Decision 92-05-022 May 8, 1992

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Investigation on the Commission's own motion to implement the Biennial Resource Plan Update following the California Energy Commission's Seventh Electricity Report. I.89-07-004 (Filed July 6, 1989)

OPINION ON PROTESTS TO PACIFIC GAS AND ELECTRIC COMPANY'S AVOIDED COST POSTINGS FOR THE QUARTER COMMENCING AUGUST 1, 1991, AND MONTHS COMMENCING NOVEMBER 12, DECEMBER 9, 1991, JANUARY 13, 1992 AND FEBRUARY 10, 1992

In this decision, we consider the appropriate gas throughput assumption to use for purposes of calculating avoided energy prices. The issue is composed of several parts: (1) what is the appropriate core throughput volume to use? (2) what is the appropriate noncore throughput volume to use? and finally, (3) what is the appropriate total throughput, on a quarterly or monthly basis, to use? The gas throughput affects the posted price if the electric utility is purchasing gas from more than one portfolio (core/noncore) or service level (firm/interruptible). The relative volumes from each portfolio or service level are important in accurately determining the electric utility's avoided cost.

In addition, we address certain issues which have arisen as a result of our investigation into this protest regarding the level of documentation which should be contained in the avoided cost posting itself.

¹ The November posting is the first monthly posting and reflects the modifications ordered in Decision (D.) 91-10-039.

I. Protests and Responses

The quarterly/monthly posting sets energy payments from Pacific Gas and Electric Company (PG&E) to qualifying facilities (QFs) priced at the purchasing utility's short-run marginal costs. On July 19, 1991, the California Cogeneration Council (CCC) filed a protest regarding the proposed avoided energy cost posted by PG&E on July 2, 1991 for the quarter running from August 1 through October 31, 1991. CCC protested two aspects of PG&E's posting. PG&E's final posting remedied one of CCC's areas of concern and CCC withdrew that portion of the July 19, 1991 protest on August 19, 1991. The remaining concern is that PG&E has made its posting on the basis of the "most recent estimates" of utility electric generation (UEG) throughput volumes rather than an adopted throughput forecast. CCC cites D.86-10-045 to support its argument that PG&E must rely on a throughput forecast that has been adopted by the Commission.

PG&E supplies gas to various customers, one of which is its own electric department. PG&E's gas department formerly maintained both a core portfolio and a noncore portfolio. Noncore customers had the option to purchase gas from PG&E's noncore portfolio or through self-procurement. Pursuant to D.90-09-89, the noncore portfolio has been eliminated. Currently, on PG&E's system, the UEG is allowed to purchase gas from the gas department through core subscription or directly within the electric department through self-procurement.

In order to determine natural gas rates, the Commission must accept assumptions regarding the volume of gas that will flow to each customer class. In PG&E's last Annual Cost Allocation Proceeding (ACAP), it was assumed that PG&E's electric department would purchase gas only through core subscription. Therefore, the Commission did not include self-procured volumes in its assumptions

regarding throughput to serve UEGs. In fact, however, PG&E's electric department is purchasing some gas on its own.

When the UEG procures a portion of its gas on its own and the rest through core subscription, since gas from various sources could be differentially priced, the relative volumes from each source may affect the UEG's avoided cost. Since no relative volumes were adopted in PG&E's ACAP, a dispute arises as to the appropriate throughput forecast to rely on in arriving at the avoided cost posting.

PG&E filed a response to CCC's initial protest on August 7, 1991. In its response, PG&E maintains that CCC's protest is without merit because D.86-10-045 does not explicitly discuss the volumes to be used in calculating the weighted cost of gas when both core and noncore gas is used. PG&E contends that D.88-07-024 addresses this issue and allows the use of its internal forecast. PG&E notes that it used an internal forecast in its posting for the quarter commencing May 1, which no party protested.

In its reply to PG&E's response (filed August 19, 1991), CCC asserts that PG&E has not been responsive to its concern. According to CCC, the decision cited by PG&E as the basis for using an internal forecast did not include discussion of throughput forecast methodology, and PG&E has not provided any substantive reasons for adopting the use of the internal forecast now.

In its response dated September 9, 1991, PG&E points out that the forecast adopted in PG&E's 1991 ACAP is inaccurate because it assumes that UEG customers would not burn any noncore gas. PG&E also states that the effect of CCC's proposal to use an adopted forecast would be to ignore a more accurate forecast and thus increase the level of the August quarterly posting.

CCC replied (on October 2, 1991) that, *PG&E certainly should include both core and noncore gas in the throughput forecast that is the basis of the QF price update. However,...total UEG throughput volume must be based on an adopted forecast....the most

recent Annual Cost Adjustment [sic] Proceeding provides an <u>adopted</u> throughput forecast that accounts for both core and noncore gas." (Page 2, emphasis in original.) In footnote 2, CCC notes that they would not by definition object to the postings reflecting formally filed updates of monthly core volumes provided that the total monthly volume is based on the last adopted total throughput forecast.

On November 6, 1991, PG&E responded that CCC's suggestion (in footnote 2 of its October 2 filing) would cause serious errors in determining the avoided fuel cost because it would misstate noncore gas usage. CCC renewed its protest on December 16, 1991 and again on January 16, 1992, February 13, 1992, and March 11, 1992 regarding the appropriate gas throughput volumes to use when calculating avoided energy prices.

II. PG&E's Postings

For the quarter commencing May 1, 1991, for the first time, PG&E's avoided cost posting reflected gas volumes purchased outside of the core portfolio. In order to reflect those volumes, PG&E used an internal forecast of total volumes expected to be burned over the quarter. The internal forecast was based on PG&E's most recent planning information and not on an adopted forecast. In the May posting, the volumes purchased outside of the core comprised a very small portion of the total volume for the quarter, therefore the price posting was not significantly affected. No party protested PG&E's method for the May quarter. (We note that the preliminary posting for the May quarter did not indicate that PG&E would be burning any noncore volumes.)

In its preliminary posting for the August 1 quarter, PG&E offered a different method for determining the volume of gas it would use for the purpose of calculating the average UEG rate. For the core volumes, PG&E indicated it would use "65% of volumes

adopted in D.91-05-029 for the August 31 [sic] - October 31, 1991 period." (Footnote 8, July 2, 1991 posting.) The volume indicated corresponds to the volumes found in May 30, 1991 workpapers (page 4) filed with Advice Letter No. 1624-G-B. This workpaper breaks the total annual supply forecast adopted in the last PG&E ACAP into monthly throughput and then further divides the volumes into firm and interruptible throughput. ("Firm" throughput corresponds to core volumes and 'interruptible' to purchases outside of the core.) The sum of the core volumes indicated for August, September, and October in the May 30 workpaper equals the UEG volume at core prices indicated in PG&E's preliminary posting for the August quarter. The noncore volumes in the preliminary posting are not derived from the May 30 workpaper but rather are based on the most recent estimate of UEG gas procurement. The sum of the core and noncore volumes in the preliminary posting does not equal the total monthly throughput volume for the August quarter derived from the May 30 workpaper.

In its final posting for the August quarter, PG&E slightly modified its method, basing both the core and noncore volumes on the UEG's most recent estimate of gas procurement. Further exploration shows that PG&E has used the most recent information available for core volumes associated with the month of August while using the core volumes indicated in the May 30 workpaper for September and October. As in the preliminary posting, the sum of core and noncore volumes does not equal the total monthly throughput found in the May 30 workpaper.

In its November posting, PG&E used yet another method for arriving at the UEG volumes. The core volumes appear to come from a filing PG&E makes on a monthly basis with the Energy Branch of the Commission's Advisory and Compliance Division (CACD) as required by Schedule G-UEG. In this filing, PG&E is required to notify the Commission of modifications to its Service Level 2 (Pirm) Monthly Contract Quantity. In this same filing, PG&E

indicates its UEG's planned Service Level 4 (Interruptible) election volumes. The UEG initially receives a Service Level 2 allocation based on the demand forecast adopted in the ACAP. Workpapers filed by PG&E with its ACAP application break down the annual volume into monthly volumes.

The Service Level 2 and 4 volumes in the monthly filing with CACD correspond to the volumes PG&E has used in its November posting. In its posting, PG&E indicates that these volumes are "per most recent UEG planning forecast" (Footnote 6, November 12, 1991 posting) but does not indicate that the volumes correspond to a filing made with the Commission. The sum of the core and noncore volumes again do not equal the total monthly throughput found in the May 30 workpaper discussed above. PG&E's December 9, 1991 posting is consistent with the method employed for the November posting, as are subsequent postings.

III. Relevant Decisions

A. D.86-10-045

D.86-10-045 is cited by the protestant as the reason an adopted volume of gas should be used in making the avoided cost posting. On page 6 (mimeo.), Conclusion of Law 2, D.86-10-045 states, 'PG&E should use the most recent forecast of gas burn adopted...for quarterly QF energy prices." PG&E is correct that this decision does not specifically address the relative volumes of core and noncore gas. This is not surprising, since at the time of D.86-10-045, the UEG was purchasing gas out of only the core portfolio, as it continued to do until May 1991. D.86-10-045 has not been modified by subsequent Commission action. Thus, there was no reason to address the issue of noncore volumes.

B. D.88-07-024

PG&E cites D.88-07-024 to support its use of an internal forecast of gas throughput in making its avoided cost posting. D.88-07-024 says that "for an electric utility that elects service from both the core and noncore portfolios, the energy payment to QFs is calculated using an average of the two WACOGS [weighted average cost of gas from both the core and noncore portfolios], considering the relative volumes purchased by the electric utility from each portfolio." (Finding of Fact 3.) The decision does not discuss the calculation of "relative volumes" from each portfolio. Nothing in D.88-07-024 indicates that "relative volumes" from each portfolio should not be consistent with adopted volumes, nor does it ever mention the use of adopted volumes versus internal forecasts.

C. D.91-05-029

PG&E's most recent ACAP (D.91-05-029) adopted an annual forecast of gas supply and demand. No monthly breakdown of these volumes is formally adopted by the Commission. Subsequent Advice Letter filings are accompanied by workpapers regarding monthly breakdowns of annual supply volumes for UEG rate design purposes. These workpapers also indicate the relative amounts of firm and interruptible throughput on a monthly basis; however, these breakdowns are not formally adopted by the Commission. PG&E filed workpapers with their ACAP application which provide a monthly breakdown of demand throughput consistent with the adopted demand forecast.

The May 30, 1991 workpaper (discussed in Section II) provides a monthly throughput breakdown which corresponds to the total annual <u>supply</u> forecast adopted in the latest ACAP. The monthly filing PG&E makes with CACD makes modifications to the volumes of core subscription gas the UEG receives. These volumes are initially based on the annual <u>demand</u> forecast adopted in the ACAP and the workpapers associated with this forecast.

D. D.91-10-039

In this decision, the Commission adopted an interim methodology for determining the noncore gas price which is one component of avoided cost. The Commission directed the utilities to use the most current forecast of procurement in determining the supply basins from which gas will flow. We recognized that there would be some discrepancies between the volumes assumed for transportation purposes and volumes used to determine supply basin weightings. For PG&E, volumes assumed for purposes of determining the transportation rate are consistent with volumes adopted in the most recent cost allocation proceeding or Energy Cost Adjustment Clause (ECAC) proceeding. D.91-10-039 also changed the avoided cost posting from a quarterly posting to a monthly posting. In addition, the utilities were required to provide certain information with their posting to support their forecasts.

IV. Discussion

This throughput question poses a dilemma. In D.91-10-039, we acknowledged that a more current forecast of gas procurement in determining supply basin weightings provides additional robustness in the avoided cost posting. However, we have maintained the use of adopted volumes for purposes of determining the transportation price component. PG&E's internal forecast for noncore volumes does not appear to precisely coincide with the forecast used to determine supply basin weightings. No noncore throughput forecast is adopted. Allowing the use of another different internal forecast would lead to the undesirable

² For Southern California Edison Company (Edison), volumes used to determine transportation rates are consistent with volumes adopted in the most recent Southern California Gas Company (SoCal) cost allocation proceeding.

result of further discrepancies between the components of avoided cost.

While it may be preferable to use the most current forecast of UEG gas usage, D.86-10-045 requires that an adopted UEG forecast be the basis for throughput volumes for purposes of calculating avoided costs. In the case of a utility that purchases from only one portfolio (either core or noncore), as San Diego Gas & Electric Company and Edison do, only one throughput forecast need be adopted; that forecast should be consistent with the volume adopted for purposes of determining the transportation price component. This problem does not arise for Edison both because it purchases only from outside of the core and because there is a throughput adopted for Edison in the SoCal cost allocation proceeding.³

PG&E purchases gas from both the core and noncore portfolios. We adopted a total UEG throughput for PG&E but not a distribution between the core and noncore. We encourage participants in future proceedings where forecasts of gas throughput are adopted to keep in mind the problems which have arisen here where no distribution between core and noncore was formally adopted. Other problems have occurred because we have not formally adopted monthly volumes. While we may prefer the use of "most recent estimates" of gas throughput, we will not change Commission policies through the protest forum; changes of this type will be more appropriately considered when we undertake a comprehensive reevaluation of our short-run avoided cost methodology in Phase 3 of this proceeding.

³ We find no evidence to suggest that Edison has adopted the same method utilized by PG&E in determining throughput as suggested by CCC in its December 16, 1991 protest.

We can now answer the three questions posed in the opening paragraph. Beginning with the final question, what is the appropriate total throughput to use on a quarterly or monthly basis? Based on D.86-10-045, the utility must use a total throughput which has been adopted, but D.91-05-029 did not adopt throughput on a monthly or quarterly basis. Therefore, we must require PGSE to use total throughputs for the applicable time periods that are consistent with the annual adopted volumes. We see two ways to do this:

Option A: Use the total monthly volumes put forward in the May 30, 1991 workpapers underlying Advice Letter No. 1624-G-B for rate design purposes. These volumes are consistent with the annual volumes adopted in PG&E's last ACAP and represent reasonable estimates of UEG gas supply.

Option B: Use the total monthly volumes put forward in workpapers underlying PG&E's last ACAP application. These volumes are consistent with the UEG demand forecast adopted in PG&E's last ACAP. PG&E's monthly filing with CACD, which notifies the Commission of shifts in Service Level 2 volumes, is based on these volumes.

PG&E's forecasts of total monthly volumes in their postings have significantly exceeded the volumes in the workpapers for both supply and demand in every posting except November. In general, the demand forecast seems to be the volume with which monthly forecasts most closely coincide. In addition, the demand forecast workpapers serve as the basis for the UEG's initial Service Level 2 allocation. This adds pleasing consistency to its use. Therefore, we will choose Option B and require PG&E to use

⁴ We note that in the December posting, the actual noncore volumes listed for November are higher than the previous monthly forecast.

monthly throughput totals that are consistent with the adopted demand forecast in its most recent cost allocation proceeding.

What is the appropriate core throughput volume to use? PG&E currently is using a core volume in its posting that is the same as the Service Level 2 volume filed on a monthly basis with CACD. This volume is its most current forecast. It also represents shifts in core volumes based on the UEG demand forecast. CCC stated in its October 2, 1991 reply that it finds the use of the monthly update reasonable provided that the total volume is based upon an adopted throughput. We will allow PG&E to continue using this method. Therefore, the core volumes in the August (final), November, December, January, and February postings will remain the same because they were determined using the most recent forecast of Service Level 2 gas.

In answer to the remaining question, the utility can determine the appropriate noncore throughput by subtracting the core volume derived from the monthly filing with CACD from the total monthly volume consistent with the adopted demand forecast.

In future cost allocation proceedings for PG&E, we intend to adopt monthly volumes to be used for these calculations. Until then, the approach adopted in this order allows the use of current information while complying with prior Commission decisions requiring the use of adopted volumes. We think this is a reasonable approach.

V. Documentation Issues

In order to assist in the review process, each utility should provide additional documentation in its posting. This includes (1) a utility contact person and telephone number, (2) a specific citation for any page and/or table which is the source of a particular item in the avoided cost posting, and (3) all steps in the calculation process should be specified. In PG&E's postings,

certain decisions were cited as the source of numbers when in reality, the numbers were found in workpapers underlying an advice letter. This particular protest demonstrates the need for greater specificity in citations.

D.91-10-039 also requires each utility to provide basic information to substantiate its forecasts which relate especially to basin weightings for purposes of calculating a noncore price. CCC, in its December 16, 1991 protest, discussed the need for a formalized process to facilitate discovery. At this time, we prefer that the utilities continue to work informally with interested parties on discovery matters. If utility responses to data requests are consistently inadequate or not provided in a timely manner, we will consider a more formalized approach. Findings of Fact

- 1. Starting with its August 1, 1991 avoided cost filing, PG&E has made its posting on the basis of the "most recent estimates" of UEG throughput volumes rather than an adopted throughput forecast.
- 2. Currently, on PG&E's system, the UEG is allowed to purchase gas from the gas department through core subscription or directly within the electric department through self-procurement.
- In PG&E's last ACAP, it was assumed that PG&E's entried department would purchase gas only through core subscription.
- 4. PG&E's electric department is purchasing some gas on its own.
- 5. Nothing in D.88-07-024 indicates that "relative volumes" from each portfolio should <u>not</u> be consistent with adopted volumes, nor does it ever mention the use of adopted volumes versus internal forecasts.
- 6. Although PG&E's most recent ACAP (D.91-05-029) adopted an annual forecast of gas supply and demand, no monthly breakdown of these volumes was formally adopted by the Commission.

- 7. For PG&E, volumes assumed for purposes of determining the transportation rate are consistent with volumes adopted in the most recent cost allocation proceeding or ECAC proceeding.
- 8. PG&E's internal forecast for noncore volumes does not appear to precisely coincide with the forecast used to determine supply basin weightings.
- 9. Allowing the use of another different internal forecast would lead to the undesirable result of further discrepancies between the components of avoided cost.
- 10. D.86-10-045 requires that an adopted UEG forecast be the basis for throughput volumes for purposes of calculating avoided costs.

Conclusions of Law

- 1. We must require PG&E to use total throughputs for the applicable time periods that are consistent with the annual adopted volumes.
- 2. The Commission should require PG&E to use monthly throughput totals that are consistent with the adopted demand forecast in its most recent cost allocation proceeding.
- 3. We/should allow PG&E to continue using the Service Level 2 volume filed on a monthly basis with CACD.
- 4. In order to assist in the review process, each utility should provide additional documentation in its posting.
- 5. In order to assure that the conclusions reached in this decision will affect all future postings, this order should be effective immediately.

ORDER

IT IS ORDERED that the protests of the California Cogeneration Council should be granted. Pacific Gas and Electric Company should adjust avoided cost payments for the August quarter and the months of November, December, January, and February in a manner consistent with this decision.

This order is effective today.

Dated May 8, 1992, at San Francisco, California.

DANIEL Wm. FESSLER
President
JOHN B. OHANIAN
PATRICIA M. ECKERT
NORMAN D. SHUMWAY
Commissioners

L CERTIFY THAT THIS DECISION WAS APPROVED BY THE ABOVE // COMMISSIONERS TODAY

NEAL J. SHULMAN, Executive Director