the California Energy Commission Public Interest RD&D funding for 1998 as shown in Table 4

**Table 4: Estimating Current Expenditure Under Old  
 Categories  
 Total Three Year Authorizations**

	1996 GRC Amounts 1997 \$ (millions)	Current Estimate \$ (millions)	\$ Change (millions)	Percent Change from GRC
Cost Reduction Projects	39.3	28.9	(10.4)	(26)
Customer Systems	20.7	14.5	(6.2)	(30)
Grid & Merchant Systems	26.4	17.4	(9.0)	(34)
Planning & Business Services	28.7	24.6	(4.1)	(14)
CEC		29.7 <sup>2</sup>	29.7	100
<b>Totals</b>	<b>115.1</b>	<b>115.1</b>	<b>0</b>	<b>0</b>

(negative)

Phase II

PG&E cites a number of influences that led to its decision to decentralize its business units and to disperse RD&D functions directly to decentralized business units in early 1998. Among the influences were the passage of AB 1890, various Commission energy industry restructuring decisions, and other changes in the once vertically-integrated electric utility business.

Each of the business units is now independently responsible for project management and reporting of their research and development activities. As significant RD&D funding has been directed toward the CEC, PG&E's internal programs are shrinking to reflect a focus on issues unique to its customers and to reflect increased pressure on rates. PG&E expects to complete much of its ongoing electric research during 1998 with RD&D balancing account funding, with a significantly reduced program in 1999.

PG&E is seeking CEC funding for public interest programs in 1998, and, if PG&E receives these revenues back from the CEC, they will be separate from PG&E's balancing account expenditures.

The total of the actual expenditures for 1996 and 1997, and estimates for 1998 are shown in Table 5.

<sup>2</sup> The amount shown for transfer to the CEC is the annual expenditure for 1998 only.

**Table 5: Expenses Under New Categories  
 Total Three Year Authorizations**

	1996 GRC Amounts (\$ millions)	Current Estimate (\$ millions)	Percentage (Decrease) Increase
Customer Services	23.3	15.4	(34)
Electric Distribution	21.5	13.6	(37)
Gas Supply and Distribution	15.1	14.3	(5)
Power Transmission	21.3	17.4	(18)
Planning & Business Services	33.9	24.7	(27)
CEC	0	29.7 <sup>3</sup>	100
<b>Totals</b>	<b>115.1</b>	<b>115.1</b>	<b>0</b>

(negative)

In its Test Year 1999 GRC, PG&E is proposing to fund gas and electric RD&D through its operating budgets. PG&E may also fund some electric RD&D through application to the CEC for additional public interest RD&D funds. PG&E believes the RD&D reporting requirements should change because of the decentralization and general energy industry structural changes.

PG&E is not requesting any modifications to its total RD&D funding authorization at this time.

**NOTICE**

Notices of Advice Letters 2076-G/1759-E and 2076-G-A/1759-E-A were made by publication in the Commission's calendar and by mailing copies to interested parties in accordance with Section III of General Order 96-A.

<sup>3</sup> Again the amount shown for transfer to the CEC is the annual expenditure for 1998 only.

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### PROTESTS

Enron filed a protest on December 7, 1998 taking issue with use of the RD&D funds, fund shifting, and separation of gas and electric RD&D.

PG&E responded on December 18, 1998 explaining that A.L. 2076-G-A/1759-E-A is based on the three year period from 1995 through 1998.

### DISCUSSION

In response to Commission Resolution E-3405, dated January 24, 1995, PG&E filed A.L. 2076-G/1759-E requesting approval of reorganization of its RD&D and regrouped research efforts reflecting PG&E's lines of business and changed internal reporting relationships.

PG&E decentralized its management of RD&D functions and dispersed those functions to decentralized business units. The passage of AB 1890, mandating transfer of RD&D funding to the CEC, and restructuring of the California electric industry necessitated PG&E's RD&D reorganization.

In D.92-12-057 47 CPUC 2d 242 we established a funding range and expressed our concern of excessive RD&D expenditures as follows: "We believe this range would give PG&E adequate flexibility because we do not desire to micromanage its RD&D programs, yet not go so high as to relinquish our obligations to monitor utility activities." On p. 243 we adopted the same fund-shifting limits as imposed on other California utilities in response to Division of Ratepayer Advocate's (DRA)<sup>4</sup> recommendation based on their concern that utilities will receive RD&D money for certain purposes, then spend the money without constraint, on another entirely different RD&D program. We were concerned then both about excessive RD&D spending in total and by category.

In AL 2076-G-A/1759-E-A PG&E requested authority to shift funding between programs beyond 20 percent, but within the 50 percent limits established by D.92-12-057.

The shifting of RD&D funds to the CEC resulted in declines in funding for each category, but D.92-12-057 applies to any change including increases and decreases. Therefore, as required by D.92-12-057 PG&E filed advice letter AL 2076-G-A/1759-E-A requesting authority to revise its RD&D budget, by program, in excess of 20 percent.

PG&E's funding shift in excess of 20 percent was also the result of legislative mandate to transfer funds to the CEC.

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<sup>4</sup> DRA is now known as the Office of Ratepayer Advocates.



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We now address the three issues submitted in Enron's protest.

Are these New Programs Strictly Limited to Distribution and Transmission Functions?

In its first protest item Enron expressed concern that RD&D funds would be strictly limited to transmission and distribution functions. Enron proposed that the Commission require PG&E to provide the exact components of RD&D accounts to ensure that PG&E is not subsidizing generation RD&D programs through Public Purpose Programs (PPP) funds.

PG&E responds that Enron seemingly misunderstands the nature of its reorganization request, which relates to the RD&D one-way balancing account for the 1996 general rate case cycle (1996 through 1998), for both gas and electric projects. The program is almost complete, and the regulations for RD&D programs and funding have changed over time.

PG&E stated that the Commission ruled after 1996 that electric RD&D funds could no longer be spent on generation research. In a footnote PG&E recounts discussions with Commission staff establishing that spending for uncompleted generation-related projects in 1997 was allowed; however, there was to be no spending for generation-related projects whatsoever in 1998. PG&E continues by pointing to Assembly Bill 1890 that limited research to transmission and distribution areas and resulted in isolating \$30 million of PG&E's total electric RD&D budget for public interest electric RD&D funds. Therefore the reorganization request in A.L. 2076-G-A/1759-E-A is for a period of time in which the Commission allowed generation research, both gas and electric programs, and the 1998 funding related to public interest research. The Commission's established process of reviewing balancing accounts takes place at the end of each GRC cycle. PG&E expects that the upcoming review of the close-out of its 1996-1998 balancing account will be thorough enough to assess its adherence to the Commission's and legislature's dictates.

We note that comparison of old and new categories in Table 2 shows no generation in either category. We agree that the upcoming review of the close-out of its 1996-1998 balancing account will be thorough enough to detect any unauthorized expense on generation. We deny Enron's protest on this item.

There is no Justification for the Shifting of Funds and Name Changes.

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PG&E states that it filed its RD&D annual report for 1997, based on the new categories. PG&E promised to send a copy of the annual report to Enron and answer any questions.

D.92-12-047 answers the second issue of Enron's protest. We gave PG&E the flexibility of shifting funds between programs within established limits because we do not desire to micromanage its RD&D programs. PG&E can shift funds within the 20 to 50 percent limit with approval of an advice letter filing, and PG&E filed A.L. 2076-G-A/1759-E-A seeking such approval.

We deny Enron's protest on this item.

The Gas Supply & Distribution Account is not Electric Related and Should not be Included in the Electric RD&D Funds.

PG&E again points to the old and closing balancing account in which the Commission combined gas and electric program funds. Historically, the RD&D balancing account contains both gas and electric funds. However, under the Commissions' reporting requirements PG&E must break down expenditures between gas and electric costs.

We note that Table 2 shows Gas Supply and Distribution broken out from Cost Reduction and Grid and Merchant projects as shown in separate categories of RD&D.

Utilities are required to separately report gas and electric RD&D expenses under the Uniform System of Accounts. The annual audit should verify that such expenses are properly reported. Such oversight should minimize the possibility that utilities could use RD&D expenses to reduce the headroom or to cross-subsidize electric with gas RD&D allowances or vice versa.

We deny Enron's protest on this item.

COMMENTS

The draft resolution of the energy division in this matter was mailed to the parties in accordance with PU Code Section 311(g). No comments were received.

**FINDINGS**

1. PG&E filed A.L. 2076-G/1759-E on April 1, 1998 requesting Commission approval of a two phase reorganization of its RD&D programs.
2. D.92-12-057 requires utilities to file an advice letter if funds are shifted between programs in excess of 20 percent.
3. PG&E's new organization causes a fund shift in excess of 20 percent.
4. On November 16, 1998 PG&E filed AL 2076-G-A/1759-E-A amended requesting authority to shift RD&D funds in excess of 20 percent, but less than 50 percent.
5. Enron filed a protest on December 7, 1998 of possible generation expenses, justification for fund-shifting, and possible commingling of gas and electric RD&D expenses.
6. The two phase reorganization consists of 1) a regrouping of project categories in 1997 and 2) a disbursement of RD&D functions into various business unit organizations.
7. The passage of AB 1890 and the Commission's restructuring decisions led PG&E to disperse its RD&D functions from a centralized management structure to decentralized business units.
8. PG&E requests that the new benchmarks be accepted as a basis for any future fund-shifting review.
9. It is reasonable to approve PG&E's two-phase reorganization of RD&D programs.
10. It is reasonable to approve PG&E's fund shifting in excess of 20, but less than 50 percent.
11. Review of the annual RD&D report and audit of the balancing account over the three year General Rate Case cycle should provide adequate assurance that PG&E will not cross-subsidize electric with gas RD&D funds or reduce the headroom in funding the competition transition charge.
12. We authorized PG&E's fund shifting in the range of 20 to 50 percent in D.92-12-057 to avoid micro-managing PG&E's RD&D programs.
13. Enron's protest is denied.

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**THEREFORE IT IS ORDERED that:**

1. PG&E's Advice Letter 2076-G-A/1759-E-A is approved.
2. Advice Letter 2076-G-A/1759-G-A shall be marked to show that it was approved by Commission Resolution E-3550.
3. Enron's protest is denied.
4. This resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed, and adopted at a conference of the Public Utilities Commission of the State of California held on February 18, 1999, the following Commissioners voting favorably thereon.



WESLEY M. FRANKLIN  
Executive Director

RICHARD A. BILAS  
President  
HENRY M. DUQUE  
JOSIAH L. NEEPER