PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

COMMISSION ADVISORY
AND COMPLIANCE DIVISION
Energy Branch

RESOLUTION G-2930
December 6, 1990

R E S O L U T I O N

RESOLUTION G-2930. PACIFIC GAS AND ELECTRIC COMPANY REQUEST FOR AUTHORITY TO IMPLEMENT LONG TERM GAS TRANSPORTATION CONTRACT WITH CALIFORNIA AND HAWAIIAN SUGAR COMPANY. BY ADVICE LETTER 1610-G, FILED SEPTEMBER 13, 1990.

SUMMARY

1. By Advice Letter 1610-G, filed September 13, 1990, Pacific Gas and Electric Company (PG&E) submitted for approval a negotiated long-term gas transportation agreement with California and Hawaiian Sugar Company (C&H).

2. This resolution rejects the contract on the grounds that, with the recent escalation in oil prices, C&H does not have a viable uneconomic bypass opportunity. Therefore, a discounted gas transportation rate is not required.

BACKGROUND

1. Uneconomic bypass occurs when a customer leaves the utility system even though the customer's alternative energy source costs more than the marginal cost of utility service. That is, ratepayers could receive some positive margin contribution from the potential bypasser by offering a rate less than or equal to the bypass cost, but still higher than utility marginal cost.

2. Decision 86-12-009, dated December 3, 1986, requires that all non-core gas transportation agreements with a term of 5 years or more be submitted to the Commission for approval. The C&H contract, submitted by PG&E under Advice Letter 1610-G, provides gas transportation to the customer's sugar refinery in Crockett, California, for a term of 5 years.

3. Decision 89-12-045 provides guidance on the Commission's policies on long-term contracts. The purpose of long-term contracts is to encourage the utilities to attract incremental load that might otherwise be lost (p. 7). Further, the Decision states "...long-term contracts are appropriate under certain circumstances. They are primarily useful where a customer must

make a decision regarding whether or not to invest in bypass facilities and such facilities would clearly result in uneconomic bypass" of the utility (p. 20).

4. PG&E included C&H's history of gas transportation from 1987 through mid-1990. C&H transported 26.1 million therms in 1987, 13.9 million therms in 1988, 11.6 in 1989, and 7.5 through June of 1990. The fluctuations in demand reflect C&H's tendency to switch fuel when oil prices are favorable. Thus, C&H's estimated annual demand of 23 million therms represents an incremental load of between 8 and 12 million therms each year.

5. PG&E estimates the contract will generate approximately $1.8 million in revenues each year, for a total of approximately $8 million in present value over the 5-year contract period.

6. After the initial 5-year term, the contract will remain in force for successive one-year terms until terminated by either party. There are provisions for early termination in the event of significant changes in the relationship between gas and oil prices, or in C&H's ability to burn #6 fuel oil.

7. The contract calls for a monthly customer charge of $37,500 and a volumetric rate of $.06 per therm for the first 30 million therms used each contract year. PG&E estimated that C&H would receive approximately a 33% discount from the tariffed rate under the proposed contract.

8. The volumetric and customer charges escalate at the end of each year based on changes in the wholesale price index and a natural gas and oil price differential. The Combined Index Factor (CIF) is a weighted average of the Economic Index Factor (EIF) and the Fuel Price Index (FPI). The indices are constructed as follows:

$$\text{EIF} = \frac{\text{WPI Effective the last quarter of the previous year}}{\text{WPI Effective 2/1/90}}$$

Where WPI = the wholesale price index for industrial products except energy, seasonally adjusted, as calculated by Data Resources Inc. (DRI).

$$\text{FPI} = \frac{\text{Current quarter OIL}}{\text{Current quarter GAS}} * \frac{\text{GAS effective 2/1/90}}{\text{OIL effective 2/1/90}}$$

Where OIL = quarterly wholesale price index for refined petroleum products as reported by DRI; and GAS = quarterly wholesale price index for gas fuels, as reported by DRI.

$$\text{CIF} = \text{EIF} * .7 + \text{FPI} * .3$$

9. Paragraph 13 of the contract states that either party may terminate the agreement if the FPI is less than .70 or greater than 1.30.

10. The contract includes a long-run marginal cost price floor in paragraph 10. Beginning at such time as the Commission adopts a long-run marginal cost for PG&E and allocates costs to the non-core class to which C&H belongs, the rate based upon such allocated cost will become the minimum rate under the contract.

11. Exhibit B of the advice letter includes the provision that C&H will take or pay for a minimum of 15 million therms each contract year.

12. C&H has a history of switching fuels when short-term oil prices are attractive, and has burned #6 oil as its primary fuel in the past. C&H has been approached by a fuel supplier with a proposal to use C&H's 60,000 barrel holding tank as a shipping and receiving terminal. Because this arrangement would reduce C&H's inventory carrying costs for oil and would provide a reliable supply of fuel, C&H has stated it would enter into this terminal arrangement absent a long-term contract with PG&E.

13. The priority for the transportation gas would be P4.

NOTICE

1. This Advice Letter appeared on the Commission Calendar on September 17, 1990, and copies were mailed to the utilities and interested parties on PG&E's gas advice letter mailing list, in accordance with Section III of General Order 96-A.

PROTESTS

1. The Commission's Division of Ratepayer Advocates (DRA) submitted a protest to Advice Letter 1610-G on October 3, 1990, with concerns about the marginal cost calculations provided in the documentation of the contract.

2. Toward Utility Rate Normalization (TURN) submitted a protest to Advice Letter 1610-G on October 3, 1990, with concerns that the increase in world oil prices rendered the anti-bypass contract unnecessary.

3. According to DRA, PG&E underestimated the marginal cost of serving C&H, with the result that ratepayers will be responsible for possible shortfalls in revenue. DRA claimed that the advice letter underestimated the total marginal costs of serving C&H by excluding the variable costs component of marginal transmission and storage and the marginal customer costs. DRA also argued that PG&E's method of calculating marginal costs was not

consistent with their Present Worth method as advocated in I.86-06-005, the Commission's gas rate design investigation.

4. According to DRA, PG&E failed to include the total cost of all capacity expansion projects that will be built while the contract is in force. PG&E only included costs of capacity on the proposed Wyoming-California (WyCal) pipeline and Pacific Gas Transmission (PGT) expansion projects, although the 1990 California Gas Report calls for a significantly larger capacity need on the PG&E system. DRA stated that PG&E has signed agreements with Transwestern Pipeline Co. for capacity on its proposed San Juan expansion of at least 200 mdth/day. The cost of this capacity is not included in PG&E's cost calculations.

5. DRA recognizes the difficulties of litigating marginal costs in an advice letter and recommends rejecting the proposed contract. PG&E would still be able to discount rates to C&H but, consistent with D.89-10-034, PG&E's shareholders would remain at risk for possible revenue shortfalls.

6. TURN stated that although the contract may have been a reasonable and necessary anti-bypass measure when the contract was negotiated, recent events in the world oil market have rendered it obsolete. Their protest states that the high current oil prices make it unnecessary to offer a rate as low as that found in the contract in order to keep fuel-switching customers burning natural gas.

7. TURN also stated that the permissive termination agreement in paragraph 13 of the contract may already have been triggered by the large increase in the price of oil, and that it makes no sense to approve a contract that could be terminated by its own terms as soon as it is approved.

8. TURN recommends that the Commission reject the Advice Letter or withhold action pending further developments in the oil market.

RESPONSES TO PROTESTS

1. PG&E responded to DRA's protest by asserting that the marginal cost estimates used in the advice letter are correct. The estimates were based on the best preliminary cost data available as of June 1990. PG&E also noted that the inclusion of a marginal cost floor price in paragraph 10 of the contract ensures that ratepayers are protected, as required in D. 89-10-034.

2. PG&E stated that negotiating short term discounted rates, as DRA suggested, would not prevent C&H from bypassing at any time.

3. In response to DRA's criticism of the marginal cost estimates, PG&E stated that variable costs were excluded from the calculations because the data were not available when the contract was negotiated. PG&E stated that its subsequent analysis showed that the variable costs could not exceed the more than $6 million difference between revenues and marginal costs of serving C&H.

4. PG&E stated that its present worth methodology is the same as that which was presented in February 1990 workshops on long run marginal costs. The present worth method calculates the marginal cost of deferring investment plans for one year as the result of reduced demand. According to PG&E, the marginal costs used in the contract analysis are based on multi-year investment plans, and the total marginal cost is the sum of the costs of deferring those individual investments.

5. In response to DRA's objections to the exclusion of other capacity investments in the marginal cost calculations, PG&E stated that it had commitments only to the WyCal and PGT expansion projects at the time the C&H agreement was negotiated. PG&E further stated that the contract yields benefits to ratepayers even with the inclusion of PG&E's commitment on the Transwestern expansion. PG&E also noted that its cost estimates for capacity expansions were consistent with the 1988 California Gas Report and PG&E's 1989 Gas Marginal Cost filing in I. 86-06-005. PG&E stated that it was not possible to tie marginal cost estimates used in the analysis to capacity needs disclosed in the 1990 California Gas Report.

6. In response to TURN's objections to the contract, PG&E stated that independent forecasts of fuel prices indicate that the market will not support current price levels for an extended period. PG&E believes that the index used in the contract to set the rate accounts for changes in the relationship of gas and oil prices, and that the fuel price termination provision in paragraph 13 can be employed if oil prices remain high at the next rate adjustment in 1991.

7. PG&E also submitted a revised estimate of contract revenues based on a DRI forecast of oil price indices. DRI forecasts that oil prices are likely to return to "pre-invasion" levels in early 1991 and beyond. Using DRI's forecast, PG&E estimated that contract rates still provide a higher level of revenues than would be collected under discount-adjusted default rates.

8. C&H responded to PG&E and TURN's protests with a letter outlining its proposal for converting its oil storage facility to a terminal. In that letter, written October 9, 1990, C&H reiterates that if the Commission rejects the advice letter, C&H will proceed with its conversion to oil, regardless of the "short term oil price hike."

DISCUSSION

1. The Commission Advisory and Compliance Division (CACD) reviewed the advice letter for compliance with Commission policies and previous decisions on anti-bypass contracts.

2. The terms of the C&H contract protect ratepayers with the long-run marginal cost floor price and the take-or-pay provision. The Commission has not yet adopted marginal costs for PG&E, which makes it impossible to review PG&E's marginal cost submissions. Further, because the long-run marginal cost proceeding, I.86-06-005, has been temporarily delayed because of other gas proceedings, it may be two years or more before PG&E's long-run marginal costs are known. In the meantime, long-term contracts approved on the basis of marginal cost showings may not fully reflect the costs of serving the customers.

3. D. 85-12-102 established the long-term gas transportation program. Among the findings of fact that supported the decision were several that took notice of the utilities' excess capacity and ability to serve transportation customers from existing facilities (Findings of Fact numbers 8, 19, and 20).

4. PG&E has made no showing of excess capacity necessitating load retention. In its testimony for the 1990 ACAP (A. 90-08-029), PG&E forecasts curtailments of approximately 29,774 mdth for noncore and core-elect customers during the test period of 1991-92.

5. The gas procurement rules in D. 90-09-089 were adopted in recognition of supply problems posed by California's constrained pipeline capacity. As noted in that decision, when new pipeline capacity becomes available and with the development of capacity brokering programs, gas markets will grow increasingly competitive. The capacity brokering proceeding, R. 88-08-018, is underway and will help alleviate the over-subscribed pipeline system. New interstate pipelines are planned, although none are yet under construction.

6. Given that capacity constraints will likely continue for several more years, the Commission needs to know what effects the proposed incremental volumes will have on PG&E's system capacity. Can PG&E serve the incremental load without displacing other customers? It is not clear that the Commission should approve long-term discounted contracts for incremental loads in the face of constrained pipeline capacity.

7. D. 89-12-045 and D. 89-10-034 outlined the criteria for review of anti-bypass contracts. First, the utility must support the credibility of the customer's bypass threat. Second, the utility must demonstrate that bypass would be uneconomic for ratepayers as a group. And third, the utility must show that the

agreement reaches the highest rate that could be negotiated with the customer. The Commission will not approve discounted rates and the resulting cost shift to other ratepayer classes without a strong showing.

8. PG&E offered support of C&H's bypass threat in the form of fluctuating historical gas transportation volumes, which demonstrate C&H's inclination and ability to switch fuels. PG&E also outlined the technical, economic, and regulatory feasibility of C&H's bypass option in Attachment VI of the advice letter. The oil terminal facility would save C&H more than $50,000 each year in oil inventory carrying costs, and the conversion would cost approximately $90,000.

9. CACD investigated the applicable air quality regulations and emissions requirements for C&H to convert to oil as its primary fuel. The Bay Area Air Quality Management District reported that C&H would need no additional permits to burn oil as their primary fuel. The letter confirming this is attached.

10. Since the Iraqi invasion of Kuwait on August 2, 1990, oil prices have more than doubled. As TURN pointed out, the termination provision in paragraph 13 may already have been triggered by the steep rise in oil prices.

11. CACD investigated the current oil and gas price indices used in constructing the contract's FPI. The most recent crude oil price forecast by DRI in October, 1990, shows oil ranging from $34 per barrel in the first quarter of 1991 to a low of $26.83 in the first quarter of 1992. DRI staff reported that DRI's October forecast resulted in 1.059 for the oil index, and 0.912 for gas. Using these updated figures, CACD calculated the FPI as described in the advice letter, and determined that the FPI now stands at 1.345. This value is more than the FPI value of 1.3 that would trigger the termination provision in paragraph 13. Because the permissive termination provision of the contract has already been triggered, CACD recommends rejecting the advice letter.

12. PG&E submitted revised projections of contract revenues based on a DRI forecast of oil prices, which was calculated in September 1990 after the invasion of Kuwait. That earlier DRI projection called for oil prices of $21.76 per barrel in 1991 to a high of $22.12 in 1995, sharing PG&E's belief that the current price is only a short-term anomaly, and that prices will soon return to near pre-invasion levels of $18 per barrel.

13. In September 1990, the Energy Information Administration (EIA) of the federal Department of Energy released its Short-Term Energy Outlook. In that report, the EIA projects a $25 per barrel world oil price for 1991, and significant declines in demand due to continued high oil prices.

14. As TURN pointed out, high world oil prices bring into question the viability of C&H's bypass alternative. CACD estimates that oil prices above $22.69/bbl would negate the bypass potential. Since DRI and EIA forecast oil prices significantly higher than $22/bbl for at least the coming year, CACD recommends rejecting the advice letter.

FINDINGS

1. D. 89-12-045 sets forth Commission policy that no anti-bypass transportation contract should be approved unless the customer has a viable opportunity to invest in bypass facilities that would clearly result in uneconomic bypass.

2. The proposed contract would provide stable revenues to PG&E, at an average discount of 33% from the tariffed transportation rate. Ratepayers would be protected by the take-or-pay provision and, when PG&E's marginal costs are known, the long-run marginal cost price floor.

3. Because the Commission has not adopted long-run marginal costs for PG&E, it is not possible to determine whether PG&E's marginal cost calculations for this contract are correct.

4. C&H has an opportunity to invest in facilities that would allow it to bypass PG&E and switch to fuel oil as its primary fuel.

5. PG&E's constrained capacity and forecasts of curtailments raise the question of whether the Commission should approve discounted long-term contracts for incremental loads.

6. Current oil prices make it much more expensive for C&H to burn oil than to procure its own gas and transport it at PG&E's tariffed rate.

7. Projections of oil prices over the next year are uncertain, but are generally higher than the $22.69 per barrel price that would make bypass attractive to C&H.

8. The permissive termination provision in paragraph 13 of the contract has already been triggered by the rise in oil prices.

9. C&H does not have a viable bypass opportunity; therefore, there is no need to offer a discounted rate to prevent uneconomic bypass.

THEREFORE, IT IS ORDERED THAT:

1. The long-term gas transportation contract between Pacific Gas and Electric and California and Hawaiian Sugar Company, which is the subject of Advice Letter 1610-G, is rejected.

2. This order is effective today, and Advice Letter 1610-G shall be so marked.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on December 6, 1990. The following Commissioners approved it:

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

Neal J. Shulman
Executive Director