STATE OF CALIFORNIA PETE WILSON, Governor

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

January 8, 1992 Resolution No. G-2971

San Diego Gas & Electric Company
P.O. Box 1831
San Diego, CA 92112

Attn: Douglas P. Hansen
Manager - Pricing

Dear Mr. Hansen:

An error has come to my attention concerning revisions to Schedule GTCG, Natural Gas Transmission Service For Cogeneration Customers, that were implemented by Resolution G-2971. Please be advised that the following correction is now attached to the Resolution and is effective as of the Resolution date, November 20, 1991.

Text on page four, bottom of paragraph six reads:

> "The difference in gas and oil consumption (in Btus) between the two runs (QFs-out minus QFs-in) was divided by the amount of cogeneration QF production (in kWh)."

The correct language is:

> "The difference in gas and oil consumption (in Btus) between the two runs (QFs-out minus QFs-in) was divided by the change in total energy production by oil- and gas-fired plants (in kWh)."

Copies of this correction will be forwarded to the service list attached to Advice Letter 758-G, as authorized by Resolution A-4661.

Yours truly,

Wesley Franklin for

NEAL J. SHULMAN
Executive Director

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

COMMISSION ADVISORY AND
COMPLIANCE DIVISION
Energy Branch

RESOLUTION G-2971
November 20, 1991

R E S O L U T I O N

RESOLUTION G-2971. SAN DIEGO GAS & ELECTRIC COMPANY REVISES ITS COGENERATION GAS ALLOWANCE CALCULATION IN COMPLIANCE WITH DECISION 90-09-043 AND RESOLUTION G-2946 TO REFLECT ITS AVERAGE ANNUAL INCREMENTAL HEAT RATE.

BY ADVICE LETTER 758-G, FILED ON JUNE 21, 1991.

SUMMARY

1. San Diego Gas & Electric Company (SDG&E) submits revisions to its cogeneration Rate Schedule GTCG, Natural Gas Transmission Service for Cogeneration Customers which were made in compliance with Decision (D.) 90-09-043 and Resolution G-2946. Approval of these revisions will enable SDG&E to reflect the use of its average annual incremental heat rate in calculating the cogeneration gas allowance.

2. This Resolution approves Advice Letter 758-G, but instructs SDG&E to withdraw Advice Letter 665-G.

BACKGROUND

1. Public Utilities Code (Code) Section 454.4 requires that gas utilities offer cogenerators the same gas rates offered to utility electric generation (UEG) customers. This "parity" rate is offered to cogenerators only for the amount of gas the UEG would have required to generate the amount of electricity produced by the cogenerator. This amount is known as the cogeneration gas allowance (CGA), and provides cogenerators with a discounted rate for gas transportation only to the extent that cogenerators' productivity is superior to that of UEGs.

2. Resolution G-2738, issued October 16, 1987, authorized Pacific Gas and Electric Company (PG&E) to use its most recent incremental energy rate (IER), instead of its most recent incremental heat rate (IHR), as the basis for determining the CGA.

3. On January 18, 1989, SDG&E submitted Advice Letter 665-G essentially requesting the same treatment given to PG&E by Resolution G-2738. It requested authorization to revise its

calculation of the CGA, using its most current IER value as thermal basis for charges to cogenerators. Advice letter 665-G remains open, awaiting Commission resolution.

4. In D.90-09-043, issued September 12, 1990, the Commission considered whether the CGA should be calculated on the basis of the IHR or the IER. The IHR, expressed in British thermal units (Btus) per kilowatt-hour (kWh), is a measurement of the efficiency of a UEG unit burning gas or oil. The IER, also in Btus per kWh, is a mathematically derived expression of the efficiency of all electric resources on the margin during a forecast period. The Commission determined that Code Section 454.4 requires the use of the IHR to calculate the CGA even though it found that the IER was the more appropriate measurement of the UEG fuel efficiency. As a result, the Commission ordered Southern California Gas Company (SoCal) to file by advice letter, tariff changes which reflect application of an average annual IHR for determining the CGA.

5. On November 13, 1990, SoCal submitted Advice Letter 1991, with revised cogeneration gas schedules reflecting the use of an annual average IHR for each of the electric utilities in SoCal's service territory. In this Advice Letter, SoCal described the method it used to develop the IHR and the resultant CGA.

6. Resolution G-2946, issued April 24, 1991, approved SoCal's Advice Letter 1991, with modifications. This resolution also required PG&E and SDG&E to file revised cogeneration tariffs to clarify the figures and the method used to calculate their respective CGA. This resolution directed both utilities to follow the format used by SoCal in Advice Letter 1991.

7. On June 21, 1991, SDG&E filed Advice Letter 758-G. The filing contained the revised cogeneration gas schedules reflecting the use of SDG&E's annual average IHR and the resultant CGA.

NOTICE

1. Advice Letter 758-G was noticed by publication in the Commission calendar and was served to other utilities, government agencies, and SDG&E's cogeneration customers, in accordance with the requirements of General Order 96-A.

PROTESTS

1. No protests to Advice Letter 758-G have been received by the Commission Advisory and Compliance Division (CACD).

DISCUSSION

1. The CGA was originally established in compliance with D.92792, dated March 17, 1981. This Decision stated that the cogeneration gas rate "shall apply to that amount of natural gas

which the electric utility in that service territory would require to generate an equivalent amount of electricity." The limitation was established to tie the amount of gas qualifying for the cogeneration rate to the equivalent volume of gas a utility would have consumed to produce the same kWh, thus relating the energy savings achieved to the fuel costs avoided by the UEG. The CGA is consistent with avoided cost principles. The gas allowance requirement was subsequently codified in Code Section 454.4 in 1984.

2. At the time D.92792 was issued, California utilities were generally burning gas at the margin to produce electricity, and therefore, the CGA was based on the average IHR of gas plants. Since that time, utilities no longer rely solely on gas or oil at the margin, and frequently use nuclear, hydropower, and purchased power on the margin. The IHR, which applies only to fossil generation, cannot measure the efficiency of such resources.

3. Recognizing this, Resolution G-2738 was issued which approved PG&E's use of the IER to calculate its CGA. That resolution found that the IER was a reasonable measure of system efficiency on which to base the CGA. Based on the findings of this resolution, SDG&E filed Advice Letter 665-G. The purpose of this Advice Letter was to revise the CGA to reflect SDG&E's current IER and transmission line loss factor that had been adopted by its most recent Energy Cost Adjustment Clause (ECAC) decision. SDG&E received numerous protests to this Advice Letter, many of which dealt with the appropriateness of the use of the IER as the basis for the calculation of the CGA.

4. The Commission did not issue a resolution to Advice Letter 665-G because the same subject had surfaced in Application 89-04-021 et. al. for SoCal. After evaluating the various positions of the parties in SoCal's proceeding, the Commission issued D.90-09-043. In that decision, the Commission confirmed its view expressed in Resolution G-2738 that the IER is an appropriate measure of a utility's electric generation efficiency from which to determine the natural gas allowance to cogenerators when resources other than gas or oil are used at the margin. Nonetheless, the Commission concluded that Code Section 454.4 requires the CGA to be calculated using an IHR. To try to resolve the problem, the Commission stated that it would seek a legislative change to Code Section 454.4 which would require the use of the IER in calculating the CGA. However, until and unless such a change is made, the Commission concluded that the IHR is the appropriate method for determining the CGA. As a result, the Commission ordered SoCal to revise its gas tariffs for cogenerators accordingly. This decision only applied to SoCal.

5. In compliance with this decision, SoCal submitted Advice letter 1991 with revised cogeneration gas schedules reflecting the use of an IHR for each of the electric utilities in SoCal's service territory. Although D.90-09-043 had specified that the IHR was the more appropriate method for calculating the CGA in accordance with Code Section 454.4, it did not adopt an actual

methodology for calculating the CGA using the IHR. As a result, there was considerable disagreement about the methodology SoCal used in filing its proposed revised tariff sheets in Advice Letter 1991.

6. After reviewing and evaluating the various parties' protests and comments, the Commission issued Resolution G-2946. In that resolution, the Commission approved and adopted, with some modifications, SoCal's proposed methodology for calculating its CGA. The Commission concluded that the methodology, as modified, best fulfills the requirements of Code Section 454.4 and D.90-09-043, and is consistent with the Commission's avoided cost principles. The adopted methodology used outputs from the final production cost model run in each regulated utility's ECAC proceeding. First, it identified the total amount of gas and oil consumed when all qualifying facilities (QFs) are on-line. Next, gas- and oil-fired cogeneration QFs were removed from the simulation, resulting in additional production from other resources. The difference in gas and oil consumption (in Btus) between the two runs (QFs-out minus QFs-in) was divided by the amount of cogeneration QF production (in kWh). The CGA was then expressed in therms per kWh. This data used to calculate the CGA would be updated annually after each regulated electric utility's most recent ECAC.

7. In Resolution G-2946, the Commission also directed SDG&E and PG&E to file advice letters, within 60 days of the effective date of the resolution, with revised cogeneration tariff sheets specifying their calculation of the CGA. The Commission recommended that both utilities follow the format used by SoCal in Advice Letter 1991 and should document the origin of data used to calculate the CGA.

8. In compliance, SDG&E submitted Advice Letter 758-G revising its calculation of the CGA using the IHR. The method used by SDG&E to develop the IHR in Advice Letter 758-G mirrors the approach utilized by SoCal in Advice Letter 1991. However, SDG&E has not withdrawn Advice Letter 665-G which revises its calculation of the CGA using the IER. These two advice letters propose the use of conflicting methodologies. CACD recommends that if, and when, a legislative change to Code Section 454.4 is implemented which allows the use of the IER to calculate the CGA, SDG&E may re-submit an advice letter requesting the use of an IER. Until such time, SDG&E's Advice Letter 665-G must be withdrawn since it is a filing establishing an unauthorized IER for the basis in calculating the CGA.

FINDINGS

1. Although Resolution G-2738 approved PG&E's use of an IER to calculate the CGA, D.90-09-043 required SoCal to use of an IHR.

2. Until and unless legislativo changes are made to Code Section 454.4 to require the use of the IER, the CGA should be calculated using an IHR.

3. SoCal's methodology for calculating the IHR was approved and adopted in Resolution G-2946.

4. Resolution G-2946 directed SDG&E and PG&E to file advice letters, with revised cogeneration tariff sheets following the format used by SoCal in its Advice Letter 1991.

5. SDG&E's methodology for calculating its CGA filed in Advice Letter 758-G is consistent with the methodology used by SoCal in Advice Letter 1991.

6. The IHR and the CGA filed in SDG&E's Advice Letter 758-G will be updated periodically to reflect the data adopted in SDG&E's annual ECAC proceeding.

7. SDG&E's Advice Letter 665-G, requesting the use of an IER to calculate the CGA, conflicts with SDG&E's Advice Letter 758-G.

8. SDG&E should withdraw its pending Advice Letter 665-G.

THEREFORE, IT IS ORDERED that:

(1) San Diego Gas and Electric Company's methodology for calculating the cogeneration gas allowance using its average incremental heat rate is approved.

(2) San Diego Gas and Electric Company will update their cogeneration gas allowance upon the conclusion of its annual Energy Cost Adjustment Clause proceeding. Revised cogeneration tariffs shall be filed within 30 days of the issuance of the final decision in the annual Energy Cost Adjustment Clause proceeding.

(3) San Diego Gas and Electric Company must withdraw Advice Letter 665-G within 30 days of the effective date of this Resolution.

(4) Advice Letter 758-G shall be marked to show that it was approved by Commission Resolution G-2971.

(5) This Resolution is effective today.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on November 20, 1991. The following Commissioners approved it:

Neal J. Shulman

NEAL J. SHULMAN
Executive Director

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

Commissioner John B. Ohanian, being necessarily absent, did not participate.