

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

COMMISSION ADVISORY AND
COMPLIANCE DIVISION
Energy Branch

RESOLUTION G-3108
January 19, 1994

R E S O L U T I O N

RESOLUTION G-3108. SOUTHERN CALIFORNIA GAS COMPANY REQUESTS APPROVAL OF A FUEL CELL INSTALLATION AND OPERATION AGREEMENT BETWEEN SOUTHERN CALIFORNIA GAS COMPANY AND THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, FOR THE UNIVERSITY OF CALIFORNIA AT SANTA BARBARA.

BY ADVICE LETTER 2247-G, FILED ON DECEMBER 8, 1993.

SUMMARY

1. By Advice Letter 2247-G, Southern California Gas Company (SoCalGas) submits for approval a service agreement between SoCalGas and The Regents of the University of California, for the University of California at Santa Barbara (UC Santa Barbara), for the installation and operation of a 200 kW fuel cell. SoCalGas requests approval of all the terms and conditions of the agreement, and specifically requests a finding that the agreement and the rates contained therein are just and reasonable.
2. No protests have been filed.
3. This Resolution approves the agreement as filed.

BACKGROUND

1. By Advice Letter 1856, SoCalGas requested to reallocate unspent and deferred marketing program funds to a proposed new Non-Residential Fuel Cell Program (Fuel Cell Program).
2. In Resolution G-2871, the Commission authorized the reallocation of funds but made them subject to refund pending approval of the Fuel Cell Program in SoCalGas' Test Year 1990 General Rate Case (GRC).
3. In its Test Year 1990 GRC application (A.88-12-047), SoCalGas requested Commission authority to purchase and install ten fuel cells in conjunction with its Fuel Cell Program.
4. In Decision (D.) 90-01-016, the Commission approved SoCalGas' proposed Fuel Cell Program and authorized SoCalGas to

purchase, install and operate ten pre-commercial fuel cells for demonstration purposes.

5. By Advice Letter 2106-G and Advice Letter 2152-G, SoCalGas requested approval of two separate contracts between SoCalGas and a selected customer to install and operate a 200 kW fuel cell as part of its Fuel Cell Program.

6. The Commission approved Advice Letter 2106-G and Advice Letter 2152-G by Resolution G-3001 and Resolution G-3037, respectively.

7. By Advice Letter 2247-G, SoCalGas has submitted for approval a service agreement between SoCalGas and UC Santa Barbara (the Agreement) for the installation and operation of a 200 kW fuel cell as part of SoCalGas' Fuel Cell Program. The fuel cell is to provide electricity and hot water for use by facilities of UC Santa Barbara.

NOTICE

Advice Letter 2247-G was served on other utilities, government agencies, and to all interested parties who requested such notification, in accordance with the requirements of General Order 96-A.

PROTESTS

No protests have been received by the Commission Advisory and Compliance Division (CACD).

DISCUSSION

1. In Advice Letter 1856 (filed February 16, 1989), SoCalGas described its proposed Fuel Cell Program as follows:

SoCalGas intends to offer the fuel cell to its customers as a Partial Energy Service (PES). The customer will buy gas for the fuel cell, at the cogeneration rate, and use the thermal and electric outputs to displace the site requirements. SoCalGas will own and maintain the fuel cell at the customer's site. Company revenues for the fuel cell will be realized by charging the customer a facility fee to recover costs for owning and maintaining the equipment but structured so that the customer would still realize a savings on overall utility costs.

2. In Resolutions G-3001 and G-3037, the Commission approved two contracts to install, operate and maintain 200 kW fuel cells as part of the Fuel Cell Program described in Advice Letter 1856.

3. In Advice Letter 2247-G, SoCalGas is requesting Commission approval of another agreement regarding installation and operation of a fuel cell as part of its Fuel Cell Program.

4. With the exception of minor wording changes and changes to fit the specific needs of UC Santa Barbara, the Agreement submitted in Advice Letter 2247-G is essentially the same as the contract approved by Resolution G-3037.

5. In Resolution G-3037, the Commission found that in order to approve the reasonableness of a fuel cell contract the Commission must consider the following items:

- 1) Did SoCalGas use the applicable tariffs in calculating contract terms?
- 2) Is the level of discount below the avoided costs of the customer reasonable?
- 3) Is SoCalGas ensuring an appropriate mix of customers in its fuel cell program?
- 4) Is the length of the terms of the contract reasonable?
- 5) Are the other terms and conditions of the contract reasonable?

6. Under the Agreement, SoCalGas will charge UC Santa Barbara for the electrical energy generated by the fuel cell (at Southern California Edison's existing TOU-8 rate) plus the cost of gas (billed at SoCalGas' GN-32 commercial and industrial non-core rate) equivalent to the thermal load met by the fuel cell. UC Santa Barbara will also pay SoCalGas for the gas used by the fuel cell (billed at GN-52 cogeneration rate). CACD has determined that SoCalGas used the appropriate tariffed rates to calculate the costs to UC Santa Barbara for purposes of the Agreement.

7. In order to ensure that UC Santa Barbara has a guaranteed savings from the fuel cell, SoCalGas will provide a discount. In the Agreement, SoCalGas and UC Santa Barbara negotiated a 10% discount that is deducted from the price UC Santa Barbara pays for the value of the electrical and thermal energy produced by the fuel cell less the cost of gas used by the fuel cell. This discounting method is consistent with methods used in similar business contracts for conventional third party owned cogeneration facilities.

8. The fuel cell contract that was approved by Resolution G-3037 contained a 15% customer discount provision. A 10% discount rate is at the low end of customer discount rates offered by competing cogeneration suppliers. CACD believes the 10% discount offered to UC Santa Barbara is reasonable.

9. By Resolution G-3001 and Resolution G-3037, the Commission approved contracts for fuel cell installations at an air quality management district headquarters and at a hotel, respectively. The Agreement provides for the installation and use of a fuel cell at university campus facilities. Providing electrical and thermal energy with a fuel cell installation at university facilities affords a unique opportunity to further demonstrate

the operation of a fuel cell under diverse conditions and thus expands upon the diversification intended for SoCalGas' fuel cell demonstration program. CACD believes that SoCalGas is ensuring an appropriate mix of customers in its Fuel Cell Program.

10. The term of the Agreement is 20 years. In Resolution G-3037, the Commission determined that a 20-year fuel cell contract was reasonable as long as it was subject to modification through the Commission's General Order 96-A. Similarly, the Agreement provides assurance that future Commission action may modify the terms. Therefore, CACD believes that the 20-year term of the Agreement is reasonable.

11. CACD reviewed and considered all other terms and conditions of the Agreement and determined that they are reasonable.

FINDINGS

1. The Agreement submitted in Advice Letter 2247-G is substantially similar to the contract approved by Resolution G-3037.

2. SoCalGas' method for charging UC Santa Barbara for the fuel cell is consistent with the Fuel Cell Program as described in Advice Letter 1856.

3. SoCalGas used the appropriate tariffed rates to calculate the costs to UC Santa Barbara for purposes of the Agreement.

4. The discount method used by SoCalGas in order to ensure that UC Santa Barbara has a guaranteed savings from the fuel cell, is consistent with discount methods used in similar business contracts for conventional third party owned cogeneration facilities.

5. The 10% negotiated discount between SoCalGas and UC Santa Barbara is reasonable.

6. The installation and use of a fuel cell at university facilities expands upon the diversification of customers intended for SoCalGas' Fuel Cell Program.

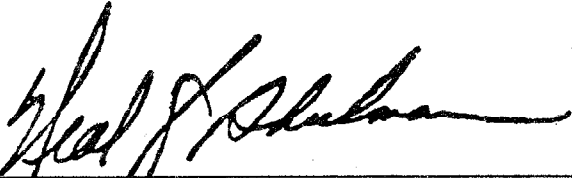
7. The 20-year term of the Agreement is reasonable since it is subject to Commission modification through General Order 96-A.

8. The terms and conditions of the Agreement, and the rates contained therein, are reasonable given the specific situations as they apply at the time the contract was negotiated.

THEREFORE, IT IS ORDERED that:

- (1) Southern California Gas Company's fuel cell service agreement with UC Santa Barbara as submitted in Advice Letter 2247-G shall be approved with an effective date of January 19, 1994.
- (2) Advice Letter 2247-G shall be marked to show that it was approved by Commission Resolution G-3108.
- (3) This Resolution is effective today.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on January 19, 1994. The following Commissioners approved it:



NEAL J. SHULMAN
Executive Director

DANIEL Wm. FESSLER
President
PATRICIA M. ECKERT
NORMAN D. SHUMWAY
P. GREGORY CONLON
JESSIE J. KNIGHT, Jr.
Commissioners