I. Introduction

The first area rate proceeding conducted by the Federal Power Commission is now pending before the United States Supreme Court.¹ In this proceeding, the Federal Power Commission established ceiling prices for natural gas produced in the Permian Basin area of Texas and New Mexico and sold to interstate pipelines. In additional proceedings, now at various stages of prosecution, the Commission will establish ceiling prices for the other gas producing areas of the United States.² The Permian Basin decision raises a fundamental question about price regulation in an era freed from the constraints of substantive due process: What legal standards govern price regulation under traditional American regulatory statutes providing for "just and reasonable" rates?

In the Permian Basin decision the Federal Power Commission established a ceiling price of 16.5 cents per thousand cubic feet (known

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¹ This article was prepared as part of a larger study of natural gas price regulation being conducted by the author for the Law and Economics Program of the University of Chicago.

² See Southern Louisiana (Initial Decision, Dec. 30, 1966); Hugoton-Andarko (Hearings completed); Texas Gulf Coast (Hearings completed); Other Southwest (Instituted Feb. 28, 1967). These five proceedings together account for 93 per cent of the natural gas sold in interstate commerce. F.P.C. Press Release No. 14822 (Feb. 28, 1967).

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² Edmund W. Kitch
in industry argot as "an MCF") for new gas well gas and 14.5 cents per MCF for gas well gas committed to interstate commerce prior to January 1, 1961 and all gas produced in association with oil. This "two price system," as it is labeled by the Commission, is designed to carry out a policy of economic price discrimination. The two price system separates the market for new gas, in which supply is responsive to price (or elastic) because it is still in various stages of development, from: (1) the market for old gas in which supply is unresponsive to price (or inelastic) because the producer is legally obligated to supply it; (2) gas produced in association with oil, in which supply is inelastic because it is an inevitable by-product of oil production. Both price ceilings are subject to quality discounts for gas which is below pipeline quality in pressure or impurities content. The Commission also raised to 9.0 cents per MCF the price of natural gas flowing under contracts providing for a price below that level.

The decision was appealed to the United States Court of Appeals for the Tenth Circuit. Numerous contentions irrelevant to this article were advanced there: notably, that area rate proceedings are not permissible under the Natural Gas Act and that the Commission's procedures were improper. The court upheld the Commission on these points, relying quite persuasively on Wisconsin v. Federal Power Commission (Phillips II). However, the court of appeals found a conceptual flaw in the Commission's determination of the ceiling prices. The Commission had relied on complex cost computations to set the ceiling rates at a level which would enable the industry to recoup its "costs." But the Commission then made the ceiling prices subject to quality discounts without finding, or having any basis in the record for finding, what the impact of the quality discounts would be on the ability of the industry to recoup its costs. The court, therefore, remanded the case to the Commission for a determination of the impact of the quality discounts on the industry's ability to recover its costs under the regulation. Since there is substantial evidence that cost was not, in fact, the exclusive or even the most important factor in the Commission's determination of the ceiling prices, the Tenth Circuit's ground for reversal is rather ironic.

3 Price inclusive of Texas production taxes. The New Mexico ceiling is 15.5 cents plus applicable production taxes as of the date of the decision. Hereinafter referred to as the "new gas" price.

4 The New Mexico ceiling is 13.5 cents plus taxes. Hereinafter referred to as the "old gas" price.

5 Skelly Oil Co. v. FPC, 375 F.2d 6 (10th Cir. 1967).


7 375 F.2d at 35.
The facts of the case raise three basic issues for the law of price regulation. First, can non-cost considerations permit or even require a regulatory Commission to set rates higher than cost? Second, does the Permian Basin decision constitute a price freeze and, if so, is such a price freeze permissible under traditional American regulatory statutes? Finally, to what extent can prices be regulated so as to require, as opposed to permit, price discrimination? This article will discuss these three issues in the factual context of the Permian Basin decision.

II. STANDARDS FOR PRICES

When the Federal Power Commission announced its 1960 decision to abandon the individual cost of service approach to natural gas price regulation and, instead, institute area rate proceedings, it did not clearly indicate the criteria it would follow in establishing area prices. The Commission said:

Our ultimate objectives will be to set prices in all producing areas which will be adequate to maintain the gas supplies needed by the consumers of the nation, but at prices that are no higher than are necessary to accomplish that purpose. We intend to make use of cost data we have obtained in the past and we intend to acquire and consider cost information in the future. We also intend to use all information of an economic nature we have acquired. . . .

The Supreme Court, which has provided the major impetus towards natural gas producer regulation, has been even less helpful. In Phillips Petroleum Co. v. Wisconsin (Phillips I), where the Court originally held that the Federal Power Commission had jurisdiction to regulate natural gas field prices, it said nothing about the appropriate method for determining prices. And when, in Phillips II, the Court affirmed the decision of the Federal Power Commission abandoning individual cost of service proceedings, it made only a passing and elliptical reference to the fact that “we were advised at oral argument that composite cost-of-service data will be considered in the area rate proceedings.”

Nor did Supreme Court cases construing the meaning of “just and reasonable” rates under the Natural Gas Act, as applied to natural gas pipeline companies, offer any clear guidelines. The leading case,
Federal Power Commission v. Hope Natural Gas Co.\textsuperscript{13} was open-ended, expressly rejecting the reproduction cost formula, while observing that “it is the result reached not the method employed which is controlling.” \textsuperscript{14} In this situation, the primary issue to be resolved in the Permian Basin decision was the appropriate method for establishing prices. As a foundation for analysis, it is useful to set out four alternative methods\textsuperscript{15} which might be used to set natural gas field prices.

1. The Surrogate Market. The Commission could set a price which would balance supply and demand. Under this method the Commission would start with the market price, and then adjust it to compensate for market “imperfections.” The producers in the Permian Basin case advocated a form of this method when they argued that the Commission should set area rates on the basis of negotiated contract prices.\textsuperscript{16} This method would be of questionable legality. The Commission once used it in a pipeline rate case by including in the pipeline’s cost of service the value of the pipeline’s own gas production priced at “the weighted average arm’s length payments for identical natural gas in the fields.”\textsuperscript{17} The Court of Appeals for the District of Columbia reversed in FPC v. City of Detroit,\textsuperscript{18} on the ground that, under the Natural Gas Act, cost must be used “at least as a point of departure.”\textsuperscript{19} The problem with this method is that it is difficult to find a rationale for a type of regulation which accomplishes exactly what the market accomplishes.

2. Price-result method. Under this method the Commission would approach the problem of price in terms of the result that any given price level, and any change in price level, would have on the industry. This method is significantly different from the surrogate

\textsuperscript{13} 320 U.S. 591 (1944).
\textsuperscript{14} Id. at 602.
\textsuperscript{15} A fifth method, often used under other regulatory statutes, is designed to protect an industry, such as air transport regulation or agricultural commodity regulation. It has as its primary focus the financial health of the industry and attempts to set prices high enough and to restrict entry sufficiently to assure that firms in the industry will operate profitably. See, e.g., Nebbia v. New York, 291 U.S. 502 (1934). Natural gas regulation, however, is consumer protective, not industry protective, see Phillips Petroleum Co. v. Wisconsin, 347 U.S. 672 (1954), and this method would be inappropriate in Permian Basin.
\textsuperscript{16} Area Rate Proceeding 61-1 (Permian Basin), F.P.C. Opinion 468, 34 F.P.C. 159, 180-83 (1965) [hereinafter cited as Opinion 468].
\textsuperscript{17} Panhandle Eastern Pipe Line Co., 13 F.P.C. 53, 76 (1954).
\textsuperscript{18} 230 F.2d 810 (D.C. Cir. 1955), cert. denied, 352 U.S. 829 (1956).
\textsuperscript{19} Id. at 818. The Supreme Court read City of Detroit narrowly in a footnote to Wisconsin v. FPC, 373 U.S. 294, 310 n.16 (1963), but the footnote dealt with the issue of whether area rate proceedings were legal, not whether costs could be disregarded.
market method, because the Commission would not attempt to set the price at a level which would balance supply and demand. Rather, the Commission would determine the amount of gas "needed" and set a price appropriate to elicit that supply. The Commission would examine the available supply of gas and decide whether it was excessive, sufficient or insufficient. If sufficient, the price would be left at its present level; if excessive, it would be lowered; if insufficient, it would be permitted to rise. If the amount of gas demanded at the price set exceeded the amount supplied, the Commission would ration the supply among the potential customers.

The *Hope* case,²⁰ read broadly, envisions the use of this method. In *Hope*, which dealt with price regulation of a single company, the Court stressed the need to relate the regulated price to its impact on the financial health and stability of the company. In the context of area rates, the emphasis on result would seem to require that the Commission set the area rates at a level which would elicit sufficient supply and in a manner which would not cause disruption of the industry's financial stability and development efforts.

In the *Permian Basin* decision, the Commission considered the level of supply in setting price ceilings. Producers contended that the reserves-to-production ratio had fallen too low. The Commission rejected this contention,²¹ but said that ". . . the adequacy of reserves is an important factor in our determination here, and will continue to be an important factor in reviewing area rates in the future . . . ."²²

3. Costs. Cost computations are the traditional method for regulatory determination of prices. This is the method used in pipeline rate cases under the Natural Gas Act and by the Commission in the *Permian Basin* case. Reference to costs as a basis for price determination in area rate cases was approved by the Supreme Court in *Phillips II.*²³ The rationale for relying on costs is that regulation should result in the lowest possible price to the consumer, and the price which permits the industry to earn its costs is the lowest price which can fairly be imposed on the industry. The difficulty with the method is that it is hopelessly circular in the context of a competitive industry, such as natural gas exploration and development, where there are no legal restraints on entry and no legal obligation to provide the service. Over the long run, if the Commission sets the price of natural gas at 16.5 cents per MCF on the basis of cost, the industry only will

²¹ Opinion 468, 34 F.P.C. at 183-85.
²² *Id.* at 185.
invest resources worth up to 16.5 cents per MCF in the development of natural gas. A sixteen and a half cent price will elicit a sixteen and a half cent cost.

4. Price control. Price control as a method of regulation has been undertaken in the United States chiefly in wartime. Under price control, the basic determinant of prices is historical. Prices are frozen as of the date price control is instituted. A variant of this recently has been advanced in the Presidential price-wage guidelines, under which prices are frozen at their present level subject to an annual allowance for increases in productivity. The most significant use of this type of regulation, apart from wartime price control, has been in rent control.24

Price control has a special history in the field of natural gas. The Supreme Court sanctioned regulation of this type in Atlantic Refining Co. v. Public Service Commission (CATCO),25 which was decided against the background of the sharp natural gas field price rise which occurred during the 1950's. The increases were spurred by developments in the technology of gas transportation and the construction of additional pipelines to the fields. Natural gas producers, who formerly had faced a single pipeline monopsonist, suddenly found that they could bargain for a higher price from the now competitive pipelines.26 At about the same time, large reserves of natural gas, advantageously located in relation to the important east coast markets, were discovered in southern Louisiana. These reserves brought unprecedented prices. In CATCO, the Federal Power Commission had certified, as required by "public convenience and necessity," a sale of Southern Louisiana gas under section 7 of the Natural Gas Act.27 The price of 22.4 cents per MCF was higher than any previously certified price. The Supreme Court affirmed a judgment of the Third Circuit reversing the Commission, holding that the order of the Commission, finding that the price of 22.4 cents was required by public convenience and necessity, was not supported by the evidence. The Court based its reversal on the structure of the Act. If the Commission approved a rate under section 7 of the Act, it would be the effective rate unless and until the Commission were to find subsequently that it was not

26 P. MACAVOY, PRICE FORMATION IN NATURAL GAS FIELDS 265 (1962), concludes: "As has been suggested by this long analysis of price formation in the 1950's, gas markets were diverse in structure and behavior, and were generally competitive or were changing from monopsony toward competition."
27 Under section 7, a natural gas company must have a certificate of public convenience and necessity to authorize the construction of gathering facilities, after a contract for the sale of the gas has been made. 15 U.S.C. §717f(c) (1964).
"just and reasonable" under section 5.\textsuperscript{28} No part of the price collected in the interim would be subject to refund—whether or not it was just and reasonable at the time collected. Since the Commission, in the late 1950's, was making very little, if any, progress on producer rate regulation,\textsuperscript{29} that interim could be a very long period of time indeed. If, on the other hand, the initial certificate of sale was conditioned on a lower, clearly legal price, the producer could still collect a higher price by filing for an increase under section 4 of the Act.\textsuperscript{30} This increase, however, would be subject to refund if it were subsequently found not to result in a "just and reasonable" price. The Court ordered the case remanded to the Commission for consideration of the appropriate price conditions in light of the evidence. "Where the proposed price is not in keeping with the public interest because it is out of line . . . .", wrote the Court, "the Commission in the exercise of its discretion might attach such conditions as it believes necessary."\textsuperscript{31} As further elaborated by the Commission and the courts of appeal, the opinion became the basis for the "in-line" pricing doctrine under which the Commission would not certify a sale under section 7 of the Act unless its price were no higher than the previously prevailing price for uncommitted reserves in the area.\textsuperscript{32}

When the Commission announced the adoption of area rate proceedings in 1960, it also issued a set of guideline prices which continued the \textit{CATCO} "in-line" approach.\textsuperscript{33} Two guideline rates were established for each gas producing area, except Southern Louisiana, where litigation was still in progress over the appropriate level of the "in-line" price. One rate (16 cents for the Permian Basin) was the rate above which no new contracts for the sale of gas would be approved under section 7. This rate was established at approximately the highest price at which new gas had previously been approved for

\textsuperscript{28} Section 5 empowers the Commission to reduce rates prospectively if they are not just and reasonable. 15 U.S.C. § 717d (1964).

\textsuperscript{29} The first producer rate case to be decided by the Commission was the remanded Phillips I, 24 F.P.C. 537 (1960), decided six years after the Supreme Court found that the Commission had jurisdiction.

\textsuperscript{30} Section 4 requires natural gas companies to file changes in rates with the Commission. The Commission can order an investigation of the change and suspend its operation for five months. After that time, the change goes into effect, but the Commission can require the natural gas company to furnish a bond for any refund which subsequently may be ordered by the Commission. 15 U.S.C. § 717c (1964).


sale in the area, and simply carried out the "in-line" policy of CATCO.34 The other price (11 cents for the Permian Basin) was the price above which no filing for a rate increase under section 4 of the Act would be approved prior to determination of the area price. This rate was set at the approximate average field price for 1959 in the area.35 This guideline appears to have been an extension of the CATCO "in-line" doctrine to section 4 of the Act.

The guidelines were issued without compliance with the notice requirements of the Administrative Procedure Act.36 Therefore, they do not have the force of rules. Nevertheless, they have had a substantial impact on Commission action, although the Commission has been able to avoid any challenge to their validity by never expressly relying on them in making a decision. In section 7 cases, it has continued to hear and rule on evidence in each case as to the "in-line" price,37 while all section 4 increases above the guideline have simply been consolidated with the area rate proceedings.

The price control method was not discussed in the Commission's Permian Basin opinion. The Commission, in a general passage, did say:

We believe the area approach should be adopted because it is well adapted to the economic facts of the industry and the practical administrative problems of carrying out the primary purpose of the Act, which is to achieve effective price control.38

But the significance of this passage is ambiguous. The Commission did not mention the area price guidelines, nor suggest that area prices should simply be set at historic levels. Nevertheless, the price for new gas (16.5 cents subject to quality discounts) is so close to the section 7 guideline (16 cents not subject to quality discounts) that the price

34 This is made clear by the comparisons in Appendix B. Brief of Petitioner Wisconsin at 51, Wisconsin v. FPC, 373 U.S. 294 (1963).
35 "The old-gas levels announced for each area were essentially the average weighted price for all gas sold from the area in interstate commerce in 1959, with the figures rounded off to make a more consistent pattern." Brief of Petitioner Wisconsin at 31, Wisconsin v. FPC, 373 U.S. 294 (1963).
36 5 U.S.C. § 1003(a) (1964). "General statements of policy" are exempted from the notice requirement.
37 The in-line price has generally been somewhat less than the guideline price. In Hawkins, F.P.C. Opinion 475 (Sept. 22, 1965), cert. denied, 88 S. Ct. 33 (1967), rev'd, Public Serv. Comm'n v. FPC, 373 F.2d 816 (D.C. Cir.), the Commission attempted to set the in-line price at the same level as the guideline price by relying on prices of gas flowing under temporary certificates in determining what was "in-line." Commissioner Black, dissenting from the Commission's decision, argued the guideline price was a "statement of settlement policy" and that the in-line price should be lower to discourage litigation. Hawkins, F.P.C. Opinion 475, at 4.
38 Opinion 468, 34 F.P.C. at 178-79.
control approach may well have played a part in the Commission's price determination.

Thus, in the Permian Basin decision, the Commission rejected the surrogate market method, gave passing consideration to the result method, explicitly used the cost method and set prices at a level consonant with the price control method. The Commission thereby avoided an explicit confrontation with the crucial issue in the case: what method or methods should be used to determine regulated prices.

III. THE DETERMINATION OF PRICES IN Permian Basin

Although the Commission explicitly relied on costs in setting prices in the Permian Basin decision, non-cost factors also played a significant if not controlling role. This was acknowledged by the Commission itself:

[W]e conclude that a composite cost showing must be the basic ingredient in determining the area rate. This does not mean that other factors should not be considered. The Commission must exercise its judgment and determine a rate in light of all the evidence in the record. For one thing, the rate must be one that the evidence indicates will elicit a level of exploration activity adequate to provide the increased gas supplies required by consumers in the future. There is also a need to exercise judgment in the design of the rates to avoid unnecessarily sharp and abrupt departures from existing pricing patterns and the business and community dislocations which could result. Of course, in fixing the rate of return, a key element in the cost determination, the Commission has wide discretion to consider these factors, so that to a considerable degree they can be accommodated within the framework of composite cost pricing. Nevertheless, we make clear that we do not confine ourselves to a cost calculation in determining just and reasonable rates.39

An examination of the actual cost computations in the Permian Basin decision reveals the direction and magnitude of the non-cost considerations. The Commission never indicates, however, at what point, in what way and for what purposes non-cost factors influenced its determination of the Permian Basin rate ceilings.

It is difficult for any discussion of the cost computations in the Permian Basin case not to founder on the details of their construction. The principal cost computation—the national cost of gas figures used to fix the price for new gas—is based on the testimony of a distributor-sponsored witness.40 Because of the lack of any uniform system for

39 Id. at 190.
40 Testimony of Herman G. Roseman. See text accompanying notes 80-83 infra.
reporting or collecting cost data in the industry, the cost computations rely on a wide variety of sources.\textsuperscript{41} The assemblage and coherent presentation of this data is a truly virtuoso performance. The cost of old gas, on the other hand, is based on questionnaires prepared by the Commission staff and filled out by the large producers in the Permian Basin.\textsuperscript{42} It is a more routine presentation, although there are serious problems of its compatibility with the cost of new gas.\textsuperscript{43} A detailed examination of the possible choices involved in each item of cost is a fruitless form of inquiry; particular choices usually can be justified by equally good arguments on either side. Ultimately, there is little to rely on in making a choice other than the Commission's administrative expertise. However, two significant choices in the cost computations result in a major upward movement in the price of gas and are difficult to accept. Some idea of the magnitude of this upward movement can be gained by comparing the staff's presentation with the Commission's results. On the basis of the large company questionnaires, the staff computed the average cost of all raw gas produced in the Permian Basin at 9.09 cents per MCF,\textsuperscript{44} using a 9.5 per cent rate of return. The Commission concluded that the national cost of new gas was 16.43 cents in 1960 \textsuperscript{45} and that the area cost of old gas was 14.39 cents per MCF;\textsuperscript{46} both figures are more than 50 per cent greater than the staff's cost estimates.

It is not possible to prove that the costs the Commission reached are economically incorrect because there is no economically rational way to allocate costs between the joint products—oil, gas and condensates. Even the costs of gas well gas are to a significant extent joint with those of oil.\textsuperscript{47} In this situation, the Commission turned to the legal tradition of regulatory cost computations and the standards

\textsuperscript{41} E.g., Questionnaires sent to producers by the Commission staff; the Census of Mineral Industries for 1958; the Chase Manhattan Bank, 1961 Annual Analysis of the Petroleum Industry; the World Oil Magazine; the Oil and Gas Journal; the Joint Association Survey. Skelly Oil Co. v. FPC, 375 F.2d 6, 24 (10th Cir. 1967).

\textsuperscript{42} The Commission did not rely on the small producer questionnaires because of the low percentage returned. Opinion 468, 34 F.P.C. at 214. The costs of those small producers who returned the questionnaire were higher than for the major producers. Compare Exhibit 171, Schedule 1, Record, Area Rate Proceeding 61-1 (Permian Basin), F.P.C. Opinion 468, 34 F.P.C. 159 (Aug. 5, 1965) [hereinafter cited as Record] (Small Producers: 10.61 cents) with Exhibit 170, Schedule 1, id. (Major Producers: 9.09).

\textsuperscript{43} See text accompanying notes 80-92 infra.

\textsuperscript{44} Exhibit 170, Schedule 2, Record.

\textsuperscript{45} Opinion 468, 34 F.P.C. at 192.

\textsuperscript{46} Id. at 218.

\textsuperscript{47} Exploration and development costs are significantly joint, even granting that the industry can direct its search for oil or gas. Accepting the Commission's new gas cost calculations, exploration and development constitute 38 per cent of the cost of gas well gas. On the general problem, see the excellent discussion in M. Adelman, THE SUPPLY & PRICE OF NATURAL GAS 28-33 (1962).
of fairness on which they are implicitly based. It is possible to test the Commission's use of these standards against norms of logical consistency. Thus tested, the Commission made two major, questionable choices which resulted in a higher cost.

First, the Commission based its computations on a 12 per cent industry-wide rate of return. The Commission supported this rate of return by confusing individual rate making with area rate making. For instance, the Commission considered as relevant the risk that an individual producer will hit a dry hole. But Permian differs from the usual rate proceeding, where the issue is the maximum amount that a particular firm should be able to earn on its investment. Under the Permian regulation there is no upper limit on what any single firm can earn. If all investments in natural gas production actually averaged a return of 12 per cent a year, capital would rapidly flow into the industry. All that is necessary is a rate of return sufficiently above the market rate of return to compensate for the special risks of the petroleum industry. For the industry as a whole these risks would appear to be small, since the law of averages works with inexorable certainty in exploration and development. The average rate of return on total assets in manufacturing industries for the period 1938 to 1956 was 7.2 per cent. The Commission has refused to permit a pipeline a return higher than its overall return of 6.5 per cent on its own production, even though the production risks for a single pipeline are surely higher than for the entire production industry. Although it is extremely difficult to arrive at any figures on the basis of the fragmentary data and non-inclusive averages in the Permian Basin record, 12 per cent is substantially on the high side.

The Commission stated that the rate of return also reflected the risk of finding gas of less than pipeline quality—a clever way of avoiding the quality discount problem. Since there was no evidence in the record as to what those discounts would be, one can only say that "risks" were involved. It is a novel doctrine, indeed, that the rate of return should be adjusted to reflect the risk that the regulatory cost computations are incorrect. The Commission concluded:

> After weighing all the evidence on the issue we believe a return of 12 per cent is appropriate in light of the considerations previously discussed and the presentations in this case, particularly the testimony of witness Shaffner and Morton

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48 Opinion 468, 34 F.P.C. at 188.
49 G. STIGLER, CAPITAL AND RATES OF RETURN IN MANUFACTURING INDUSTRIES 34 (1963).
with respect to the returns by non-integrated producers in the Permian Basin. [But how can the rate of return of the successful producers who have stayed in the business provide a basis for finding an average, which must by definition include the return on the expenditures of those who have failed as well as those who have succeeded?] It also considers the needs of the smaller independent who traditionally drills much of the Permian exploratory footage and his limited resources to weather even a brief series of unproductive expenditures.\textsuperscript{52}

Second, the Commission decided not to include in its average costs the cost of gas produced in association with oil. Gas produced in association with oil is an inevitable by-product of oil production. Although the computations for such gas require allocation of substantial joint costs, reasonable allocation methods result in a lower cost than that for gas well gas (where all costs, other than exploration and development, must be allocated entirely to the gas). The cost of new gas did not, by definition, involve the cost of associated gas. The old gas price applies to all associated gas. Yet the Commission did not include in the cost of old gas the cost of associated gas. The Commission gave only cost reasons for this decision but, as cost reasons, they are questionable:

\textit{W}e shall use the cost of gas-well gas as the yardstick for all prices we fix in this proceeding. We do so for two reasons. First, the record reveals that casinghead gas and other associated gas are found largely as a by-product of the search for oil. [True also of old gas well gas.] Historically, casinghead gas has not been priced on a cost basis [True of all gas. Has it been priced higher than cost?] and any cost-finding technique is unrealistic which assigns large sums for exploration and development to casinghead gas. [Why not simply allocate less and lower the cost?] A second and related reason is that gas-well gas costs are much more meaningful because they are far less dependent upon allocations between gas and oil than are the costs of casinghead and other associated gas. [Less meaningful in what sense?].\textsuperscript{53}

Since two-thirds of the gas produced in the Permian Basin is produced in association with oil,\textsuperscript{54} the decision not to include associated gas in the cost computations was, in effect, a decision to base the cost of gas in the area on only one-third of production. This decision,

\textsuperscript{52} Id. at 204.

\textsuperscript{53} Id. at 190.

\textsuperscript{54} Id. at 173.
which was justified in terms of the difficulty of allocating joint costs, results in a major upward movement in the resulting cost.

Thus, at two critical points the Commission made decisions which had the effect of substantially increasing the resulting cost. Both of these decisions are questionable from a strict cost accounting point of view. Yet the Commission gave no indication of what, if any, non-cost factors were influencing its decision, even though the Commission emphasized in its opinion that it was relying on non-cost factors.

IV. RESULT AS A LIMIT ON COST: A DIGRESSION ON Hope

Must a regulatory commission set prices according to the results of rigorous cost computations? Or are there significant non-cost factors which may, or even must, be considered in determining prices? The issue was raised in Federal Power Commission v. Hope Natural Gas Co.55 Read traditionally, Hope established a permissive constitutional approach, the most important consequence of which was to approve the use of original cost, rather than reproduction cost, in the computation of a rate base. But the language of the opinion suggests a broader reading—that Hope freed price regulation from legal accounting formulas, instead directing attention to the impact of the regulatory price policy on the unregulated markets in which the regulated firm must operate. The most important of these unregulated markets for traditional utility regulation is the capital market. Hope can be read to imply that the setting of prices on the basis of abstract formulas, without attention to the results of those formulas in the capital market, is unreasonable. In an ambiguous passage, the Court said:

\[T\]he investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. . . . By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and attract capital." 56

Hope, itself, was an easy case for the application of the test. Hope, a wholly-owned subsidiary of Standard Oil of New Jersey, had had

55 320 U.S. 591 (1944).
56 Id. at 603 (emphasis added).
an excellent history of earnings. The Court, therefore, upheld the rate order, even though it was based on questionable rate base calculations. But could the converse ever be true? Could a rate based upon correct cost of service calculations ever be unreasonable under *Hope*, because of the results flowing from the computed price?

Discussion is facilitated by an example. Let us consider a small electric distributor which provides a single service to an all-residential community called Simpletown. Assume that capital expenditures each year equal depreciation, so that the total investment remains the same. The utility, Simpletown Electric Company, has been subject to regulation from the outset. The original capital of $1,000,000 was used to purchase an existing distribution facility which, for several years, had earned $80,000 per year. The regulatory commission with jurisdiction historically had regulated the facility on the basis of an original cost rate base of $1,000,000 and allowed an eight per cent rate of return. The Commission had announced its intention to continue this policy. The company was financed with 50 per cent debt and 50 per cent equity. The bonds were sold at five per cent interest on the market to investors fully apprised of the planned regulatory policy. The stock was also sold and brought $500,000. The company subsequently earned $80,000 a year and the bondholders and stockholders received what they had expected to receive. In this regulatory nirvana, the Commission could simply sit back and leave the rates set forever. The investors would have no basis for complaint; they invested knowing what the policy would be. Consumers would have no basis for complaint; they would be getting their electricity at actual cost.

Now let us introduce two disruptive factors: inflation and an increase in the demand for electricity. The increase in demand can result from the growth of Simpletown or from changes in consumer preferences. It is also necessary to assume that the costs of constructing electric distribution facilities have increased.

If it has the power to do so, the regulatory commission could preserve the simplicity of the situation by refusing to permit the utility to respond to the increased demand. If the increased demand arises from the geographic expansion of Simpletown, the Commission might refuse to permit the old utility to expand and insist that a new company be organized to serve the new areas. A two price system—similar to that in the *Permian Basin* case—would then arise,

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67 Deflation benefits the owners of the utility under original cost rate making. They would, therefore, have no basis for complaint.

68 In spite of inflation, costs could have decreased due to technological improvements.
with a price for "old" electricity sold by the original utility at the
historic cost and a price for the "new" electricity sold by the new
utility at current cost. But this type of situation is usually charac-
terized by creeping growth. It is doubtful whether the Commission
would choose to require the construction of a completely new system,
thus ignoring the probable efficiencies of expanding the old system.

If the increased demand comes from the desire of the utility's
present customers to consume more electricity at the regulated price;
the Commission could refuse to permit the expansion and engage in
rationing. This system of rationing might be simple (the Commiss-
ion could simply let the physical capacity of the system check con-
sumption) or sophisticated (the Commission could attempt to deter-
mine the amount that customers would consume if the price were set
so that supply equalled demand, and then allocate the supply in that
amount). But rationing, in any form, is unlikely to be politically
palatable and the Commission would probably choose to approve
expansion.

Let us assume that the original construction costs have doubled.
The company contemplates a 50 per cent expansion of capacity at a
cost of $1,000,000. Assume also that capital rates are now at the
same level as they were at the time of the original construction.
Everything seems to remain simple; the construction is carried on,
the rate base doubles and so do the permitted earnings. This can be
achieved by permitting the Company to increase all its rates; or,
assuming no legal restrictions on the rate structure, the Commission
could permit the Company to charge an even higher rate on the "new"
electricity and continue the original rate on the "old" electricity, on
the theory that only consumers of the new electricity should pay for it.
The latter is precisely the price system adopted in Permian Basin,
although average cost pricing has traditionally been used instead.

But the situation is actually a bit more complicated. In the
original financing, investors took the risk that the established system
would continue to earn what it had earned in the past. The risks
involved in the expansion are greater: Will the Commission permit
the rates to be increased? How long will it take for permission to
be granted? Will the demand for the service be enough at the in-
creased rate to actually result in a doubled profit? These are uncer-
tainties which will drive up the cost of capital. Assuming that the
market cost of capital is the same as at the time of the original financ-

59 The percentage relationship between the new rate and the old would turn on
the relationship between operating expenses and total costs. If expenses were neg-
ligible, the increase would be one-third (½ × ½ = 2). The larger the ratio of operat-
ing expenses to total costs, the less the percentage increase necessary.
ing, the company will now need to earn more than eight per cent to finance the expansion. Since the Commission limits the return to eight per cent, the utility is unable to attract capital to finance the expansion its customers demand, without diminishing the value of the interest of its existing shareholders. The *Hope* test arguably is violated.

What could the Commission do to avoid this result? Most simply, it could increase the permitted rate of return. If the demand for electricity is insufficient to support a higher price, this would fail. In any case, it increases the cost of electricity. The Commission, alternatively, could lower the cost of raising capital by reducing the risk. This it could do in a number of ways. It might make known to the investment community a promise to permit the increase promptly, as soon as the new facilities are built. But the promises of regulatory commissions are unenforceable, and the fact that the Commission will permit the rate does not mean that the rate will increase revenues. The Commission could reduce the risk still further by permitting the increase—or at least part of it—before the expansion, thereby proving both its willingness to permit the higher rate and the ability of the company to attract business at that rate.

Thus, the demand for expansion, the need for external financing and continuing inflation put pressure on regulatory commissions to move away from the strict logic of original cost rate setting.\(^6\) The utility's cost of capital is increased to the extent that a commission rigorously follows original cost logic. Yet a commission is charged with a responsibility to insure that the public is obtaining service at the lowest possible cost.

This hypothetical illustrates the situations in which considerations of result might require that a rate be set higher than cost. Similar considerations were operative in the *Permian Basin* case.

V. **Natural Gas and *Hope***

The situation in natural gas price regulation is more complicated than that in traditional utility regulation, because natural gas price regulation has significant consequences not only in the capital market, but in two other markets as well: first, in the market for gas, where interstate purchasers of gas, regulated by the Federal Power Commission, must compete with unregulated, intrastate purchasers; second, in the market for producing interests in gas wells, whose price will be determined by the expected income stream from the well.

\(^6\) They can do so without abandoning the formal logic, by manipulating the rate of return.
The price of new gas is the price that will have the most impact. The new gas price is the price that interstate pipelines must use to bid gas purchases away from intrastate markets. Under the section 7 in-line price doctrine, the Commission, after 1960, would approve sales in the Permian Basin at levels below 16 cents per MCF. What would have been the consequences if the Commission had set the area rate for new gas below this level?

Between 1960 and the effective date of the area rates, the Commission would have approved, under section 7, all rates under 16 cents as required "by the public convenience and necessity." It would then turn around and reduce those rates under section 5 as not "just and reasonable." This involves, of course, no formal inconsistency. But what would be the result? In the future, all sellers contemplating a sale would know that their initial price, approved under section 7 of the Act, was not guaranteed for the life of the sales contract. Once the gas is committed to interstate commerce it cannot be withdrawn. Sellers' attorneys might note that the cost computations which support the prices in Permian Basin can easily be revised downward. The reaction of sellers would automatically be simply to increase the amount of the "premium" they insist upon for interstate sales, in order to compensate for the risk that the Commission would lower the price during the term of the contract. This does not mean that the interstate price would increase above 16 cents, since regulation would bar that. Rather, it would mean that sellers would prefer to sell in the intrastate market as long as they could stay, for example, within two cents of the interstate price. The two cents would compensate the seller for the risk of entering the regulated market with its threat of downward price revision; it is a cost which the consumer would ultimately pay. It hardly benefits the consumer if he has to pay 16 cents for 14-cent gas in order to compensate for the regulation supposedly designed to protect him. A statistical study based on 1958 figures showed that sellers required a 1.16 cent premium before selling in the interstate market, to compensate for the costs and risks of regulation.\(^1\) And in 1958 there was, as yet, only a vague and unsubstantiated fear that the Commission would impose a price freeze.\(^2\) If, in place of that risk, there is the risk that at any time the Commission

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\(^1\) Gerwig, *Natural Gas Production: A Study of Costs of Regulation*, 5 J. LAW & Econ. 69, 85 (1962).

\(^2\) Gerwig found that fear of a price freeze accounted for about 27 per cent of the 1.16 cent premium. *Id.* at 85. Gerwig concluded "that natural gas producers in the Gulf Coast from 1956 to 1958 held a rather low probability estimate, around 22 per cent, of a price freeze precluding escalation of price for their interstate contracts." *Id.* This estimate was probably a correct reading of the Commission. But the Court did impose a price freeze in 1959-60 in *CATCO* and succeeding cases. See F.P.C. v. Texaco, Inc., 377 U.S. 33 (1964); Atlantic Ref. Co. v. Public Serv. Comm'n, 360 U.S. 378 (1959).
can and may revise its rates downward, the premium will be substantially higher. On the other hand, if the industry is confident that the area rate will be maintained, the amount of the premium will be less and interstate consumers will get more gas for the same amount of money.

The Commission was sensitive to the fact that the threat of future downward revision could undermine the effectiveness of the new gas price in attracting new supplies.

In order to assure that every effort will be made by producers to bring in new gas-well gas we also state our conviction that the ceiling set in this proceeding should continue to apply to all such new gas dedicated within the ceiling fixed herein even if in any later review of the area rate for the Permian Basin the evidence indicates that a lower price would be justified for future discoveries. We cannot bind the Commission for the future, but we state our view that any lower ceiling should apply only to new gas dedicated after the ceiling price may have been subsequently reduced.4

Since the Commission cannot be bound, actions are likely to be more convincing than words. No matter what the Commission says, its "promises" for the future are likely to be taken seriously only if the price levels which it has sanctioned in the past continue to be respected. If the in-line price is acknowledged as a floor price by the Commission, the industry can have more confidence that, in the future, the new gas price will be recognized as a floor. The Commission explicitly recognized the need not to disrupt past "expectations of producers," when it set the date for the division between old and new gas at January 1, 1961, instead of at the date of the decision, even though the higher price for new gas could not possibly operate as an incentive to develop gas already committed before it was announced.5

The problem of respecting the in-line price and, at the same time, justifying price on the basis of cost has become acute in the Southern Louisiana area rate case. The Commission in Permian Basin established the price for new gas on the basis of national cost. Consistency requires that the formula be followed in Southern Louisiana, even though price levels in Southern Louisiana have been higher than in the Permian Basin because gas in Southern Louisiana is found in larger quantities and is closer to the major east coast heating markets. The in-line price in Southern Louisiana has been 20 cents,6 while in

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4 Opinion 468, 34 F.P.C. at 188.
5 Id. at 188-89.
6 Including state production taxes. Pan American Petroleum Corp. v. FPC, 376 F.2d 161, 164 (10th Cir. 1967). The in-line price in Southern Louisiana has fluctuated as a result of the litigation following CATCO. A summary of its rather complex history can be found in id. at 165-67.
Permian it was 16 cents. The Examiner in *Southern Louisiana* followed the *Permian* computations, with some minor changes. By using a higher royalty rate and by taking into account higher production taxes within Louisiana, he was able to arrive at 18.5 cents. But this was still 1.5 cents less than the applicable in-line price of 20 cents. To reduce the problem, the Examiner added an additional incentive factor of one cent. The Examiner based this “fudge factor” on the fact that *Southern Louisiana* has been and continues to be the chief area in which new gas supplies are found. The Examiner did not explain, however, why it is more important to encourage exploration in Southern Louisiana than in the Permian Basin. In fact, one could logically conclude that, since exploratory activity has been so successful in Southern Louisiana, a lower price would attract sufficient supply, while in the Permian Basin, where exploration has been less successful, a higher price is required.

Although the one cent fudge factor reduced the difference between the area rate and the in-line price presently applied in Southern Louisiana to one-half cent, the result was that rates approved in prior section 7 proceedings would be reduced. A special, related problem arose in *Southern Louisiana* because the Commission, during the pendency of the proceeding, had settled several section 4 proceedings at prices ranging from 18.125 cents to 20.625 cents. The parties argued that these settlement rates should be allowed to stand. The Examiner

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66 In *Permian*, the Commission used 12.5 per cent, because both the distributor and producer rate witnesses used it and “no participant demurs to the inclusion of such an item or to the 12.5 percentage.” Opinion 468, 34 F.P.C. at 206. A study based on responses to staff questionnaires, introduced in *Southern Louisiana*, showed that the average royalty was 15.7 per cent. See *Area Rate Proceeding 61-2 (Southern Louisiana)*, Initial Decision 108 (Dec. 30, 1966). The 12.5 per cent figure was apparently based on the widely held belief that all oil royalties are one-eighth. This is not true. For instance, the important federal offshore leases provide for royalties of one-sixth. The Examiner in *Southern Louisiana* used 14 per cent as the average royalty figure. Id. at 109. This, in theory, requires a revision of the *Permian* figures, if the Commission adopts it.

67 “Under all the circumstances of this case, and based upon the application of discretion and judgment to the facts as developed in the instant record, it is concluded that an additional factor of 1 cent per MCF should be added to the determined new gas cost figures. . . .” Id. at 208. The Examiner in *Permian Basin* anticipated this difficulty by applying a geographic discount of 1.25 cents to his cost results to allow for the fact that *Permian* gas is less valuable than the national average. *Area Rate Proceeding 61-1 (Permian Basin)*, Initial Decision, 34 F.P.C. 306, 364-65 (Sept. 17, 1964) [hereinafter cited as Initial Decision]. The Commission rejected the geographic discount. Opinion 468, 34 F.P.C. at 207.


In the instant case it is concluded that in fixing the rate for new gas well gas for the South Louisiana area, a relevant and prime factor which should be considered above and beyond the determined cost is the particular importance of the South Louisiana area to the nation’s required natural gas supply, both now and for the foreseeable future. . . .” Id. at 208.
rejected the claim. If the Commission affirms the Examiner's actions, the message to the industry will be clear. All prices obtained in interstate sales must be discounted for the risk that the price will be subsequently reduced.

The second important market in which the price regulation of natural gas has significant consequences is the market for producing interests. One of the important ways in which the exploration and development segment of the industry can raise capital is by selling producing interests in developed wells. The price these interests bring will be the present value of the discounted income stream from the gas. The rate at which that income stream is discounted will turn on, among other factors, the risk that regulation will reduce that income stream. If the purchaser of the producing interest must take into account the risk that rates presently permitted will be reduced in the future as not just and reasonable, he will pay less for the interest. Thus, in essence, the value of the end product of exploration and development is reduced. Again, this consequence follows no matter what the level of the ceiling. Assuming a constant 16 cent ceiling price, producing interests will be more valuable if the risk that the Commission will reduce that price is low and less valuable if the risk is high. If the value of producing interests declines, the incentive for exploration and development activity also declines. This increased cost, or decreased responsiveness to price, results in no social gain—it simply compensates for a risk which the regulation itself created. The best criteria for the industry to use in evaluating the possibility of future price reductions remains the Commission's past actions—are prices it has approved in the past respected in the present?

Since 1960, the Commission has approved increases on existing contracts to levels at or below eleven cents. The value of producing interests would have been based on that price, discounted by the risk of a reduction. Therefore, although the level of increases permitted is not as important as the in-line price in attracting gas away from intrastate sales, it does affect the price which can be realized for producing interests. If the Commission follows a policy of approving increases to a given level, it should follow that policy in a way that assures the maximum response to the permitted price. The Commission respected the eleven cent guideline price by a substantial margin, setting a price of 14.5 cents for old gas.70

In the Permian Basin decision there were strong reasons for respecting the area price guidelines as a floor on possible rates. The

69 Id. at 272-74.
70 Details of the old gas computations are discussed at text accompanying notes 83-92 infra.
Commission apparently recognized this in *Permian Basin* by accepting cost figures which resulted in prices above the guideline rates.

VI. Is Price Control "Just and Reasonable"?

The need to respect the guideline prices combined with price levels justified on the basis of cost results in a price freeze. The Commission practically acknowledged this in its discussion of "Changes in the Area Rate" in the *Permian Basin* decision. It can be argued that this is not so, because the price ceiling may always be revised upward in the future to recognize higher costs; but, as a practical matter, this seems impossible. In economic terms, if the price of gas is set at 16.5 cents, the cost of gas will be 16.5 cents. There is no reason to expect the future figures to be substantially higher than the 1960 figures, since the industry, in effect, has operated under a price freeze since 1960. The only room for adjustment in the 1960 figures is downward, since the Commission has already done its best to stretch them upward. If the *Hope* "result" test bars a decline below present levels on presently committed gas, the result is a permanent price freeze on the gas. *Hope* bars a lower rate; costs cannot justify a higher one. Can such a price freeze be "just and reasonable" under the Natural Gas Act?

To simply freeze a price at its historic level is an inflexible approach to the task of price regulation. Congress, in drafting a statute based on the Interstate Commerce Act, hardly could have meant to include a price freeze within the concept of "just and reasonable" rates. When it has wished to impose price control, Congress has been able to specify what it wanted. For example, under the wartime defense rent control act, Congress specified that rents should be set at the April 1, 1941 level. It is clear that Congress had no comparable

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71 Opinion 468, 34 F.P.C. at 227-28. To assure this result, the Commission imposed a moratorium on filings for rate increases until January 1, 1968. *Id.* at 230.
72 Economic costs, of course, include rents, but rents are not fully accounted for in the Commission's computations. Some rents are included in the form of lease acquisition costs and in royalties. The Commission's theory appears to be that all rents which are reflected in payments made by the industry to "outsiders" should be treated as "costs," but no others. *See* the discussion of the Examiner in Area Rate Proceeding 61-2 (Southern Louisiana), Initial Decision 108 (Dec. 30, 1966), criticizing the inclusion in the study of royalty rates, royalties actually paid to other firms in the industry. To include rents, whose value depends on the anticipated income stream, in the rate computations is circular, as the Court recognized in *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 601 (1944). The Commission was able to avoid confronting this circularity by valuing the most significant payments reflecting rents, royalties, on the basis of another circularity—the industry contract institution which defines the amount of royalties as a percentage of price. Since the Commission's computations do not include all rents, and since costs including rents will always equal price over the long run, the Commission's cost computations, if carried out accurately, will always result in a price less than the currently established price.
system of price regulation in mind when it passed the Natural Gas Act. CATCO might be cited in support of the proposition that a price freeze is legal under the Natural Gas Act. However, the CATCO holding was based not on the desirability of a price freeze, but on the need to provide a refund mechanism for prices which might later be found not to be "just and reasonable."

The two price system is crucial to the Commission's price freeze policy. It enables the Commission to separate the price of gas which is committed to interstate commerce from the price necessary to attract sufficient new supplies. The price on committed gas is frozen while the price for uncommitted reserves can be increased. This was recognized by Dr. Alfred Kahn, the distributor-sponsored witness who had originated the two price system, and whose testimony was central to the entire proceeding.

Had the Commission explicitly followed a price freeze policy, it probably would have violated the statutory standard. The Commission's cost computations are designed to protect this policy from attack in the courts. Ironically, however, if the Commission defends Permian on the ground that the cost computations were the actual basis for the

74 "The bill provides for regulation along recognized and more or less standardized lines. There is nothing novel in its provisions, and it is believed that no constitutional question is presented." H.R. Rep. No. 709, 75th Cong., 1st Sess. 3 (1937); S. Rep. No. 1162, 75th Cong., 1st Sess. 3 (1937).


76 Professor, Department of Economics, Cornell University.

77 See Record 7203-7375, particularly 7288-7375.

78 In his testimony, Dr. Kahn explicitly related his suggestion for a two price system to wartime price control:

During World War II, for example, the United States Government imposed a ceiling on the price of copper, while offering various bonuses or premiums to induce the expansion of higher-cost production from marginal mines. This situation, a relatively inelastic supply in the face of sharp increases in demand, is obviously analogous to the position of gas in the last ten years. Actually, a policy of this kind was adopted during World War II in an even more precisely analogous situation. I refer to the subsidy that was granted on certain classes of stripper-well oil production by the Office of Price Administration from August, 1944, through November of 1945. There was bitter controversy within the Administration about the desirability of such a subsidy, in contrast with a general price increase. The Petroleum Administration for War proposed a blanket rise in the price of crude oil of 35 cents a barrel, on the ground that the price ceilings established towards the close of 1941, while perhaps adequate to cover historical costs, did not take into account the increased costs of finding and development. This proposal was opposed by the Office of Price Administration, on the ground that the price increase was unnecessary for the major part of production, and would have conferred large windfall gains on the industry at large, whereas a selective subsidy to marginal wells would cost the consumer only a fraction of what a general price increase would have cost. Record 7317. In a more informal setting, Dr. Kahn has referred to natural gas price regulation as a "price freeze." Kahn, Economic Issues in Regulating the Field Price of Natural Gas, 50 Am. Econ. Rev. 506, 514 (Conf. No. 1960).
price ceilings and states that its future actions will be consistent with them, the result is a price freeze. If it is truly the result reached, not the method employed, which is controlling in judicial review of price regulation, then the Court must confront the issue of whether such a price freeze is just and reasonable under the Natural Gas Act.

VII. THE TWO PRICE SYSTEM

The Permian Basin case, by adopting the two price system, follows the historic price control practice of setting the price for new sources of supply higher than the price freeze level, in order to induce additional supply. A two price system can also be justified on the basis of a cost analysis which separates historic costs from future costs, as the discussion of Simpletown Electric Company showed.

The two price system in Permian Basin raises a novel legal issue. Concern with price discrimination in regulation has always centered on the issue of the extent to which regulatory commissions should and could permit firms to engage in differential pricing of similar or identical services. The issue of whether a commission can affirmatively require a firm to engage in differential pricing has never been posed.

The Commission supported each price under the two price system by means of a separate cost computation, basing the cost computation for old gas on the historic cost of gas in the Permian Basin and the cost of new gas on the national cost of finding gas in 1960. The computations of the cost of finding new gas were developed in the proceeding by distributor-sponsored witness Herman Roseman, who testified that his computations were constructed within the framework of the testimony of Alfred Kahn. Roseman's presentation, however, is not fully consistent with Kahn's testimony. Not only does he arrive at a cost of gas somewhat lower than Kahn apparently had contemplated (14.03 cents), but his method is also, for the most part, applicable to both old and new gas. Roseman never explains how one

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80 Record 14, 660.
81 Exhibit 224, Schedule 1, Record. Subsequently revised to 15.39 cents. Initial Decision, 34 F.P.C. at 343. Kahn testified:
Based on various Commission and Examiner's decisions in proceedings with which I am familiar, which find historic costs of gas in the 11 to 14 cent range, it would seem that the new gas prices listed in the Statement of General Policy have a wide enough spread from these costs to provide the kind of incentive to which I have been alluding in my testimony.
Record 7369.
82 Because it is largely made up of current expense items which apply to all gas produced in 1960. Kahn, in his testimony, had little to say about the appropriate price of old gas, taking the position that the price had little economic significance and raised only a legal question. Record 7346, 7356. But Kahn indicated the cost of old gas should be based on historic costs, a recommendation the Commission ultimately accepted. Id. 7346. Roseman, however, presented no computations for the cost of old gas.
can develop a cost for old gas consistent with his presentation for the cost of new gas. The most important items are exploration and development costs. These he does not capitalize. Instead, he arrives at a cost of 3.00 cents for finding an MCF of gas, and then adds an “Allowance for Growth” of 1.11 cents. While the title is impressive, the amount is, in fact, the amount necessary to permit recovery of exploration and development costs from current production. As a result, the total finding cost figure of 4.11 cents is applicable not only to volumes of new gas, but also to volumes of *all* gas produced.

When the Examiner decided to adopt Kahn's two price system, he was left with a serious problem. As the price for new gas he could adopt Roseman's testimony. He had no trouble pushing these figures up above the guideline price (to 16.88). For the cost of old gas, however, the Examiner had to develop an ingenious system, using an average backtrend of costs for gas produced before 1960. This showed that, on the average, the cost of finding and developing such gas had been 75 per cent of 1960 costs. He then took 75 per cent of the exploration and development costs and successful well costs and used these to compute a cost for old gas. The result was a cost of 12.82 cents. The Examiner first broached this system during Roseman's testimony and, although Roseman was hesitant, the Examiner used it. But he made a serious error. Since exploration and development costs were treated as current expense, they represented current conditions and appropriately could not be backtrended. It is difficult to see why he made this error. Perhaps it was the only way he could get a computational result close to the guideline differential (11 and 16).

On review, the Commission recognized the error, but apparently felt that there was an even more serious problem with the Examiner's method. The Examiner essentially had reached an historic cost for old gas without relying on actual historic figures. Use of current figures plus price trends is a circuitous way of arriving at actual costs and the possibility of large error is inherent in the method. The Commission decided to rely on the historic costs for the Permian Basin, as developed by the staff on the basis of the large company ques-

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83 Initial Decision, 34 F.P.C. at 343.
84 Id. at 356.
85 Id. at 357.
86 Id. at 343.
87 Record 20, 564. “[I]f there is any implication that one could make such a trending in a relatively simple manner, I would be very skeptical of that. You would have to consider a whole set of expenditures and investments and so forth.”
88 The Examiner's spread in his final rates was 16.75 to 12, extremely close to the 5 cent guideline spread. As part of his rate design, the Examiner adjusted his cost figures by means of a geographic discount and a gold standard. Initial Decision, 34 F.P.C. at 363-71. This aspect of the Examiner's decision was not followed by the Commission. See Opinion 468, 34 F.P.C. at 174-75.
89 Opinion 468, 34 F.P.C. at 218-19.
tionnaires. These figures contained their own exploration and development costs developed historically. New gas costs, however, were developed on the assumption that exploration and development costs were a current expense. Thus, the new gas computations were inconsistent with the historical computations. But the Commission apparently feared that complete reliance on the trending method would be reversed. Its solution, also ingenious, was to rely on both methods without relying exclusively on either.

The result was a price differential of two cents (14.5 as opposed to 16.5). This was substantially less than the differential in the area price guidelines. The Examiner had come much closer to the guideline differential. It is interesting to speculate why the Commission decreased it. One reason was that, since the Examiner had used the trending method, albeit incorrectly, the Commission was required to pay some attention to its results when applied correctly. In any case, the cost methodology for new gas, with its large component of current expenses, required that the cost of old gas be compatible and this compatibility could only be achieved through the backtrend method. Second, the Commission had originally promised upon issuing the guidelines that the differential would be reduced and eventually eliminated. Third, the Commission may have been uncomfortable with the fact that the two price system amounted to price discrimination. And fourth, the increase above the old gas guideline price is in accord with the Commission’s general tendency to raise the price of gas under old contracts, while putting a ceiling on new gas prices. The most notable instance of this practice is the Commission’s inexplicable action raising the price of all gas to a floor of 9.00 cents, no matter what the contract price. But the fact remains that the amount of the differential, 12 per cent of the new gas price, is substantial.

It is one of the puzzling aspects of the Permian Basin decision that the two price system has not been treated as a problem of price

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89 Id. at 213-14.
90 Id. at 218.
91 Statement of General Policy No. 61-1, 24 F.P.C. 818, 819 (1960): “It is anticipated that these differences in price levels will be reduced and eventually eliminated as subsequent experience brings about revisions in the prices in the various areas.” Because of the substantial amount of gas in the Permian Basin flowing under older contracts, the guideline price spread was greater than in any other area.
92 Opinion 468, 34 F.P.C. at 231. The Commission gives no reason for this action. The Examiner was probably led to this result by his rate design for old gas, quite different from the Commission’s, which involved compressing existing contract prices around a 12 cent average. Initial Decision, 34 F.P.C. at 365-69. But the Examiner ordered the increases only with the consent of the purchaser, which probably would not have been forthcoming. Id. at 369.
discrimination. The Commission supported the two price system for the same reasons that a monopsonist engages in price discrimination—more gas for less. But it did not discuss the legality of its pricing system in light of the strong historic policies against price discrimination. Nor did the parties raise the issue in that way. Perhaps the reason is that the two price system resembles the basic pricing system that has been introduced into the industry through the institution of the long term contract. Because of the long term contract and the upward price trend since World War II, gas flowing under old contracts traditionally has been cheaper than gas under new contracts. This differential has been diminished, however, by the prevalence in the industry of most-favored nation clauses, which permit sellers under old contracts to obtain higher prices when there is an increase in the market for uncommitted reserves. The problem of differential prices under long term contracts in an unregulated market has never been thought to constitute price discrimination. In price regulated markets, however, it has been customary to bar such contracts because they lead to discrimination. Following this tradition, the Federal Power Commission once eliminated just such differences in a natural gas company’s rate structure on the ground that they were “unjust, unreasonable and unduly discriminatory.”

Not only might the two price system violate the “just and reasonable” standard of the Natural Gas Act because it constitutes systematic price discrimination; it may also require a violation of the Robinson-
Patman Act. The two price system requires a seller to sell a commodity of like grade and quality to different purchasers at different prices. The Commission’s cost computations would not be sufficient to support a cost justification defense under the Act. The only aspects of the Act which require extended discussion are the requirement that the discriminatory sales be consummated contemporaneously and the requirement of injury to competition.

It can be argued that, since gas is sold only when the long term contract committing it to interstate commerce is made and the price ceilings apply to contracts made at different times, the difference in price is not between sales made under substantially similar conditions and, therefore, the two price system does not violate the Robinson-Patman Act. There are two answers to this argument. First, if associated gas is of the same grade and quality as gas well gas, then identical gas is sold at different prices at the same time. (Although it can be argued that associated gas is probably not of the same grade or quality, since the deliverability of associated gas—determined by state oil production allowances—makes it less desirable than gas well gas). Second, it is not entirely accurate to characterize the sale of gas as taking place at the time the contract is made. To the extent contracts contain indeterminate pricing provisions, the sale takes place at the time the price is determined. A seller could not defend a charge of price discrimination under the Robinson-Patman Act on the ground that the lower priced sale was made under a requirements contract providing that sales under the contract would be at the market price. For example, if all natural gas contracts provided that the price would

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97 It is possible that no seller in the Permian Basin sells new gas to one pipeline and old gas to a competitor, but the number of sellers involved in the market makes this improbable.

98 A manufacturer would not be able to justify price discrimination under the Act by proving that he served his favored customers from an old plant and his disfavored customers from a new plant. See F. Rowe, Price Discrimination Under the Robinson-Patman Act 283-84 (1st ed. 1962).

99 Since a “discrimination” can arise only from pricing disparities in reasonably comparable transactions under “similar circumstances,” the “prohibition of the statute cannot come into play if the pertinent sales are too far apart in time.” Id. at 48.

100 Discrimination is unlawful:

where the effect of such discrimination may be substantially to lessen competition or tend to create a monopoly in any line of commerce, or to injure, destroy, or prevent competition with any person who either grants or knowingly receives the benefit of such discrimination, or with customers of either of them.

be the applicable area rate (as the Commission now permits),\textsuperscript{101} then price would be determined for both old and new gas at the same time and under the same conditions.

The other argument that can be made against application of the Robinson-Patman Act to the two price system is that no showing has been made of injury to competition. This argument is easily answered. The effect of the Commission's two price system is to favor long established gas pipeline companies, which have a high percentage of old gas contracts, over pipeline companies which have recently entered the field and which, therefore, have few or no old gas contracts. Given the Commission's average cost pricing policy for pipelines, it will be difficult for any new entrant to underprice an existing pipeline, assuming that the entrant's transmission costs are the same. The price offered by the existing pipeline will be based on an average which reflects the lower cost of the old gas contracts. This process will never end. The Commission apparently envisages that the two price system will become a three price system. When and if gas shortages develop and there is increasing need to induce the development of additional supplies, the Commission will then establish an even higher "new new" gas well price. Thus, in the 1970's, when the established gas pipelines have used up all of their old gas, they will still have an advantage, because the entrants will have to buy "new new" gas while the established pipelines are selling new gas. A pricing policy which restrains entry is the most significantly anti-competitive pricing policy possible.\textsuperscript{102} But it is consonant with other aspects of FPC policy, which appear to disfavor competition among pipelines.\textsuperscript{103}

Which leaves the question: Does the Robinson-Patman Act apply to natural gas companies acting in accord with F.P.C. regulation? There is no authority on the point, but it is difficult to construct an argument that it does not. The Robinson-Patman Act is textually part of the Clayton Act. Section 7 of the Clayton Act, which regulates

\textsuperscript{101} 18 C.F.R. § 154.93(b-1) (1967).

\textsuperscript{102} A two price system which provided for a lower price on the new gas would not have this effect, and therefore would not violate the Robinson-Patman Act.

\textsuperscript{103} The most notable instance has been the Commission's approval of the merger of El Paso Natural Gas Co. with Pacific Northwest Pipeline Corp., 22 F.P.C. 1091 (1959), \textit{rev'd}, California v. FPC, 369 U.S. 482 (1962). The Supreme Court ultimately held that the merger violated section 7 of the Clayton Act. United States v. El Paso Natural Gas Co., 376 U.S. 651 (1964). Entry of a third pipeline into the California market was barred by the Commission in Transwestern Pipeline Co., F.P.C. Opinion 500 (July 26, 1966). Gulf Pacific Pipeline Co., a subsidiary of Tenneco, Inc. and a newcomer to the California market, proposed to build a pipeline from the Katy and Pledger fields to Los Angeles, exclusively for the purpose of supplying gas to electric utilities in Los Angeles. The Commission denied the proposal and ordered instead that the gas should be provided through expansion of the capacity of existing pipeline companies.
mergers, has been held applicable to natural gas companies,\textsuperscript{104} although it expressly provides that merger transactions approved by the Federal Power Commission are immunized.\textsuperscript{105} While the Clayton Act contains provisions providing for special treatment of some regulated industries,\textsuperscript{106} there is no exemption for companies subject to the jurisdiction of the Federal Power Commission. The Robinson-Patman Act does not apply to most regulated industries because they sell services rather than commodities,\textsuperscript{107} but natural gas is clearly a commodity. Nor does the Natural Gas Act contain such a comprehensive system of regulation of price discrimination as to necessitate construing the Robinson-Patman Act as inapplicable. Section 4(b) of the Natural Gas Act provides:

No natural-gas company shall, with respect to any transportation or sale of natural gas subject to the jurisdiction of the Commission, (1) make or grant any undue preference or advantage to any person or subject any person to any undue prejudice or disadvantage, or (2) maintain any unreasonable difference in rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service.\textsuperscript{108}

Although this provision clearly includes price discrimination also covered by the Robinson-Patman Act, it is more particularly concerned with two phenomena—differentials between geographic locations and classes of service—which the Robinson-Patman Act does not reach because of its requirement of injury to competition. The anti-discrimination provisions of the Natural Gas Act are broadly focused on fairness as between customers or classes of customers, not on injury to competition between customers. At the very least the Robinson-Patman Act, and the historic legislative aversion to price discrimination which it reflects, provide part of the content of the standard of "just and reasonable" prices under sections 4 and 5 of the Natural Gas Act. The Commission, however, gave no consideration to the injury to competition which its two price system would

\textsuperscript{104} California \textit{v.} FPC, 369 U.S. 482 (1962).
\textsuperscript{105} 15 U.S.C. § 18 (1964): "Nothing contained in this section shall apply to transactions duly consummated pursuant to authority given by the . . . Federal Power Commission."
\textsuperscript{106} See, \textit{e.g.}, 15 U.S.C. §§ 20, 21(a) (1964).
cause. It benefits the consumer little to exchange more expensive gas in the field for the inefficiencies inevitable in pipelines perpetually shielded from effective competition.

VIII. Conclusion

The Permian Basin case, if presented and argued to the Supreme Court in the same way it has been argued before the Commission and the Tenth Circuit, will look very different from the case described in this article. As long as cost is treated as the only relevant issue for the determination of the area ceilings, the case is quite simple. If the Court feels that its function in reviewing the decision is simply to assure itself of the formal consistency of the Commission's reasoning, then it should follow the Tenth Circuit and remand the case to permit the Commission to dress up its cost logic. If the Court feels that its function is to review the substance of the cost computations, then it should remand and require the Commission to revise the factors which, with little cost logic to support them, have increased the resulting prices. But before the Court takes this step, which would be a logical reaction to the case as it has developed, it should consider the non-cost reasons for setting the price ceilings higher than cost. And if it does so, then it must confront the issues of whether the recognition of expectations based on existing rate structures is permitted or required in price regulation and whether a price freeze result is "just and reasonable" under traditional regulatory statutes. In addition, the Court must face the novel issue of whether compulsory price discrimination injurious to competition is legal in a regulated industry, both under the "just and reasonable" standard of regulatory statutes and under the Robinson-Patman Act.

In reviewing the Permian Basin decision the Court will be under substantial pressure to affirm and thereby to avoid adding another set of hearings to a regulatory history which already has been painfully slow. But confrontation of these issues does not require that the decision be remanded for further hearings. It is possible to read the Commission's decision as holding that the new gas ceiling price has been set at its present level, not because of a price freeze policy, but because the Commission has concluded that the in-line price has proved sufficiently high to stimulate the necessary amount of exploration and development. The old gas price is more difficult, since it is not supported by cost. Considerations of result are irrelevant for any price above 11 cents. It appears to be supported only by a

desire to introduce some, but not too much, monopsony price discrimination into the rate structure and to perpetuate that discrimination through a price freeze. If the Court finds that such a rate is not just and reasonable, it can simply direct that the ceiling price for all gas should be the same.

If the Court affirms, it can make a substantial contribution to natural gas regulation by taking two steps. First, it should acknowledge that the cost computations do not support the resulting price levels and, in upholding the result, should rely on the Commission's determination that present supplies are adequate. This would vastly simplify natural gas regulation for the future, by freeing the regulation from the complexity of cost calculations. Second, the Court should acknowledge the importance of recognizing expectations based on price levels validated by the Commission in the past. Consumers of interstate gas should not be required to pay for the unnecessary contingency that the rates on gas committed to interstate commerce will be reduced by the Commission in the future.