NB

Decision No. 65078

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Investigation on the Commission's own motion into the production, storage, conservation, reserves, transportation, transmission and sale of natural gas in California.	))))))	Case No. 7132 Filed June 6, 1961

(Appearances are listed in Appendix A.)

O P I N I O N

Purpose of Investigation

The Commission instituted the above-entitled investigation into the production, storage, conservation, reserves, transportation, transmission and sale of natural gas in California for the following purposes:

a. To determine the relevant facts concerning the above-enumerated subjects involving natural gas in California.

b. To determine whether the regulation of said subjects, to the extent not presently regulated, would tend to make more effective the regulation and supervision by this Commission of gas corporations and any other public utilities selling, transporting, transmitting or consuming natural gas.

c. To cooperate with and assist any committee of the Legislature investigating any of said subjects.

d. To inquire into the economic and other relationships between natural gas and other fuels.

e. To make findings and recommendations based upon the record produced by said investigation, and to render such orders and decisions as to the Commission may appear appropriate.

All gas corporations were made respondents and required to assist the Commission in the investigation. All public officers

and agencies, civic bodies and associations, electric distributing agencies and persons interested in the subject matter of the investigation were invited and urged to participate.

The participation and helpful assistance rendered in this investigation by all parties is acknowledged with appreciation.

Public Hearing

Public hearings were held, after due notice, at San Francisco and at Los Angeles before Commissioner Mitchell and Examiner Dunlop on 17 days during the period beginning December 4, 1961 and ending August 9, 1962. Commissioners Grover, Fox, McKeage and Moloboff were in attendance during one or more days of hearing.

The record is extensive. It includes some 2,700 pages of transcript and 60 exhibits. Testimony was presented by 41 witnesses and statements of position were offered by 40 parties.

The investigation was conducted in three phases. The first phase dealt with the subject of production. The second phase inquired into the economic and other relationships between natural gas and other fuels. The third phase of the investigation sought relevant facts relating to natural gas in California on four subjects: (A) Availability and Requirements, (B) Storage, (C) Transportation and Transmission, and (D) Regulation.

Production

Natural gas production in California represented 10 percent of the total production in the United States in 1947 and 4 percent in 1960. The trend in net natural gas production in California,

Texas and in the entire United States is shown in Exhibits 6 and 41 and is summarized in the tabulation following:

Year	Net Natural Gas Production (Billions of Cubic Feet) California	Texas	United States
1947	524	2,504	5,630
1950	566	3,380	6,893
1955	549	4,922	10,113
1960	520	5,903	13,090
1961	569	*	*

* Data was not available when Exhibits 6 and 41 were prepared.

In California natural gas is produced from two types of wells, namely: gas wells and oil wells. Gas wells are further segregated between dry gas wells and gas condensate wells. Dry gas wells, which predominate in northern California, produce natural gas only with insignificant amounts of liquid condensate. Gas condensate wells produce a gas from which a significant amount of liquid products may be extracted. Most oil wells produce both crude oil and gas. This type of well predominates in southern California. The gas from oil wells is termed "casinghead gas" and normally yields liquid products and residue gas when processed.

Current gas reserve and deliverability information is not made public by producers in California. However, in interstate gas pipeline certificate and rate proceedings before the Federal Power Commission, gas reserve and deliverability data in considerable detail are required in support of the projects and rate requests. Limited estimated California gas reserve information is available to the general public through the Division of Oil and Gas in its "Summary of Operations" reports, through the U. S. Bureau of Mines in its "Minerals Yearbook" and through the American Gas Association - American Petroleum Institute publications. The trend of

estimated natural gas reserves revealed by these several sources of information is contained in Exhibits 6 and 41 and is summarized below:

Year	Estimated Natural Gas Reserves at End of Year (Billions of Cubic Feet) California	Texas	United States
1947	10,233	90,026	165,927
1950	10,023	102,404	185,593
1955	8,883	108,207	223,697
1960	10,145#	119,489	263,759
1961	9,595#	*	*

* Data was not available when Exhibits 6 and 41 were prepared.

\# Subject to revision in report of following year.

If reasonably reliable current estimates of known California gas reserves, deliverability thereof and availability for use were revealed, better judgments could be made with respect to the need for importing into California additional quantities of out-of-state gas, the reasonableness of the price paid for California produced gas, and the justification for constructing additional facilities by gas distributing utilities.

The trend in well drilling activity and in the number of producing wells is revealed in Exhibit 6 and is summarized below:

Year	Number of Wells Drilled California	Texas	United States	Number of Producing Wells California	Texas	United States
1947	2,053	9,301	33,093	24,076	112,489	492,192
1950	1,829	16,585	43,279	25,143	130,609	531,208
1955	2,465	19,981	56,682	34,258	170,391	609,157
1960	1,709	15,581	46,751	37,887	211,239	*
1961	*	*	*	*	*	*

* Data was not available when Exhibit 6 was prepared.

Economic and other Relationships Between Natural Gas and other Fuels

Natural gas is now and should continue to be for many years to come a major source of fuel supply for California. Natural

gas is also used in California as a raw material in the production of petrochemicals and carbon black and for repressuring and recycling of oil fields.

Domestic and commercial service customers of gas corporations use natural gas as a fuel primarily for cooking, water heating, and space heating. Electricity actively competes for the cooking and water heating loads but, on a cost basis, is not currently competitive for the space heating load.

The firm industrial customer uses gas as a fuel for furnaces, ovens, kilns and other like equipment. Competing fuels include electricity and the lighter grades of fuel oil.

The interruptible customers use gas in a multitude of ways, including space heating and the production of steam. Interruptible gas customers are required to have a standby fuel supply available for gas used other than as a raw material since gas service may be interrupted in case of short supply or lack of pipeline capacity.

Under current economic conditions, expansion of hydroelectric generation in California to assist in meeting future energy requirements is limited. However, interstate high voltage alternating or direct current electric transmission is a possible future major supplement to California energy requirements.

Residual fuel oil is a substantial contender for a share of California's total energy needs but is subject to air pollution restrictions and to availability variation by federal import restrictions on crude oil. It appears that desulphurization of residual fuel oil, in order to meet air pollution control requirements, currently would place such fuel outside competitive price limits within the restricted areas.

The significant area in which liquid fuels compete with natural gas in California is in heavy industry and power generation. As recently as 1949, residual fuel oil supplied somewhat over half of the fuel for heavy industry and power generation in California. However, by 1961, almost three-quarters of this market was satisfied with natural gas. The oil industry attributes this decline in oil's share of the market to the great increase in availability of natural gas, the comparatively low price for interruptible natural gas service, and air pollution control restrictions on the use of fuel oil. It is the position of the Western Oil and Gas Association that the availability of ample supplies of fuel oil can temper any rise in gas prices, but that factors such as air pollution control restrictions and comparatively low prices for interruptible natural gas may prevent fuel oil from exercising the regulating force of competition.

Coal at the present time is not generally used in California. The nearest coal reserves of commercial quantities are found in Utah, Arizona, New Mexico and Colorado. Coal imported from these states may be competitive in California with other fuels under certain conditions. However, coal fuel presents air pollution problems similar to fuel oil. Minemouth electric generation with high voltage transmission may be one way of getting around air pollution problems in the use of coal.

Liquid petroleum gases (butane and propane) of domestic origin are generally not competitive with natural gas because of their higher initial price at the refinery. Liquefied methane, however, from Alaska or from Central and South America delivered by refrigerated tankers to California may be competitive in the future.

Nuclear energy as a fuel in steam-electric generating plants, possibly could be competitive with natural gas and fuel oil

in the range of 4 to 5 cents per therm by the late 1960's. Several nuclear powered electric generation plants have been built in the United States. Pacific Gas and Electric Company has participated in several of these plants, including the Vallecitos experimental plant. Pacific Gas and Electric Company has the Humboldt Bay nuclear plant about ready for service, and has been authorized by this Commission to construct a 325,000-kilowatt nuclear plant at Bodega Bay.

Southern California Edison Company is participating in several experimental nuclear plants in the United States and has negotiated the substance of a contract with an equipment manufacturer and architect-engineering firm for the construction of a 375,000-kilowatt closed cycle, pressurized water nuclear power plant in Southern California. The Department of Water and Power of the City of Los Angeles also has announced its intention to construct a large nuclear power plant on its system.

When nuclear fuel becomes competitive, it is not expected to replace the use of natural gas in existing steam-electric generation plants. Rather, it appears that nuclear-fueled plants will be built as new electric generation capacity is required if economically attractive at the time the addition must be made.

Availability and Requirements

Natural gas total annual sales by California gas distributing utilities for the period 1952 to 1961 increased from 551.4 to 1,149.4 billions of cubic feet. In this period annual firm sales increased from 335.6 to 537.0 billions of cubic feet, an increase of 60 percent while annual interruptible sales increased from 215.8 to 612.4 billions of cubic feet, an increase of 184 percent. Thus, since 1952 interruptible sales have increased at more than three times the rate of increase of firm sales, and in 1961

exceeded firm sales by 75.4 billions of cubic feet. Annual volumes of gas used for electric generation in California increased from 76.8 billions of cubic feet in 1952 to an estimated 350.5 billions of cubic feet in 1961, an increase of 357 percent.

A report on the availability and requirements for gas in California through the year 1971 was presented as Exhibit 42 by a committee of the natural gas utilities. The report showed a decline in California supply, with an increase in out-of-state supply, an increase in annual firm requirements of 298.7 billions of cubic feet from 1961 to 1971 and an increase in annual interruptible potential of 409.8 billions of cubic feet during the same period. A summary of annual and peak day supply and requirements follows:

Annual Supply and Requirements
(Exhibit 42)

Item	Actual 1961	Estimated 1965	1970	1971
	(Billions of Cubic Feet)			
Annual Gas Supply				
California Source	390.9	393.5	287.4	270.0
Out of State	933.3	1372.5	1841.0	1950.5
Underground Storage Withdrawal	38.0	52.0	55.5	59.6
Other	.5	-	-	-
Total Supply	1362.7	1818.0	2183.9	2280.1
Annual Gas Requirements				
Firm	584.0	706.2	852.0	882.7
Underground Storage Injection	30.8	51.9	55.4	59.5
Interruptible Potential, Adjusted Basis	747.2	928.8	1117.9	1157.0
Potential Requirements, Adjusted Basis	1362.0	1686.9	2025.3	2099.2

Peak Day Supply and Demand
(Exhibit 42)

Item	Winter Season Actual 1961-62	Estimated 1965-66	1970-71	1971-72
	(Billions of Cubic Feet)			
Peak Day Gas Supply				
California	1.51	1.35	1.14	1.04
Out of State	2.95	3.61	4.97	5.27
Underground Storage Withdrawal	1.01	1.18	1.50	1.50
Other	(.03)	.04	.04	.04
Total Supply	5.44	6.68	7.65	7.85
Operating Tolerance	-	(.07)	(.07)	(.08)
Net Gas Supply	5.44	6.61	7.58	7.77
Peak Day Demand				
Firm	4.45	5.94	7.26	7.54
Underground Storage Injection	.01	-	-	-
Interruptible Potential	2.29	3.31	3.93	3.99
Total Demand	6.75	9.25	11.19	11.53
Curtailment	1.87	3.26	4.04	4.18
Total Sendout	4.88	5.99	7.15	7.35

(Red Figure)

The California Gas Producers Association took exception to the projection of gas supply available from California sources contained in Exhibit 42, claiming that such supply should at least be held constant at the present volumes over the entire period through 1971. However, no definite reserve or deliverability studies were presented to support such a claim. Inadequate knowledge of estimates of California gas reserves and deliverability restrict judgments on the future availability of California source gas.

The out-of-state estimated supply contained in Exhibit 42 assumes the availability and certification from time to time of substantial additional quantities of gas not now identified as to source. Under the assumptions of gas requirement, storage and curtailment contained in Exhibit 42, existing supplies are shown by this exhibit to be adequate to meet peak day firm requirements in northern California up to and including the heating season 1967-68 and in southern California at least for the heating season 1962-63.

Storage

The gas utilities are under obligation to secure sufficient gas to meet their firm customer requirements. These firm requirements vary from warm to cold seasons of the year, from weekdays to week ends, from days of average to extreme cold temperature and from hour to hour during the day. California gas utilities use a variety of methods to equate load and meet the variations in firm customer requirements for gas. Among these methods are the use of underground storage, variation in gas supply, pipeline pack and draft, gas holders, and off-peak deliveries to interruptible customers. The method or combination of methods used to meet the firm customer requirements for gas that produce the least cost to the firm customer depend upon a number of interrelated economic factors, and for any particular case would have to be ascertained by detailed studies of alternatives.

Pacific Gas and Electric Company, at the present time, has two underground storage fields, the Pleasant Creek Field located not far from the town of Winters, and the McDonald Island Field located to the west of the City of Stockton. These two storage fields have a working storage capacity of 33½ billions of cubic feet, a maximum withdrawal rate with present wells of 212 millions of cubic feet per day and an ultimate planned maximum withdrawal rate with additional wells of 420 millions of cubic feet per day. In addition to these two storage fields Pacific Gas and Electric Company has what it calls a delivery and return arrangement with the Coalinga Nose Field under which Pacific Gas and Electric Company may obtain up to 35 millions of cubic feet per day.

According to Pacific Gas and Electric Company there are a number of dry gas fields that appear to be adaptable to underground

storage operations located within 50 miles of the Milpitas terminal of its Topock line and the Antioch terminal of its Alberta-California line. However, based on Pacific Gas and Electric Company's estimates of gas supply and market forecasts for firm and interruptible gas customers, Pacific Gas and Electric Company asserts that it will not require additional storage fields until sometime after 1971.

The Pacific Lighting System operates four principal storage projects: Goleta, Playa del Rey, Montebello and East Whittier. These four projects have a combined working storage capacity of 28.3 billions of cubic feet and a daily withdrawal capacity of 1.245 billions of cubic feet. In addition to the above-mentioned four projects Pacific Lighting System has utilized on comparatively short-term contractual arrangements two other storage facilities, one at Castaic near Newhall and the other at La Purisima, near Santa Maria.

According to Pacific Lighting System there are some nine reservoirs of varying sizes within the Los Angeles basin which may eventually be available for storage operations. In the coastal area and the San Joaquin Valley Pacific Lighting estimates there are about 30 reservoirs which might be available for storage purposes.

Pacific Lighting System is currently negotiating for underground storage projects, having recently acquired the Turnbell Canyon Field.

Except for Pacific Gas and Electric Company and Pacific Lighting System, no other gas distributing utility in California operates underground storage fields.

The Commission staff urged the pooling of gas supplies between gas utilities and a study of the feasibility of pooling or

joint utility operation of large capacity underground storage facilities as possible means of holding to a minimum the demand-meeting facilities provided by each utility. With respect to interchange or pooling of gas supplies, the record reveals that in response to a letter from the Commission dated February 26, 1962 (Exhibit 43), the Pacific Lighting System and Pacific Gas and Electric Company have formed a committee to explore feasible supply interchange or pooling arrangements. With respect to pooling of storage facilities, the gas utilities pointed to the wide separation between the load centers of San Francisco and Los Angeles as being a controlling factor in their claim that the pooling of underground storage facilities is impracticable.

Transportation and Transmission

The Commission staff offered data in Exhibit 40 on the economics of gas pipeline transmission. No producer, gas distributing utility or other parties offered evidence on the subject of transportation and transmission of natural gas although opportunity to do so was accorded at the hearings.

Richfield Oil Corporation, in a statement of position, contended that the natural gas public utilities in California should be required to operate their pipelines as common carriers of gas for California gas producers. According to Richfield, at the present time there are no common carriers of gas in California, but Richfield claimed it had gas for which it needed common carrier service. However, there was no revelation of the quantity of gas now needing transportation.

A landowner located in western Sutter County expressed the view that if the Commission would require the existing gas pipelines to act as common carriers of gas for California producers,

such producers would be able to dispose of their gas and the gas utilities would make a profit by charging a fee for transporting the gas. The record revealed, however, that there was no substantial amount of California produced gas made nonmarketable because of a lack of pipelines.

The Pacific Lighting group of companies claimed that they had not dedicated any of their pipelines to public uses as common carriers and do not hold themselves out to perform transportation service. It was their position that in the absence of a dedication on their part, they could not be compelled against their will, to act as common carriers. Pacific Lighting group maintained that they perform gas exchange for some gas producers by substitution of volumes, that gas exchange is curtailable and that gas exchange was incident to the purchase of gas from California producers and was part of the consideration under the purchase contracts.

Basic Issue on Regulation

The basic issue related to regulation raised in this investigation is whether or not the regulation of producers of natural gas in California with respect to rates, service, financing, certification, or any of such items to the extent not now regulated, would tend to make more effective the regulation and supervision by this Commission of gas corporations and any other public utility selling, transporting, transmitting, or consuming natural gas.

Background Information to be Considered in Viewing Issue on Regulation of California Produced Natural Gas

Customers of California natural gas distributing utilities in 1952 paid $269,914,000 and used 551 billions of cubic feet of gas and in 1961 paid $723,570,000 and used 1,149 billions of cubic feet of gas. The average price paid to the California gas

distributing utilities by customers varied among customer classes as indicated in the tabulation following:

Customer Class	Average Price per 1000 Cu.Ft.(Mcf) Paid by Customers of California Gas Distributing Utilities		
	1952	1961	Increase
General Service	65.21¢	92.32¢	27.11¢
Gas Engine	27.52	53.40	25.88
Firm Industrial	40.42	60.80	20.38
Interruptible Industrial	28.94	41.46	12.52
Sales to Municipalities	33.38	47.08	13.70
Inter-department	26.27	37.50	11.23

The largest single item of cost that California public utility natural gas corporations incur is the cost of gas. The total cost of gas increased from $110,362,000 in 1952 to $393,516,000 in 1961. The 1952 amount represented 41 percent of all gas utility costs including taxes and return, while the 1961 figure represented about 55 percent of all costs.

Prior to 1947 all natural gas used in California was locally produced. By 1961 about three-fourths of all gas purchased by California public utility natural gas corporations for resale to gas customers came from out-of-state sources and one-quarter came from local producers. The price paid for out-of-state gas is subject to regulation by the Federal Power Commission at the California border and at the wellhead in the United States while California produced gas sold to California distributors has not been directly regulated at the wellhead by any governmental agency.

The price paid California producers by gas distributing utilities is about double the average United States producer price for gas sold in interstate commerce in assured volumes with assured rates of delivery. A comparison of the gas prices received by the

producers in California with those received by producers in Texas and in the United States for the years 1955 and 1960 follows:

Sales to	Average Annual Price Received by Gas Producers Per Thousand Cubic Feet 1955	1960
Gas Utility Northern California	24.5¢	29.8¢
Gas Utility Southern California	18.2	27.8
El Paso Natural Gas Company, Permian Basin, Texas	9.0	13.8
Interstate Pipeline Companies, Texas	9.9	13.6
Interstate Pipeline Companies, United States	10.6	15.6

Only a little over one half of the natural gas produced in California is sold to the gas distributing public utilities; the balance is retained by the producers for their own use, except for some amounts being sold by the producers directly to the City of Long Beach, Southern California Edison Company and a few industrial customers. With minor exceptions, Pacific Gas and Electric Company purchases the gas sold by producers in northern California and the Pacific Lighting System purchases the gas sold by producers in southern California.

The number of California producers selling gas to California public utility gas distributors increased from 47 in 1947 to 114 in 1960. These 114 producers in 1960 sold 267.6 billions of cubic feet of gas to the gas utilities for $77,599,165. Fifteen of these California producers sold 80 percent of the gas purchased by the gas utilities in that year.

The wellhead price of California produced gas in northern California between 1947 and 1961 rose from an average of 14.1 to 30.2 cents per Mcf. In this same period the wellhead price of locally produced gas in southern California rose from 11.6 to 29.3 cents per Mcf. According to the Pacific Lighting group of companies,

some 83 percent of the California produced gas which they proposed to purchase in 1962 would come under their so-called long-term contracts at a price in 1962 of 34.47 cents per Mcf based on a so-called border price formula.[1]

Up to mid 1960 El Paso Natural Gas Company was the sole supplier of out of state natural gas to California. In August 1960 Transwestern Pipeline Company began supplying out-of-state gas to Pacific Lighting Gas Supply Company and late in 1961 Pacific Gas and Electric Company began receiving Canadian gas from Pacific Gas Transmission Company.

The area wellhead policy statement ceiling prices for initial service stated by the Federal Power Commission (FPC) as of October 31, 1961 varied from 16 cents per Mcf in the Permian Basin area of Texas to a maximum of 26.3 cents per Mcf in the State of West Virginia. If the FPC Permian Basin area ceiling price of 16 cents per Mcf had been applicable to purchases made by the California gas distributing companies from California producers in 1961, the cost of gas would have been decreased by about $42,000,000 in that year. If, on the other hand, the 26.3 cents per Mcf FPC price of West Virginia had been applicable, the decrease would have been about $9,000,000. Based on 1961 purchases, a one cent per Mcf change in the price of gas to California distributing utilities amounts to $3,040,000 for California produced gas and $8,815,000 for the volumes of gas received from out-of-state sources.

The cost of producing gas in California has not been revealed by gas producers and has not been a factor considered by

1. By Decision No. 63706, dated May 14, 1962, the Commission denied a request of Pacific Lighting Gas Supply Company to increase rates, based in part, on applicant's claimed border-price cost of California produced gas.

either Pacific Gas and Electric Company or the Pacific Lighting System in negotiating gas purchase contracts with California producers. The factors which Pacific Gas and Electric Company considers essential in determining price for California producer gas include:

1. Location of the field in relation to existing company lines and the capacity of such lines.
2. Heating value of the gas and whether controlled mixing with other supplies may be necessary to maintain a uniform composite heating value.
3. The relation between the estimated recoverable reserves and the sustained deliverability of the wells.
4. Type of gas as between gas produced with oil and dry gas.
5. The annual load factor of the purchase obligation.
6. The wellhead pressure and whether compression is anticipated in order to deliver gas into Pacific Gas and Electric Company's lines.
7. Production problems, such as wet wells, which may make it desirable that the gas be produced at rates and load factors differing from those which best fit the requirements of Pacific Gas and Electric Company.
8. The length of the purchase contract term and the length of the price review period.
9. Contract provisions providing for arbitration or elective contract termination in the event the parties are unable to agree on renegotiated prices.

The Pacific Lighting group have tied the price they pay for California produced gas to a formula based on an average border price they pay for imported gas.

Commission Staff Position on Regulation

Counsel for the Commission staff urged that the Commission give consideration to directing its staff to draft proposed legislation giving to the Commission jurisdiction to regulate for the public benefit all sales of California produced natural gas for resale and sales for industrial use except those sales of natural gas to be

used for the production or gathering of hydrocarbon substances and that the Commission take all necessary steps to urge that such proposed legislation be enacted into law.

An engineering witness for the Commission staff recommended that direct regulation of producer's sales of natural gas to gas corporations be undertaken. He suggested that all producers selling gas to gas corporations file sale contracts as rate schedules with the State of California; that the initial filing be at a rate level no higher than the contract rate levels actually in effect during 1961; that no increase in area rates be made effective except upon a cost showing on an area basis by producers and a finding by the State that such increase is justified; and that reserve and deliverability studies, and quality and flexibility of supplies accompany the cost data. The staff witness suggested further that an individual producer cost-basis method be used, in lieu of area pricing, if the area-pricing method were to be declared unconstitutional.

Position of other Parties on California Producer Wellhead Price Regulation

Producer wellhead price regulation was opposed by Western Oil and Gas Association, Oil Producers Agency of California, California Gas Producers Association, Great Basins Petroleum Company, Occidental Petroleum Company, Belridge Oil Company, McCulloch Oil Corporation, Universal Consolidated Oil Company, Atlantic Oil Company, California Manufacturers Association, Richfield Oil Company, San Joaquin Valley Oil Producers Association, Reserve Oil and Gas Company, the Board of Supervisors of Contra Costa County, Pauley Petroleum, Inc., and a landowner of Sutter County.

Wellhead price regulation was considered undesirable and unnecessary by the Pacific Lighting group of companies, San Diego

Gas and Electric Company, Southwest Gas Corporation, Southern California Edison Company and California Farm Bureau Federation. Pacific Gas and Electric Company urged that the protection of the public interest does not require regulation of California producers so long as the forces which have tended to stabilize California wellhead prices in recent years continue to operate in a reasonably satisfactory manner.

A number of parties, including the City of Long Beach, the City and County of San Francisco, the Board of Supervisors of San Joaquin County, the Board of Supervisors of Colusa County, the Board of Supervisors of Glenn County, the Laundry and Linen Supply Board of Trade of San Francisco, Laundry Institute of Southern California and the City of Palo Alto, took no position either in support of or opposed to regulation of California wellhead prices. The City of Los Angeles expressed the view that if direct producer-consumer sales grow, then regulation of wellhead prices may be required.

The representative of the City of San Diego advocated legislation regulating California producer wellhead prices and suggested that fair and reasonable wellhead prices may be set by use of a composite of individual cost of service of the 15 leading producers in California on an area basis with allowance, if proved, for area differences.

Findings

The Commission finds that:

1. Natural gas is a major source of fuel supply in California and will continue for many years to come to have a very significant impact upon the economy of this State.

2. Natural gas is a wasting asset and its wise and prudent use is essential in the public interest.

3. The cost of natural gas is the major item of expense of the natural gas distributing utilities in California.

4. Three-fourths of the gas consumed in California is imported gas subject to price regulation by the Federal Power Commission at the California border and also at the wellhead, if produced in the United States.

5. One-fourth of the gas consumed in California is produced in California, the wellhead price for which has not heretofore been directly regulated by this Commission or by any other governmental agency.

6. If California produced gas were sold for resale in interstate commerce, such gas would be subject to wellhead price regulation by the Federal Power Commission.

7. The cost of producing gas in California has not been revealed by the gas producers and has not been a factor considered by the natural gas distributing utilities in negotiating gas purchase contracts with California producers.

8. Since the commencement of gas imports into California in 1947, the average price paid to California gas producers by all gas distributing utilities in this State increased from 12.9 cents per thousand cubic feet to 29.8 cents in 1961, an increase of 131 percent. During this same period the average price paid at the California border for imported gas rose from 15.2 cents per thousand cubic feet to 34.2 cents,[2] an increase of 125 percent.

9. The current price paid to California natural gas producers by California gas distributing utilities is about double the price

2 A portion of this price has been lowered by action of the Federal Power Commission (FPC), with other portions subject to possible reduction and refund upon final action by the FPC in certain pending rate proceedings of El Paso Natural Gas Company before the FPC.

paid on the average to natural gas producers in the rest of the United States for gas sold in interstate commerce in assured volumes with assured rates of delivery.

10. A change of one cent per thousand cubic feet in the price paid by California gas distributing utilities for 1961 deliveries of natural gas would have affected amounts paid to California producers by $3,040,000 and amounts paid to out-of-state suppliers by $8,815,000, a total of $11,855,000 in that year.

11. The price paid gas producers in northern California is, for all practical purposes, determined by the Pacific Gas and Electric Company. The price paid gas producers in southern California by the Pacific Lighting group of companies is based on an average border-price formula.

12. Natural gas reserve and deliverability data are required by the Federal Power Commission in interstate proceedings.

13. Producers in California are not required by law to make public their current estimates of known natural gas reserves and deliverability.

14. Reasonably reliable current estimates of known California natural gas reserves, deliverability thereof and availability for use are essential elements in evaluating: (a) the reasonableness of the price of California-produced natural gas; (b) the justification for constructing storage, gathering, compressing and distribution facilities by gas utilities; and (c) the need from time to time for importing into California additional quantities of out-of-state natural gas supplies.

15. About 90 percent of the gas produced north of a line running through Santa Clara and Mono Counties and 35 percent of the gas produced south of said line was sold in 1960 to the gas distributing utilities; the remainder was used by the producers,

except for some amounts sold directly by the producers to the City of Long Beach, Southern California Edison Company and a few industrial customers.

16. In 1960 some 114 gas producers in California delivered approximately 267.6 billions of cubic feet of natural gas to California gas corporations, which in turn either directly or indirectly, mediately or immediately, delivered such commodity to or for the public or some portion thereof. Fifteen of such California producers delivered 80 percent of such natural gas.

17. The Supreme Court of this State has held that, absent proof of dedication to the public use or the enactment by the Legislature of appropriate legislation, a producer of natural gas in California may not be directly regulated by this Commission.

18. The direct regulation of sales of California-produced natural gas for resale and of sales for industrial use, except those sales of natural gas to be used for the production or gathering of hydrocarbon substances, will make more effective the regulation and supervision by this Commission of gas corporations and any other public utility selling, transporting, transmitting or consuming natural gas.

19. The Commission's present rate-making powers over gas distributing utilities do not supply the total solution to the problems facing this Commission in its attempt to protect the public from unjust and unreasonable costs of California-produced natural gas.

Recommendation

The California Public Utilities Commission respectfully recommends that the Legislature consider the extent, if any, to which the existing statutes should be amended in the furtherance of the public interest to permit this Commission to more effectively regulate directly California producer sales of natural gas for

resale and to regulate directly sales for industrial use except those sales of natural gas to be used for the production or gathering of hydrocarbon substances.

O R D E R

IT IS ORDERED that:

1. The Secretary is directed to cause to be served a copy of this opinion and order upon each respondent and to cause to be mailed a copy to each appearance of record, other than respondents, and to the Governor and each member of the California Legislature.

2. Investigation under Case No. 7132 is discontinued.

The effective date of this order shall be twenty days after the date hereof.

Dated at San Francisco, California, this 12th day of March, 1963.

George G. Grover
President

Commissioners

I concur with the findings herein but except to the failure to make specific recommendations. I shall set forth such specific recommendations to the Legislature in a separate report.

Frederick B. Holoboff

LIST OF APPEARANCES

RESPONDENTS

Harry P. Letton, Jr., Milford Springer, and John Ormasa, for Southern California Gas Company; Milford Springer, Harry Lenape and Reginald Vaughan, for Southern Counties Gas Company of California; O. C. Sattinger, Milford Springer and J. R. Elliott, for Pacific Lighting Gas Supply Company; F. T. Searls and John C. Morrissey by John C. Morrissey for Pacific Gas and Electric Company; Chickering & Gregory by Sherman Chickering and Richard B. Morris, for San Diego Gas & Electric Company; William M. Laub for Southwest Gas Corporation;

PROTESTANT

Bruce McKnight, for San Joaquin County;

INTERESTED PARTIES

Graham, James & Rolph by Boris H. Lakusta and Leo J. Vander Lans, for El Paso Natural Gas Company; Alfred H. Driscoll and Oliver C. Jessen, for Department of Water & Power of the City of Los Angeles; Roger Arneberg, Arthur Karma, Robert W. Russell and Manuel Kroman, for the City of Los Angeles; Rollin E. Woodbury, H. W. Sturgis, Jr., and William E. Marx, for Southern California Edison Company; Henry A. Dietz, by Fredric G. Dunn, for County of San Diego; Alan M. Firestone, Edwin L. Miller, Jr. and Robert S. Teaze, for the City of San Diego; Stanley M. Lanham, for the office of City Attorney of San Diego; K. L. Parker for City of Glendale; Harold Wilsey, Jr., for County of Colusa; Earl Davies, for Tehama County; Earl A. Radford, for Shell Oil Company; Alan Short and Jerry B. Whitney for Occidental Petroleum Corporation; Miles W. Newby, Jr. and Paul F. Schlicher, for Texaco, Inc.; S. Atwood McKechan for himself and some landowners in newly discovered gas fields in western Sutter County; Henry E. Jordan, for Bureau of Franchises and Public Utilities, City of Long Beach; Gerald Desmond by Edward T. Bennett, for City of Long Beach; Stark Fox, for Oil Producers Agency of California; John A. Lilygren, for Socony Mobil Oil Company, Inc.; Thelen, Marrin, Johnson & Bridges by Chester H. Brandon, and R. Clyde Hargrove, for California Gas Transmission Company; Harold Gold, Reuben Lozner and Clyde F. Carroll, for Department of Defense and Other Executive Agencies of United States of America; O'Melveny & Myers by Lauren M. Wright, for Riverside Cement Company, Division of American Cement Corporation; Brobeck, Phleger and Harrison, by George D. Rives and Gordon E. Davis, and William W. Eyers, for

LIST OF APPEARANCES

INTERESTED PARTIES--Contd.

California Manufacturers Association; Jack O. Sanders and Eldrige W. Sinclair, for H. Zinder & Associates, Inc.; Everett S. Layman, for Sesnon Oil Company; Ball, Hunt & Hart, by Clark Heggeness, for Richfield Oil Corporation; Donald H. Ford for Overton, Lyman & Prince, for Southwestern Portland Cement Company; Donald J. Carman and Richard Edsall by Richard Edsall for California Electric Power Company; William L. Knecht and Ralph Hubbard, for California Farm Bureau Federation; Turner McBaine, for Western Oil & Gas Association; Charles A. Zubieta, for Union Pacific Railroad Company; Killebren & Hubbard by Russell L. Van Patten, for Glenn County; Jack W. Oney, for Sunset International Petroleum Corporation; W. Bruce Wylie, for Landowner-Producer, self and others; Troy Hillman, for himself; Ernest K. Sachreiter, for himself and Mrs. P. B. Arnold; Paul Chesini, for Chesini Brothers; Fred Tarke, for Fred Tarke & Sons; David S. Miller, for himself; Richard H. Sanborn, for H. L. Sanborn & Sons; Harold F. Green, for San Joaquin Valley Oil Producers Association; Wellborn, Barrett & Rodi, by Owen F. Goodman, for E. L. Doheny and Patrick A. Doheny; Edward F. Buckner and Stanford Herlich, for San Bernardino County; Dion R. Holm, Orville I. Wright, and Robert R. Laughead, for City and County of San Francisco; Ralph W. Trueblood, Jr., for Belridge Oil Co.; Wilsey Ham & Blair by Harold Heidrick, for Wilsey Ham & Blair; C. G. Williams, for Universal Consolidated Oil Company; Robert S. Rose, for McCulloch Oil Corporation of California; Matthew J. Dooley, for Laundry & Linen Supply Board of Trade of San Francisco; Robert E. Michalski, for City of Palo Alto; R. E. Frey, for William E. Warne, Department of Water Resources; L. E. Scott, for Pauley Petroleum; Gerald Jones, for District Public Works Office, 12th Naval District; Miles W. Newby, Jr. and A. C. DeCrane, for Texaco Corporation, Inc.; Fritz F. Heimann, for General Electric Company, Atomic Power Equipment Department; G. Don Sullivan, for National Coal Association; Earl J. Evans, for Utah-Wyoming Coal Operators Association; T.M.C. Martin, for the University of California; Henry F. Lippitt II, for California Gas Producers Association; Raymond L. Johnson, for State Lands Division and Jerome J. McGrath of McGrath and McGrath, for National Coal Association and Fuels Research Council, Inc.

COMMISSION STAFF
Franklin G. Campbell and Melvin E. Mezek.

NB

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Investigation on the Commission's own motion into the production, storage, conservation, reserves, transportation, transmission and sale of natural gas in California.	))))))	Case No. 7132 Filed June 6, 1961

BENNETT, William M., Commissioner, concurring in part.

I have previously concurred with the majority herein as to the factual portion of the instant opinion. I have taken exception to the failure of the majority to make a specific recommendation to the Legislature which to me is called for from a reading of the opinion. The factual portion of the opinion is quite persuasive of the need for regulation of the sale of natural gas in California. In addition to urging specific legislation at this time, I also take the position that the Commission, pending future legislation, has available to it the means of attempting to control the sale of natural gas to gas distributing utilities by invoking Section 216(c) of the Public Utilities Act. The bases upon which I reach these conclusions are set forth herein.

Natural gas is part of the economic fabric of California. It is indispensable and in view of the population and industrial growth which is inevitable, it will become more so. The growth pattern of the past is a sure key to the growth pattern of the future. It takes little imagination to conceive of the even greater importance of natural gas to the California economy by noting that California has already exceeded New York State as the most populous state in the Nation and by 1980 California will have an estimated

population of thirty million.[1] This increase in population, the lack of other energy fuels, the proscription of fuel oil by air pollution controls--all of these things make natural gas unique and make it the sole energy fuel for most Californians.

Consumers in California are wed almost indissolubly to a gas appliance of some kind. Individual consumer investment in gas appliances prohibits resort to an alternative fuel assuming one were available. Beyond the binding investment tie to appliances the consumer, by the very nature of the residence in which he lives, is committed to natural gas. The same is true generally speaking as to commercial and industrial users. In short, the consumer is a captive customer.

It is disturbing to read in the factual portion of the instant opinion the disparity between prices paid to California gas producers and those paid to gas producers of the Southwest. Federal regulation has imposed ceilings upon wellhead prices in the Southwest and absent State regulation of California producers, California prices are, in most cases, double that of Southwest prices. The disparity between these prices is even more striking when it is realized that California producers have established for themselves the unique so-called "border price formula" which provides that California producers shall be paid for California wellhead gas the same average price at which Southwest produced gas is delivered at the California border. The California border price represents the Southwest wellhead price to which is added the cost of transmission through long overland pipelines. This latter transmission expense is, of course, not associated with California produced gas but despite this fact California producers, generally

1 Report of the Governor's Commission on Metropolitan Area Problems, State of California, 1960.

speaking, obtain the higher price. The consumers of California and the gas distributing utilities which serve them enjoy the dubious distinction of paying "about double the average United States producer price for gas sold in interstate commerce in issued volumes with assured rates of delivery." (Majority opinion page 14.)

This suggests that Californians are paying excessive prices for California produced natural gas, unless by great coincidence a border price is a fair return--and no more--to a California producer. As the opinion points out, if an area ceiling price had existed in California then in 1961 the cost of gas would have been decreased by about $42,000,000 in that year. Needless to add, this $42,000,000 was paid for by California ratepayers.

Presently California wellhead prices are set in the open market and are as high as the traffic will bear. Based upon past experience it is likely that California gas prices will increase. The significance of such increases may be measured by the fact that "a one cent per Mcf change in the price of gas to California distributing utilities amounts to $3,040,000 for California produced gas. ..." (See Majority opinion page 16.) All of these things call for public economic intervention. The Legislature should enact measures designed to regulate the sale of natural gas both to California gas distributing utilities and to industrial consumers. Such regulation should be on a public utility type cost basis as was recommended by the Commission staff. In short, I adopt the position of the Commission staff as it is set forth beginning on page 17 of the opinion.

California officially has long taken the position that regulation of independent producers engaged in interstate commerce is in the public interest. Sound reasons exist for such a position.

(See, The Case for the Consumer of Natural Gas by the Honorable Paul H. Douglas, United States Senator from Illinois, The Georgetown Law Journal, Vol. 44, No. 4, June 1956, at page 566.) Most of the reasons set forth therein are pertinent as to the necessity for regulation in California. The United States Supreme Court in Phillips Petroleum Co. vs. Wisconsin, 347 U.S. 672, in upholding federal regulation of independent producers pointed out, on page 685, that producers' prices, "the rates charged may have a direct and substantial effect on the price paid by the ultimate consumers. Protection of the consumer against exploitation at the hands of natural-gas companies was the primary aim of the Natural Gas Act."

In the interim and pending such legislative action as may follow, it is highly important that the effort be made to protect California gas consumers from devices such as the border price formula which is arbitrary, which lacks standards predicated upon a cost basis and which results in payments to producers which I suspect represent more than a fair and reasonable return upon their investments. It is my opinion that this Commission is bound to commence proceedings under Section 216(c)[2] of the Public Utilities Act in an attempt to bring California producers within its regulation. Section 216(c) is quite plain in its reading and it is equally plain as to its meaning--at least to me.

The Supreme Court in the Richfield case[3] has suggested that the Commission might utilize Section 216(c).

2 "Sec. 216(c). When any person or corporation performs any service or delivers any commodity to any person, private corporation, municipality or other political subdivision of the State, which in turn either directly or indirectly, mediately or immediately, performs such service or delivers such commodity to or for the public or some portion thereof, such person or corporation is a public utility subject to the jurisdiction, control, and regulation of the commission and the provisions of this part. (Part former Sec. 2(ee).)"

3 Richfield Oil Corp. v. Public Utility Commission, 54 Cal.2d 419.

In the Richfield case at page 439, as to a particular sale, the Court said had the Commission "found that Richfield had dedicated its gas reserves for peaking purposes to the extent it had supplied such service in the past, we are not prepared to say that its finding would be unsupported. We leave that question open, for the Commission did not limit its assertion of jurisdiction to Richfield's peaking services." (Emphasis added.)

Since it may take some substantial period of time before legislation comes to pass and since there is the clear suggestion in the Richfield case that this Commission may presently have power and therefore a duty over producers, it is my opinion that we have an obligation to invoke Section 216(c).

Accordingly then, and in conclusion, I urge upon the Legislature the enactment of statutes designed to regulate California producers upon a public utility cost type method; and secondly, pending the advent of such legislation, I would urge the Commission to apply Section 216(c) to a producer or producers selling natural gas for resale to a California gas distributing utility. We have an obligation to protect consumers to the full extent of our jurisdiction under present law.

Dated at San Francisco, California, this 19th day of March, 1963.

WILLIAM M. BENNETT
Commissioner