

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking on the  
Commission's Own Motion to Adopt  
New Safety and Reliability  
Regulations for Natural Gas  
Transmission and Distribution  
Pipelines and Related Ratemaking  
Mechanisms

Rulemaking 11-02-019

**OPENING TESTIMONY OF DAVID MARCUS  
ON BEHALF OF THE  
COALITION OF CALIFORNIA UTILITY EMPLOYEES**

January 31, 2012

1 **I. Introduction**

2 In his November 2, 2011 Scoping Memo in this proceeding,  
3 Commissioner Florio identified the very first issue to be addressed in  
4 ratemaking testimony as “revenue requirements,” and explained that, “[a]ny  
5 recommendations that utility shareholders bear a portion of the costs of  
6 future safety-related expenses and investments must be well-supported, and  
7 address the safety implications of the proposed ratemaking treatment.”<sup>1</sup> This  
8 testimony explains why safety-related costs imposed on utility shareholders  
9 should be based on past behavior, and not tied to future expenses and  
10 investments.

11 The general issue here arises from the distinction between future costs  
12 and sunk costs, and between penalties and incentives. CUE, the Commission  
13 and the public have a strong desire for a safe gas delivery system, and in  
14 providing incentives to make sure utility shareholders feel the same way.  
15 Since shareholders are generally believed to respond better to financial  
16 incentives than to simple exhortations, those incentives have to be at least  
17 partially financial, either rewarding desired behavior or penalizing undesired  
18 behavior.

19 PG&E's past management of its gas delivery system was inadequate, a  
20 conclusion with which PG&E now agrees. CUE and many others believe that  
21 ratepayers should not have to pay PG&E twice for work it failed to do in the

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<sup>1</sup> R.11-02-019, Amended Scoping Memo and Ruling of the Assigned Commissioner, 11/2/11, p. 3.

1 past. CUE also strongly supports, and believes all other parties do as well,  
2 the need for PG&E (and the other California gas utilities) to make  
3 substantial investments to improve the safety of their gas systems. But there  
4 is a real risk that in trying to achieve one goal (don't pay twice for the same  
5 work), the other goal (get the needed work done) will be undermined. This  
6 testimony addresses ways to achieve both goals without the pursuit of one  
7 compromising attainment of the other. Ultimately, the Commission can  
8 impose penalties for past errors without unintentionally providing incentives  
9 for PG&E to avoid doing all of the needed future work.

10 **II. What should be done, or not done, now?**

11 In the current situation, there is strong reason to believe that PG&E at  
12 least, and possibly other California gas utilities, have not built or operated a  
13 sufficiently safe gas system. The gas plans the Commission is now starting to  
14 evaluate are a response to that belief, and are intended to make the existing  
15 system much safer. The issue which the Scoping Memo anticipates arising is,  
16 if not enough money was spent in the past on gas safety, should shareholders  
17 be held to account by requiring them to pay some "portion of the future  
18 safety-related expenses and investments" needed to make up for past under  
19 spending?

20 CUE's answer is "no." Identifying expenditures and investments that  
21 need to be made in the future, but refusing to reimburse utilities for making  
22 them, provides exactly the wrong incentive. If utilities know they will  
23 recover less than 100 percent of their investments, they will have a direct and

1 strong financial incentive to resist making the investment in the first place,  
2 since the more they spend, the more they will lose. Also, if they are told they  
3 will only be reimbursed up to X dollars for investments that ought to cost  
4 more than X, with shareholders making up the difference, they will have a  
5 direct and strong financial incentive to cut corners in order to keep the total  
6 investment as close to X as possible.

7 As CUE previously wrote regarding proposals to have PG&E  
8 shareholders pay for part of the future costs of gas pipeline safety,

9 CUE believes that the Proposed Decision's requirement that PG&E,  
10 and only PG&E, allocate the costs of testing and replacing pipeline  
11 between ratepayers and shareholders is misplaced. The requirement  
12 intertwines assessing PG&E's culpability for its past failure with  
13 future costs for improving the safety of California's gas system.  
14 Moreover, the requirement gives shareholders a disincentive to  
15 undertake the necessary work to ensure a safe system. Instead, the  
16 Commission should determine PG&E's fault and appropriate penalty  
17 for its past failure separately from assessing the cost of future work  
18 required to achieve a safe gas system for Californians.<sup>2</sup>  
19

20 CUE expanded those comments, explaining that,

21 by requiring shareholders to pay for upgrading PG&E's gas system,  
22 the Commission would be undercutting shareholders' incentives to  
23 quickly perform the necessary work. CUE understands the impulse to  
24 penalize PG&E, and CUE is not opposed to the sentiment per se, but  
25 the Commission must think carefully about how best to implement a  
26 penalty. The Commission has an important goal here – to get  
27 California's gas systems up to standards. But, the potentially  
28 undesirable effect of requiring shareholders to pay for the work for  
29 which they will see no return is that there is less incentive for  
30 shareholders to provide the money to do the work.  
31

32 If the Commission is steadfast on punishing PG&E for the San  
33 Bruno rupture in this proceeding, the Commission should consider a  
34 system whereby PG&E is penalized up front, but not on the margin.

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<sup>2</sup> CUE, 5/31/11 comments on Bushey PD in R.11-02-019.

1 For example, for the first million dollars of capital investment, the  
2 return on equity (“ROE”) would be zero, but for each million dollars of  
3 capital investment after that, the ROE would be 12 percent. Such a  
4 system would achieve the desired effect of punishing PG&E, but would  
5 eliminate the negative side effect of discouraging investment. In fact,  
6 it would provide shareholders with an incentive to supply the capital  
7 quickly in order to get some return on their investment.<sup>3</sup>  
8

9 Alternatively, PG&E's own proposal to have shareholders pay for 2011  
10 costs to survey and remediate parts of the gas transmission system fits into  
11 the rubric set out above. Since 2011 costs are now sunk, and not subject to  
12 incentives to underspend, there is no incentive problem with making them  
13 into shareholder costs. Going forward, PG&E's shareholders should bear  
14 responsibility for past misdeeds through a penalty proceeding, but not by  
15 giving counterproductive incentives to avoid doing the work needed to  
16 provide safe gas service.

### 17 **III. Conclusion**

18 At his confirmation hearing, Commissioner Florio said that if money  
19 was diverted from safety expenditures in the past, ratepayers should not  
20 have to pay that money again. He said the tricky part is deciding what  
21 should have been done in the past based on past funding and what is a result  
22 of changing the standards. CUE agrees. But here again, even beyond  
23 deciding what the utility should have done in the past but didn't do, there is  
24 the question of how to impose a consequence for past behavior. In order to  
25 get the incentives for future behavior right, the Commission should  
26 distinguish between the consequences for past behavior and the desired

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<sup>3</sup> Ibid.

1 future behavior. Where money was inappropriately underspent in the past,  
2 the underspending should be recouped from shareholders via some sort of  
3 penalty. But that penalty should be clearly linked to the past misbehavior,  
4 and not imposed on future investments. Otherwise, the Commission will be  
5 trying to use two wrongs to make a right, underfunding future work to offset  
6 PG&E's underspending on past work.

7 Underfunding future work by requiring shareholders to pay for part of  
8 it is wrong because it gives PG&E an incentive to either cut corners on the  
9 future work (in order to control costs) or to endeavor not to do it at all (to  
10 avoid shareholder losses). The Commission doesn't want shoddy work, and it  
11 shouldn't want to have to fight a recalcitrant PG&E to get PG&E to do what  
12 needs to be done. The Commission can, and should, have it both ways. It  
13 should reassure PG&E that it will fully fund future work that the  
14 Commission finds is needed for safety, so that there is no extra incentive for  
15 PG&E to avoid doing that work, or to do it on the cheap. But it should also  
16 penalize PG&E for past work that was either promised and not done, or  
17 should have been done pursuant to then-existing safety requirements, but  
18 was not done. And it should also make clear to PG&E, in case there is any  
19 doubt, that it is prepared to impose further penalties in the future, if PG&E  
20 doesn't do the right thing this time around.

# ATTACHMENT A

## RESUME

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June 2011

### Employment

#### Self-employed, March 1981 - Present

Consultant on energy and electricity issues. Clients have included Imperial Irrigation District, the cities of Albuquerque and Boulder, the Rural Electrification Administration (REA), BPA, EPA, the Attorney Generals of California and New Mexico, alternative energy and cogeneration developers, environmental groups, labor unions, other energy consultants, and the Navajo Nation. Projects have included economic analyses of utility resource options and power contracts, utility restructuring, utility bankruptcy, nuclear power plants, non-utility cogeneration plants, and offshore oil and hydroelectric projects. Experienced user of production cost models to evaluate utility economics. Very familiar with western U.S. grid (WSCC) electric resources and transmission systems and their operation and economics. Have also performed EIS reviews, need analyses of proposed coal, gas and hydro powerplants, transmission lines, and coal mines. Have presented expert testimony before FERC, the California Energy Commission, the Public Utility Commissions of California, New Mexico, and Colorado, the Interstate Commerce Commission, and the U.S. Congress.

#### Environmental Defense Fund (EDF), October 1983 - April 1985

Economic analyst, employed half time at EDF's Berkeley, CA office. Analyzed nuclear power plant economics and coal plant sulfur emissions in New York state, using ELFIN model. Wrote critique of Federal coal leasing proposals for New Mexico and analysis of southwest U.S. markets for proposed New Mexico coal-fired power plants.

#### California Energy Commission (CEC), January 1980 - February 1981

Advisor to Commissioner. Wrote "California Electricity Needs," Chapter 1 of Electricity Tomorrow, part of the CEC's 1980 Biennial Report. Testified before California PUC and coauthored CEC staff brief on alternatives to the proposed 2500 megawatt Allen-Warner Valley coal project.

#### CEC, October 1977 - December 1979

Worked for CEC's Policy and Program Evaluation Office. Analyzed supply-side alternatives to the proposed Sundesert nuclear power plant and the proposed Point Conception LNG terminal. Was the CEC's technical expert in PG&E et. al. vs. CEC lawsuit, in which the U.S. Supreme Court ultimately upheld the CEC's authority to regulate nuclear powerplant siting.

**Energy and Resources Group, U.C. Berkeley, Summer 1976**

**Developed a computer program to estimate the number of fatalities in the first month after a major meltdown accident at a nuclear power plant.**

**Federal Energy Agency (FEA), April- May 1976**

**Consultant on North Slope Crude. Where To? How?, a study by FEA's San Francisco office on the disposition of Alaskan oil.**

**Angeles Chapter, Sierra Club, September 1974 - August 1975**

**Reviewed EIRs and EISs. Chaired EIR Subcommittee of the Conservation Committee of the Angeles Chapter, January - August 1975.**

**Bechtel Power Corporation (BPC), June 1973 - April 1974**

**Planning and Scheduling Engineer at BPC's Norwalk, California office. Worked on construction planning for the Vogtle nuclear power plant (in Georgia).**

### **Education**

**Energy and Resources Group, U.C. Berkeley, 1975 - 1977**

**M.A. in Energy and Resources. Two year master's degree program, with course work ranging from economics to engineering, law to public policy. Master's thesis on the causes of the 1972-77 boom in the price of yellowcake (uranium ore). Fully supported by scholarship from National Science Foundation.**

**University of California, San Diego, 1969 - 1973**

**B.A. in Mathematics. Graduated with honors. Junior year abroad at Trinity College, Dublin, Ireland.**

### **Professional Publications**

**"Rate Making for Sales of Power to Public Utilities," with Michael D. Yokell, in Public Utilities Fortnightly, August 2, 1984.**