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Decision 90 07 055 JUL 18 1990

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Investigation on the Commission's own motion into implementing a rate design for unbundled gas utility services consistent with policies adopted in Decision 86-03-057.	I.86-06-005 (Filed June 5, 1986)
And Related Matters.	R.86-06-006 Application 87-01-033 Application 87-01-037 Application 87-04-040

O P I N I O N

This decision sets forth final guidelines for estimating long-run marginal costs (LRMC) for the gas operations of Pacific Gas and Electric Company (PG&E), Southern California Gas Company (SoCal), and San Diego Gas & Electric Company (SDG&E).

I. Background

In Decision (D.) 90-01-021 we affirmed our commitment "...to implementing a program of long-run marginal cost-based rates as quickly as is reasonably feasible...." To that end, we directed the Commission Advisory and Compliance Division (CACD) to hold workshops with the utilities and interested parties. We also directed CACD to prepare a report on information received at the workshops. After CACD presented its report on April 13, 1990, we issued D.90-05-037 proposing a set of guidelines for estimating LRMC. We sought comments on the proposed guidelines. Today's decision adopts final LRMC costing guidelines based on the workshop report and the parties' comments.

II. Comments of the Parties

A. PG&E

PG&E agrees in principle with most of the guidelines, but is concerned that some inconsistencies exist between the schedules in this proceeding and in R.90-02-008, in which we are considering gas procurement issues. PG&E recommends that the Commission either postpone LRMC testimony until after final rules are adopted in the procurement case, or adopt a set of data assumptions (for instance, using the California Gas Report as the source for long-term forecasts) for use in LRMC testimony.

PG&E recommends the use of the present worth method for all capacity costs, including customer marginal costs. It expresses concern, however, that the Commission's proposed guidelines may be interpreted as assuming that the present worth method applies to customer groups rather than planned investments.

PG&E agrees that interstate pipeline costs should be included in the LRMC studies, but believes that the costs charged to California utilities, rather than estimates of actual costs of construction, are the appropriate measure to be included.

B. SDG&E

SDG&E generally supports the Commission's guidelines, and suggests that the Commission elaborate on the present worth method to clarify how it should be used. SDG&E also notes that historic data may not always be adequate to determine the current marginal customer costs of certain classes and requests permission to use detailed cost estimates in such cases. SDG&E believes that more detailed guidelines on interstate marginal costs would be helpful.

C. Division of Ratepayer Advocates

Division of Ratepayer Advocates (DRA) points out that where load is falling because of conservation efforts, the

regression method of estimating distribution LRMCs could give nonsensical results. DRA proposes a "design distribution demand" criterion for correcting this problem by assuming future distribution expansions and estimating their costs.

DRA argues that the present worth method of reflecting future costs is arbitrary, and prefers the use of a real economic carrying charge instead. DRA also recommends that the utilities be required to include their reliability criteria in their LRMC filings.

D. Southern California Edison Company

Southern California Edison Company (Edison) opposes the use of the present worth method, arguing that the method has no theoretical foundation and was developed before the advances in marginal cost techniques coming out of the electric industry. Edison also recommends that the gas utilities be required to identify in their filings the particular form of demand (for instance, winter vs. summer) associated with each marginal cost component.

E. Southern California Utility Power Pool and Imperial Irrigation District

Southern California Utility Power Pool and Imperial Irrigation District (SCUPP/IID) asks the Commission to consider which customer classes' load growth causes system additions in developing LRMCs. SCUPP/IID supports the Commission's recognition of the need for explicit reliability standards.

F. Toward Utility Rate Normalization

Toward Utility Rate Normalization (TURN) urges the Commission to consider any adopted guidelines a base case that each utility must include in rate filings, rather than binding rules. TURN believes the procedural schedule discussed in D.90-05-037 is unrealistic and more time should be provided to consider LRMC and cost-allocation issues.

On the subject of the study guidelines, TURN recommends discussion of a commodity-related component of LRMC, and recommends deleting the language regarding A&G costs. TURN asks that the Commission consider the possibility that some system components may initially be sized to meet any expected load increase, and so bear virtually no LRMC. TURN notes that regression methods of estimating distribution marginal costs may under some circumstances yield nonsensical results.

TURN supports the present worth method and the inclusion of interstate costs in LRMCs.

G. California Gas Producers Association

California Gas Producers Association (CGPA) expresses concern over the use of short-term system optimizations, but has no objections to the use of the present worth method for reflecting future costs in present rates. CGPA notes that as long as incremental rates are used for new pipeline capacity, the impacts of pipeline additions should not undermine the allocation and productive efficiency benefits associated with LRMC rates.

H. California Industrial Group

California Industrial Group (CIG) notes that the ultimate test of a rate design methodology is the reasonableness of the rates, and reminds the Commission that some adjustment to LRMCs must be made to reconcile marginal cost revenues with the revenue requirement. CIG recommends that the Commission concentrate on improving the current embedded-cost allocation methodology rather than embark on a full-scale LRMC-based method.

Should the Commission go forward with LRMC, CIG supports using one methodology for all utilities. It opposes the use of the service drop--regulator--meter (SRM) method of calculating customer costs as underestimating those costs, and the present worth method of adjusting future costs as not being founded on economic theory. CIG argues that including the LRMC of interstate pipelines is inconsistent with the Commission's methodology for the electric

utilities, where, according to CIG, the "Commission recognizes that the utility's marginal cost is simply the price it must pay to the seller" of certain inputs not under utility control.

I. Cogenerators of Southern California

Cogenerators of Southern California (CSC) opposes the SRM method of calculating customer costs, arguing that some distribution costs should also be included. CSC supports the Commission's proposed use of actual, as opposed to optimized, systems for costing purposes, and urges the use of each utility's actual planning process. CSC supports the inclusion of interstate pipeline marginal costs, but recommends that non-core customers' option of direct bypass be separately stated. CSC suggests storage LRMCs be calculated separately for core and non-core.

J. Federal Executive Agencies

Federal Executive Agencies (FEA) supports the Commission's move toward LRMC-based allocation and rate design, and notes that methodologies are likely to evolve over time. FEA requests clarification that the present worth method does not apply to distribution LRMCs, and that D.90-05-037 did not imply that different LRMCs might be calculated for different customer groups, but only that different groups were more or less likely to impose the LRMCs. FEA notes that because the present worth method depends on actual utility expansion plans, it is not very useful if a utility has no plans to expand a given component. FEA seeks to explore this problem in hearings.

FEA opposes the inclusion of interstate pipeline LRMCs in the Commission's methodology, and urges the use of pipeline demand charges instead.

K. Geothermal Resources Association

Geothermal Resources Association (GRA) expresses concern over the rapid pace of the LRMC proceeding, and worries that including allocation issues with LRMC issues in hearings will be confusing and controversial. GRA urges the Commission to include

reliability standards in the current phase of the proceeding so that it will not be forced to redesign rates at some future time. GRA supports the use of real economic carrying charges for adjusting future costs instead of the present worth method.

L. North Canadian Oils

North Canadian Oils (NCO) supports the Commission's move to LRMC-based rates, but urges the Commission not to use interstate costs in setting intrastate rates. NCO points out that new pipelines to California would result in interstate costs being unbundled from intrastate costs, and that estimating interstate LRMCs now would impose the difficult task of picking one proposed project as a proxy. NCO urges the Commission to use LRMCs for allocating intrastate costs only, and to adopt a policy goal of unbundling the costs of interstate pipelines from the costs incurred inside the state.

III. LRMC Study Guidelines

After careful consideration of the comments filed by interested parties, we will adopt LRMC guidelines somewhat modified from those we originally proposed. In the following rules, additions to the originally-proposed guidelines are underlined. Appendix A presents the new guidelines in total.

A. System Components

The system components which may be priced as products using LRMC include:

- o Customer-related.
- o Distribution.
- o Transmission: Interstate, Local, and "Backbone".
- o Storage: Seasonal and Peaking.

The utilities should, in developing their cost studies, choose the specific functions which best suit their respective systems. Permitting the utilities to determine appropriate system components recognizes that the utilities have built and operated their systems according to local geography and customer requirements.

The cost studies should identify customer-related costs as those clearly associated with providing access to the gas system. Customer-related costs should be calculated using the "SRM" method proposed by DRA, which defines access costs as only those associated with the service line, regulator, and meter of each customer. The utilities should develop customer LRMCs for each of the ACAP rate groups, annualize the costs with a real economic carrying charge, and add administrative and general and operating and maintenance expenses. In identifying the access costs of a "typical" customer, the utilities should use actual current cost information. In the absence of actual current cost information, detailed cost estimates may be used.

B. Expansion Costs

LRMC studies should apply engineering costs to estimate expansion costs, except for those associated with distribution. Distribution costs should be analyzed using regression analysis because of the difficulty of defining a "typical" distribution facility. Distribution expansions may be assumed if necessary to produce meaningful results. The present worth method need not be applied to estimates of distribution system costs. LRMC studies should not employ the "optimized" system technique proposed by SoCal. In estimating expansion costs, the utilities should make explicit all assumptions used in determining "typical" investments.

C. Future Costs in Current Rates

Prices (based on LRMC should recognize that some customers cause demand for system additions more than others, and some cause demand for additions sooner than others. To

recognize these differences between customer groups, LRMC studies should incorporate an adjustment which takes into account the proximity or distance of actual, planned additions) should reflect the cost of planned capacity additions which occur over time. LRMCs are one measure of the cost of these future capacity additions. The studies should employ the "present worth" method proposed by PG&E, which incorporates the timing of planned additions into the LRMC calculation.

D. Interstate Capacity

Total system costs include the costs of interstate capacity as well as intrastate facilities. The cost studies should include a marginal cost component for interstate capacity. The studies should use the estimated costs of a new pipeline as a proxy for the LRMC of expanding the existing system.

E. Storage/Transmission Equivalence

Storage and transmission capacity may be tradeoffs for one another to some extent. The utilities' cost studies may recognize this trade-off. If they do, the utilities' assumptions should be explicit.

F. Reliability

The utilities should, in their cost studies, include assumptions about system reliability. Parties may present proposals for appropriate reliability levels and how reliability should be measured.

IV. Procedural Schedule

PG&E suggests that the timing of our decision in R.90-02-008 will affect the development of LRMC. TURN makes similar observations regarding cost allocation for the gas system. Although we agree that any restructuring of the gas industry may affect the development of LRMC and cost allocation, we do not believe we need to delay this proceeding. Cost-allocation

principles may be developed notwithstanding the outcome of R.90-02-008, and implemented in subsequent ACAPs according to prevailing regulatory programs and industry structure.

On the issue of LRMC review, PG&E proposes that our decision today defer submittal of utility testimony on LRMC calculations until 45 days after the final rules are rendered in R.90-02-008. Alternatively, PG&E asks that we sharpen the focus of LRMC hearings. Specifically, PG&E asks us to adopt the following guidelines:

- The 1990 California Gas Report long-term gas requirements forecast shall be used as an illustrative basis for calculating the utility resource plans;
- Each utility's most recently adopted ACAP short-term gas requirements forecast shall be used as the basis for calculating illustrative marginal cost revenue;
- Revenue reconciliation and rate design issues shall be addressed in individual ACAPs if the desire is to use LRMC results for 1992 test-year cases; and
- Specific allowances shall be made for revisions to investment (resource plans, allocation determinants, and revenue reconciliation proposals if required) no sooner than 45 days after final rules are adopted in OIR 90-02-008.

Although we will not tie the progress of this proceeding to that in R.90-02-008, we believe PG&E's request to focus this proceeding and its proposed guidelines are reasonable. We will not impose PG&E's guidelines on the other utilities or parties at this time because they have not had an opportunity to comment on them. We urge them, however, to consider the usefulness of PG&E's guidelines in simplifying this first review of LRMC.

D.90-05-037 anticipated September hearings. This proceeding has been slightly delayed so that September hearings are

not possible. However, we still intend to issue a decision on cost allocation and LRMC in time to implement them in ACAPs for test year 1992. We direct the assigned Administrative Law Judge to schedule, as soon as possible, a prehearing conference to set forth in more detail the scope of the proceeding and address other procedural matters, including a final schedule for these hearings.

Findings of Fact

1. D.90-05-037 proposed guidelines for the development of LRMC studies.

2. Respondent utilities and parties filed comments on the guidelines proposed in D.90-05-037.

Conclusion of Law

The LRMC study guidelines set forth in this decision should be adopted.

O R D E R

IT IS ORDERED that the guidelines for developing long-run marginal cost studies for gas operations are adopted.

This order is effective today.

Dated JUL 18 1990, at San Francisco, California.

G. MITCHELL WILK
President
FREDERICK R. DUDA
STANLEY W. HULETT
JOHN B. OHANIAN
PATRICIA M. ECKERT
Commissioners

I CERTIFY THAT THIS DECISION WAS APPROVED BY THE ABOVE COMMISSIONERS TODAY

NEIL J. SHULMAN, Executive Director

AB

LONG-RUN MARGINAL COSTS STUDY GUIDELINES

A. System Components

The system components which may be priced as products using long-run marginal costs (LRMC) include:

- o Customer-related.
- o Distribution.
- o Transmission: Interstate, Local, and "Backbone".
- o Storage: Seasonal and Peaking.

The utilities should, in developing their cost studies, choose the specific functions which best suit their respective systems. Permitting the utilities to determine appropriate system components recognizes that the utilities have built and operated their systems according to local geography and customer requirements.

The cost studies should identify customer-related costs as those clearly associated with providing access to the gas system. Customer-related costs should be calculated using the service drop--regulator--meter method proposed by Division of Ratepayer Advocates, which defines access costs as only those associated with the service line, regulator, and meter of each customer. The utilities should develop customer LRMCs for each of the ACAP rate groups, annualize the costs with a real economic carrying charge, and add administrative and general, and operating and maintenance expenses. In identifying the access costs of a "typical" customer, the utilities should use actual current-cost information. In the absence of actual current-

cost information, detailed cost estimates may be used.

B. Expansion Costs

LRMC studies should apply engineering costs to estimate expansion costs, except for those associated with distribution. Distribution costs should be analyzed using regression analysis because of the difficulty of defining a "typical" distribution facility. Distribution expansions may be assumed if necessary to produce meaningful results. The present worth method need not be applied to estimates of distribution system costs. LRMC studies should not employ the "optimized" system technique proposed by Southern California Gas Company. In estimating expansion costs, the utilities should make explicit all assumptions used in determining "typical" investments.

C. Future Costs in Current Rates

Prices should reflect the cost of planned capacity additions which occur over time. LRMCs are one measure of the cost of these future capacity additions. The studies should employ the "present worth" method proposed by Pacific Gas and Electric Company, which incorporates the timing of planned additions into the LRMC calculation.

D. Interstate Capacity

Total system costs include the costs of interstate capacity as well as intrastate facilities. The cost studies should include a marginal cost component for interstate capacity. The studies should use the estimated costs of a new pipeline as a proxy for the LRMC of expanding the existing system.

E. Storage/Transmission Equivalence

Storage and transmission capacity may be tradeoffs for one another to some extent. The

utilities' cost studies may recognize this trade-off. If they do, the utilities' assumptions should be explicit.

F. Reliability

The utilities should, in their cost studies, include assumptions about system reliability. Parties may present proposals for appropriate reliability levels and how reliability should be measured.

(END OF APPENDIX A)