

**ORIGINAL**Decision No. 29264

## BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Investigation on the Commission's own motion into the reasonableness of the Rules and Regulations, in so far as they relate to the character of natural gas served, of PACIFIC GAS AND ELECTRIC COMPANY, and of SAN JOAQUIN LIGHT AND POWER CORPORATION

Case No. 4124

In the Matter of the Application of the CITY OF OAKLAND, a municipal corporation, to the RAILROAD COMMISSION OF THE STATE OF CALIFORNIA to declare null and void, and strike from the files of said Commission, that portion of "Rule and Regulation No. 2 - Character of Service," filed October 22, 1935, by PACIFIC GAS AND ELECTRIC COMPANY, designated "Revised Sheet C.R.C. No. 473-G," which purports to fix the range of heating value of natural gas to be served its consumers, and fix and establish in lieu thereof a minimum heating requirement not less than that used in fixing and establishing the existing rates for natural gas.

Application No. 20455

F. B. Fernhoff and W. W. Cooper, for City of Oakland,  
 J. J. O'Toole and Dion Holm, for City of San Francisco,  
 T. B. Quinn and W. B. Hogan, for City of Stockton,  
 Chas. Clifford, for Marin County Board of Supervisors,  
 Pillsbury, Madison & Sutro, by H. Fullerton, for  
 Standard Oil Company of California,  
 C. P. Cutten and R. W. Duval, for Pacific Gas & Elec-  
 tric Co. and San Joaquin Light and Power Corporation,  
 C. L. Rowe, for City of Fresno.

BY THE COMMISSION:

O P I N I O N

On April 3, 1936, the City of Oakland filed its Applica-

tion No. 20455, in which it petitions the Commission to declare null and void and strike from its files Rule and Regulation No. 2 - Character of Service - filed October 22, 1935, by Pacific Gas and Electric Co., effective December 1, 1935, and identified as Revised Sheet C.R.C. No. 473-G, in so far as said rule and regulation purports to fix and establish the heating value of natural gas to be supplied to its consumers, and to fix and establish in lieu thereof the minimum heating value of natural gas to be furnished, pursuant to existing natural gas schedules, on the basis of approximately 1150 B.t.u. per cubic foot.

On April 17, 1936, the Commission received a letter dated April 15, 1936, from the City Clerk of the City of Fresno, stating that -

"By resolution of the Commission of the City of Fresno, adopted at the last regular meeting, the undersigned was directed to communicate with the Railroad Commission of the State of California and most respectfully request that your Honorable Commission issue an order fixing a minimum requirement of 1150 B.t.u.'s for gas furnished local residents by the San Joaquin Light and Power Co."

On May 4, 1936, the Commission issued its Order Instituting Investigation (Case No. 4124) on its own motion into the reasonableness of the Rules and Regulations, in so far as they relate to the quality or character of natural gas served, of Pacific Gas and Electric Company and San Joaquin Light and Power Corporation.

Both of these matters were finally set for public hearing before Commissioner Harris in San Francisco on August 26, 1936, written notice thereof being forwarded on August 18, 1936, to the two utilities involved, and to the City Attorneys of Oakland, San Francisco, Sacra-

mento, Stockton, San Jose, Berkeley, Alameda, Fresno and Bakersfield.

Public hearing was held on these matters at San Francisco on August 26, 1936, at which time they were consolidated for purposes of hearing. Appearances were entered by the two utilities involved, and by the Cities of Oakland, San Francisco, Stockton, Marin County Board of Supervisors and Standard Oil Company of California. No one appeared for the City of Fresno. At this hearing the matter was submitted, with the understanding that inasmuch as the City of Fresno had neglected to enter an appearance, the proceedings would be reopened should the City of Fresno so desire.

Although no direct request for the reopening of the proceedings was received from said City of Fresno, the Commission, on its own motion, issued its order reopening Case No. 4124 and set same for further hearing before Commissioner Harris at Fresno, on September 23, 1936.

A public hearing was held at Fresno on said date and the matter submitted.

In its Application No. 20455, the City of Oakland alleges that the present natural gas rates of Pacific Gas and Electric Company were predicated upon the furnishing of natural gas with a heating value of approximately 1150 B.t.u. per cubic foot; that said Rule and Regulation No. 2 permits said utility to lawfully supply its consumers with natural gas having a monthly average heating value of less than 1150 B.t.u. per cubic foot and as low as 900 B.t.u. per cubic foot; that a reduction in heating value below that assumed in the fixing of rates results in an increase in rates; that the minutes and records of said Rail-

road Commission do not show or indicate any formal action, finding or order upon the part of said Railroad Commission ordering the filing or acceptance of said Rule and Regulation No. 2;" that no showing was made by said Commission that such increase was justified, as required by Section 63(a) of the Public Utilities Act; and that said Rule and Regulation No. 2 purports to authorize an unreasonable and unlawful discrimination by Pacific Gas and Electric Company between localities and consumers.

At the hearing in San Francisco, the City of Oakland, through its City Attorney, read into the record a prepared statement, the purpose of which he stated was to direct the attention of the Commission to matters of record which are decisive of the application. In this statement, applicant claims that the operation of existing Rule and Regulation No. 2 of Pacific Gas and Electric Company "has for its result an increase in the charge for gas to consumers because decreased heat units increase the quantity of gas needed to perform an equivalent service, and with rates fixed on a volumetric basis, increased use means increased total cost." The statement continues: "furthermore, the applicable sections of G. O. 58-A need only to be read to show that Rule No. 2 fails to comply with the requirements of the General Order."

Said statement further claims that said Rule and Regulation No. 2 is invalid for two reasons:

1. That "it was not filed and accepted by the Commission as required by Section 63(a) of the Public Utilities Act, as there was no showing before the Commission or finding by the Commission that the increase in charges which might result from the acceptance of the new regulation were justified."

2. That "The purported rule does not comply with the requirements of this Commission's General Order No. 58-A "Standards for Gas Service in the State of California," effective July 1, 1932.

and claims that said Rule and Regulation No. 2 authorizes unjust discrimination between communities at the will of the utility, but applicant makes no contention that since the filing or by reason of the filing of same, the utility has made an increase in the charge to its consumers.

Applicant, City of Oakland, called no witnesses and introduced no further testimony than the prepared statement above referred to, together with a memorandum of "Excerpts from Standards for Gas Service - Circular of the National Bureau of Standards, No. 405 - U. S. Department of Commerce," which was received as Exhibit No. 1.

The utility, Pacific Gas and Electric Company, through its attorney, contended that its present Rule and Regulation No. 2 is more restrictive upon the utility than the rule that was superseded, in that it limits the heating value of the gas to from 900 to 1200 B.t.u.'s per cubic foot, whereas the superseded rule simply stated "natural gas" without limitation in heating value and that the filing of the present rule in nowise results in an increase in a rate or charge for gas service to the utilities' consumers.

It contends, further, that no formal order or hearing under Section 63(a) of the Public Utilities Act was necessary to make such rule and regulation effective, in that it was filed in the same manner as all of the utilities of this State have been informally filing revisions of their rules and regulations with this

Commission for the last twenty years; that said rule is just and reasonable and that same was filed and accepted by the Commission and is a valid and effective rule and regulation; that the rule in its present form accurately describes the character and quality of the gas available to the utility for use in supplying customer demands; that in practically all of the contracts under which the utility purchases natural gas in the fields it is obliged to take and pay for natural gas having a heating value of 900 B.t.u. or more per cubic foot, the purchase price being the same regardless of the heating value; that the heating value of the natural gas produced in a state of nature is beyond the control of the utility and that there is no economic way in which the heating value of said gas can be altered to meet any particular specifications; that the setting up by the Commission of a standard of quality for utilities higher than the normal range of the heating value of natural gas as now developed and which may be reasonably expected in the future would discourage the development of new fields, which development will be necessary to supply future demands for gas; that it is the purpose of the utility, in so far as is possible, to utilize the natural gas supplies available to it and to the fullest extent conserve and make economic and beneficial use of same; and, finally, that the utility has no intention whatsoever of seeking or taking a disproportionately large supply of relatively low heating value gas or gases, with the intent to reduce the heating value of gas which is supplied to its customers, nor of discriminating between communities or classes of consumers.

It contends, further, that although said rule and regula-

tion does not strictly comply with paragraph 11 of General Order No. 58-A, wherein the latter specifies that -

"Each gas utility supplying natural gas or hydrocarbon gas for domestic, commercial or industrial purposes, shall file with the Commission as a part of its schedule of rates, rules and regulations, the average total heating value of the natural gas or hydrocarbon gas, together with the maximum fluctuation above or below the average total heating value which may be expected of the gas supplied by it in each district, division or community served,"

nevertheless the rule is in substantial compliance with said order; that there must be reasonable latitude in supplying natural gas service and that a strict and literal interpretation of said order would be impracticable and impossible of enforcement.

The utility called no witnesses and introduced but two exhibits, Exhibit No. 2 - "San Joaquin Light and Power Corporation Gas Department, Chronological Record of Preliminary Statement and Rule 2" and Exhibit No. 3 - "Pacific Gas and Electric Company - Gas Rule and Regulation No. 2 (Rule in effect immediately prior to introduction of natural gas and revisions to date)."

Mr. Claude C. Brown, Chief Engineer of the Commission, was called as a witness on behalf of the Commission and testified regarding the introduction of and change-over to the service of natural gas on the system of Pacific Gas and Electric Company, citing the applications and decisions involved, and as to the revisions and filings of Rule and Regulation No. 2 of said utility. He also testified as to the quantities of gas served in the East Bay Division of said utility and that the average heating value of same has been well above 1150 B.t.u. per cubic foot at all times since the inception of natural gas service in said area, and quoted the corresponding Rule and Regulation No. 2 of other major gas utilities

in California.

He further testified that the filings and revisions of Rule and Regulation No. 2 of both Pacific Gas and Electric Company and San Joaquin Light and Power Corporation had been regularly filed in accordance with the Commission's General Order No. 54, were all matters of public record, that no secret orders had been issued by the Commission, and pointed out the fact that continuously since the introduction of natural gas service in Fresno, the average monthly heating value of the gas served to the consumers in Fresno has been well above 1150 B.t.u. per cubic foot; that all of the natural gas served in said Fresno area has come from the North Dome of the Kettleman Hills Field; that same is and continuously has been delivered from said Kettleman Hills Field to the Fresno system of San Joaquin Light and Power Corporation by means of a 10" line owned and operated by Southern California Gas Company and that although there exists a 6" emergency interconnection between this 10" line and the 16" Pacific Gas and Electric Company's Buttonwillow line, the valve in said 6" interconnection has been continuously closed, save for the period July 28, 1932, to August 5, 1932, during which time the valve in the 16" Buttonwillow line south of said 6" interconnection was closed and only Kettleman gas was served to Fresno through said 6" interconnection; that San Joaquin Light and Power Corporation purchases the natural gas that it serves to its consumers in Bakersfield from Southern California Gas Company, and that said gas comes largely from the Midway Field, which varies in heating value from 850 to 1000 B.t.u. per cubic foot; that the Bakersfield system and the Fresno system have no physical



connection; that the utilities regularly report to the Commission the heating value of the gas that they serve and that the Commission engineers periodically check the apparatus used to determine said heating value.

He further pointed out the difficulty of maintaining a closely regulated heating value of natural gas, due to the fact that the distributing utilities have no control over the operations of the producers and gasoline extraction plants, from whom they purchase their supplies of natural gas, which operations may cause wide variations in the heating value of said gas, and that a reasonable leeway or tolerance is therefore necessary in the rules and regulations of the utilities relating to said heating value.

At the hearing in Fresno, the City of Fresno called three witnesses. One of these, Mr. E. H. Musser, Deputy Supervisor, Division of Oil and Gas, State of California, testified that he had no personal knowledge of the heating value of the natural gas secured from Buttonwillow Field but that he understood from hearsay that it was approximately 950 B.t.u. per cubic foot. The second witness, Mr. R. C. Patterson, Supervisor of Oil and Gas Leasing Operations, United States Geological Survey, Department of the Interior, testified that while he had no personal knowledge of the heating value of the natural gas secured from either Buttonwillow or Kettleman Hills Fields, he had heard that the heating value of the Buttonwillow Field gas was in the neighborhood of 950 B.t.u. per cubic foot, while that from Kettleman had varied from 1050 to 1200 B.t.u. per cubic foot. He stated that (Tr. page 108):

"They take gas from the----that is produced from several different zones; we have what we call the white gas and the black gas zones and they commingle the gases and they get variables, they can not get a standard regularly there because they commingle those gases and they have different properties."

The third witness, Mr. J. F. Dodge, Professor in Charge of the Department of Petroleum Engineering, University of Southern California, testified that, in his opinion, the underground supply of natural gas in the Kettleman Hills Field is approximately seven and one-half trillion cubic feet (above 50 lbs. pressure) and although continuously since 1930 this field has been physically capable of producing all of the gas that the compressor and transmission lines from it could handle, that other fields might have to be called upon to carry peak demands; that if a Thomas Recording Calorimeter were allowed to get out of adjustment it would read incorrectly; that, in his opinion, a reasonable minimum heating value of the Kettleman Hills gas served in Fresno would be 1075 or 1100 B.t.u. per cubic foot; that the record in his files of the heating value of Kettleman Hills dry gas, as furnished to him by others, varied from 1110 to 1156 B.t.u. per cubic foot; that the operation of gas appliances adjusted for 1150 or 1175 B.t.u. gas, with 850 B.t.u. gas would be highly unsatisfactory; that, in his opinion, it is highly desirable to use gas from the dry gas fields to help carry peak demands.

The utility, through its witnesses, introduced testimony to the effect that the natural gas which it furnishes to its consumers in Fresno, Madera, Chowchilla, Merced, Selma, Sanger and contiguous territory is purchased from Pacific Gas and Electric Company and has come entirely from the North Dome of Kettleman Hills, while the natural gas that it serves to its consumers in Bakersfield is purchased from Southern California Gas Company; that there is no connection between the Pacific Gas and Electric Company's Kettleman

compressor station and the Southern California Gas Company's 10" line that serves Fresno, and no connection between the 16" Pacific Gas and Electric Company's Buttonwillow line and said Southern California Gas Company's 10" line, other than the 6" emergency interconnection referred to in previous testimony; that it would be physically impossible to bring gas north from Buttonwillow, mix it with Kettleman gas in said compressor station and transmit it to Fresno through existing facilities; that nothing but straight Kettleman Hills gas has ever been delivered to Fresno; that any gas from Buttonwillow and Semitropic is and always has been commingled and mixed, at the compressor station, with Kettleman Hills gas and transmitted north through the Pacific Gas and Electric Company and Stanpac lines for delivery to the consumers of Pacific Gas and Electric Company in the north and to Standard Oil Company and its subsidiaries and that none of it was delivered to Fresno; that the calorimeters of the San Joaquin Light and Power Corporation are carefully maintained and tested each week and kept in proper adjustment; and that the average monthly heating value of the natural gas delivered in Fresno and Bakersfield and, as recorded by the recording calorimeters during the period January, 1932, to August, 1936, inclusive, varied from a minimum of 1152 to a maximum of 1212 B.t.u. per cubic foot in Fresno, and from a minimum of 950 to a maximum of 1069 B.t.u. per cubic foot in Bakersfield.

The issues in these proceedings are whether or not the existing Rules and Regulations No. 2 of Pacific Gas and Electric

Company and San Joaquin Light and Power Company

1. Were properly filed with the Commission;
2. Are lawful and effective rules and regulations;
3. By their filing constitute an increase in gas rates;
4. Authorize unlawful and unreasonable discrimination between localities and consumers;
5. Have been fully complied with by the utilities;
6. Have resulted in the furnishing to Fresno consumers of other than Kettleman natural gas;
7. Are in compliance with General Order No. 58-A.

The evidence in the record of these proceedings indicates that in the cases of both utilities, the existing rules were filed with the Commission and put into effect in full and proper accordance with the Commission's General Order No. 54, and are therefore lawful and effective rules and regulations. In both cases the rules which were superseded by the existing rules specified merely "natural gas" without limitation as to the heating value of the gas served, so that the limitations as to heating value as set forth in the existing rules increase rather than decrease the minimum allowable heating value of said gas and, therefore, do not constitute an increase in gas rates. There being no increase in rates or charges, no showing or finding was necessary to make the rules effective under Section 63(a) of the Public Utilities Act.

The existing rules, setting forth as they do the maximum and minimum heating value of the natural gas served on the system of each utility, are more restrictive in range than the rules which they superseded and, therefore, are less discriminatory than were the rules that they superseded.

As to the quality of the natural gas that the utilities are and have been serving under these rules since they became effective, the record clearly indicates that the heating value thereof has been well above the minimum limits specified in the rules, and that the consumers in Fresno have received none other than straight Kettleman

Hills natural gas, with the exception of 1823 MCF of 950 B.t.u. Diesel gas manufactured in the standby plant in 1935.

The record further discloses the fact that although neither of the rules is in strict compliance with the provisions of General Order No. 58-A, in that they do not specify the average total heating value of the natural gas to be served together with the maximum fluctuation above or below said average which may be expected of the gas supplied in each district, division or community served, there exists an entire lack of control by the utilities over the heating value of the natural gas delivered to them by the gas producers and gasoline extraction companies from whom they purchase their supplies of said gas. And, further, that the heating value of said natural gas varies from time to time, depending upon the particular gas fields from which it is drawn and upon the operations of the producers and extraction companies in said fields; that a number of the recently discovered additional sources of natural gas contain dry gas of a lower heating value than that secured from Kettleman Hills Field; and that in view of these facts it is essential that there be allowed a certain leeway or tolerance in the formulation and interpretation of rules and orders governing the quality of natural gas served under said rules and orders.

This Commission has, in the past, and will continue in the future, to keep closely in touch with the quantity, heating value and cost of the natural gas purchased by these utilities from their various sources of supply, to the end that no prejudice may result to the consumers to whom the gas is served.

The Order herein will require that the utilities render monthly reports to the Commission of the quantities of natural gas purchased, designating the various sources of supply and the

purchase price for same. It will also require that Rule and Regulation No. 2 of each of the two utilities shall be so revised as to set forth the maximum and minimum limits between which the average monthly heating value of the natural gas served may be expected to vary in each portion of its system having different limits, it being the understanding that if and when the utility determines that it will be unable to further maintain said limits it will formally present the matter to the Commission.

Appropriate steps will be taken by the Commission to make these requirements uniform for all the gas utilities in the State.

#### O R D E R

The City of Oakland having petitioned the Commission to "declare null and void and therefore strike from its files all that portion of Rule and Regulation No. 2 - Character of Service - filed October 22, 1935, by Pacific Gas and Electric Company, and bearing the designation 'Revised Sheet C.R.C. No. 473-G,' which purports to fix and establish the monthly average heating value of gas supplied on regular schedules, where natural gas is specified, between 900 B.t.u. and 1200 B.t.u. (dry basis) per cubic foot, and fix and establish in lieu thereof the minimum heating content of natural gas to be furnished pursuant to existing natural gas schedules, on the basis used in the fixing of said schedules; that is, approximately 1150 B.t.u. per cubic foot," and the Commission having, on its own motion, instituted an investigation into the reasonableness of the Rules and Regulations, in so far as they relate to the quality or character of natural gas served, of Pacific Gas and Electric Company and of San Joaquin Light and Power Corporation, hearings having been held, the proceedings having been submitted and being now ready for decision,

The Railroad Commission of the State of California Hereby  
Finds as a Fact;

1. That the existing Rules and Regulations No. 2 of Pacific Gas and Electric Company and San Joaquin Light and Power Corporation were properly and lawfully filed with the Commission.
2. That said rules and regulations are therefore lawful and effective rules and regulations.
3. That the filing of these rules and regulations did not constitute an increase in gas rates.
4. That said rules do not authorize unlawful and unreasonable discrimination between localities and consumers.
5. That said rules have been fully complied with by said utilities, in that the heating value of the gas served by said utilities under said rules has been well above the minimum limits specified therein.
6. That the San Joaquin Light and Power Corporation has at no time served to its consumers in the City of Fresno any other gas than straight natural gas from Kettleman Hills oil field, with the exception of 1823 MCF of 950 B.t.u. diesel gas manufactured in the Fresno standby gas plant in the year 1935.
7. That said Rules and Regulations No. 2 are not in strict compliance with General Order No.58-A of this Commission.

Basing its Order on the foregoing findings of fact, and on such other findings and statements of facts as are set forth in the opinion preceding this order, or in this order,

IT IS HEREBY ORDERED that Application No. 20455 be and it is hereby dismissed.

IT IS HEREBY FURTHER ORDERED that Pacific Gas and Electric Company and San Joaquin Light and Power Corporation shall file with this Commission, starting with December, 1936, monthly statements showing the quantities of natural gas purchased during the preceding month, and the purchase price paid for same from

each of its sources of natural gas supply.

IT IS HEREBY FURTHER ORDERED that Pacific Gas and Electric Company and San Joaquin Light and Power Corporation shall each file with this Commission, on or before December 1, 1936, a revision of its gas Rule and Regulation No. 2, setting forth therein the maximum and minimum limits between which the average monthly heating value of the natural gas served may be expected to vary for each portion of its system having different limits, said variation being limited to 100 B.t.u. per cubic foot of natural gas.

Except as otherwise provided, the effective date of this order shall be twenty (20) days from and after the date hereof.

Dated at San Francisco, California, this 9th day of November, 1936.

M B Harris  
Leon Whitell  
Matthew Mann  
Frank Decker  
Commissioners.

*7 Concurs in the order*  
W J Carr  
Commissioner.