

## PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

COMMISSION ADVISORY  
AND COMPLIANCE DIVISION  
ENERGY BRANCH

RESOLUTION G-3037  
MARCH 24, 1993

R E S O L U T I O N

RESOLUTION G-3037. SOUTHERN CALIFORNIA GAS  
SUBMIT FOR APPROVAL A CONTRACT BETWEEN SOUTHERN  
CALIFORNIA GAS AND HYATT HOTELS (IRVINE, CA) 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 2152-G, FILED ON DECEMBER 18, 1992.

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SUMMARY

1. Southern California Gas Company (SoCal) requests approval of a contract between SoCal and the Irvine Company to install and operate a 200 kW fuel cell at a Hyatt Hotel in Irvine, CA as part of SoCal's fuel cell demonstration program authorized in D.90-01-016. SoCal also requests approval as to the reasonableness of the terms and conditions of its contract with the Irvine Company.
2. This Resolution approves the contract between SoCal and the Irvine Company as well as the reasonableness of the terms and conditions of the contract.

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. \$2.1 million of the \$6.6 million had already been conditionally authorized by the Commission in Resolution G-2871 (A.L.1856, approved April 12, 1989) with the remaining \$4.5 million authorized in the General Rate Case itself.
2. In its original request for authorization for its fuel cell program (Advice Letter 1856 filed February 16, 1989), 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

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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.

3. SoCal has already installed the first of its ten fuel cells at the Diamond Bar headquarters of the South Coast Air Quality Management District (SCAQMD). The Commission approved SoCal's contract with the SCAQMD via Resolution G-3001 (A.L. 2106, approved June 17, 1992).

4. The second of the ten fuel cells is to be installed at the Irvine Company's Hyatt Hotel. SoCal has entered into a service agreement with the Irvine Company regarding the company's reimbursement to SoCal for the cost and operation of the fuel cell for which it seeks Commission approval through this Resolution.

5. Under the service agreement, SoCal will charge the Irvine Company 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 Irvine Company has a guaranteed savings from the fuel cell, SoCal will reduce these charges to 85% of the avoided costs. the Irvine Company will pay this avoided cost to SoCal in two components. First, the Irvine Company will pay SoCal for the gas used by the fuel cell (billed at SoCal's GN-52 cogeneration rate), and secondly the Irvine Company will pay a "facilities charge" to SoCal equal to the difference between 85% of the avoided cost and the GN-52 cogeneration gas costs.

6. The proposed contract between SoCal and the Irvine Company 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.

#### PROTESTS

1. The Division of Ratepayer Advocates (DRA) protests this Advice Letter.

2. DRA is concerned that SoCal's sale of electricity to customers through its fuel cell demonstration program would 1) make SoCal an "electric corporation" under the Public Utilities Code and therefore subject to Commission regulation and 2) constitute bypass of the Edison system.

3. DRA is also concerned with the reasonableness of the terms and conditions of the contract between SoCal and the Irvine Company raising three major concerns.

4. First, DRA is concerned about a provision in the contract that requires SoCal to credit the Irvine Company with a 15% discount from their "avoided costs" in cases where the fuel cell fails to provide energy for more than thirty days due to

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negligence, curtailment, or design/mechanical failures not caused by external factors.

5. Second, DRA believes that SoCal provided insufficient documentation to justify the 15% discount offered to the Irvine Company.

6. Finally, DRA opposes the 20-year term of the contract believing it is not necessary for a "demonstration" project.

## DISCUSSION

### Summary of Issues

1. SoCal's authority to enter into contracts to install and operate the ten fuel cells of its demonstration program has already clearly been authorized by the Commission in D.90-01-016 and Resolutions G-2871 and G-3001.

2. The primary issue to be resolved in this Resolution is the reasonableness of the terms and conditions of the contract between SoCal and the Irvine Company.

3. All of the remaining issues raised by DRA in its protest are attempts to relitigate issues already resolved by the Commission.

4. The following is a discussion of each of these issues.

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

5. Both Resolution G-2871 and D.90-01-016 which established the fuel cell program clearly envisioned SoCal owning, installing, and operating its fuel cells. Therefore, SoCal is allowed by the Commission to enter into a service agreement with the Irvine Company. The Commission has already approved one fuel cell contract with the SCAQMD under this program via Resolution G-3001.

6. The terms and conditions of the contract with the Irvine Company are consistent with SoCal's description of its "Partial Energy Service" contained in its original Advice Letter filing for the fuel cell program in 1989. The current 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.

7. Except for the level of customer discount, the terms and conditions of the Irvine Company contract are substantially similar to SoCal's contract with the SCAQMD already approved by the Commission .

The primary issue to be resolved in this Resolution is the reasonableness of the terms and conditions of the contract between SoCal and the Irvine Company.

8. In its Advice Letter filing, SoCal is also requesting Commission approval of the reasonableness of the terms and conditions of the contract with the Irvine Company. In SoCal's previous filing for its fuel cell program (Advice Letter 2106-G) the Commission approved SoCal's fuel cell contract with the SCAQMD but did not rule on the reasonableness of the contract due to an insufficient evidentiary record.

9. In response to the Commission's finding with regards to reasonableness, SoCal requested clarification from the Advisory & Compliance Division (CACD) on the supporting documentation that SoCal would need to file with its Advice Letter for the Commission to undertake a reasonableness review.

10. From its review of SoCal's General Rate Case (D.90-01-016) and Resolution G-2871, CACD identified two broad goals for the fuel cell program. First and foremost, the program was to demonstrate the uses and potential of fuel cell technology. Secondly, the program should be designed to recover, through the rates charged to the fuel cell users, as much of the costs of the program as possible. SoCal was to offer the fuel cell as part of a Partial Energy Service (PES) where the revenues paid by the customer were to be "structured so that the customer would still realize a savings on overall utility costs." There appears to be no requirement in either Resolution G-2871 or D.90-01-016 that the fuel cell program was to be self-supporting. Presumably, any losses incurred by the program would be offset by the demonstration benefits of the new technology.

11. Accordingly, the following are the major issues to be addressed in a reasonableness review:

- o Did SoCal use the appropriate tariffed rates in determining each customer's avoided costs?
- o At the time each contract was negotiated, did SoCal negotiate the highest price possible for the provision of fuel cell service, consistent with the Commission's goal of promoting this new technology?
- o Did SoCal choose a diverse mix of customers in allocating its ten fuel cells in order to maximize the benefits of the program?
- o What is the appropriate length of the contract for which SoCal is seeking approval?
- o Any other terms and conditions in the contract that should be reviewed.

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12. In their protest to this Advice Letter, DRA raises concerns with several of the above issues, particularly the 15% discount off of its avoided costs granted to the Irvine Company. In its response to DRA's protest, SoCal notes that the 15% savings level is consistent with similar promises of proposed savings offered by vendors of other cogeneration technologies.

13. Another concern of DRA regarding the 15% discount is its applicability to months in which the fuel cell fails to provide energy for more than thirty days due to negligence, curtailment, or design/mechanical failures not caused by external factors. The Commission finds this a reasonable condition given the demonstration nature of the fuel cell program.

14. DRA is also concerned that SoCal provided insufficient documentation regarding the negotiations that led up to contract approval. The Commission shares DRA's concerns on this issue and believes that SoCal's initial filing only marginally meets the Commission's criteria for reasonableness review. In response to these concerns, SoCal submitted additional information on the level of customer discount offered by competing cogeneration suppliers. The Commission would hope to see better documentation for any future contracts that offer customer discounts greater than 10%.

15. Finally, DRA opposes the 20-year term of the contract believing it is not necessary for a "demonstration" project. SoCal responds that a 20-year contract is necessary since fuel cell customers "expect that installation and performance of the fuel cell will equal that of an already accepted and proven technology." Although the Commission is approving the reasonableness of the 20-year contract for this particular installation, we note that the contract is subject to General Order 96-A requirements and could be changed at a future date by the Commission as a result of its proceedings. Among the changes that could be adopted could be a "buy-out" of the contract under Sections 16 and 17 of the Agreement under terms that would leave both SoCal and the customer indifferent.

16. In its protest, DRA did not raise any objection to two of the criteria SoCal needs to approve the reasonableness of the contract. These criteria are ensuring that SoCal used the appropriate tariffed rate in determining the customer's avoided costs and that SoCal's overall fuel cell program have a diverse mix of customers utilizing the fuel cell technology. CACD therefore confirmed that SoCal had met each of these two criteria in its Advice Letter filing.

The remainder of the issues raised by DRA are attempts to relitigate issues already settled by the Commission

17. In its protest DRA again asserts that SoCal's provision of electric service from its fuel cell operation would qualify SoCal as an "electric corporation" under Public Utilities Code (PU Code) Section 218 and that SoCal should not be in the electric business by owning fuel cells. Both of these issues have already been resolved by the Commission in D.90-01-016 and Resolutions G-2871 and G-3001.

18. In its protest, DRA offers a new and novel argument that SoCal should be classified as an "electric corporation" once it owns and operates three or more fuel cell projects. In support of this argument, DRA misinterprets PU Code Section 218.5 to state that any corporation which provides cogeneration electric service to three or more persons is an electric corporation. The correct interpretation of PU Code 218.5 is that a corporation can own any number of cogeneration projects and not be an "electric corporation" provided that each individual project serves no more than two persons.

19. As SoCal notes in its response to DRA's protest, acceptance of DRA's misinterpretation of PU Code 218.5 would subject essentially all cogeneration project developers to Commission regulation, a position contrary to the legislative intent of the code. DRA's interpretation is also contrary to the Commission's, and DRA's, oft-stated goals to improve competition within the electric generation sector (see for instance I.89-07-004).

20. Finally, DRA opposes funding of the fuel cell program since it believes that the program is a "commercialization" program and not a "demonstration" program. DRA relies for this argument on the Commission's recent decision in Southern California Edison's GRC (D.91-12-076) where the Commission noted that "demonstration of the proven technology at utility or customer sites, to encourage customer acceptance" (also known as showcasing) should not be capitalized (D.91-12-076, p. 80).

21. There are two major problems with DRA's assertion, however. Legally, the decision upon which DRA relies applies only to Edison and does not, nor could it, modify in anyway the Commission's previous approval of SoCal's project in the GRC. Secondly, from a policy perspective, even if one were to accept that the Edison GRC decision reflected Commission policy applicable to all utilities, the Edison GRC decision itself noted that "showcasing activities may be justified for other reasons" (D.91-12-076). This has already been reflected by the Commission's specific endorsement of projects such as SoCal's fuel cell program and Pacific Gas & Electric's Natural Gas Vehicle program.

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's contract with the Irvine Company is substantially similar to the SCAQMD contract already approved by the Commission in Resolution G-3001.
3. SoCal's proposed method of charging the Irvine Company for fuel cell service is consistent with its description of "Partial Energy Service" contained in Advice Letter 1856.
4. SoCal is authorized to enter into its contract with the Irvine Company to provide fuel cell service at the Irvine Company's Hyatt Hotel in Irvine, California.
5. In order for the Commission to approve the reasonableness of a fuel cell contract the Commission must consider the following items: 1) did SoCal use the applicable tariffs in calculating contract terms 2) is the level of discount below the avoided costs of the customer reasonable 3) is SoCal ensuring an appropriate mix of customers in its fuel cell program 4) is the length of the terms of the contract reasonable and 5) consideration of the other terms and conditions of the contract.
6. SoCal used the appropriate tariffed rates to calculate the Irvine Company's avoided costs for purposes of the fuel cell contract.
7. SoCal's fuel cell program has a diverse group of participants.
8. SoCal's initial filing on the reasonableness of the 15% discount off of avoided costs and its applicability to periods when the fuel cell is inoperative is only marginally adequate for the Commission to make a determination given the level of customer discount offered. SoCal rectified this shortcoming by providing additional information to CACD. However, for future filings offering discounts of greater than 10% the Commission expects SoCal to offer greater documentation of the negotiating history of the contract and the calculation of the level of discounts offered by competing vendors of cogeneration technology.
9. The 20-year term of SoCal's contract with the Irvine Company is reasonable as long as the contract is subject to modification through the Commission's General Order 96-A.
10. SoCal's contract with the Irvine Company is reasonable given the specific situations as they apply at the time the contract was negotiated and the party the contract was negotiated with.

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11. All of the remaining issues raised by DRA in its protest are attempts to relitigate issues already resolved by the Commission.

12. The Commission's findings in Southern California Edison's General Rate Case (D.91-12-076) are not applicable to Southern California Gas.

13. As a matter of policy, the Commission has approved funding of commercialization programs on a case-by-case basis.

14. SoCal Gas is not an "electric corporation" as defined under Public Utilities Code section 218 as a result of offering fuel cell service provided each fuel cell serves no more than two individuals or corporations.

**THEREFORE, IT IS ORDERED that:**

1. Southern California Gas Company's (SoCal) request to enter into its contract with the Irvine Company to provide fuel cell service on a demonstration basis as requested by SoCal in Advice Letter 2152-G is approved for service on and after January 27, 1993.

2. SoCal's contract with the Irvine Company is reasonable given the specific situations as they apply at the time the contract was negotiated and the party the contract was negotiated with.

3. SoCal should provide the Commission with a greater level of documentation of the negotiating history of the contract and the level of discounts offered by competing vendors of cogeneration technology for all additional contracts under SoCal's fuel cell demonstration program offering discounts of greater than 10%.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on March 24, 1993. The following Commissioners approved it:



NEAL S. SHULMAN  
Executive Director

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