PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

COMMISSION ADVISORY AND COMPLIANCE DIVISION ENERGY BRANCH RESOLUTION G-3001 JUNE 17,1992

## RESOLUTION

RESOLUTION G-3001. SOUTHERN CALIFORNIA GAS SUBMITS FOR APPROVAL A CONTRACT BETWEEN SOUTHERN CALIFORNIA GAS AND THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) TO INSTALL AND OPERATE A 200 KW FUEL CELL AS PART OF A DEMONSTRATION PROGRAM AUTHORIZED BY THE COMMISSION IN D.90-01-016.

BY ADVICE LETTER 2106-G, FILED ON MARCH 13, 1992.

# **SUMMARY**

- 1. Southern California Gas Company (SoCal) requests approval of a contract between SoCal and the South Coast Air Quality Management District (SCAQMD) to install and operate a 200 kW fuel cell as part of SoCal's fuel cell demonstration program authorized in D.90-01-016. SoCal also initially requested authority to establish a memorandum account to track fuel cell revenues and expenses, but subsequently withdrew its request in response to a protest filed by the Division of Ratepayer Advocates (DRA).
- 2. This Resolution approves the contract between SoCal Gas and the SCAQMD.

### **BACKGROUND**

- 1. In SoCal's 1990 General Rate Case (D.90-01-016), the Commission authorized \$6.6 million in capital expenditures for SoCal to purchase and install ten 200 kW fuel cells for non-residential applications.
- 2. SoCal had originally requested authorization for its fuel cell program in Advice Letter 1856 (filed February 16, 1989). In this Advice Letter filing, SoCal described the program as follows;

SoCal 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 output to displace the site requirements. SoCal 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

structured so that the customer would still realize a savings on overall utility costs.

- 3. In Resolution G-2871 (approved April 12, 1989), the Commission approved SoCal's fuel cell program but only allocated \$2.1 million for its implementation. This \$2.1 million consisted of unspent funds carried over from the Conservation Cost Adjustment (CCA) balancing account. SoCal was directed to seek the remaining \$4.5 million needed for the program in its test year 1990 General Rate Case (GRC). If the fuel cell program was not approved in the GRC, then the initial \$2.1 million would be returned to the ratepayers.
- 4. In SoCal's 1990 GRC (D.90-01-016), the Commission gave final approval to SoCal's fuel cell program and authorized \$6.6 million in capital expenditures for the program for the purchase of the ten fuel cells. \$2.1 million of these funds would be the carry-over from the CCA account with the remaining \$4.5 million authorized in rates.
- 5. SoCal has received the first of the ten fuel cells authorized by the Commission and is installing it at the Diamond Bar headquarters of the South Coast Air Quality Management District (SCAQMD). Delivery and installation of the remaining nine fuel cells is expected in the near future at other customer sites such as prisons, hospitals, etc.
- 6. SoCal has entered into a service agreement with the SCAQMD regarding the SCAQMD's reimbursement to SoCal for the cost and operation of the fuel cell. Under this service agreement, the SCAQMD would essentially pay "avoided cost" pricing to SoCal for the electricity and thermal loads provided by the fuel cell.
- 7. Under the service agreement, SoCal will charge the SCAQMD 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 SoCal's GN-10 commercial rate) equivalent to the thermal load met by the fuel cell. In order to ensure that the SCAQMD has a guaranteed savings from the fuel cell, SoCal will reduce these charges to 95% of the avoided costs. The SCAQMD will pay this avoided cost to SoCal in two components. First, the SCAQMD will pay SoCal for the gas used by the fuel cell (billed at SoCal's GN-52 cogeneration rate), and secondly the SCAQMD will pay a "facilities charge" to SoCal equal to the difference between 95% of the avoided cost and the GN-52 cogeneration gas costs.
- 8. The proposed contract between SoCal and the SCAQMD will run for 20 years (the expected life of the fuel cell) and has a minimum payment provision ensuring that SoCal will, at a minimum, recover the capital cost of the fuel cell.
- 9. In Advice Letter 2106, SoCal is requesting approval solely for the service agreement between SoCal and the SCAQMD.

#### PROTESTS

- 1. The Division of Ratepayer Advocates (DRA) protests this Advice Letter stating its opposition to 1) establishment of a memorandum account as requested by SoCal (subsequently withdrawn) 2) SoCal providing electrical energy directly to enduse customers and 3) SoCal's assertions regarding the costs and revenues associated with the fuel cell program.
- 2. Southern California Edison (Edison) protests this Advice Letter stating that it is not clear from SoCal's filing whether or not SoCal should be classified as an "electric corporation" as that term is defined under Public Utilities Code Section 218.

### SUPPORT

- 1. The SCAQMD has submitted a letter to the Commission supporting adoption of SoCal's Advice Letter. It cites the need for new and innovative technology such as fuel cells, and state that fuel cells "promise to play an important role in (the SCAQMD's) effort to meet state and federal air quality standards."
- 2. The California Air Resources Board (CARB) also submitted a letter to the Commission urging adoption of the Advice Letter, pointing out the fuel cell's "significant potential for substantially reducing air pollution impacts from electric generation compared to conventional, combustion-based methods."

### **DISCUSSION**

## Summary of Issues

- 1. The primary issue to be resolved in this Resolution is SoCal's authority to enter into a contract to install and operate a fuel cell at the SCAQMD headquarters. The Commission has clearly authorized SoCal, in both Resolution G-2871 and D.90-01-016, to offer fuel cell service on a demonstration basis to up to ten customers.
- 2. A major secondary issue, but one which does not have to be resolved in this Resolution, is the reasonableness of the terms of the contract between SoCal and the SCAQMD. Almost all of the remaining issues raised by both Edison and DRA in their protests to SoCal's filings are attempts to relitigate issues already resolved by the Commission in Resolution G-2871 and D.90-01-016.

# SoCal is already authorized by the Commission to provide fuel cell service

3. Both Resolution G-2871 and D.90-01-016 clearly envision SoCal owning, installing, and operating its fuel cells. Therefore, SoCal is authorized by the Commission to enter into a service agreement with the SCAQMD to provide fuel cell service.

The terms and conditions of the SCAQMD contract are consistent with SoCal's description of its "Partial Energy Service" contained in its original Advice Letter filing in 1989. The current SCAQMD contract and the "Partial Energy Service" both contain many of the same elements including payment for gas at the cogeneration rate, use of a facility charge, and guaranteeing that the customer will realize a savings on overall utility costs.

# <u>Commission approval of the contract does not mean that the charges are reasonable</u>

- 4. In approving the service agreement, however, the Commission does not rule or judge on the reasonableness of the terms, conditions, and prices contained in the SCAQMD contract. Resolution of the reasonableness of this contract is better left to other forums such as the reasonableness review process.
- 5. DRA notes that in SoCal's original Advice Letter 1856 filing, SoCal appears to claim that the fuel cell program will result in total revenues to the utility being greater than total costs. SoCal's current Advice Letter 2106 filing does not appear to make a similar claim for the SCAQMD contract, although revenue forecasts prepared by SoCal as part of its filing appear to show that the SCAQMD contract will provide revenues greater than costs. Since we are only approving the SCAQMD contract and not judging its reasonableness at the present time, DRA's concern over SoCal's assertions regarding the costs and revenues associated with the fuel cell program are rendered moot.

The SCAQMD demonstration program is a cogeneration project as classified under state and federal law. SoCal does not have to be an electric corporation in order to provide electric service to the SCAQMD.

- 6. The remainder of the issues raised by both Edison and DRA are attempts to relitigate issues already settled by the Commission in either Resolution G-2871 or D.90-01-016.
- 7. For example, Edison, and to a lesser extent DRA, assert that it is unclear in SoCal's filing whether or not SoCal's providing fuel cell service to the SCAQMD would qualify SoCal as an "electric corporation" under Public Utilities Code (PU Code) Section 218.
- 8. Even a cursory reading of PU Code Section 218 reveals that SoCal would not be an "electric corporation". The SCAQMD demonstration program is a cogeneration project which is clearly excluded from the definition of electric corporation. PU Code Section 218 excludes from the definition of "electric corporation" any corporation that 1) utilizes cogeneration technology (as defined in Public Utilities Code section 218.5), 2) utilizes power from other than a conventional source (which is an appropriate classification for a fuel cell) 3) provides service to less than two persons or corporations and 4) generates electrical energy on the same site as which it is

used. The SCAQMD demonstration program meets each of these criteria. As SoCal clearly notes in its application, the SCAQMD demonstration has been certified as a "Qualifying Facility (QF)" under federal law (18 CFR Section 292.201 et seq).

# Is it appropriate for SoCal to be in the electric business?

- 9. DRA also raises the broader policy question as to whether it is appropriate for SoCal to provide electric service directly to end-use customers. Once again, in approving the fuel cell program and SoCal's description of its "Partial Energy Service" it is clear that the Commission intended for SoCal to provide both electric and thermal service from its fuel cells.
- 10. DRA's concerns also must be considered in light of the small size of SoCal's program. The total size of SoCal's program (10 fuel cells at 200 kW) is only 2 megawatts (2 mW). This represents substantially less than 1/10th of 1% of the approximately 5,000 mW of QF capacity located in Southern California, and less than 1/100th of 1% of the total generating capacity in Southern California of approximately 20,000 megawatts.
- 11. Finally, it should be noted that SoCal's GRC decision (D.90-01-016) effectively caps SoCal's provision of electric service to the ten fuel cells contained in its demonstration program. Any additional installation of fuel cells above that level would require further Commission approval.

#### FINDINGS

- 1. Both Resolution G-2871 and D.90-01-016 envision SoCal providing both electric and thermal load output from its demonstration fuel cell program.
- 2. SoCal is authorized to enter into its contract with the SCAQMD to provide fuel cell service to the SCAQMD at the latter's Diamond Bar headquarters.
- 3. SoCal's proposed method of charging the SCAQMD for fuel cell service is consistent with its description of "Partial Energy Service" contained in Advice Letter 1856.
- 4. The Commission is not ruling on or judging the reasonableness of SoCal's contract with the SCAQMD as this is best done in forums such as reasonableness reviews.
- 5. SoCal has withdrawn its initial request in Advice Letter 2106 requesting establishment of a memorandum account to track expenses associated with the fuel cell program.

- 6. SoCal Gas is not an "electric corporation" as defined under Public Utilities Code section 218 because its proposed contract with the SCAQMD 1) utilizes cogeneration technology (as defined in Public Utilities Code section 218.5), 2) utilizes power from other than a conventional source 3) provides service to less than two persons or corporations and 4) generates electricity on the same site as which it is used.
- 7. The provision of electrical energy from fuel cells operated as part of SoCal's demonstration program is minuscule in comparison to the total amount of both QF capacity and total generating capacity in Southern California.
- 8. The total amount of electricity that SoCal is able to provide to end-use customers is effectively capped at approximately 2 mW through D.90-01-016.

# THEREFORE, IT IS ORDERED that:

- 1. Southern California Gas Company's (SoCal) request to enter into its contract with the South Coast Air Quality Management District (SCAQMD) to provide fuel cell service on a demonstration basis as requested by SoCal in Advice Letter 2106-G is approved.
- 2. SoCal is not authorized to establish a memorandum account to track fuel cell revenues and expenses.
- 3. SoCal will remove from its Advice Letter filing its proposed Preliminary Statement sheet establishing the Fuel Cell Memorandum Account.
- 4. Upon removal of SoCal's proposed Preliminary Statement, Advice Letter 2106-G shall be marked to show that it was approved by Commission Resolution G-3001.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on June 17, 1992. The following Commissioners approved it:

NEAL J. SHULMAN

Executive Director

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