CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO. CA 95814-5512

November 1, 2002

VIA Next Day Air

Docket Office
California Public Utilities Commission
505 Van Ness Avenue, Room 2001
San Francisco, CA 94102

Re: R.02-10-001

Dear Docket Clerk:

Enclosed for filing in the above-entitled matter are the original and **five copies** of the **COMMENTS OF THE CALIFORNIA ENERGY COMMISSION ON THE ORDER INSTITUTING RULEMAKING.** Please return the extra copy in the enclosed stamped, self-addressed envelope. Thank you for your attention to this matter.

Very truly yours,

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Enclosures

cc: **R.02-10-001** - service list

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Establishment of a Public Purpose Program Surcharge Pursuant to Assembly Bill (AB) 1002.	Rulemaking 02-10-001

COMMENTS OF THE CALIFORNIA ENERGY COMMISSION

ON THE ORDER INSTITUTING RULEMAKING

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COMMENTS OF THE CALIFORNIA ENERGY COMMISSION ON THE ORDER INSTITUTING RULEMAKING

Pursuant to the October 3, 2002, order by the California Public Utilities Commission (Commission), the California Energy Commission (CEC) respectfully offers these comments on the establishment of the public purpose program surcharge mandated by AB 1002. In this filing, the CEC limits its comments to the subject of research and development (R&D).

I. Summary

The CEC strongly believes that the natural gas surcharge should be adequate to fund R&D at an appropriate level, based on history, equity and public policy. At a minimum this should be $13,500,000 annually. In addition, the CEC believes that the administration of the natural gas R&D program, again, for reasons of history, equity and public policy, should be with the CEC. Through the administration of similar programs the CEC already has in place methodologies, procedures and policies for selection of projects and the awarding of funds.

II. Allocation of the Natural Gas Surcharge

Assembly Bill (AB) 1002[1] mandates that the Commission impose a natural gas surcharge adequate to fund low-income assistance programs, energy efficiency programs and "public interest research and development" not adequately provided by the competitive and regulated markets.

The CEC believes that the amount allocated for public interest R&D should be at least $13.5 million annually.[2]

A. The "Working Group Report" Provides Historical Context

As indicated below and in the context of historical R&D funding the CEC feels that $13.5 million is a modest amount and should be considered a minimum for future funding under the provisions of AB 1002.

In connection with the Commission's restructuring rulemaking, R.94-04-031, the Commission requested various reports. The "Working Group Report on Public Interest R&D Activities" was developed to provide information regarding energy-related R&D activities in a restructured environment. The Report, which was submitted on September 6, 1996, was the culmination of many months of work by fifteen different entities.

The report addressed several topics germane to the current rulemaking, including the public goods R&D costs and the administration of public goods R&D programs.

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[1] Chapter 932, Statutes of 2000, enacting Public Utilities Code Section 890 *et seq.*
[2] This reflects $12,000,000 in 1996 dollars, adjusted according to the Gross Domestic Product deflator, to estimated 2003 dollars.

Utility funding for both private goods and public goods R&D has been both in-house and through associations such as the Electric Power Research Institute (EPRI) and the Gas Research Institute (GRI). For several reasons it is difficult—but not impossible—to estimate how much of this funding is solely for public interest natural gas R&D.

One, the utilities report their R&D expenses in the aggregate for both private goods and public goods R&D; AB 1002 provides funding only for "public interest" R&D. The "public interest" portion of past utility R&D has been calculated at around 50%. This figure was not simply a guess or extrapolation, but rather was the result of careful review and analysis by the CEC staff of the individual R&D projects then being funded by both the electric and gas utilities.

Two, the utility expenditures, other than those for SoCal Gas and Southern California Edison (SCE), reflect the costs of both electric and natural gas expenditures. As to the expenses reported by the "dual" utilities, Pacific Gas and Electric (PG&E) and San Diego Gas & Electric (SDG&E), the CEC estimates that about 1/5, or 20%, of the expenses are natural gas related. It is unclear why there is this level of funding, given that the percentage of gas to electric expenses within the low-income program, at least for PG&E, is about 22%.[3] Within the context of energy efficiency, for 1999, $228 million was collected by the electric surcharge under AB 1890, while $45 million was the amount reflected for natural gas energy efficiency programs.[4]

Three, the GRI expenditures reflect national, rather than California-only expenditures. However, 10% of this total reflects the approximate California share.

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[3] Advice Letter 24154-G, October 11, 2002.
[4] Draft Resolution E-3792, page 2 and Senate Third Reading analysis, page 4, August 28, 2000.

According to the Working Group Report, in 1991 the total amount spent for electricity-and natural gas-related R&D by the State's four major utilities—PG&E, SCE, SDG&E and SoCalGas—was nearly $145 million. This amount declined steadily and precipitously to barely over $60 million in 1996.

Expenditures by SoCalGas alone, for the period 1991 through 1996, exclusive of transportation, are shown below.[5] At least one-half of this amount reflects expenditures for public interest R&D.

1991	1992	1993	1994	1995	1996
12,825,500	17,491,230	12,240,459	13,809,600	7,490,880	8,247,000

By way of contrast, the statewide budget for public purpose natural gas R&D for 1999 was $500,000.[6] This is woefully inadequate. This represents a substantial and unwarranted decline.

To reiterate, the CEC believes the appropriate annual allocation of the AB 1002 surcharge for purposes of funding public goods R&D is a minimum of $13,500,000.

B. Equity Demands that Natural Gas R&D Be Adequately Funded

The Working Group Report examined the issue of funding impacts on natural gas programs. At the time the report was written, 1996, all but one of the contributing entities endorsed a natural gas surcharge. The principle adopted was that "public interest R&D activities should be funded and administered in an equitable manner which

[5] Working Group Report, Appendices, App. III-6. Dollar amounts have been adjusted to 1996 dollars. Amounts reflect both private goods and public goods expenditures.
[6] Senate Rules Committee, Third Reading Analysis, page 4, August 28, 2000.

insures that the beneficiaries of these activities contribute fairly to the funding, and that those who fund these efforts receive a fair share of the benefits." [7] This should eliminate "free-ridership" and cross-subsidies. A second principle was that public interest R&D should be funded and administered in a manner that avoids or minimizes unfair competition.[8]

The Report notes that many types of public interest R&D activities provide benefits to both electric and natural gas suppliers and/or their customers. Examples include improvements in gas-fueled generation and many end-use efficiency products, such as insulation, ducting or windows, which reduce heating and cooling loads for both natural gas and electricity customers.

The CEC's Public Interest Energy Research (PIER) program currently is funding R&D projects in gas-fueled generation and end use efficiency through an electricity surcharge. While these projects are expected to provide ample benefits to electric ratepayers and suppliers, they also provide benefits to gas ratepayers and suppliers. This results in an unfair cross-subsidy from electricity ratepayers to gas ratepayers. Stakeholders in the R&D Working Group Report process raised and discussed the issue of "free ridership" and the resulting effect on competition between the two energy sources, since electricity ratepayers disproportionately carry the burden of supporting public interest R&D.

Historically, as noted, the ratio between electricity and natural gas R&D expenditures is about 5 to 1. Under the extension of the AB 1890 public interest R&D program, the utilities are collecting and forwarding $62.5 million annually in surcharges

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[7] Working Group Report, p. 3-17
[8] *Ibid*.

for electricity-related R&D. Accordingly, the natural gas equivalent would be $12.5 million annually.

C. Public Policy Dictates that Natural Gas R&D Be Adequately Funded

In addition to the historical view of utility expenditures for natural gas R&D, the Working Group Report considered an alternative method for evaluating the "appropriate" amount of public interest R&D expenditures.[9] This method, referred to as "social investment," calls for the utilities to devote 1% of their gross operating revenues to public interest R&D. The amount projected by the Report for this approach, exclusive of large-scale commercialization, was $165 million. For natural gas, this translates to $33 million annually.

While this is substantially greater than the $12 million derived from the historical method, a 1% allocation to R&D is also substantially lower than that spent by other industries. By way of comparison, in 1994 the telecommunications industry spent about 3.3%, the electronics industry spent 5.7%, and the health care industry spent 9.8% of gross operating revenues on R&D.[10] More recent data, expressed as a percentage of domestic net sales, indicates that U.S. industry as a whole spent 3.8% of domestic net sales on R&D, the electronics industry spent 8.9%, and the health care industry 3.2%.[11]

As noted, the benefits of energy efficiency improvements can accrue to both electricity and natural gas consumers. This saves individuals money on their utility bills, supports a more reliable and secure energy system in California, decreases

[9] The Report has, as subsets, different methods for evaluating the "historical" expenditures. Working Group Report, pages 3-7 to 3-9.
[10] *Id.* at 3-6.

environmental consequences of energy production and consumption, and diminishes demands on the utility supply systems. Given the challenges facing California's utility system, the Commission should order more, rather than less, funding for natural gas R&D.

III. The CEC Should Administer the R&D Program

The CEC believes that the administration of the natural gas R&D program funded under AB 1002 should be with the CEC for the following reasons. One, the CEC has over twenty-five years of experience as an administrator of energy-related R&D, including natural gas programs. Two, by statute, Public Utilities Code Section 381(f), the CEC is the administrator for the Public Interest R&D program funded under AB 1890 and successor legislation.[12] Three, enabling legislation for the PIER program established a comprehensive foundation for the three major elements of a public interest R&D program: planning, implementation and evaluation. SB 1038 [13] established an advisory panel, a report to the Governor and Legislature and a broad-based public interest group, including the regulated utilities, to assist the CEC in selecting and evaluating R&D projects. AB 995 and SB 1194[14] require the CEC to develop "investment plans" every five years before funding is authorized by the

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[11] National Science Foundation, Division of Science Resource Statistics, Survey of Industrial research and Development, 2000.
[12] SB 1194 (Chap. 1050, Stats. of 2000) and AB 995 (Chap. 1051, Stats. of 2000) extend the public interest programs mandated by AB 1890, including R&D, for another ten years, at a comparable funding level.
[13] Chap. 515, Stats. of 2000.
[14] See note 11.

Legislature for the PIER program. SB 90 provides clear public implementation requirements for the conduct of the PIER program.[15]

Under these statutes, the CEC already has a program in place, plus a level of scrutiny and outside expertise, which would likely exceed anything imposed on another administrator. Indeed, to appoint an administrator other than the CEC would be redundant and duplicative.

Finally, the CEC does not use PIER funding for internal "bricks and mortar" research facilities and instead has opted to conduct a planned program through the R&D community for California and Californians. A competitive public process, with peer oversight and input, is the foundation for PIER program awards.

IV. OTHER

The CEC believes that evidentiary hearings are needed to establish the amount of the surcharge to be allocated for R&D and the appropriate administrator for the natural gas R&D program.

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[15] Chap. 905, Stats. of 1997, adding Chapter 7.1 to Division 15 of the Public Resources Code and adding Article 5 to Chapter 2.5 of Part 1 of Division 1 of the Public Utilities Code.

V. CONCLUSION

For the reasons noted, the CEC believes that the allocation of the natural gas surcharge imposed under AB 1002 should provide at a minimum $13,500,000 annually. In addition, the CEC believes that the R&D program funded under AB 1002 should be placed with the CEC, to achieve coordination between programs and to avoid overlap and duplication.

The CEC appreciates the opportunity to provide these comments.

Respectfully submitted,

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November 1, 2002

CERTIFICATION OF SERVICE

I, **LINDA TORRES**, certify that I have caused copies of the **COMMENTS OF THE CALIFORNIA ENERGY COMMISSION ON THE ORDER INSTITUTING RULEMAKING,** to be served by electronic mail, on or before November 1, 2002, on all parties who provided e-mail addresses for the identified service list **R.02-10-001** provided by the California Public Utilities Commission for this proceeding. I have also served by U.S. Mail appropriate copies to the California Public Utility Commission's Docket Office as well as to parties on the service list on November 1, 2002.

November 1, 2002

DECLARANT
(Service Lists attached to the original only.)