

CA-42

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

COMMISSION ADVISORY AND  
COMPLIANCE DIVISION  
Energy Branch

RESOLUTION G-3155  
November 22, 1994

R E S O L U T I O N

RESOLUTION G-3155. SOUTHERN CALIFORNIA GAS COMPANY REQUESTS APPROVAL OF THE EG&G CHANDLER MODELS 292 AND 2920 GAS CHROMATOGRAPH FOR HEATING VALUE MEASUREMENT PURPOSES.

BY LETTER FROM SOUTHERN CALIFORNIA GAS COMPANY DATED AUGUST 8, 1994.

---

SUMMARY

1. By letter dated August 8, 1994, Southern California Gas Company (SoCalGas), in conformance with General Order (G.O.) 58-B Section 5, requests approval of the EG&G Chandler Models 292 and 2920 (EG&G) gas chromatographs for heating value (BTU) measurement purposes.
2. This Resolution approves SoCalGas' request.

BACKGROUND

1. On December 1, 1993, SoCalGas submitted a request for approval of the EG&G Model 292 gas chromatograph for heating value measurement as required by General Order 58-B. SoCalGas' request and supporting documentation was reviewed by Frank Crua of the Energy Branch in the Commission Advisory and Compliance Division (CACD).
2. Mr Crua advised SoCalGas that in accordance with Section 5.b of G.O. 58-B, a minimum of a three-month comparison test of the EG&G chromatograph with an approved device such as the Daniel Danalyzer Model 500 (Daniel) chromatograph is required. A report of the test results must be submitted to the Commission.
3. SoCalGas initiated the 3-month comparison test on February 23, 1994 and completed it on June 10, 1994. A report with the test results was submitted with a letter dated August 8, 1994.

### DISCUSSION

1. The test results in the SoCalGas report demonstrated the reliability and accuracy of the EG&G chromatograph. The 24 Hour Daily BTU Averages for the EG&G and Daniel chromatographs was recorded and compared throughout the test. The test results indicate that EG&G Model 292 chromatograph was as accurate as the approved Daniel Model 500 chromatograph.
2. The average difference between the Daniel and EG&G 24-hour daily averages was only 0.26 BTU or about 1/4 BTU. In addition, the average percentage variation between the Daniel and the EG&G 24-hour daily averages was 0.03%.
3. Approval is being requested for both the Model 292 and the Model 2920, but only the Model 292 is being tested. Rather than testing both models, EG&G provided documentation to support the fact that functionally, both models of the chromatograph are identical as required by G.O. 58-B, Section 5.d. - Approval of New Devices for Heating Value Measurement. The difference is that the Model 292 is a portable unit that requires an external stream selector for automatic calibration or sampling more than one stream, and the Model 2920 has an integrated stream selector.
4. EG&G recommends a monthly automatic calibration interval in compliance with the requirements of G.O. 58-B, Section 8 - Calibration of Heating Value Measurement Devices. EG&G has submitted test data to substantiate their recommendation, and the SoCalGas report contained the weekly calibration information which indicated that the chromatograph held its calibration throughout the test.
5. On June 2, 1994, Frank Crua of the Energy Branch staff visited the SoCalGas Olympic Base facility where the EG&G unit was being tested. All data included in SoCalGas' report was presented to Mr. Crua along with a hands-on demonstration of the EG&G chromatograph hardware and software.
6. The Energy Branch has reviewed the test data, and concludes that the test results demonstrate that the EG&G chromatograph Model 292 is as reliable and accurate as the previously approved measurement systems. The Energy Branch recommends approval of SoCalGas' request to use the EG&G Chandler Models 292 and 2920 gas chromatograph.

### FINDINGS

1. The EG&G chromatograph Model 2920 is based on the design of the Model 292. Functionally, the two instruments are identical. The manufacturer did an extensive study of the performance of the Model 2920 and determined that the results would be identical to those obtained using the Model 292.
2. In accordance with Section 8 of G.O. 58-B, the manufacturer has recommended a monthly automatic calibration interval.

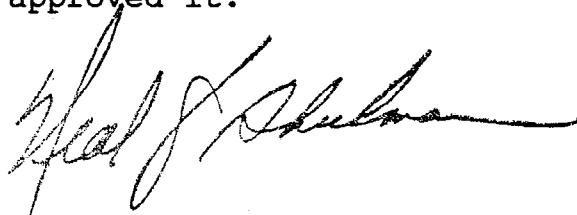
3. The Commission finds SoCalGas request for approval of the EG&G Chandler Models 292 and 2920 gas chromatograph to be reasonable.

**THEREFORE, IT IS ORDERED that:**

1. The EG&G Chandler Models 292 and 2920 gas chromatograph measurement system may be used for heat value measurement purposes when used in compliance with the manufacturer's recommended operating procedures and applicable Commission General Orders.

2. The Resolution is effective today.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on November 22, 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