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Supreme Court of the United States

OCTOBER TERM, 1943

No. 34

FEDERAL POWER COMMISSION, CITY OF AKRON, and PENNSYLVANIA PUBLIC UTILITY COMMISSION, Petitioners,

v.

HOPE NATURAL GAS COMPANY, Respondent.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT

and No. 35

CITY OF CLEVELAND, Petitioner,

V.

HOPE NATURAL GAS COMPANY, Respondent.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT

BRIEF OF STATE OF WEST VIRGINIA AS AMICUS CURIAE

This Brief is filed in the present proceedings on behalf of the State of West Virginia, pursuant to Paragraph Nine of Rule Twenty-seven of the Rules of the United States Supreme Court.

OPINION BELOW

The opinion of the Circuit Court of Appeals on the issues here involved is officially reported in 134 F. (2d) 287; and has been included in the Record at R. IV, 169-207.

JURISDICTION

The judgement of the Circuit Court of Appeals, with which the State of West Virginia is in general agreement, was entered on February 16, 1943, (R. IV, 207).

The petitions for writs of certiorari were granted by this Court on May 17, 1943, (___ U. S. ___, 63 S. Ct. 1165, 87 L. Ed. 995, (1943); R. IV, 210).

The jurisdiction of this Court in these causes has been invoked under Section 240(a) of the Judicial Code, as amended by the Act of February 13, 1925, (28 U. S. C., Sections 346 and 347), and under Section 19 (b) of the Natural Gas Act of 1938, (52 Stat. 831; 15 U. S. C., Section 717r [b]).

STATUTES INVOLVED

The Natural Gas Act of 1938 (52 Stat. 821; 15 U. S. C., Sections 717 et seq.), which became effective on June 21, 1938, is here involved. Prior to that date, there was no statutory background whatsoever.

West Virginia Tax Statutes, (Code of West Virginia, Chap. 11, Articles 6 and 13), are also involved.

CONSTITUTIONAL PROVISIONS INVOLVED

The Fifth and Tenth Amendments to the Constitution of the United States are likewise involved in this litigation.

QUESTIONS PRESENTED

1. Whether, for rate-making purposes under the Natural Gas Act, the Commission may wholly disregard the ultimate effect upon the economy and well-being of the State of West Virginia, and upon the citizens of West Virginia, of the valuations placed on gas-utility properties.

- 2. Whether, in the valuation of gas fields and gas horizons, the Commission may deliberately assign over to out-of-state domestic and industrial consumers the entire "advantage of the discovery value" of productive acreage in West Virginia.
- 3. Whether, for such rate-making purposes, the Commission may completely ignore the legal interest of the lessors of gas-producing leaseholds, in attempting to arrive at a value for West Virginia gas resources.
- 4. Whether, in drastic reduction of utility values, the Commission may utterly fail to take into account the paramount need for conservation of West Virginia's diminishing gas supply; and may thus fix minimum valuations which discourage exploratory search for new gas deposits, while hastening the abandonment of high-cost, low-yield marginal wells.
- 5. Whether, by inclusion in the utility rate-base of all by-product operations of an affiliate company, the Commission may accordingly control, in one way or another, investigatory development and research.
- 6. Whether the Natural Gas Act requires that rates and charges for and in connection with the transportation or sale of natural gas in interstate commerce must be just and reasonable to the state of production, (i. e., in this instance West Virginia),—and to the owners of gas and gas-producing lands in that state,—as well as to the consumers of gas.
- 7. Whether the rates and charges so ordered by the Commission in these proceedings are just and reasonable to the State of West Virginia, and to its citizens who own gas and gas-producing lands.
- 8. Whether the Commission's valuation of the properties of Hope Natural Gas Company did disregard the

economy and well-being of the state of production, assign to out-of-state consumers the entire "discovery value," did ignore the legal interests of lessors of gasproducing leaseholds and did discourage exploration and research, and was therefore arbitrary and capricious; and whether the ordered rates and charges were thereby rendered unjust and unreasonable.

- 9. Whether, under the guise of interstate rate-making, the Commission may, in fact, regulate "the production or gathering of natural gas," despite the explicit statutory provision to the contrary.
- 10. Whether, by the terms of the Natural Gas Act, the Commission is to value West Virginia's gas reserves as of June 21, 1938, (when the interstate gas traffic was first made subject to federal regulation), or whether the Commission may instead examine into the accounting practices of decades ago, (during which the operating company was a private industry), and thereby retroactively hold the company to have been a public utility even prior to 1938, and retrospectively value its properties.

STATEMENT OF THE CASE

This proceeding was instituted on July 6, 1938, only fifteen days after the effective date of the Natural Gas Act. The original complaint was filed with the Federal Power Commission by the City of Cleveland, Ohio. It complained of the wholesale rates charged by Hope Natural Gas Company on natural gas sold to East Ohio Gas Company, the distributing company serving Cleveland and other Ohio cities. Subsequently, other parties were permitted to intervene.

By its opinion and order, the Federal Power Commission determined that the gross proceeds derived by Hope Natural Gas Company from the production, handling and sale of natural gas in future years, should be reduced by

the sum of approximately \$3,600,000. per year. Hope Natural Gas Company thereupon filed its petition for review with the United States Circuit Court of Appeals for the Fourth Circuit, and that Court reversed the order of the Commission. The proceeding has now been brought to this Court upon petitions for writs of certiorari filed by the Federal Power Commission, by the cities of Cleveland and Akron, Ohio, and by the Pennsylvania Public Utility Commission.

The tax revenues of the State of West Virginia, and of many of its counties and municipalities, are derived in part from levies imposed upon the true and actual value of properties of natural gas companies, including gas lands, gas leaseholds and gas wells. All of the gas-producing and transporting properties operated by Hope are located in West Virginia. The West Virginia Board of Public Works has fixed the "true and actual value" of Hope's properties, for West Virginia property-tax purposes, at \$53,338,000. (Ex. 108, Supp. pp. 391-393; and R. 5431-5433). In contrast, the Federal Power Commission has sought herein to establish an interstate rate-base of \$33,712,000, for interstate rate-making purposes. Should the latter method of valuation be finally sanctioned, there would immediately be a great and irreparable loss of revenue to the State of West Virginia, with serious injury consequent to the school system and other governmental functions. West Virginia also derives a part of its revenues from a tax levied upon the privilege of engaging in the business of producing natural gas, and measured by the gross proceeds derived from the sale thereof by the producer; and the reduction in gross proceeds ordered by the Commission would likewise cause a severe loss of revenue.

The State of West Virginia (as well as the Public Service Commission of West Virginia), intervened in the consolidated proceedings before the Federal Power Commission. Briefs were filed, and oral arguments made to the Commission. Neither the Commission's order nor its opinion took any cognizance whatsoever of the position of the State of West Virginia; nor did the Commission anywhere refer to the injurious effect upon the fundamental economy of the State of such far-reaching gas-rate reductions.

From the outset, West Virginia has taken the stand that, in fitting the Natural Gas Act into the federal scheme, the Federal Power Commission must arrive at rates and charges which are just to the state in which natural gas is produced, as well as to distant consumers of the gas. Either the Commission must find formulas for the law's application which result in justice being done within the framework of the Act, or states of production may perhaps find ways outside of the Act to escape its more serious injuries. Neither the federal nor the state authorities can desire that eventuality to occur. It will be the purpose of this Brief to demonstrate that the administrative result achieved in the Hope case brings consequences which are unjust to West Virginia and its citizens; and these unfairly depress the value of gas, gas lands and gas leaseholds, unduly restrict development of their natural resources, and arbitrarily transfer their properties to the residents of other states without just compensation therefor.

When the proceeding was taken to the Circuit Court of Appeals by the appropriate review procedure, West Virginia deemed it inadvisable then to continue actively as an intervening party in the various cases, lest its interest in the broader phases of the issue be misinterpreted. The Federal Power Commission had throughout insisted on viewing these proceedings as an ordinary contest primarily between a single producer of natural gas and its

interstate customers; and had seemed unwilling to regard the contentions of the State as having any sort of independent significance. Under such circumstances the State of West Virginia did not participate further in the hearings before the Circuit Court of Appeals. Decision was made, however, to appear as Amicus Curiae in any future argument of the cause before the Supreme Court of the United States, in order that full presentation of the important questions involved in interstate valuation of natural resources might thus be had.

The present Brief as Amicus Curiae is now accordingly filed before this Court.

SUMMARY OF ARGUMENT

West Virginia contends that in determining both the rate-base and the rate, the Federal Power Commission has steadfastly refused to give any consideration what-soever to the economic welfare of the State of West Virginia and of its citizens; and the Commission's decision would now operate to transfer a considerable part of the mineral wealth of West Virginia over to citizens of Ohio and Pennsylvania. The Commission seeks thus to deprive West Virginia and its citizens of their property without due process of law or just compensation, and to invade unconstitutionally the reserved powers of the State.

Ι

A. The State of West Virginia, as Amicus Curiae, urges the importance of a fair valuation of its natural gas resources in the economy and well-being of the State. First and foremost, the State has a direct sovereign interest in governmental revenues from its natural gas industry, for without such tax income the essential services of the State must inevitably suffer. The Court has re-

cently recognized the significance of such a public interest by its decision in *Burford* v. *Sun Oil Co.*, ___ U. S. ___, 63 S. Ct. 1098, 1100, 87 L. Ed. 999, 1001-1002 (1943). And similarly, in this governmental capacity, the paramount need for conservation must be brought to the attention of the Court.

- B. Again, the State may now intervene, in behalf of its citizens, to insure an orderly marketing of its natural resources so as to promote their prosperity and welfare. Since the operating company seldom, if ever, owns the gas reserves in fee simple, it is also proper for the State to propose that the interests of the *lessor*, as well as those of the *lessee*, ought to be fairly appraised in the determination of the interstate rate-base.
- C. Finally, to the extent that the State is itself a proprietor of gas fields, it should here protest against any administrative action which might, in the long run, impair the worth of that ownership. Otherwise, its mineral wealth could later be seriously depreciated in value through the policies of the Federal Power Commission; and any contention that the methods of valuation employed were confiscatory would then come too late.

II

West Virginia also contends that the Federal Power Commission has exceeded its jurisdiction under the Natural Gas Act, and has actually applied the provisions of the Act to production or gathering properties, despite the explicit statutory provision to the contrary contained in Section 1(b) of the Act.

III

Under the formulas devised and applied by the Federal Power Commission in this case, the value of the remaining mineral resources of West Virginia will be controlled by the accidental cost of the mere facilities required to produce them, without regard to their worth either as a fuel or as raw material for commercial products. The manner in which the Commission has construed and applied the Act fails thus to accord with that proper adjustment of local and national interests required by the federal Constitution, and by the federal system.

BACKGROUND OF WEST VIRGINIA'S INTERVENTION

It has become necessary for the State of West Virginia to explain here the legal and factual background of its intervention in these proceedings. While the important facts now adduced are amply set forth in the Record, there is no mention of the State's situation either in the Federal Power Commission's opinion or in any of the various briefs of Commission counsel.

A. The Position of the State of West Virginia.

"In no other field of public service regulation is the controlling body confronted with factors so baffling as in the natural gas industry", (Pennsylvania v. West Virginia, 262 U. S. 553, 621 (1923), per Brandeis, J., dissenting). The present litigation splendidly illustrates that dictum, at least to the extent that future exploitation of West Virginia's gas reserves depends upon their reasonable valuation in interstate markets. In fact, the ultimate issue here goes back twenty years or more, for the whole problem before this Court is simply the orderly development of these mineral resources in accordance with the needs of West Virginia. Pennsylvania v. West Virginia decided only that a producing state could not, by legislation, require preference to be accorded local consumers, and thereby withdraw a larger volume of gas from an established interstate current. Still the holding did not in any way involve interstate price-fixing; nor did it go so far as to foreshadow a later attempt to jeopardize the State's economy by harsh undervaluation of operated leaseholds. The question now arises as to whether,—granted West Virginia's gas resources have thus been irrevocably dedicated to intertate commerce,—it is a fair implication from the *Pennsylvania* v. West Virginia theory that the producing state should have no voice whatsoever in their management.

The State of West Virginia does not attempt, in the present Brief as Amicus Curiae, merely to advocate the interests of a single producing company. It assumes, rather, that the litigation now before this Court will be determinative of the validity of the current administrative practices of the Federal Power Commission. Thereafter, the same measuring-rod, the same yardstick of valuation, can be applied to other gas operators in West Virginia; and the vital issues will have already been settled. In other words, the State of West Virginia appears here because the precedent which the Hope case will establish may become of grave import for the future. Exactly the same issues, the same argument, the same dangers will be met in numerous other proceedings involving West Virginia. In all of them there will be the identical questions,—namely, the position of the producing state in our federal system, and the valuation of mineral resources within the rule of Pennsylvania v. West Virginia.

This Court will note that the ultimate issue has to some extent been viewed in briefs of counsel for the respective petitioners,—and, indeed, by the opinion of the Commission itself,—as though it were a contest merely between the Standard Oil Company (New Jersey) and the householders of northeastern Ohio and western Pennsylvania. There is the suggestion that the case involves "dividends to Standard Oil"; and the past financial history of the

Standard Oil subsidiary, prior to the Natural Gas Act of 1938, is accordingly scrutinized. To such contentions the State of West Virginia has no reply to make. Whether or not the Standard Oil Company should be regarded as subject to the Public Utility Holding Company Act of 1935,—and analogous questions, are not before the Court in the present litigation. The State of West Virginia is concerned only with the fair valuation of its mineral resources, within the vast scope of the interstate commerce clause. Hence, the circumstance that one of the various operating companies, engaged in "the production or gathering of natural gas," is owned or controlled by Standard Oil is not only irrelevant here, but wholly immaterial. The State of West Virginia regrets that it has been necessary to advert to such allusions in briefs of counsel.

B. Nature of the West Virginia Gas Industry.

Something like half of the nation's total annual consumption of natural gas is presently transported in interstate commerce; and the problem of rate-making becomes a most important one, especially because such an interstate gas traffic (for the most part) denoted purely private business and not public-utility service prior to the 1938 federal law. The Brief for Petitioners, Federal Power Commission et al., (page 78, footnote 37), apparently does not realize that the Hope Company was in no sense a common-law or statutory utility before 1938, (Missouri v. Kansas Gas Co., 265 U. S. 298 (1924); Public Utilities Comm. v. Landon, 249 U. S. 236 [1919]). It also complicates matters that almost four-fifths of the whole national production goes for industrial purposes, with ordinary domestic uses playing a surprisingly minor role in its utilization (Brown, Ex. 19, 6). In other words, unlike the product of most public-service companies, there is actually an existing price for gas which is relatively independent of the customary sales to utility-patrons; and that gas price had been established (prior to 1938) by trading at arm's length in competition with coal, coke, oil and other fuels.

Moreover, the Court will judicially note that natural gas companies furnish an irreplaceable commodity; a state's natural resources are seriously depleted in this kind of commerce. It is customary to compare the interstate development of gas deposits with the movement of timber, iron ore and other raw materials from mining states to manufacturing centers, (as in *Pennsylvania* v. West Virginia); but the essential present factor of pricecontrol, under the Natural Gas Act, is then overlooked. Under normal conditions, there is no restraint on the interstate bargaining as to timber or solid minerals; a producing state's economy is not seriously threatened by outside rate-making. Indeed, the Guffey Act carefully took into account all these factors, so that ideals of conservation and investment-stability were linked up to the concept of consumer protection in bituminous coal pricefixing, (15 U. S. C., Sections 828 to 851). In the absence of such safeguards, interstate rate-making could, in the long run, entail the export of valuable natural resources at a sale-price less than the actual worth of the commodity at the point of origin. And Pennsylvania v. West Virginia might then lead, under statutory and administrative regulation, to ruthless exhaustion of local gas resources simply for the benefit of nearby industrial states,—a result unthinkable in our federal system.

In West Virginia, the gas-producing sands are continuously variable in thickness; and they are inclined to be lenticular in character, (—which is to say, shaped like a double-convex lens),—with porosity differences causing irregular areas of production. (Tollefson, Ex. 15.) Local geological prophecy is accordingly far less certain than in regions of the southwest, (Sisler and Tucker,

Natural Gas in West Virginia: contained in GEOLOGY OF NATURAL GAS, published by the American Association of Petroleum Geologists [1935]). widespread distribution over gently-sloping geological structures, without the concentrated pools on structural highs one finds in Texas or California fields. Erratic sand conditions naturally increases drilling hazards, though the existence of several producing-horizons somewhat balances the chances. But West Virginia leaseholds generally produce lower open-flow volume; in the present litigation, for example, the exhibits show that the 3300 Hope Company wells average only a relatively-small daily yield. Thus the delivery over longer periods of time sends up the overhead charges. The important geological factor in all this is that these gas pools are extremely limited in extent, and separated considerably by unproductive areas; and they occur (along anticlinal structures) on synclines, on the flanks of anticlines and on the crests. It is that very unpredictable quality which, more than anything else, creates so high a discovery value for producing leaseholds. Gas properties then appreciate more and more in value; and the appreciating process continues on indefinitely as the Appalachian fields decline in production. (Stephenson, Valuation of Natural Gas Properties, 1015-1016; contained in GEOLOGY OF NAT-URAL GAS, published by the American Association of Petroleum Geologists [1935]).

This Court has had before it, within the last decade or so, many important cases involving oil and gas production of the southwest, in all of which the issue of conservation of mineral resources was directly or indirectly involved. In no one of the series of these cases,—extending all the way from *Champlin Refining Co. v. Corp. Comm.*, (286 U. S. 210 [1932]), and *Sterling v. Constantin*, (287 U. S. 378 [1932]), down to *Federal Power Comm. v. Natural Gas Pipeline Co.*, (315 U. S. 575 [1943]), and

Burford v. Sun Oil Co., (___ U. S. ___, 63 S. Ct. 1098, 87 L. Ed. 998 [1943]), was the question of acute shortage of mineral resources squarely presented. In contrast, the issue in the past has usually been over-production or waste: for example, Thompson v. Consolidated Gas Utilities Corp., (300 U. S. 55 [1937]), revealed that during 1934 and 1935 a billion cubic feet of natural gas was being blown off into the air daily, in the West Texas gas field. (Over a year's time, more gas by far was thereby lost than now remains within the recoverable reserves of the Hope Company's operated acreage). But from these very cases involving such enormous waste, the impression is readily gained that the nation's gas reserves are inexhaustible or nearly so. Now, for the first time, gas litigation is being considered by this Court in which the problem is one of diminishing supply. The fate of the Indiana gas belt, (NATIONAL RESOURCES BOARD, REPORT ON NATIONAL PLANNING, Part IV., Report of the Planning Committee for Mineral Policy, 391-439, [1934]), may well prove to be the future in store for West Virginia. In any event, the State has already fallen from first place in national production, two decades ago, to fifth place during recent years. (In 1938, the West Virginia standing was sixth.)

Accordingly, both by reason of geological uncertainties and because of diminishing yield, West Virginia's gas deposits are becoming increasingly valuable. Among the factors to be considered here are the declining volume of output from old wells,—the lower delivering-capacity of new wells,—the increased cost of carrying reserve acreage for future operations,—and the overhead costs of conservation measures. It is impossible to believe that present undervaluation of operated leaseholds can increase the supply of gas available.

C. Method of Gas Leasing in West Virginia.

It might be well to survey briefly methods of gas leasing in West Virginia, in order that various legal incidents of the gas leasehold may readily appear. (Tollefson, Ex. 23; Ex. 26.) Normally the Appalachian oil and gas operator will first select an area for prospecting work, assuming favorable structure and sand conditions; naturally the porosity and permeability of the producing formation cannot be accurately predicted by the geologist until drilling has made considerable data available. And from this angle, new gas supplies must always prove a risky speculation. Granted, however, a promising region has been chosen for prospecting, the process of securing mineral titles then gets under way. Taking into account the cost and uncertainty of buying the mineral rights in fee, the sounder policy of leasing them is ordinarily adopted here, the practice being to get together as large a block of leased acreages as practicable, before drilling a test well in unproven territory. To ensure retaining the benefit of favorable discovery, the operator must therefore acquire and hold thousands of acres during the exploratory period. Otherwise, successful drilling might simply prove territory controlled by others, so that neighboring leases in each direction would have to be bought up in competition with outsiders, and at prices reflecting the operator's own hazardous accomplishment. Yet if a series of dry holes indicates nonproductive land, those very leases will probably be surrendered, and their entire charges be written off as total loss along with the serious drilling expense. By and large, in the gas industry one thus meets with a constant cycle of surrendering old leases and taking up new ones as the effort to locate new reserves continuously persists.

All these areas, both producing and unoperated, are held under oil and gas leases which have usually been secured for a nominal consideration. Under their provisions, the operator pays an annual delay rental—as a rule, a dollar an acre—as compensation for postpoing drilling; the so-called fixed term or exploratory period then runs for five or ten years, as the particular lease may provide. If within this term a producing well is successfully brought in, the extension clause ("as long thereafter as oil or gas is produced") next comes into play, and the lease continues indefinitely thereafter for the life of the field. In that event, the operator will pay the lessor a stipulated gas-well rental—ranging between two and three hundred dollars a year for each well from which gas is marketed—or, in the newer fields, the lessor will receive a gas royalty equivalent to one-eighth of the gas marketed. As the production gradually diminishes over the years, the operator nurses the old wells along until the rock pressure falls to the average abandonment minimum, and ultimately the operation is given up.

These details are essential to an understanding of the legal significance of the ordinary gas leasehold, which is simply the legal right of the operator to enter on the lessor's premises, to explore for gas, to "sever" the gas from the freehold by reducing it to possession, and to remove it from the premises. In other words, the gas lessee has a common-law profit a prendre, (of an exclusive nature), conveyed originally for a term of years and then on discovery extended for the life of the field. (Simonton, The Nature of the Interest of the Grantee under an Oil and Gas Lease, [1917] 25 W. Va. L. Q. 295.) In West Virginia, for example, the operator's interest is treated as a chattel real, which is to say, a profit for years rather than an incorporeal hereditament, subject as such to the lien of an execution and taxable presumably as Class IV personalty. (State v. South Penn Oil Co., 42 W. Va. 80, 24 S. E. 688 [1896]; Drainer v. Travis, 116 W. Va. 390, 180 S. E. 435 [1935]). Analogously, the lessor's rent-receiving reversion in subsurface minerals has separate legal recognition, being valued for tax purposes at several times the annual gas rental or royalty per well, depending on the character of the producing field. In other words, both the grantor and grantee of the profit own important property interests; and those possess considerable present taxable value, quite apart from the original consideration for the lease and the development costs ensuing later. Between the parties, together they own the gas. All this would seem to be most elementary knowledge in oil and gas law, were it not for the alarming proposal now seriously offered, that the interstate consumers should "reap the advantage of the discovery value" of Appalachian gas leaseholds. Surely Pennsylvania v. West Virginia ought not to be carried so far.

A further word might be added, too, as regards the claim of the lessor, whose reversionary interest in the gas might be lost altogether if the small well were ultimately surrendered and plugged. Surely, as owner in fee of the gas, he should be represented in some way during the rate proceedings: it is his gas which is being severed and then transported in interstate commerce. Where his compensation is in the nature of a gas well rental for the producing and paying life of the field, that rent-receiving reversion ought to justify recognition in leasehold valuation. A fortiori, if the lessor under new leases has stipulated for an "eighth" gas royalty, the export price becomes a matter of even more vital concern to him. It is difficult to infer that the instrument of lease contemplated an eventual valuing of both profit a prendre and reversion on the basis of the book cost, comprising the original nominal consideration and the later development expense. In that event, the lessor would no doubt be surprised to find that he had absolutely no legal claim to any part of the "discovery value," under the policy of the Federal Power Commission.

D. "The Rate Payers Reap the Advantage of the Discovery Value."

1. The Policy of the Federal Power Commission.

In the last analysis, the fundamental issue in the present litigation,—and the one in which the State of West Virginia has deep concern,—is the proper valuation of the gas profit a prendre, both as regards producing areas and the unoperated leaseholds prudently held in reserve for reasonably-anticipated market demand. In the course of the Brief of Commission Counsel at the hearings before the Federal Power Commission, (p. 211), the ordinary practice in the gas industry was summed up in these terms:

"When undeveloped acreage is proved nonproductive, its cost, the cost of drilling and delay rentals, are worthless. If proved productive, however, it suddenly acquires great intrinsic value as a gas-producing acreage. The inclusion of this enhanced value on productive acreage in the rate base, with the depletion expense computed upon such value and allowed in operating expenses, provides for all losses in connection with exploration and development and provides a fund to obtain additional developed gas acreage to replenish the gas supply."

Nevertheless, for the valuation of West Virginia gas reserves, Commission Counsel has advocated, (pp. 211-212), and the Federal Power Commission has adopted quite a different plan. In the discussion of depletion charges, the following rule was proposed by Commission Counsel, (and ultimately approved by the Commission):

"When gas producing acreage is priced at original cost, there is no enhancement of the depletion expense allowance to cover the costs of explora-

tion and development. The rate payers, therefore, reap the advantage of the discovery value. * * * (Counsel) has recommended that the original cost of producing leases be included in the rate base, in contradistinction from the 'market value' of producing leases."

In view of the confusing terminology of Commission Counsel, a word of explanation might be added here. The term "rate payer" has definite significance both in dictionary-meaning and in legislative use: it is the specific term commonly-employed in England to denote taxpayer.¹ A rate payer is thus one who pays the local (tax) rates. So far as the present case goes, the consumers of northeastern Ohio and western Pennsylvania are in no sense West Virginia rate payers (or taxpayers). The great consumer-industries in these adjoining states contribute absolutely nothing, by way of direct taxation, to the support of West Virginia schools and other essential governmental services. Accordingly, the correct legal statement of the decision of the Federal Power Commission is simply that the (West Virginia) rate payers lose "the advantage of the discovery value" (of West Virginia gas reserves). To put it briefly, the out-of-state users gain. while local taxpayers are deprived of the benefit of the fair value of these wasting assets.

In other words, if the operated territory proves productive, the operator is then allowed in his rate-base merely the nominal cost of original acquisition of those acres under which the gas was later found by testing, along with the actual expense of drilling the wells. There is no discovery value for either lessor or lessee: apparent-the gas at once belongs to the interstate customer, sub-

¹Yet Commission Counsel continuously becloud the issue by its improper use. For example, the Brief of Petitioners, (page 18), argues that "well-drilling expenditures had been contemporaneously recovered through revenues from the rate payers."

ject only to the payment of transportation charges and a reasonable return on the diminutive rate-base of nominal costs and drilling expense. No doubt it might be seriously contended that the operator is amply safeguarded against financial loss by including within the category of operating expenses (1) delay rentals on undeveloped leaseholds, (2) dry-hole losses, (3) disbursements for nonproductive acreage that is abandoned and (4) the other exploration costs. Thus, one can say, the utility has obtained a fair return on the actual-cost basis. As regards the gas properties themselves, the same argument would assume that the consumers have in the past bought a substantial equity in these particular holdings, simply by paying prices that included delay rentals and drilling The fundamental fallacy in it all is the complete failure to consider the reversionary interest of the lessor or the economy of the producing state, not to mention the arbitrary and retroactive policy of viewing the profit a prendre on the basis of an investment of decades before, rather than according to its fair value in 1938. And until this Court has ruled otherwise, the State of West Virginia will contend that its natural gas resources as of the year 1938, (theretofore owned by private interstate industry), were being regulated by Congress on today's basis.

2. Administrative Valuation of Natural Gas Leaseholds.

So the Commission's order has raised the vital question in this litigation as to how low West Virginia leasehold values can be fixed within the limits of the Constitution, in order that interstate domestic and industrial consumers may pay less for the rapidly-diminishing supply of natural fuel. Naturally, it would merely be arguing in a circle to assert that the operator's profit a prendre is worth no more than the capitalization of net income from

whatever gas rates may ultimately be established by the Federal Power Commission. The whole difficulty is, what are the proper rates: and the Natural Gas Act specifically empowers the Commission to determine "fair value" in making up the rate-base. One must accordingly start with the valuing of gas properties, before even considering the important collateral issues of operating expenses and rate of return. And any alleged monopolistic character of natural gas, according to Justice Cardozo, may be wholly ignored, (West Ohio Gas Co. v. Public Utilities Comm., 294 U. S. 63, 72 [1935]):

"The suggestion is made that there is no evidence of competition. We take judicial notice of the fact that gas is in competition with other forms of fuel, such as oil or electricity."

If one may properly infer from the very silence of the Natural Gas Act that the method of valuing gas profits a prendre is still open, the prior administrative and judicial practice in the task of intrastate rate-making should then be studied. It would be convenient to separate the case-law into two periods, marking the division by the United States Supreme Court's ruling in United Fuel Gas Co. v. Railroad Comm. of Ky., (278 U. S. 300 [1929]), a dozen years ago. Originally, in the earlier stage, there was considerable uncertainty among commissions and courts as to how to tackle the issue. Gradually, "present fair value" became the approved test in West Virginia, Pennsylvania, Ohio and New York.

The legal history of leasehold valuation within the Appalachian territory was mirrored in case-law from the

²City of Charleston v. Public Service Comm., 95 W. Va. 91, 120 S. E. 398 (1923), syl. 2.

³City of Erie v. Pennsylvania Gas Co., 278 Pa. 512, 528, 123 Atl. 471, P. U. R. 1924D 89 (1924).

⁴Logan Gas Company v. Public Utilities Comm., 124 Ohio St. 248, 177 N. E. 587 (1931).

⁵Pennsylvania Gas Co. v. Public Service Comm., 207 N. Y. Supp. 599 (1925).

mid-continent field. All the old rulings,—for and against capitalization or for and against present value,—were reviewed in decisions by Oklahoma, Kansas and Montana commissions and courts. The upshot of it all was

the approval of an administrative process of valuing gas rights on some basis of present worth, so that the national picture was uniform: up to a dozen years ago, there was very little doubt as to the proper solution.⁹

United Fuel Gas Co. v. Railroad Comm. of Ky., (278 U. S. 300 [1929]), involved valuation of gas rights covering a total of more than eight hundred thousand acres, a relatively small part of which was held in fee. Geological and engineering experts had computed an estimate of the total volume of gas underlying the proven and probable territory. These calculations had been supplemented by testimony that in Pittsburgh there was an unregulated market for industrial gas, which could always be maintained in competition with coal and coal products. Other experts

⁶Re Pawhuska Oil & Gas Co., P. U. R. 1917D 947 (1917); American Indian Oil & Gas Co. v. Poteau, 108 Okla. 215, 235 Pac. 906 (1925).

⁷Landon v. Lawrence, P. U. R. 1916B 331 (1916); Landon v. Public Utilities Comm., 242 Fed. 658, P. U. R. 1918A 31 (D. C. Kan. 1917).

⁸Re Baker Natural Gas Utility, P. U. R. (1921E 609, 622 1921); Public Service Comm. v. Montana Petroleum Co., P. U. R. 1924B 364.

⁹To be sure, the West Virginia Supreme Court of Appeals held, (Natural Gas Co. v. Public Service Comm., 95 W. Va. 557, 121 S. E. 716 [1924], syl. 6), that the total of the delay rentals paid had to be taken into account for any survey of appreciation in lease values; yet that judicial result can be understood, even though it seems doubtful. Possibly there was the intuitive thought of achieving lower rates in the regulated West Virginia market for the West Virginia consumers of an exhaustible West Virginia natural resource, as against higher prices in the unregulated sales outside the state. This would seem to be an extremely broad extension of the custom of the lessor's free gas covenant, so as to amount to a "cheap gas covenant" in favor of local consumers; yet in substance that is what the delay-rental holding might accomplish. By keeping down the rate-base through a discount of leasehold appreciation, it is not farfetched to suggest the West Virginia theory effectively protected domestic consumers. Perhaps it merely illustrated a latent effort to circumvent Pennsylvania v. West Virginia: granted West Virginia consumers could not have priority as a matter of state legislation, they might at least have more favorable prices for the local product as a matter of judicial decision.

familiar with the production and marketing side had given opinions also based on an assumed gas supply available for unregulated sale at predictable prices. On the other hand, only about a sixth of the entire acreage was proven territory. After characterizing the proof offered as "wanting in probative force," the Court held:

"On the record as made, appellants have failed to present any convincing evidence of value of their gas field which would enable us to assign to it any greater value than that which they appear to have assigned to it on their books. This book value, therefore, may be accepted, not as evidence of the real value of the gas field, but as an assumed value named by the appellants, which on the evidence presented cannot reasonably be fixed at any higher figure." (278 U. S. 300, 318.)

Accordingly, since the burden of proving the value in a confiscation case rested on the utility, and had to be "supported by clear and convincing evidence," the action of the lower federal court in denying an injunction against the commission rate-making was unanimously affirmed. It must be borne in mind, however, that the company had roughly but seventy thousand operated acres,—with more than ten times that much unoperated,—and it was allowed by the Court to include the latter in its rate-base and their delay rentals in operating expenses. This decision was thus conclusively significant for several reasons. In the first place, the issue as to capitalization was definitely settled, in the affirmative; the value of leasehold had to be taken into account in natural gas regulation. Next, precise evidence was essential in the establishment of the valuation claimed, for the testimony as to a computed value for gas reserves in the ground based on geological estimates and predicted future prices could not be accepted. Nevertheless, the inference was left that had market value been proven, by adequate sales and purchases of leases, its adoption would have been approved. Finally, reasonable accumulations of undeveloped acreage might be sustained, where the operator's business required such prudence and foresight.

With the *United Fuel Gas* case, a new chapter began in leasehold valuation. Litigation was henceforth to turn on the adequacy of the proof offered by the operator in support of its position as to present fair value. sure, in Los Angeles Gas & Electric Corp. v. Railroad Comm. of Cal., (289 U. S. 287, 305 [1933]), the Chief Justice observed as to public utility properties that "the criteria at hand for ascertaining market value, or what is called exchange value, are not commonly available." Still in subsequent rate cases, efforts were diligently made to produce the "clear and convincing evidence" required. Dayton Power & Light Co. v. Public Utilities Comm., (292) U. S. 290 [1934]), brought the problem to the Supreme Court once more. In addition to the customary forecasts of production capacity in an unregulated market, there were now instances of actual sales of other leaseholds in sporadic transactions, at disparate prices. The Ohio Commission had actually valued producing acreage at twenty-five dollars an acre, following the precedent of the Logan case and disregarding book cost. It was held without dissent that the burden of proof as to confiscation on the basis of the old rates had not been sustained. Recent state cases have tended, moreover, to some sort of present value for gas properties.

The direct issue of leasehold valuation has not again reached the Supreme Court, although the recent decision in the Natural Gas Pipeline case is indicative of the Court's interest in the subject. Chief Justice Stone, who wrote the opinion in United Fuel Gas Co. v. Railroad Comm., again spoke for the majority; and specifically observed that the Federal Power Commission had here

taken the operator's statement as to the present value of the gas reserves. On the whole, the language of the Court perhaps seems to approve the Commission's action:

"And the allowed 'present value' of leases as of June 1, 1939, \$13,334,775, is approximately \$4,000,000 more than book cost, even without taking into account a substantial reduction for depletion services of \$1,152,854, which the companies had accrued on their own books by the end of 1938." (62 S. Ct. 736, 744, 86 L. Ed. 699 [1942]).

Nothing was said about undeveloped acreage, nor was there any court reference to the inclusion of delay rentals in some rate-making category.

Sifting down all the case-law for both the periods before and after 1929, certain propositions seem clearly established. In the first place, no court of last resort has refused to capitalized gas leaseholds, although the precise method of capitalization still remains open. Secondly, it has not been held as a matter of federal constitutional law that leases *must* be valued merely at book cost. Thirdly, unoperated territory ought not to be capitalized until there is "present or immediate need" for its use. Fourthly, unusual proof by "clear and convincing evidence" is requisite to support the claim of market valuation. And, finally, delay rentals on reasonable quantities of unoperated leaseholds can be included within operating expenses, (unless the amortization charge be adequate to carry them). It is to be noted, however, that the reversionary interest of the grantor of the gas profit a prendre, as well as the economy of the producing state, has scarcely received adequate judicial recognition as yet.

3. Leasehold Valuation and the Producing State.

The gravity of the issue before the Court amply justifies this extended discussion of gas-leasehold valuation.

As a matter of West Virginia law, gas reserves are presently valued by the Public Service Commission at their real worth, with certain deductions; if the proposed variant of original cost (adopted by the Federal Power Commission) were to be finally upheld, there would then be two different methods of valuation flourishing simultaneously, side by side. For all intrastate utility service, market value would be the legal standard: but for the interstate gas traffic, something less than out-of-pocket expenditure would control as to leasehold and reversionary interests of producers and farmers alike, in the export of West Virginia's mineral wealth. That result would call up the shadowy ghost of Swift v. Tyson, (16 Pet. 1 [1842]; see Note [1940], Oil and Gas Law in the Federal Court, 46 W. Va. L. Quart. 154), to serve as the governing factor in interstate gas-property valuation.

Nevertheless, wholly apart from all these various questions, the paramount consideration now before the Court is the situs of the ownership of the "discovery value," as between the producing state and the distant consumers. An ordinary example will suffice here. Assume there is a block of new operated leaseholds, (with satisfactory rock-pressure), the development of which has cost the operator the following sums:

Nominal consideration	\$ 20.00
Delay rentals	1,000.00
Drilling expense:10	
30 producing wells	
at \$7,000 per well	210,000.00
Total cost	\$211.020.00

In all probability, the minimum present worth of these new leaseholds, with their producing wells, would be (in

¹⁰Arnold and Kemmitzer, Petroleum in the United States, 169 (1931).

normal times) in excess of a half-million dollars. Thus, the "discovery value" of such leases might amount to hundreds of thousands of dollars. The Federal Power Commission has decided that "discovery value" belongs to domestic and industrial users in adjoining states: it is no longer, at least for interstate rate-making purposes, the property of West Virginia and West Virginia operators. To put the issue more succinctly,—West Virginia producers have in the past exported their gas to Ohio and Pennsylvania; and the Commission has now sought analogously to export across the state-line the "discovery value" of West Virginia gas-leaseholds. It is ridiculously absurd to suggest that so important a value ought not to be included within the reckoning of West Virginia's mineral wealth.

Accordingly, the State of West Virginia has been obliged to intervene in these proceedings, simply in order to protect and safeguard its natural resources against arbitrary administrative action. This Court has the serious responsibility of adjusting interstate relations, so as to promote commerce in natural gas among the states in accordance with the mandate of Congress. Still the precedent of Pennsylvania v. West Virginia does not compel the surrender of "discovery value" to out-of-state consumers,—nor does the Constitution contemlate so severe an injury to the producing state. Yet the Federal Power Commission has refused even to consider the protests of West Virginia against such spoliation.

ARGUMENT

Ι

The State of West Virginia, as Amicus Curiae, May Urge the Importance of a Fair Valuation of Its Natural Gas Reserves in the Economy and Well-being of the State.

A. THE STATE HAS A DIRECT SOVEREIGN INTEREST IN GOVERNMENTAL REVENUES FROM ITS NATURAL GAS INDUSTRY.

This Court has in the past recognized the interest of the State in taxes from its oil and gas industry. In *Burford* v. *Sun Oil Company*, (___ U. S. ___, 63 S. Ct. 1098, 1100, 87 L. Ed. 999, 1001-1002, 1007 [1943], *per* Black, J.), the Court said:

"Texas interests in this matter are more than that very large one of conserving gas and oil, two of our most important natural resources. It must also weigh the impact of the industry on the whole economy of the state and must consider its revenue, much of which is drawn from taxes on the industry and from mineral lands preserved for the benefit of its education and eleemosynary institutions.¹⁰"

Footnote. ¹⁰"The problem of gaining an adequate revenue from the petroleum industry was particularly serious in Texas during the period 1930-35. The question was discussed by Governor Sterling in messages to the legislature in 1931, 1932, and 1933, and by Governor Allred in 1935. See The Texas Senate Journal, Jan. 13-May 23, 1931, p. 526; ibid, July-August, 1931, p. 594; ibid, September-October, 1931, p. 164; ibid, August-September, 1932, p. 60; ibid, Reg. Sess. 1933, pp. 587, 589, 590."

Footnote. ²⁶"The special session of July and August, 1931, was in session when MacMillan v.

Railroad Commission was decided, and, as has been noted above, the MacMillan Case provided the special session with the bulk of its business. People's Petroleum Producers v. Smith (DC) 1 F Supp 361 was the cause of the special session of November, 1932. In his introductory message to the special session, Governor Sterling said: 'Most assuredly, I would not, at this time, have called you into extraordinary session except I believe a grave crisis again confronts the State and our people on account of the Federal Court having held that the Railroad Commission has gone beyond the authority given in this statute enacted at that time in promulgating their orders as to proration and conservation of oil and gas * * * It is apparent that (as a result of the decision) the state's greatest natural resource oil and gas-will be wasted and destroyed, resulting in a tremendous financial injury to the state, especially to the taxpayers and the public schools. It is apparent that under such conditions, the state's income, as a result of the gross production tax on oil, will be reduced from approximately \$16,000 a day to a few thousand dollars per day, thus depriving the State of a tremendous amount of revenue.' Texas Senate Journal, Nov. 1932, pp. 3, 4."

There is little doubt in the present litigation that the Hope Natural Gas Company will effect a very considerable saving in West Virginia property taxes, as a result of the ordered rate reduction.¹¹ Certainly, the reduced tax-valuation which unfortunately becomes inevitable, (when the Federal Power Commission fixed the ratebase at roughly \$33,000,000., as compared with the pres-

¹¹The Hope Company has represented to the Commission that it expects to save \$338,000 annually, in West Virginia property taxes, (Brief for Petitioners, Federal Power Commission *et al.*, p. 32).

ent Board of Public Works tax-base of almost \$53,000,000.), will affect property taxes in most of the counties of the State.¹²

 12 According to the printed Report of the State Tax Commissioner, 1937-1938 and 1939-1940, (pp. 1059 and 1054, respectively), the assessment of the Hope Company by counties is as follows:

	1936	1937	1938	1939
Barbour	\$ 261,600	\$ 251,800	\$ 248,000	\$ 251,300
Boone	1,654,800	1,647,200	1,635,800	1,592,900
Braxton	517,900	513,600	531,200	533,700
Brooke	33,800	33,300	33,600	31,600
Calhoun	2,683,700	2,774,500	2,872,700	2,786,500
Clay	121,600	121,400	137,300	97,900
Doddridge	4,316,900	4,376,100	4,398,100	4,174,500
Gilmer	3,433,800	3,561,400	3,570,400	3,382,500
Harrison	11,756,100	11,657,500	11,840,400	11,394,800
Jackson	**************************************	4,300	11,700	11,600
Kanawha	2,665,900	2,742,900	2,832,900	2,820,900
Lewis	4,407,900	4,399,000	4,548,100	4,392,400
Lincoln	65,300	61,100	61,900	60,300
Logan	31,900	34,900	31,400	30,300
Marion	2,950,100	2,907,900	2,875,300	2,818,000
Marshall	\$ 1,040,500	\$ 1,027,500	\$ 1,037,700	\$ 1,011,700
Mason	*****	200	6,700	6,400
Mingo	20,400	20,800	18,500	17,200
Monongalia	907,300	911,100	906,800	833,200
Nicholas	301,400	282,500	288,400	271,700
Pleasants	307,900	299,500	300,000	282,700
Preston		12,400	15,200	15,000
Putnam		4,200	4,800	4,500
Raleigh	3,300	3,200	3,300	3,300
Randolph	1,400	1,400	1,400	1,300
Ritchie	3,409,400	3,904,300	3,733,200	3,554,600
Roane	643,700	771,600	811,500	708,400
Taylor	156,200	143,700	166,700	160,600
Tyler	1,551,800	1,605,100	1,619,300	1,547,100
Upshur	43,200	42,500	43,200	47,300
Wayne	900	900	900	300
Wetzel	6,119,300	5,987,800	6,157,400	5,933,500
Wirt	58,300	102,300	104,300	86,600
Wood	1,533,700	1,492,100	1,551,900	1,485,400
Total	\$51,000,000	\$51,700,000	\$52,400,000	\$50,350,000

According to Chapter 11, Article 6, Section 11 of the Revised Code of West Virginia, the Board of Public Works has the duty of assessing and fixing the true and actual value of all public-utility property. The West Virginia Supreme Court of Appeals has said that the income producing capacity of property is an inportant factor, (West Penn Power Co. v. Board of Review and Equalization, 112 W. Va. 442 [1932]). In the face of this statute, and of the Court's interpretation, it would be impossible for the West Virginia Board of Public Works to ignore the effect of an order of the Federal Power Commission which might have the effect of limiting the company's annual net earnings to approximately \$2,000,000. If this Court should find that a 6½% return is as low a rate as is fair, it would be very difficult also for the Board of Public Works to contend that the Hope Company's net earnings of \$2,000,000 could be capitalized at roughly \$53,000,000., present valuation.

The Hope Natural Gas Company is also subject to a business or occupation tax, measured by the value of the gas produced by its operated wells. Under Sections 2a and 3a of this production-tax law (West Virginia Revised Code, Chapter 11, Article 13, Sections 2a and 3a), the levy of the tax is fixed at 7.8% of the gross proceeds from sale of the entire production in the State, regardless of the place of sale or the fact that delivery may be made outside the State. Under Section 1 of the same statute, gross "proceeds of sale" are defined as "the value actually received from the sale of tangible property without any deduction on account of the cost of property sold or expense of any kind." In Section 2, provision is made for determining the value of products transported out of the State; and the tax commissioner of the State is directed to prescribe uniform rules for ascertaining such value. In measuring value by the gross proceeds derived from their sale, the State has recognized, and has given full effect to the various factors of time, place and conditions influencing the marketing of natural resources. Taxable value thus becomes practically the substantial equivalent of market value.

Exhibit 67, Schedule 8 (Sheets 1, 2 and 3), shows the gross sales and production taxes paid by Hope on both intrastate and export sales during the years 1937, 1938 and 1939. The record does not show what production in m. c. f. for each year was used by the State in determining the value of the gas at well: consequently it is not possible to ascertain the precise m. c. f. value. Nevertheless, production figures for those years appearing in the record indicate that the value, thus ascertained by the State, was at least 16¢ per m. c. f. Such official determination of well-mouth value by state authorities is entitled to great weight as evidence. On the other hand, if the value of the Hope properties as estimated by the interstate ratebase is to be reduced by almost two-fifths, then obviously the well-mouth value must similarly be reduced. Granted the unit value of the product is thereby depreciated, the production tax yield must be seriously affected. 12a Undervaluation of the Hope gas lease-holds must thus cost the State of West Virginia hundreds of thousands of dollars in production taxes.18

¹²aPerhaps a minimum estimate of the loss to the State in production taxes might be set forth here. The Federal Power Commission reduced the amount available to the Hope Company for its supply of natural gas by \$3,600,000., approximately. Since the tax of 7.8% is based on "the gross proceeds derived from the sale thereof by the producer," (Code of West Virginia, Ch. 11, Art. 13, Sec. 2a), the fall in tax revenue is easily calculated by applying the percentage rate to the reduction in gross income to the Company. The resulting figure of \$280,800. represents the immediate cost to West Virginia in production taxes, at the very minimum.

¹³The importance of the production-tax yield to West Virginia can be seen from the following table, (Report of State Tax Commissioner, 1937-1938 and 1939-1940):

The State of West Virginia may now urge before this Court the paramount necessity of the maintenance of its governmental revenues. No arbitrary depreciation of the State's natural resources should be permitted, when the immediate effect of such undervaluation is to cripple the school system and other essential services of the State. The adjustment of the several states within the federal framework of the Constitution surely did not contemplate the impairment of a producing state's tax structure, purely for the benefit of consumers in adjoining industrial states.

The State of West Virginia does not expressly advocate either the prudent-investment or the reproductionvalue doctrine in these proceedings; nor does the State urge the approval by this Court of any particular theory of accountancy. The issue is a far graver one. In the adjustment of the several states within the edifice of our federal system, how far may a federal commission regulate the fundamental economy of a producing state?

Note 13—(Cont'd.)	Production Tax	:	
Year Ended June 30	Coal Production	Oil and Gas Production	
1935	\$2,547,389.95	\$1,162,396.11	
1936	2,279,903.14	1,270,322.93	
1937	2,620,497.51	1,425,529.21	
1938	2,454,600.05	1,631,540.58	
1939	2,125,021.00	1,344,415.00	
1940	2,699,852.00	1,627,145.00	
	Clay, Sand, etc. Production	Timber Production	
1935	\$167,867.23	\$ 49,050.94	
1936	28,153.96	65,923.99	
1937	56,299.17	43,914.35	
1938	66,764.65	53,167.17	
1939	•	\$ 60,362.00	
1940		94,333.00	
	Other Natural Resou	ırces	
1940	\$ 6,646.00		

B. THE STATE HAS LIKEWISE A GOVERNMENTAL INTEREST IN THE CONSERVATION OF ITS NATURAL RESOURCES.

This Court has similarly in the past recognized the interest of the State in the conservation of its natural resources. In Railroad Commission v. Rowan & Nichols Oil Co., (310 U. S. 573, 582 [1940], per Frankfurter, J.), the Court said:

"If these wells, most of them small, were restricted to production on the basis of an hourly potential formula, it might be unprofitable to operate them at all. Not only are the individual interests of these small operators involved, but their effect upon the state's economy is an appropriate factor to be taken into account when plans are devised to keep the wells open." (Italics ours.)

That dictum simply reflected the long-continued interest of the Court in matters of state conservation. Starting with Ohio Oil Company v. Indiana, (177 U. S. 190 [1900]), and continuing on down through Champlin Refining Co. v. Corp. Comm., (286 U. S. 210 [1932]), to Patterson v. Stanolind Oil and Gas Co., (305 U. S. 376 [1939]), the decisions have consistently favored reasonable statutory and administrative conservation efforts.

The State may now, therefore, represent to this Court how seriously conservation policies will be jeopardized, through the present endeavors of the Federal Power Commission to reduce West Virginia leasehold values to a modified "original cost" basis. In three respects at least, the State will suffer:

1. Exploratory development of new fields will be discouraged. Unless the operator profits by the "discovery value" of his new producing leaseholds, there will be little inducement to undertake "wildcatting" in unproved territory. After all, one well in every five drilled in West Virginia turns out to be a "dry hole"; and allocation of the cost of "dry holes" is one of the very issues in the present litigation. With West Virginia's known gas reserves fast diminishing, it is imperative that "wildcat" operations be maintained and encouraged, without penalizing successful development by immediate transfer of its "discovery value" to out-of-state domestic and industrial users.

- 2. Abandonment of low-yield high-cost marginal wells will be hastened.¹⁵ In the main, the same overhead charges will continue as to smaller producers, regardless of the leasehold valuation. If the leases be undervalued, the net revenue from these older operations will scarcely justify their upkeep. By and large, such wells will then be surrendered far sooner than under existing operating practice. And once a well has been given up and plugged, underlying gas reserves may be lost forever.
- 3. Secondary recovery of oil,¹⁶ now being undertaken extensively throughout the Appalachian field, will be seriously hampered by arbitrary de-

¹⁴Tucker, Future Oil & Gas Supply in Eastern United States, AMERICAN PETROLEUM INSTITUTE, Minutes of Pittsburgh Meeting, (1943).

¹⁵As a practical operating decision, Hope abandons wells when the rock pressure reaches 30# in all sands, except the Speechley and the Benson; and 100# in the latter sands. (Exhibit No. 15, p. 15 and R. p. 1053). This decision necessarily depends, in part at least, upon the price received for gas. If that price is reduced, the abandoning pressure will be raised, whereby the rate of well abandonment will be increased.

¹⁶Secondary Recovery of Oil in the United States, AMERICAN PETROLEUM INSTITUTE (1942); Note (1942), 49 W. Va. L. Quart. p. 66.

valuation of oil and gas leaseholds. If fugacious minerals are to be undervalued, there is no longer the same incentive to go on with exploratory research in secondary-recovery methods.

Quite apart from these factors, all conservation measures cost money; and when more and more of these measures are utilized, as the gas fields become older, the cost of gas is increased. Decreased leasehold valuation tends to keep such efforts at a minimum; for, after all, the "discovery value" belongs to others. The State has a direct governmental interest in averting such inevitable injury to its natural resources.¹⁷

C. THE STATE MAY INTERVENE TO PROTECT THE INTERESTS OF ITS CITIZENS UNDER THE PARENS PATRIAE DOCTRINE, AND BY VIRTUE OF THE NATURAL GAS ACT.

It has been held many times by this Court that, in matters of grave public concern, the State, as representative of its public, has an interest apart from that of the individuals affected. Accordingly, as perens patriae, the State may sue to vindicate that public interest, and may uphold the rights of its citizens as against out-of-state wrongdoers. (See, Missouri v. Illinois, 180 U. S. 208, 241 [1901]; Kansas v. Colorado, 185 U. S. 125, 142 [1902]; Georgia v. Tennessee Copper Co., 206 U. S. 230 [1907]; New York v. New Jersey, 256 U. S. 296 [1921]; Wyoming v. Colorado, 259 U. S. 419, 464 [1922]; Pennsylvania v. West Virginia, 262 U. S. 553 [1923]; North Dakota v.

¹⁷The Federal Power Commission apparently believes the conservation problem is not a serious one. For example, the *Brief for Petitioners*, (p. 76), refers to the change of accounting methods in this language:

[&]quot;* * This change in accounting also recognized the progress then being made in gas and oil exploration and in drilling methods, which was bringing about the discovery of huge resources formerly unknown and unavailable and thus was removing the fear of rapid decrease in supply—the raison d'etre of the former accounting procedure."

Minnesota, 263 U. S. 365, 374 [1923]; Wisconsin v. Illinois, 278 U. S. 367, 409 [1929]; Kentucky v. Indiana, 281 U. S. 163 [1930]).

There is language in the opinion of Massachusetts v. Mellon, (262 U. S. 447 [1923]), which might cast doubt upon this general proposition. Holding that a state could not enjoin enforcement of an appropriation act of Congress, Justice Sutherland remarked that a state might not, as parens patriae, "institute judicial proceedings to protect citizens of the United States from the operation of the statutes thereof." While no going so far as to say that a state could never intervene by suit to protect its citizens against any form of enforcement of unconstitutional acts of Congress, the Court was clear that the right on the part of the state to protest did not arise in the instance of this federal appropriation act. (See, also, Florida v. Mellon, 273 U.S. 12 [1927]). On the other hand. Hopkins Federal Savings & Loan Association v. Cleary, 296 U.S. 315 (1935), limited the scope of the Massachusetts v. Mellon decision. In the course of his opinion, Justice Cardozo said (at page 340):

"In its capacity of quasi-sovereign, the state repulses an assault upon the quasi-public institutions that are the product and embodiment of its statutes and its policy. Finding them about to deviate from the law of their creation, it is met by the excuse that everything done or purposed is permitted by an Act of Congress. The excuse is inadequate unless the power to give absolution for overstepping such restrictions has been surrendered by the state to the Government in Washington." 80 L. Ed. 261.

¹⁸Justice Cardozo then added,

[&]quot;The standing of Wisconsin to resist a trespass on its powers is confirmed if we view the subject from another angle of approach. In the creation of corporations of this quasi-public order and in keeping them thereafter within the limits of their

In other words, the mere fact that the proposed transfer of the "discovery value" of West Virginia's gas deposits over to consumers in adjoining industrial states is permitted by an Act of Congress is wholly inadequate as regards the right of the State to protest against such deliberate spoliation. The natural-gas public utilities of the State must not depart from the duty owed to the citizens of West Virginia.

Nevertheless, without regard to the parens patriae doctrine, the Natural Gas Act of 1938 specifically recognizes the interest of the state in the regulation of natural gas undertaken by the Federal Power Commission. Over and over again, the provisions of this statute expressly authorize intervention by the state, or by the political subdivision most directly concerned. (See, for example, 15 U. S. C., Sections 717c[e], 717d, 717j, 717l, 717p, and 717r.) Thus, the Act of Congress has itself definitely recognized in this instance the right of the state to participate on behalf of its citizens. The present brief, as Amicus Curiae, now sets forth the grave concern of the State of West Virginia, lest irrevocable harm be done its citizens through the Commission's arbitrary undervaluation of the State's natural resources.

1. The State of West Virginia, in Common with All States Whose Economy Is Based on the Development of Natural Resources, Is Vitally Interested in the Orderly Marketing of Its Mineral Wealth, so that the True Value of These Minerals May Be

charters, the state is parens patriae, acting in a spirit of benevolence for the welfare of its citizens. Shareholders and creditors have assumed a relation to the business in the belief that the assets will be protected by all the power of the government against use for other ends than those stated in the charter. Aside from the direct interest of the state in the preservation of agencies established for the common good, there is thus the duty of the parens patriae to keep faith with those who have put their trust in the parental power. * * *"

Returned to the State's Total Resources, as the Wasting Assets Become Exhausted.

The State of West Virginia, as parens patriae, is interested in ensuring for its citizens the orderly marketing of its mineral resources. (See Railroad Commission v. Rowan & Nichols Oil Co., 310 U. S. 573 [1940]). In short, the State may now intervene on behalf of its people, in order to avert the serious consequence of a grossly unfair undervaluation of its natural gas resources by the Federal Power Commission. This litigation directly concerns one of the great industries of the State; and its importance is such that any harm to the industry must ineviably affect the welfare of a very large group of its citizenry.

Perhaps the effect of the undervaluation of West Virginia's gas deposits might be indicated in terms of the well-mouth gas prices. Exhibit No. 49 represents an analysis of natural gas purchased and prices paid during the three-year period 1937-1939, by the twelve largest utilities operating in West Virginia. The record shows that the price paid for gas varies, according to the county and section of the State; for example, Exhibit 79 (Table V) shows gas purchased by South Penn Natural Gas Company in Boone and Kanawha Counties, in the southern part of the State, was priced at approximately twelve cents per m. c. f. On the other hand, in the central and northern parts of the State, gas was bought by South Penn at prices ranging from seventeen cents to twentytwo cents per m. c. f. In any event, purchases made by other companies, not connected with the Hope System, occurred at an average price of fifteen cents per m. c. f. It is not unreasonable, therefore, to assume that the wellmouth market-value of gas produced in the Hope territory was in the neighborhood of fifteen cents per m. c. f., as of 1938, when the Natural Gas Act became effective.

In contrast to the foregoing, a further analysis has been made to determine the exact part of the total income under the rates set by the Federal Power Commission order, which might become available to cover the well-mouth price of the gas produced by the Hope wells, after paying all expenses other than well-expense. (This analysis is printed in Appendix I, to the present Brief). In order to ascertain that well-mouth price, all items of operating revenue and deductions have been carefully segregated (other than those specifically applicable to well-head or well-mouth production). On completion of such analysis and segregation of items, the remaining revenue left to cover the well-mouth price for producing natural gas is set forth by the following summary:

Other Production Expenses (Col. 5)\$	967,929
Gas Purchased Expense (Col. 7)	7,379,437
Transmission Expense (Col. 8)	4,080,598

Total Expense for other than Gas Produced \$12,686,898 Amount Allowed for Gas Produced______ 3,258,934

Total of Recommended Gross Revenue per page 54 of Opinion_____\$15,686,898

Continuing with this summation of well-mouth price-estimates, an analysis of Exhibit 69A shows that the volume of gas produced by the Hope-owned wells in 1940 was, in round figures, about twenty-seven million m. c. f. The allowance of \$3,258,898 by the Federal Power Commission for Hope-produced gas, at the well-mouth, is therefore about twelve cents per m. c. f. If even as little as one-half of the delay rentals be transferred to general or other expense, the well-mouth allowance is reduced to approximately ten cents per m. c. f.; should any adjustment be made for federal income taxes or reclassification

and rate-case expenses, the allowed well-mouth price will be even further reduced. In short, these analyses conclusively establish that the recommended reduction in rates will result in a well-mouth price for Hope-produced gas which is from three to five cents per m. c. f. less than the going-market price. Hope gas is to be valued by the Federal Power Commission at ten or twelve cents per m. c. f.: open-market purchases of gas in the Hope territory have occurred at an average price of fifteen cents per m. c. f., hence, were the Federal Power Commission order now to be sustained, Hope would be compelled to sell its product at a price less than the cost of gas in producing regions.

Serious as the Federal Power Commission's order may be in thus reducing gas prices below cost, the City of Cleveland's proposal is even more disastrous for the gas industry. It was contended by counsel for the City of Cleveland, in the reply brief before the Federal Power Commission, that rates should be fixed which would net the Hope Company only 3.64¢ per m. c. f., for some ten million-odd m. c. f. of gas to be consumed. In other words, it is thus the position of the City that gas should be delivered to Ohio consumers at less than one-fourth of its actual value in West Virginia. Surely the very nature of this proposal indicates the background of the decision by the Federal Power Commission.¹⁹

2. The State of West Virginia Must Be Assured that a Reasonable Price Will Be Fixed for the Interstate Gas Traffic, in Order that the Values of Other Competing Natural Fuels Produced Within the State May Be Properly Safeguarded.

An equally important consideration here concerns the competition of natural gas in the open market with coal,

¹⁹The proposal of the City of Cleveland in this regard has been set forth in detail in Appendix II to this Brief.

oil and other fuels. Of course, natural gas does not enjoy a monopoly like electricity or water, for which there are no practicable substitutes. But consumer-demand for gas is substantially voluntary; if the price be too high, consumers can, and do, shift to other forms of fuel. Indeed, such a change from gas to coal was actually recommended by the Commission's engineer, (R. pp. 4439-4444), for the Hastings Compressor Station of the Hope Company. Yet the converse is also true. If natural gas be materially cheapened, consumers will turn to that fuel in preference to coal or oil. In consequence, an arbitrary and unfair undervaluation of natural gas will have the effect in West Virginia, in the long run, of depreciating further the price of West Virginia coal and oil. If there were no other reason to be furnished here, the very circumstance that West Virginia's competing fuel industries would be injured by such confiscatory administrative action as to its natural gas might amply justify the State in intervening on behalf of its citizens. (See, as to the nature of the competition between natural gas and the coal industry, Brief on Behalf of Legislation Imposing an Excise Tax on Natural Gas. (1934), submitted to the Division of Economic Research and Planning of NRA, by the National Coal Association and the United Mine Workers of America).

3. The State of West Virginia May Insist that the Prices Now Fixed for Natural Gas Will Protect and Conserve the Supply of Its Various Constituent Hydrocarbons for Future Demands of the Chemical Industry.

Finally, there is one further factor to be borne in mind. The exhibits in this case show that West Virginia natural gas is composed of butane, ethane, pentane, propane and many extremely valuable lighter hydrocarbons. For ex-

ample, a very considerable proportion of butane is yielded from these natural gas deposits, which becomes of great importance in the production of butadiene for synthetic rubber purposes. In some respects, indeed, West Virginia gas is unique in its chemical composition, because so many of these relatively scarce hydrocarbons are present. It is not unreasonable to infer from this very situation that an expansion of the chemical industry will produce a vastly-increased demand for the refining of natural gas. Were that eventuality to come about in the face of a diminishing gas supply in West Virginia, it is reasonably possible that the use of natural gas for fuel purposes might be deliberately discouraged. That is to say, West Virginia gas would be far too valuable to be utilized merely for ordinary fuel-consumption purposes. Neither the present leasehold valuations nor the consequent wellmouth prices even take into consideration the existence of so important a factor. (See Price and Headlee, Geochemistry of Natural Gas in Appalachian Province, [1924] 26 Bulletin of American Association of Petroleum Geologists 19).20

²⁰If the principles applied by the Commission in this case are upheld, then West Virginia must abandon all hope of that bright economic future whose dawn is just now disclosed by the rising sun of technological research. What shall it profit West Virginia that silk stockings can be made from gas, that alcohol obtained from gas makes rubber, that American soldiers ride the skies in parachutes made from gas, that in gas are found those hydrocarbons whose atoms can be rearranged by men of science into products as yet unknown to commerce? From all these and the wealth they promise, West Virginia must resolutely turn away, for the wealth the State might otherwise expect must henceforth and forevermore be restricted to a mere nonconfiscatory return upon the original cost of the facilities used to produce the gas. Raigorodsky and Dotterweich, War Products from Natural Gas and Natural Gasoline, (1943), 14 PETROLEUM ENGINEER, 198, 203: "Constant vigilance on the part of the petroleum industry relative to the great potential possibilities of natural gas and natural gasoline will not only materially aid in the production of war products required by our armed forces but will place this industry in a most advantageous position to convert to the production of the immense quantities of synthetic consumer goods that will most assuredly come with the return to peace."

D. THE STATE MAY IN THIS LITIGATION REPRESENT THE INTERESTS OF WEST VIRGINIA LESSORS OF NAT-URAL GAS.

In has already been indicated that natural gas is developed in West Virginia through a long-established method of leasing, by which the operator develops the land-owner's gas on a royalty basis. That owner retains his rent-receiving reversion, along with his legal right to cancel the outstanding lease in the event of abandonment or forfeiture; and the lessor's reversion is thus a valuable and well-defined property interest. However, the Federal Power Commission has utterly ignored the existing legal position as regards the West Virginia lessor. In effect, the Commission has insisted upon treating the Hope Company as though this operator were the sole owner in fee simple of all natural gas deposits involved in this litigation.

This Court will take judicial notice of the commonlyrecognized fact that West Virginia is not an agricultural state, nor one which is suited for ordinary farming purposes. Its resources are largely those of mineral wealth, so that reasonable development of the State's coal, oil and gas has been the basis of its economy. In this connection, it might be said, ownership of fugacious minerals in fee simple has been for decades a rule of property law in West Virginia, (Williamson v. Jones, 39 W. Va. 231, 10 S. E. 436, [1894]; Wilson v. Youst, 43 W. Va. 826, 28 S. E. 781, [1897]; and Preston v. Young, 57 W. Va. 278, 50 S. E. 236, [1905]). Complete legal protection has always been given to the reversioner's interest, in the judicial treatment of the oil and gas leasehold. Now, for the first time, it is proposed to do away with such a fundamental doctrine of West Virginia

legal theory, and to regard the operator as the sole spokesman for the fee ownership of natural gas.

In two respects, at least, the result is fraught with serious consequences. On the one hand, no attention has been paid to the lessor's rent-receiving reversion, whether this be fixed on a gas-well rental basis or whether a oneeighth gas royalty has been stipulated. The Federal Power Commission may assert that the inclusion of rentals and royalties in operating expenses amply protects the lessor; and perhaps that would be true, were all the lessor's revenues actually contractual gas-well rentals. However, most modern West Virginia leases are now executed on a one-eighth gas-royalty basis, so that the well-mouth price of gas becomes the standard of the reversioner's compensation. It is once more arguing in a circle to assume that operating expenses can determine the amount of the farmer's income from the gas well, when the ultimate question is the precise price of gas, which is to determine his one-eighth royalty. On the other hand, apart from the gas-well rental and gas royalty issue under the Natural Gas Act, no interstate producer can abandon either facilities or service without the Commission's approval, (15 U. S. C. 717f[b]); so the rule of *Pennsylvania* v. West Virginia has now become statutory law. Lessors have accordingly devoted their gas rights to an interstate public use. It would seem that the farmer cannot in the future withdraw his gas from the established current of interstate gas traf-In short, the gas-owner's reversion has become public-utility property.

Even though a lessor has these vital interests in his rents and in the future of his reversion, the Federal Power Commission is unwilling to recognize that ownership. The State of West Virginia may thus insist that no regulation of a local gas industry can be complete, unless the rights of the reversioner have been taken into full account. So long as the West Virginia farmer's best crop comes from the gas well on his land, the Commission must take that property interest into consideration in the working out of the State's future economy.

E. THE STATE HAS A PROPRIETARY INTEREST IN LEASE-HOLD VALUATION, AS OWNER OF GAS DEPOSITS UNDER PUBLIC LANDS.

According to the Constitution of West Virginia, (Constitution, Article XIII, Section 3), the State is owner of all waste and unappropriated lands. Among such unappropriated land is the bed of the Ohio River, which is held directly as the property of the State of West Virginia; and valuable mineral interests are known to underlie this river-bed. Moreover, the Public Land Corporation of West Virginia,—a governmental corporation,—has now been vested with the title of the State in other public lands, such as forfeited and unredeemed tax-delinquent properties, (West Virginia Revised Code, Chapter 37, Article 2A). Thus, West Virginia must be regarded as owner in fee simple of much land scattered throughout the State.

As land-owner, the State of West Virginia has a direct property interest in the protection of its gas deposits. It may, therefore, insist upon their proper valuation, and upon the orderly marketing of all underlying gas deposits. Unless the State now intervenes to protect its own natural gas, the administrative methods of valuation and marketing may be finally adjudged in the present proceeding. Accordingly, it is submitted that a reasonably fair valuation of leaseholds should be established, so as to create adequate markets in the future for all State-owned gas resources.

The Federal Power Commission Has Disregarded the Specific Intent of Congress That the Provisions of the Natural Gas Act Shall Not Apply to Production Properties.

In this case, the Commission has applied the provisions of the Natural Gas Act to the business of producing and gathering natural gas, contrary to the express language of Sec. 1 (b) of the Act, reading:

"The provisions of this Act * * * shall not apply * * * to the production or gathering of natural gas."

The rate ordered by the Commission is calculated by adding together two principal components, i. e., (1) an allowance for the expense of interstate transportation, plus a return upon properties devoted to transportation, and (2) an allowance for the expense of production, plus a return upon properties devoted to production. The amounts included in the rate base and in expense are separately determined for transportation and for production in the Commission's opinion. In determination of the rate base, Hope's properties are separated into three general classes which are given the following designations by the Commission:

Natural Gas Production Plant Transmission Plant General Plant

The Commission's opinion shows that it applied the provisions of the Act to all phases of the natural gas industry, beginning at the bottom of the well and continuing to the end of the transmission system.

The Commission investigated the original cost of drilling each hole and of the casing, tubing and other equip-

ment of each well. The same investigation was made of gathering lines. It likewise investigated the original cost of the leaseholds owned by Hope, and made a determination as between operated and unoperated acreage. From these investigations the Commission ascertained what it finds to be the original cost of the natural gas production plant and the amount of depreciation and depletion accrued therein to date. It also determined that part of the cost of certain of Hope's wells should be deducted from the total because such cost had been charged to operating expenses in previous years. Thus, the cost-finding and accounting provisions of the Act were applied to Hope's production and gathering properties. Having made these determinations, the Commission thereupon proceeded to apply the rate-making provisions of the Act to production and gathering properties. It added the cost of production properties to the cost of transmission properties and used the aggregate cost of all properties as the basic amount from which the ratebase was determined.

During the more than forty years of its existence, Hope has taken leases on more than 4,100,000 acres of land in West Virginia; leases on 3,150,000 acres have been cancelled; constant turnover and shifting of leases are involved, new leases being taken, and leases being cancelled and renewed and cancelled again, as discovereies are made. (Hope Exhibit No. 23, Methods of Gas Exploration and Development in West Virginia). The connection between such activities and the interstate transportation and sale of gas is remote. But their connection with the production of gas is immediate and direct. The Commission further extended the Act to regulation of the amount to be expended for future exploration and development, and of the amount to be included in expense for the cost of abandoning wells. The provisions of the

Act were thus applied to lands, leases, leaseholds and wells and will regulate the value of natural gas, not only at the well mouth before it enters interstate commerce, but while the gas is still in the ground, and the value of gas lands and gas leases. The effect of this regulation upon the resources of the state and counties and the properties of private landowners has been discussed elsewhere in this Brief.

Natural gas as an article of commerce is purchased and sold in an "open market" in which "fair market value" exists. The West Virginia Supreme Court has held that in establishing intrastate rates for natural gas, the utility will be charged with the fair market value of gas sold for out-of-state delivery to affiliated companies. (Charleston v. Public Service Commission, 95 W. Va. 91 [1923]; points 6 and 8 of official syllabi by Court.) In that case the contract price to the parent companies was less than fair market value. Under the Commission's order in the present case, the price Hope may charge for gas sold to its affiliates is fixed by regulation at less than market value. We concede that a fair return to their common stockholders upon the combined values of Hope's property and the property of its affiliates will satisfy constitutional demands. But the Commission's order, by disregarding the market value of gas, has appropriated to Hope's interstate customers an undue proportion of the total income of all affiliated companies; and in any future intrastate rate regulation by West Virginia, the market value of gas delivered to affiliates can no longer be included in total income, and only the value as fixed by the Commission may be so included. The West Virginia Court will apparently be compelled to change its rate-making principles.

Production of natural gas—the reduction of it to possession by wells bored from the surface—is a local or

state activity, subject to regulation by the state. (Ohio Oil Co. v. Indiana, 177 U. S. 190, 44 L. Ed. 729 [1900]). The state's rights to control and regulate oil wells were recently affirmed. (Champlin Refining Co. v. Corporation Commission, 286 U. S. 210, 76 L. Ed. 1062 [1932]; Railroad Commission v. Rowan & Nichols Oil Co., 310 U. S. 573, 84 L. Ed. 1368 [1940]).

The local or interstate character of the business of producing gas, as it is conducted by Hope and now subjected by the Commission to the provisions of the Natural Gas Act, was adjudicated by the Supreme Court of West Virginia in (Suttle, Adm'r. v. Hope Natural Gas Company, 82 W. Va. 729 [1918]). Erecting a derrick to be used in cleaning one of Hope's gas wells to accelerate its production was the activity involved. West Virginia's Court said:

* * *

"Hence it becomes necessary to consider whether the work which the deceased was doing was clearly separable and distinguishable from interstate commerce. Until reduced to possession by confinement, natural gas, it is said, though somewhat inaccurately, partakes of the nature of ferae naturae. It is not the subject of ownership till brought to the surface and confined, and of course cannot become the subject of interstate commerce till its ownership becomes complete by confinement in the ordinary, indeed the only competent, mode of transportation, pipe line conduits. The well reaches down to the gas bearing strata and releases the gas there confined, but until it reaches the surface and enters the pipe for transmission to the interstate trunk lines, it is not in interstate The production department of the commerce. gas industry is clearly separable from the transporting or marketing branch. All work in connection with the production of gas, that is, with bringing it to the surface where it may be confined and reduced to possession, is local in nature and clearly separable and distinguishable from the marketing or interstate portion of the industry."

* * *

It will not be presumed that Congress intended to confer any jurisdiction over such local or state activity to the Federal Power Commission, (Federal Trade Commission v. Bunte Brothers, 312 U. S. 349, 85 L. Ed. 881 [1941]). In (Kirchbaum v. Walling, 316 U. S. 517 [1942]), this Court said:

"To a considerable extent the task is one of accommodation as between assertions of new federal authority and historic functions of the individual states. The expansion of our industrial economy has inevitably been reflected in the extension of federal authority over economic enterprise and its absorption of authority previously possessed by the States. Federal legislation of this character cannot therefore be construed without regard to the implications of our dual system of government.

"We cannot, therefore, indulge in loose assumption that when Congress adopts a new scheme for federal industrial regulation, it thereby deals with all situations falling within the general mischief which gave rise to the legislation. Such an assumption might be valid where remedy of the mischief is the concern of only a single unitary government. It cannot be accepted where the practicalities of federalism—or, more precisely, the underlying assumptions of our dual form of government and the consequent presuppositions of legislative draftsmanship which are expressive

of our history and habits—cut across what might otherwise be the implied range of the legislation. Congress may choose, as it has chosen frequently in the past, to regulate only part of what it constitutionally can regulate, leaving to the States activities which, if isolated, are only local.

"** * The history of congressional legislation regulating not only interstate commerce as such but also activities intertwined with it, justifies the generalization that, when the federal government takes over such local radiations in the vast network of our national economic enterprise and thereby radically readjusts the balance of state and national authority, those charged with the duty of legislating are reasonably explicit and do not entrust its attainment to that restrospective expansion of meaning which properly deserves the stigma of judicial legislation. * * * * "

It may be argued that authority to so apply the provisions of the Act to the business of producing natural gas may be drawn from other sections of the Act. Section 5 (b), for instance, gives the Commission authority to investigate and determine the cost of the production of natural gas by a natural gas company in cases where it has no authority to establish rates. Section 6 (a) gives the Commission authority to investigate and ascertain the actual legitimate cost of the property of every natural gas company. Section 9 (a) gives the Commission authority to determine rates of depreciation and amortization of production property. Section 10 (a) enables the Commission to require filing of reports including cost of facilities and of maintenance and operation of facilities for production of gas. Section 14 (b) permits the Commission to determine the adequacy or inadequacy of reserves. In only one of these sections did Congress use language implying that the result of any such determinations might be reflected in the establishment of a rate. This provision is contained in Section 14 (b) where the Commission is authorized to determine the propriety and reasonableness of including delay rentals, or other forms of rental or compensation for unoperated lands and leases, in operating expenses, capital or surplus.

To hold that these other sections give the Commission authority to apply its rate making principles to the production of gas, beginning with lands and leases both operated and unoperated and continuing from the bottom of the well to the end of the transmission system, makes the latter sections override Section 1 (b) and completely destroy it. No part of the natural gas industry related to interstate transportation and sale, to which the negative language of Section 1 (b) can apply, would remain.

In acertaining the scope of this legislation and in thus applying the provisions of the Act to production properties and that part of the gas business devoted to production of gas, the Commission had no regard whatsoever for a proper adjustment of local and national interests in our federal scheme. (Federal Trade Commission v. Bunte Brothers, 312 U. S. 349, 85 L. Ed. 881 [1941]). On the contrary, it wholly ignored the interests local to West Virginia and with an eye single to interests local to Ohio and Pennsylvania, applied the Act to every phase of the gas business and drastically reduced the values of gas and gas producing lands in West Virginia.

The manner in which the Commission has applied the Act to the local activity of producing gas, and its inescapable regulation of local economy, are perilously close to an invasion of the sovereignty or quasi-sovereignty of West Virginia, and of a field of autonomy preserved against federal encroachment by the Tenth Amendment, (Hopkins Federal Savings & Loan Assn. v. Cleary, 296 U. S. 315, 80 L. Ed. 251 [1935]).

Moreover, Hope Construction & Refining Company operates some natural gas wells and about one thousand (1000) oil wells producing casinghead gas (R. 4252). Its gas from dry gas wells and its casinghead gas from oil wells is sold to Hope and becomes an integral part of the gas from which gasoline and butane are extracted and of the mass of gas delivered to consumers by Hope. The recommended method of handling the income of Hope Construction & Refining Company will be fatal to the gasoline extraction business and to experimental research in West Virginia, or at least to that part of the business conducted by affiliates of the natural gas companies.

III

The Proper Adjustment of Local and National Interests Necessitates Modification of the Federal Power Commission Order.

If we were unable to suggest formulas upon which rates for interstate transportation and sale of gas might be established other than the formula followed by the Commission, considerable force might be lent to the Commission's construction of the Act. However, at least one other way was suggested to the West Virginia Public Service Commission in 1926 by a Federal Court. That was the case of (United Fuel Gas Company v. Public Service Commission, 14 Fed. [2d] 209, affirmed 278 U.S. 322 [1929]), involving, among others, the vexatious problem of the value to be given natural gas reserves—that and other problems, the Court said, were difficult or impossible to solve. The solution suggested was (1) that the value of the utility's tangible property be ascertained with an allowance for working capital and going concern value, which would represent all upon which a return should be earned and depreciation and amortization allowed, and (2) that the fair market value of gas delivered to customers be added to the outlay for operating expenses and taxes in determining whether the rate was sufficient to cover a return and an allowance for depreciation and amortization. That the suggestion was dictum may be admitted, but the decision was by a three-judge statutory court.

In its brief and argument before the Commission, West Virginia urged that there must be separate determination of the value of gas at the well mouth based upon the going market value in the field where the gas is produced; that such amount having been determined the interstate rate might be established by adding thereto the allowance for operating expenses, depreciation, taxes and return on the transportation system. This is consistent with Hope Natural Gas Company v. Hall, (102 W. Va. 272, affirmed 274 U. S. 284 [1927]), approving ascertainment of the value or worth of gas in West Virginia for tax purposes. Of course, we do not mean to imply that these are the only formulas that can be devised for applying the Act with proper adjustment of local and national interests.

Natural gas, as a fuel or as the raw material for commercial products, is marketed in competition with coal and oil. (see *Appalachian Coals, Inc.* v. U. S., 288 U. S. 344, 361-362 [1933]). Its worth for either use is relative and is controlled by comparison of its values with the values contained in coal and oil. The competitive relationship between gas and coal as fuel is dramatically illustrated in this case by the recommendation of the Commission's gas engineer that during periods of peak demand for gas the power requirements of Hope's system be obtained by using coal instead of gas as fuel, (Record, pp. 4439-4444). Nor does all natural gas have the same worth. Its content of methane, ethane and nitro-

gen, and its heating value vary as between fields and as between wells. From the standpoint of the owner of a supply of natural gas, its proximity to markets is an economic advantage over more distant fields. All of these considerations affect value. None of them have been given any consideration by the Commission.

Ascertaining the going-market price of gas at the well mouth is difficult but not impossible. For fifty years business men in West Virginia have done it, and billions of feet of gas have changed hands on their judgments as to its price, thousands of leases have been purchased and sold, well drilling operations have been started or stopped, pipe lines built and capital investments made. Any regulatory commission can make the determination if it will accept the same evidence that ordinary reasonable men accept. The difficulty has been to produce evidence which a regulatory Commission could not constitutionally ig-The Commission partially investigated it in the present case. Its staff prepared and filed an exhibit entitled "Analysis of Natural Gas Purchased and Prices Paid by Utilities in West Virginia." (Exhibit No. 49.) In this exhibit the staff analyzed all purchases made in West Virginia by the twelve largest utilities during the three years 1937, 1938 and 1939. Tables III, IV and V filed with this exhibit show that such utilities paid thirteen cents or more per m. c. f. for approximately sixty per centum of their gas. The exhibit shows, and we freely concede, that conditions of delivery vary widely and the price named in one purchase contract may not be comparable with the price named in other contracts. adjustments may be made to correct such variations and the exhibit contains this statement: "The prices presented here are representative of West Virginia natural gas prices because they include more than 90% of such purchases." (Page 2 of Exhibit.)

In the three years covered by this exhibit, the gas purchases by the twelve utilities was roughly seventy per centum of the State's total production.

Ascertainment of the prices paid for the gas not purchased by the twelve utilities, including unregulated sales to industrial plants, presents no insuperable problem. Analysis of all sales, regulated as well as unregulated, with proper adjustments for sales between affiliates that are not arm length sales and other adjustments, would disclose the well mouth market price or market value of West Virginia gas. A rate based thereon would reflect the value of gas as a fuel and as the raw material for products of commerce, and the effects thereon of competition and the myriad factors that make market prices. Of a value thus determined, West Virginia cannot and would not complain.

All of Hope's properties, transportation properties as well as production properties, lie, and all of its business is done, within the borders of West Virginia. Assessment of such properties for taxation in order that they may bear their full share of the burden of State and local government is in consequence a matter of extreme importance to the State. If, through the action of the Federal Power Commission, any property has been eliminated from the assets of the company, assessed values will immediately be affected.

Of course, there could be no physical elimination of any property from assets. Such elimination would be accomplished, however, by a method of rate regulation, which, when principles of assessment for taxation were applied to the result, would necessarily require omission of property from the tax base.

Properties of natural gas companies in West Virginia are assessed by the Board of Public Works at their true

and actual value, (Code of West Virginia, Chap. 11, Art. 6, Sec. 11). Value is an economic fact. For public utilities it is to some extent a result of rates; and the amount of value which will result from a given rate base can in part be estimated. (Dorety, The Function of Reproduction Cost, 37 Harvard Law Review, 173 at 189.) The principles governing the ascertainment of value for the purpose of taxation are the same as those that control in condemnation cases, confiscation cases, and generally in controversies involving the ascertainment of just compensation. (See Great Northern Railway Company v. Weeks, 297 U. S. 135, 80 Law. Ed. 532 [1935]).

When West Virginia comes to apply the principles which govern the ascertainment of the value of Hope's property for taxation, it cannot ignore the impact upon earnings resulting from the Commission's regulation of Hope's rates. If any property has been omitted from the rate base so that no earnings can accrue thereon, West Virginia cannot continue to retain the value of such property in the tax base. This is not required by any provisions of constitutions or statutes. It is rather because reason and experience have taught that sterile property, property which has lost the power to produce profit, ultimately becomes worthless in the commercial world, and things which become worthless in the commercial world sooner or later cease to be the subjects of taxation. Furthermore, the omission of this item of property from the rate base necessarily reduces the gross proceeds derived from the sale of gas upon which West Virginia levies a tax for the privilege of engaging in the business of producing gas, (Code of West Virginia, Chap. 11, Art. 13).

Going concern value was wholly omitted from the rate base on which the commission permitted Hope to earn a return. The rate base is frankly and openly restricted to actual depreciated cost. Going concern value need not be separately stated if it is otherwise included in the rate base, but when original cost alone is used, it cannot be claimed that going concern value was included.

To a considerable extent, the Commission determined Hope's rate of return upon considerations indicating recognition of elements of going concern value. The company's efficient management, it said, and its established markets, its available supply of gas, its financial record, its affiliations and prospective business placed it in a strong position to attract capital upon favorable terms when it is required. Hope, says the Commission, is a seasoned enterprise whose risks have been minimized. These are the reasons given for prescribing a rate of return of 6½%. They were equally cogent reasons for appraising the physical assets as an assembled whole rather than at their mere original cost.

As indicated elsewhere in this Brief, this is not merely a contest between the utility concerned and consumers in Ohio and Pennsylvania. The contest involves the welfare of West Virginia and its citizens. West Virginia asserts that it was unjust to its welfare to omit from the basic value base, from which both rates and taxes must hereafter be computed, an item of property so long considered legitimate by State and Federal Courts and regulatory commissions, and that no rate thus determined is just and reasonable as required by the Natural Gas Act.

CONCLUSION

From the foregoing discussion in the present Brief as Amicus Curiae, the order of the Federal Power Commission has been shown to be arbitrary and confiscatory, to the extent that the Commission has wholly refused to view the effect of its drastic rulings upon the economy and well-being of the producing state, considering only the interests of out-of-state consumers. The State of West Virginia urges, therefore, that the judgment of the Circuit Court of Appeals be affirmed, and that these proceedings be returned to the Commission with appropriate directions from this Court that the Natural Gas Act be administered according to the federal nature of the Constitution.

Respectfully submitted,

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October 19, 1943.

APPENDIX I
Statement Showing That Commission's Order Establishes Well-Mouth Value of Gas at Not
Exceeding \$.1216 Per M. C. F.

	Operating Expenses, (including Adjusting return) Increased Adjusted Payroll for Future Allowance (1) (2)	Adjusted Operating Expenses (including returns) as Adjusted for Future (3)	Distribution of Adjusted Operating Expenses for Future Production					
Operating Expenses as Adjusted for Future (FPC Opinion No. 76, p. 54 and 55)			Wells (4)	Other (5)	Total (6)	Gas Purchased (7)	Trans- mission (8)	
Interstate Operating Expenses:	-,-							
Natural Gas Production	1,430,102	(114,078)	1,316,024	1,354,011	(37,987)	1,316,024		
Exploration & Development Costs	600,000	0.050	600,000	600,000		600,000	0.540.405	
Gas Purchased Transmission Expenses		8,656 93,857	8,542,435 1,912,192				8,542,435	1,912,192
Administrative & General Expenses Depletion	1,137,094 624,440	11,565	1,148,659 $624,440$	298,159 624,440	225,570	523,729 624,440	42,281	582,649
Depreciation	835,597		835,597 5,996	6,681 5,996	353,417	360,098 5,996		475,499
Taxes—State & Misc. Fed.—Federal Income Tax	1,211,012		1,211,012 76,579	414,537 9,978	$234,935 \\ 2,937$	$\substack{649,472\\12,915}$	25,374	561,540 38,290
Total Interstate Other Gas Revenues			16,272,934 (83,275)	3,313,802 (8,280)	778,872	4,092,674 (8,280)	8,610,090	3,570,170 (74,995)
Allocation of Costs to Local W. Va. Sales Return at 6½% on Inter-	(2,694,075)		(2,694,075)	(548,783)	(267,522)	(816,305)	(1,230,653)	(647,117)
state Rate Base of 33,712,526	2,191,314		2,191,314	502,195	456,579	958,774		1,232,540
Operating Revenues— Interstate Sales	15,686,898		15,686,898	3,258,934	967,929	4,226,863	7,379,437	4,080,598

APPENDIX II

Reply Brief of City of Cleveland Before the Federal Power Commission

(September 30, 1941)

Table 12, Page 104

DIRECT COSTS OF PRODUCTION OF GAS (EXCLUSIVE OF RETURN) AND INCREMENT OF DIRECT COSTS

YEAR 1940 OVER 1939

Direct Expenses of Producing Gas, Excl. of Depreciation and Depletion (Ex. 67, pp. 17, 39; Ex. 78, pp. 17, 23)	Ex. 67 1939	Exhibit 78 1940	Increment Costs—1940 over 1939
734.1 Gas Well Labor. \$ 735.1 Gas Well Supplies and Ex-	330,338.52	\$ 347,147.21	
penses	130,999.56	164,662.01	
741 Maint. of Prod. Gas Well Equip 745 Gas Well Royal-	53,457.92	83,242.02	
ties	828,851.62	885,841.27	
Total Direct Gas Well Expenses 1	1,343,647.62	1,480,892.51	
Gross Production Tax	144,633.15	221,908.58	
Total, Incl. Production Tax	1,448,280.77	1,702,801.09	
Depreciation and Depletion (Ex. 78, p. 54)			
Operated Acreage\$ Gas Well Construction Cost of Abandoning			
Total Depletion Depreciation of Gas Well Equipment (Ex.	289,341.48	449,436.00	
61, p. 21; 78, p. 26)	188,482.85	186,702.97	
Total Depreciation and Depletion\$	477,824.33	\$ 636,138.97	
Volume of Gas Produced—M. c. f. (Ex. 78, p. 54)	16,546,230	26,800,000	10,253.770

	Ex. 67 1939	Exhibit 78 1 94 0	Increment Costs—1940 over 1939
Direct Expenses per M.c.f. Produced	-555		0.01.1000
734.1 Gas Well Labor 735.1 Gas Well Sup- plies and Ex-	2.00¢	1.29¢	
penses 741 Maint, of Prod.	.79	.61	
Gas Well Equip. 745 Gas Well Royal-	.32	.31	
ties	5.01	3.31	
Total Direct Gas Well Expenses	8.12	5.52	
Gross Production Tax	.87	.83	
Total, incl. Production Tax	8.99¢	6.35¢	
Depreciation and Depletion Per M. c. f. Produced:			
Depletion Depreciation of Gas	1.75¢	1.68¢	
Well Equipment	1.14	.70	
Total Depreciation and Depletion	2.89¢	2.38¢	
Total Direct Costs of Pro- ducing Gas, Incl. Depre- ciation and Depletion:			
Amount \$. Per M. c. f. Produced	1,966,105.10 11.88¢	\$ 2,338,940.06 8.73¢	

N. B. It has been the contention of the City of Cleveland, as set forth above, that something over ten million cubic feet of natural gas should be sold by the Hope Company at a unit price of 3.64¢ per M. C. F.