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GENERAL ACCOUNTING OFFICE WASHINGTON DC ENERGY AND M--ETC F/G 21/4
FERC SHOULD IMPROVE THE NATURAL GAS WELL DETERMINATION PROCESS. (U)

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REPORT BY THE U.S.

General Accounting Office

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FERC Should Improve The Natural Gas Well Determination Process .

The Natural Gas Policy Act of 1978 established different maximum lawful price ceilings for eight categories of natural gas covering every natural gas producing well in the U.S. To qualify, producers must apply to the appropriate Federal or State jurisdictional agency for a well determination. The determinations made by these agencies are forwarded to the Federal Energy Regulatory Commission and are subject to review for substantial evidence.

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Although the well determination process is working well for the most part, the lack of agency verification procedures and the failure of FERC auditors to verify supporting evidence against producer records during field audits has weakened the effectiveness of the well determination process.

Furthermore, FERC's policy of reviewing, in-house, all determinations for required supporting evidence virtually duplicates a portion of the agencies' review procedures at a personnel cost of about \$368,000 a year.

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UNITED STATES GENERAL ACCOUNTING OFFICE
 WASHINGTON, D.C. 20548

ENERGY AND MINERALS
 DIVISION

B-203111

The Honorable C. M. Butler III
 Chairman, Federal Energy
 Regulatory Commission

Dear Mr. Chairman:

This report discusses the Commission's natural gas well determination process and suggests ways it can be more effective at less cost to the Government.

The review was performed as part of our basic legislative responsibilities because we wanted to establish the adequacy and reliability of the well determination process at the Commission and at the jurisdictional agencies. We discussed the report with Commission officials and have incorporated their comments.

This report contains recommendations to you on page 18. As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Governmental Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Director, Office of Management and Budget; the Chairman, House Committee on Government Operations, Senate Committee on Governmental Affairs, the House and Senate Committees on Appropriations; and the Secretary, Department of Energy.

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Sincerely yours,

J. Dexter Peach
 J. Dexter Peach
 Director

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D I G E S T

The Natural Gas Policy Act of 1978 established a series of maximum lawful prices for various categories of natural gas. These prices were intended by the Congress to provide producers with an incentive to locate and develop new sources of natural gas and to continue production from marginal wells. The ceiling prices vary by category and escalate each month based on the annual inflation adjustment. To establish entitlement for ceiling prices under any of the incentive price categories, producers/operators must apply for a well category determination. The act authorizes a Federal or State agency having regulatory jurisdiction over the production of natural gas to determine whether wells qualify under the defined requirements. In 1980, there were 2 Federal and 37 State jurisdictional agencies (agencies) making well determinations. (See pp. 1-3.)

Well determinations are made on the basis of documentation evidencing that a well meets the qualification requirements defined in the law and in FERC regulations. Minimum documentation is prescribed by FERC and can be supplemented by the jurisdictional agencies to cover local conditions. Such documentation must be submitted by producers when applying for one of the authorized pricing categories.

Also, well determinations made by these agencies are subject to review by FERC for substantial evidence. Determinations reversed by FERC can be appealed to the courts.

AGENCIES LACK MINIMUM
VERIFICATION PROCEDURES

Although FERC has established procedures for its use in testing the accuracy of information used in making well determinations, the jurisdictional agencies GAO reviewed generally have not. These agencies' practices were weak, to varying degrees, in the verification of spud dates (the date surface drilling began), well sites, well completion locations, and well production. When information available in agency

records was sufficient, some agencies were verifying the data and others were not. For example, production data is needed to establish stripper well eligibility for Section 108 determinations. GAO found that in determining stripper well eligibility only four of the eight agencies it reviewed routinely verified the supporting production data against available State records or other reports. (See pp. 6 and 8.)

Similarly, the Natural Gas Policy Act specifies that a well must be spudded on or after February 19, 1977, to qualify for certain new natural gas prices under Section 102; new, onshore production well prices under Section 103; or deep high-cost natural gas prices under Section 107. Seven of the eight agencies GAO reviewed, however, did not have procedures for authenticating the well completion reports submitted by the applicant with the official documents in the State or Federal files although FERC's audit program calls for it to follow such a procedure. (See pp. 6 and 7.)

NEED FOR AUDIT OF PRODUCER RECORDS

FERC field auditors did not review producer records when necessary to verify the accuracy of supporting evidence and resolve questions of eligibility. The number of unresolved cases could represent as many as 2670 determinations made by the jurisdictional agencies we reviewed.

FERC desk audits all determinations received from the agencies to establish whether the supporting evidence is sufficient to demonstrate eligibility. A sample is then selected for field audit at the agencies to verify whether the supporting evidence is accurate and reliable. FERC records show that of the about 1900 determinations field audited at the eight jurisdictional agencies GAO reviewed, eligibility was established for all but 94. Although FERC officials said the adequacy of most of these 94 determinations could be resolved only by visiting the pertinent producers and reviewing their records and operations, such visits were not made. (See p. 9.)

If the sample review of about 1900 cases are representative of the 54,500 determinations FERC reviewed from November 1978 through June 1980, from the eight agencies GAO reviewed, then the adequacy

of about 2670 determinations may depend on the outcome of these unresolved cases. (See p. 10.)

FERC CAN MONITOR
THE DETERMINATION PROCESS
MORE EFFICIENTLY

FERC's general policy is to review for sufficiency of evidence all determinations of eligibility for incentive prices provided in the Natural Gas Policy Act. This review, or desk audit, virtually duplicates a portion of the work performed by the jurisdictional agencies and costs an estimated \$368,000 a year. (See p. 11.)

Both the agencies and FERC check to see whether all required substantiating evidence was submitted with the applications and whether such evidence demonstrates compliance with the eligibility requirements. (See p. 12.)

FERC's general policy of desk auditing all determinations may have been advisable for a period following passage of the act to assure that the jurisdictional agencies learned what was required. However, GAO believes at this time that FERC could adequately discharge its responsibility for monitoring all agencies' determinations by limiting its review to a statistical sample. Results of FERC desk audits and GAO's examination demonstrate the determination process is adequate to ensure agency determinations are supported by the evidence required to substantiate eligibility. (See p. 11.)

FERC's desk audits show that only a relatively small number of determinations were not adequately substantiated during the first 18 months of the act's implementation, and that the determination process has improved since then. Of the 64,500 determinations desk audited between November 1978 and June 30, 1980, FERC affirmed 98 percent of them. In addition, FERC affirmed about 99.1 percent of those audited between July 1980 and May 31, 1981. (See p. 13.)

GAO reviewed 100 determinations for the required substantiating evidence and found that the agencies' review procedures were as effective as FERC's and that the determinations made by the eight agencies GAO reviewed were adequately substantiated. (See pp. 14 and 15.)

In addition to its desk audits of all agency determinations for sufficiency of evidence, FERC field audits a sample of those determinations to verify the accuracy of evidence supporting them.

GAO believes that FERC's objective to establish whether or not agency determinations are supported by substantial evidence can be effectively accomplished by statistically sampling the determinations.

Desk auditing a sample to monitor determinations for sufficiency of evidence is consistent with FERC's policy of field auditing a sample to validate the evidence. By consolidating these audit responsibilities, and using the same sample to conduct both the desk audits and field audits, FERC can reduce its personnel requirements budgeted for the desk audits. Based on an average annual salary of about \$23,000 for FERC's professional auditors involved in the well determination process, we estimate that in 1981, it cost at least \$368,000 for the 16 FERC auditors to desk audit all the determinations for sufficiency of evidence. (See pp. 11 and 17.)

RECOMMENDATIONS

To reduce personnel requirements budgeted for monitoring jurisdictional agency determinations, GAO recommends that the Chairman of FERC discontinue desk auditing all determinations for sufficiency of evidence and direct that the NGPA Compliance Division:

- monitor the adequacy of agency procedures based on reviewing a statistically valid sample of determinations for both sufficiency and accuracy of evidence, and
- consolidate the reviews for sufficiency and accuracy of evidence in one Branch.

Furthermore, to strengthen the effectiveness of the well determination process in assuring compliance with the Natural Gas Policy Act's requirements for incentive prices, GAO recommends the Chairman of FERC encourage the jurisdictional agencies to validate supporting evidence as part of their well determination process and direct that the NGPA Compliance Division:

- provide guidance to the jurisdictional agencies for use in implementing validation procedures, and
- coordinate its overall compliance activities with the jurisdictional agencies and review producer records when they are the only source of the supporting evidence. (See pp. 18 and 19.)

C o n t e n t s

		<u>Page</u>
DIGEST		i
CHAPTER		
1	INTRODUCTION	1
	Objectives, scope, methodology	3
2	WELL DETERMINATION PROCESS NEEDS STRENGTHENING	6
	Agencies lack minimum verification procedures	6
	Need for audit of producer records	9
3	FERC CAN MONITOR THE DETERMINATION PROCESS MORE EFFICIENTLY	11
	FERC's review of all determinations is costly	11
	Desk audit of all determinations not warranted	13
	FERC can accomplish objectives more efficiently	15
4	CONCLUSIONS AND RECOMMENDATIONS	18

ABBREVIATIONS

Agency	Jurisdictional Agency
BTU	British Thermal Unit
FERC	Federal Energy Regulatory Commission
Mcf	Thousand cubic feet
MMBtu	One million British thermal units
NGPA	Natural Gas Policy Act

GLOSSARY

Spud date	the date drilling first started.
Tolled determination	an incomplete determination that suspends FERC's 45-day review period and requires letters to be sent to the subject agency and producer requesting additional information.

CHAPTER 1

INTRODUCTION

Natural gas provides over 25 percent of the U.S. energy supply. Residential, commercial and industrial consumers use about 20 trillion cubic feet of natural gas a year, principally for heating, producing consumer goods and generating electricity.

Natural gas first came under Federal regulation with the passage of the Natural Gas Act of 1938. This act declared that interstate pipeline companies were public utilities and empowered the Federal Power Commission and later its successor agency, the Federal Energy Regulatory Commission (FERC), to establish just and reasonable rates which the interstate pipelines could charge for natural gas. In 1954, the Supreme Court extended the regulation of interstate natural gas to include interstate producers. 1/

Regulation of natural gas produced, transported, and consumed within a state was left to state regulatory commissions until passage of the Natural Gas Policy Act (NGPA) of 1978. In the early 1970's the price received by producers in the relatively unregulated intrastate market began exceeding the prices received by producers in the regulated interstate market. Producers had increasing incentive to produce gas for the intrastate market rather than the interstate market. Throughout the early 1970's shortages of natural gas appeared in interstate markets while intrastate markets were saturated with excess supplies. The cold winter of 1976-1977 aggravated the shortages and made regulation of all natural gas a high priority issue of the Congress.

The NGPA replaced the dual market for natural gas with a single market by expanding Federal jurisdiction to encompass sales in both the interstate and intrastate markets. The Federal jurisdiction over natural gas producers is temporary since the NGPA provides for the phased deregulation of most natural gas prices. Title I (Wellhead Pricing) of the NGPA specified different maximum lawful price ceilings for eight NGPA created categories of natural gas, which covers every natural gas producing well in the U.S.

1/Phillips Petroleum Co. v. Wisconsin 347 U.S. 672.

NGPA Pricing Categories

<u>Section</u>	<u>Type of gas</u>
102	New natural gas
103	New, onshore production wells
104	Interstate gas
105	Intrastate gas under existing contracts
106	Rollover contracts
107	High-cost natural gas
108	Stripper well natural gas
109	Other categories of natural gas

Ceiling prices authorized for Sections 102, 103, and 107 ^{1/} were intended by the Congress to provide producers with an incentive to locate and develop new sources of natural gas and Section 108 was intended to encourage continued production from marginal wells. The ceiling prices vary by category and escalate each month based on the annual inflation adjustment factor plus a growth factor for all categories, except a growth factor does not apply to section 103. The price variations and escalator effects from the base month to June 1980 follow:

<u>Section</u>	<u>Base Month</u>	<u>Ceiling Price Per MMBTU</u> ^{2/}	
		<u>Base</u>	<u>June 1980</u>
102	4/77	\$1.75	\$2.478
103	4/77	1.75	2.238
107	4/77	1.75	— — — — ^{3/}
108	5/78	2.09	2.652

^{1/}Section 107(c)(1-4) prices were decontrolled in November 1979. Incentive pricing under section 107(c)(5) is established by FERC.

^{2/}MMBTU is one million BTUs. A BTU is a British thermal unit, or the amount of heat required to raise the temperature of 1 pound of water one degree Fahrenheit. An Mcf (one thousand cubic feet) of natural gas provides approximately 1,021,000 Btus.

^{3/}Four of the five price categories for Section 107 high-cost gas were deregulated one year after the NGPA became effective.

To establish entitlement for ceiling prices under any of these categories, producers/operators must apply for a well category determination. The NGPA authorizes a Federal or State agency having regulatory jurisdiction with respect to the production of natural gas to make determinations as to whether wells qualify under the defined requirements. State agencies make the determinations for gas wells located on non-Federal lands, Department of Interior agencies make the determinations for gas wells located on Federal lands, Indian lands, and the Outer Continental Shelf, and the Department of Energy makes determinations for the Naval Petroleum Reserves. There were 2 Federal and 37 State jurisdictional agencies (agencies) making well determinations in 1980. State agencies are not reimbursed by the Federal government for making these determinations.

Well determinations are made on the basis of documentation evidencing that a well meets the qualification requirements defined in the NGPA and in FERC regulations. Minimum documentation is prescribed by FERC and can be supplemented by the agencies to cover local conditions. Such documentation must be submitted by producers when applying for one of the authorized pricing categories. The degree of reliance that can be placed on the well determinations depends on whether (1) the supporting data is sufficient to demonstrate compliance with the qualification requirements; and (2) the supporting data is accurate.

Well determinations made by these agencies are subject to review by FERC's NGPA Compliance Division for substantial evidence. Determinations reversed by FERC can be appealed to the courts. FERC reviewed about 65,500 jurisdictional agency determinations from inception of the NGPA in November 1978, through June 30, 1980, and about 50,000 from July 1980 through May 31, 1981.

OBJECTIVES, SCOPE, AND METHODOLOGY

We made this review to ascertain whether the well determination process was working effectively and efficiently. Our objectives were to establish whether (1) the process reasonably assures that the supporting evidence used in making determinations is sufficient, accurate, and complete; and (2) the process is economical.

The review was made at FERC and at one Federal and seven State agencies out of the 39 making determinations. These eight agencies included the major gas-producing jurisdictions ^{1/} and accounted for about 84 percent of the determinations reviewed

^{1/}In 1979, these agencies accounted for about 88 percent of the natural gas produced in the U.S.

by FERC from November 1978 through June 30, 1980. We considered this adequate coverage to evaluate the well determination process. The State agencies we reviewed were Kansas, Louisiana, New Mexico, Ohio, Oklahoma, Texas, and West Virginia. We also reviewed the determination process at the U. S. Geological Survey's offices in Metairie, Louisiana and Albuquerque, New Mexico.

We established what supporting evidence was required to substantiate eligibility under each category by interviewing officials and reviewing regulations at FERC and the eight agencies and then tested determinations affirmed by FERC for such evidence. The test was made on a preliminary sample of 100 determinations selected at random from about 54,500 determinations which FERC received from the agencies we reviewed and which FERC had audited through June 30, 1980. The sample was statistically valid for projecting from it, with a 95 percent confidence level, to the universe of determinations affirmed by FERC with respect to sufficiency of evidence.

Evidence supporting determinations generally falls into four broad categories:

- Information which originates from sources independent of the producer/developer such as well logs, bottom hole pressure tests, and well capacity tests prepared by service companies under contract with the producer/developer.
- Information which is contained in official state or federal files and is normally subject to some degree of control by the State. This includes drilling permits, well completion reports, and well location maps or files which evidence drilling dates and well sites, well completion locations (depth), and initial well production capacity.
- Information which is contained in official state or federal files and is subject to some degree of control by royalty or leasehold owners. This includes production data reported to the state by purchaser/pipeline companies for tax or other purposes.
- Information which is not contained in official state or federal files and can be verified, if at all, only by producers' records. This includes well production of non-metered wells and production days reported by the producer.

We verified the accuracy of evidence supporting our sample cases against official state or federal records and files available to the jurisdictional agencies. We did not verify supporting data which originated from service companies in view of its independent nature. Also, we did not review producers' records when they were the only available source of the supporting evidence.

Economic aspects involved evaluating the need for FERC to desk audit 1/ all agency determinations for sufficiency of evidence. We reviewed FERC's records and reports concerning the results of its audits to identify the number of determinations reversed because of insufficient evidence.

1/A desk audit is the in-house review of determinations for sufficiency of evidence.

CHAPTER 2

WELL DETERMINATION PROCESS

NEEDS STRENGTHENING

The jurisdictional agencies are not uniformly verifying the accuracy of data which producers submit to support incentive prices permitted by the NGPA. Although FERC's NGPA Compliance Division's (hereafter referred to as the Division) audit procedures call for such verifications, agency practices were weak to varying degrees, in the verification of spud dates (the date surface drilling first began), well sites, well completion locations, and well production. Where information available in state records was sufficient, some agencies were verifying the data and others were not. When the data could be verified only from producer records, neither the agencies nor FERC auditors testing the practices were verifying the data.

As described in the following sections, the reliability of the well determinations depends upon the accuracy of this data.

AGENCIES LACK MINIMUM VERIFICATION PROCEDURES

Although the Division has established procedures for its use in testing the accuracy of information used in making well determinations, the agencies we reviewed generally have not. Some verify the supporting evidence against agency records, others do not. The primary types of information required to establish eligibility are:

- spud dates;
- well sites;
- well completion locations, i.e., any subsurface location from which natural gas is being or has been produced in commercial quantities; and
- well production.

The procedures required to make these verifications and our findings at the agencies visited are discussed in the following paragraphs.

Verification of Spud Dates

The NGPA specifies that a well must be spudded on or after February 19, 1977 to qualify for either new natural gas prices under Section 102; new, onshore production well prices under Section 103; or deep high-cost natural gas prices under Section 107(c)(1). Both FERC and agency regulations require the well

spud date be supported by a Well Completion Report or a similar document.

Of the eight agencies we reviewed, only Ohio had procedures for authenticating the Well Completion Reports submitted by the applicant with the official documents in the State or Federal files, although the NGPA Compliance Division's audit program calls for it to follow such a procedure.

Verification of Well Sites

Information concerning the location site of the well for which a determination is requested and for other wells in the area is essential to establish entitlement for new onshore well prices under Section 102 and for new, onshore production wells under Section 103.

A new onshore well includes any new well that is located at least 2.5 miles from the nearest marker well, i.e. one which produced commercially between January 1, 1970 and April 20, 1977. A new onshore production well is any new well that meets Federal or State spacing requirements and, when drilled, was not within a proration unit 1/ that included both the reservoir from which the new well is producing and an old well.

To demonstrate compliance, applicants are required by regulation to submit a well location plat showing the well for which a determination is sought and (1) all other marker wells within a 2.5 mile radius for Section 102 applications or (2) all other wells in the same proration unit for Section 103 applications.

The Division's audit program calls for it to verify the applicants' well location plats against official State maps, files or other records. Six of the eight agencies 2/ included in our review followed such procedures but Texas accepted the applicants' well location plats without any validation.

Verification of Well Completion Locations

A well may qualify for Section 102 prices even if there is a marker well within a 2.5 mile radius provided it is 1,000 feet deeper or in a different reservoir. Thus, in some cases, the completion location of the determination well and of each marker well is needed to establish new onshore wells under Section 102. The applicant must provide geological data to support any con-

1/A proration unit is any portion of a reservoir, as designated by the agency having regulatory jurisdiction, which will be effectively and efficiently drained by a single well.

2/One of the agencies we reviewed did not make onshore well determinations.

tention relative to a different reservoir.

The Division's audit program calls for verifying well completion locations against the official state Well Completion Reports or similar documents. Only the Ohio and Kansas agencies included in our review verified the completion location when necessary to establish eligibility under section 102.

FERC regulations specify various tests and scientific data that may be used to establish the boundaries of a reservoir. Each of the agencies required applicants to provide all or part of this data and used geologists to review it. This data is normally produced by service companies.

Verification of Well Production

Production data is needed to establish marker wells for new onshore well determinations under Section 102 and stripper well eligibility under Section 108. Natural gas qualifies for stripper prices during any month, if during the preceding 90-day production period the well produced nonassociated gas at a rate which did not exceed an average of 60 Mcf per production day at its maximum efficient rate of flow.

Producers are required to submit production data for the 90-day period, and either a well capacity test report or 12-months production data to demonstrate maximum efficient rate of flow. We found that, in identifying marker wells and determining stripper well eligibility, only four (Kansas, Louisiana, New Mexico and West Virginia) of the eight agencies we reviewed routinely verified the supporting production data against available State records or other reports.

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In our opinion, verification of supporting evidence is essential to detect the extent of inaccurate data and to discourage the submission of inaccurate data to qualify for substantially higher prices. Documents previously filed with State or Federal agencies for other purposes can frequently be used in validating the supporting evidence. Thus, well location plats submitted with applications for new onshore well category determinations can be validated against the well location files available at the agencies.

We believe FERC should disseminate verification guidelines and encourage jurisdictional agencies to validate the supporting evidence against the previously filed records/documents available to them, at least on a sample basis. This would provide uniform procedures for supplementing FERC's sample audits. FERC can then adjust its audit scope with respect to determinations made by those agencies with reliable verification procedures and concentrate its efforts on determinations from agencies lacking adequate verification procedures. In our view, this would provide a more efficient and effective method of validating supporting

evidence than the present system which lacks coordination and uniformity.

NEED FOR AUDIT OF PRODUCER
RECORDS

FERC field auditors did not review producer records when necessary to verify the accuracy of supporting evidence and to resolve questions of eligibility. The number of unresolved cases in the sample selected for review by FERC could represent as many as 2,670 determinations made by the eight agencies we reviewed.

Determinations received from the agencies are desk audited by the NGPA Compliance Division to establish whether the supporting evidence is sufficient to demonstrate eligibility. A sample is then selected for field audit at the agencies to verify whether the supporting evidence is accurate and reliable. The Division's stated policy is to verify the authenticity of the data against any and all available sources, whether State or Federal agency records, purchaser records, producer records, or contractor records. 1/ The field auditors did not, however, examine producers' records when the agencies or purchasers did not possess the supporting evidence.

From November 1978 through June 30, 1980, the Division selected for audit about 1,900 determinations from the eight agencies we reviewed. The selection included about 1,170 determinations picked at random, about 730 of which were targeted for further examination as a result of the desk audits for sufficiency of evidence.

Division records show that eligibility was established for all but 94 of about 1,900 determinations selected for field audit. Eligibility was not resolved on these cases because State and purchaser records were not adequate to verify the supporting data. For example, production from individual wells could not be established in some cases because State production records were set up on a lease basis. In other cases, production from individual wells could not be established because the majority of wells in a region were centrally metered and the purchasers' records did not show the number of wells on each meter.

Division officials said the adequacy of most of the 94 determinations could be resolved only by visiting the producers and reviewing their records and operations. After our discussions, the Division started setting up a centralized system to

1/In addition to examining agency records, Division field auditors verify production data against purchasers' records in conjunction with the Division's contract pricing audit responsibilities.

assure followup on all questionable determinations. The Division also started sending letters of inquiry to the producers, but did not visit them to verify the data because audit emphasis was still being placed on determination audits at the agencies and at the pipeline companies to assure the determination process was working.

The 94 unresolved cases represent about 4.9 percent of the total determinations selected for audit. We were unable to establish how many of these cases related to the random sample or to the targeted cases. However, if the sample review of about 1900 cases are representative of the 54,500 determinations FERC reviewed through June 30, 1980, from the eight agencies we reviewed, then the adequacy of about 2,670 determinations may depend on the outcome of these unresolved cases.

Furthermore, the NGPA provides tremendous financial incentives to qualify old wells for stripper well prices. For example, an interstate well entitled to maximum daily earnings of about \$15 for producing 70 Mcf a day can earn about \$140 daily if average production is reduced to 60 Mcf a day to qualify for stripper prices. Producer records can provide the only source of production days and volume needed to demonstrate stripper status. 1/

Therefore, we believe producers' records should be examined to determine whether the evidence supporting the unresolved cases is accurate and whether additional followup review or corrective action is needed. The review of producer records should be a continuing process and should be coordinated with the Division's contract pricing audits.

1/This is illustrated by the response to FERC's September 1980 letter order which requested that companies identify all NGPA Section 108 filings that may have been inaccurate at the time filed. Three producers reported and requested that about 864 of 2749 stripper well determinations be withdrawn because they showed a potential for error in the supporting evidence. According to FERC officials, most of those determinations were eligible.

CHAPTER 3

FERC CAN MONITOR THE DETERMINATION

PROCESS MORE EFFICIENTLY

FERC's general policy is to review for sufficiency of evidence all determinations of eligibility for incentive prices provided in the NGPA. This virtually duplicates a portion of the work performed by the jurisdictional agencies and costs an estimated \$368,000 a year. Although the NGPA authorizes FERC to conduct these reviews, we question whether each determination should be reviewed for FERC to exercise its regulatory responsibilities adequately. Although FERC's policy may have been advisable for a period following passage of the NGPA (until the jurisdictional agencies learned what was required), FERC can now adequately discharge its responsibility for monitoring all of the jurisdictional agencies' determinations by sampling them. During recent months, the results of FERC's NGPA Compliance Division's reviews have been negligible, and our tests showed that the jurisdictional agencies' determinations for sufficiency of evidence were about as reliable as FERC's. Nevertheless, FERC has planned to continue this effort.

FERC and agency regulations require that producers submit specific documentary evidence and supplemental data in support of their applications for maximum lawful prices. FERC's general policy is to desk audit all determinations for sufficiency of evidence. Field audits for validating the supporting evidence, however, are limited to a random sample of determinations received from each jurisdictional agency and to those targeted for further examination during desk audits.

FERC'S REVIEW OF ALL DETERMINATIONS IS COSTLY

FERC spends at least \$368,000 a year to desk audit determinations for substantial evidence. These audits follow essentially the same procedures the agencies follow before weighing the evidence to make determinations.

To accomplish FERC's primary objectives under its well determination authority, the NGPA Compliance Division established:

- the Jurisdictional Agency Reports Branch to desk audit determinations for substantial evidence,
- the Review and Compliance Branches to verify, by field audit, the accuracy and completeness of the supporting evidence, and
- the General Reports Branch to process refund reports and interim collection filings.

FERC's budgeted staff for fiscal years 1981 and 1982 includes 16 and 13 persons respectively for the Jurisdictional Agency Reports Branch; 33 and 24 respectively for the Review and Compliance Branches (an additional 50 and 32 staff years respectively for contract pricing audits); and 16 and 25 respectively for the General Reports Branch.

Cost To Desk Audit
Agency Determinations

The jurisdictional agencies forward their determinations together with all substantiating evidence to the NGPA Compliance Division. Each determination is then reviewed for substantial evidence by a minimum of two persons; the desk audit is made by a team member and is reviewed by a team leader.

FERC records do not show how many staff years are used in these desk audits. A Division official informed us, however, that the personnel assigned to the Jurisdictional Agency Reports Branch spend most of their time desk auditing determinations for substantial evidence. This official also said that many Review and Compliance Branch personnel have assisted in making these desk audits because of the large number of determinations received.

Based on the average annual salary of about \$23,000 for the Division's professional auditors, we estimate that in 1981, it will cost at least \$368,000 for the 16 Jurisdictional Agency Report Branch auditors to desk audit agency determinations for sufficiency of supporting evidence. This cost is estimated to decrease to about \$300,000 in 1982.

FERC Desk Audits
Duplicate Agency Reviews

The agencies review all applications for sufficiency of evidence before weighing it to make a determination; the NGPA Compliance Division then reviews the agencies' determinations for sufficiency of the same evidence.

Both the agencies and the Division generally check to see whether all required substantiating evidence was submitted with the applications, and whether such evidence demonstrates compliance with the eligibility requirements. For example, to establish maximum efficient rate of flow for stripper eligibility, the producer/operator is required to submit either a well production capacity test or 12 months production data. The agencies and the Division check to see whether such information accompanied the application and then review the information to establish whether it demonstrates the well produced at an average daily rate of not more than the 60 Mcf allowed for stripper eligibility. Thus, the Division's desk audits virtually duplicate a portion of agency determination procedures.

DESK AUDIT OF ALL DETERMINATIONS
NOT WARRANTED

Results of both the NGPA Compliance Division's desk audits and our examination demonstrate that the natural gas well determination process is adequate to assure agency determinations are supported by the evidence required to substantiate eligibility. These results demonstrate the Division's desk audit of all determinations is not warranted.

Results of FERC Desk Audits

The Division's desk audits show that only a relatively small number of determinations were not adequately substantiated during the first 18 months of NGPA's implementation and that the documentation process has improved since then. The Division affirmed without question (i.e. reversing, returning or tolling ^{1/}), 98 percent of all determinations audited between November 1978 and June 30, 1980, and about 99.1 percent of those audited between July 1980 and May 31, 1981.

All determinations are submitted to the Division for desk audit, accompanied by such substantiation as FERC requires. As a result of its desk audits, the Division may

- either affirm or reverse a determination if it is not supported by substantial evidence;
- remand a determination if it is not consistent with information in FERC's public records; or
- toll or return a determination if it is not accompanied by all material information required or is seriously deficient in information.

Of about 64,500 determinations desk audited between November 1978 and June 30, 1980, the Division reversed or remanded 74 ^{2/} or one-tenth of 1 percent (0.1 percent), and tolled and returned 1,232 or about 1.9 percent. In addition, 234 determinations were withdrawn from FERC.

Results of Division desk audits of all determinations through June 30, 1980 and of the eight agencies we reviewed are summarized in the following table.

^{1/}Tolling a determination suspends FERC's 45-day review period and requires letters to be sent to the subject agency and producer requesting additional information.

^{2/}This includes 38 reversals of positive agency determinations and 37 reversals of negative agency determinations.

RESULTS OF NGPA COMPLIANCE DIVISION DESK AUDITS
THROUGH JUNE 30, 1980

<u>State or Federal Agency</u>	<u>Positive Determinations</u>	<u>Reversed/ Remanded</u>	<u>Tolled/ Returned</u>	<u>Withdrawn</u>
New Mexico	2,304	5	148	15
USGS/NM	5,626	5	104	9
Louisiana	5,411	1	19	4
USGS/La.	1,093	0	51	1
Texas	10,346	0	64	14
Ohio	10,338	7	111	49
W. Virginia	13,826	40	321	42
Kansas	2,120	0	104	2
Oklahoma	<u>3,486</u>	<u>0</u>	<u>65</u>	<u>14</u>
Sub-total	54,550	58	987	150
Others	<u>9,918</u>	<u>16</u>	<u>245</u>	<u>84</u>
Total all agencies	<u>64,468</u>	<u>74</u>	<u>1232</u>	<u>234</u>

As the table shows, West Virginia accounted for over half of all determinations reversed and remanded because many of its stripper well determinations included nonassociated gas in excess of the requirements for Section 108 eligibility. This agency also accounted for 321 or about 26 percent of all tolled/returned determinations because of similar problems with stripper eligibility. These and other agency problems have been substantially eliminated as evidenced by the results of determinations reviewed by the Division between July 1980 and May 31, 1981.

Of the estimated 50,000 determinations reviewed by the Division during this 11 month period, 12 or 0.024 percent were reversed or remanded; 353 or about 0.71 percent were tolled/returned; and about 82 were withdrawn. Based on these results, Division officials believe the determination process is working well.

Results of GAO Sample Review

We reviewed 100 determinations for the required substantiating evidence and found that the agencies' review procedures

were as effective as the Division's and that the determinations made by the eight agencies we reviewed were adequately substantiated.

The 100 determinations were selected at random from about 54,500 determinations which were made by the eight agencies we reviewed and which were desk audited by the Division from November 1978 through June 30, 1980. By applying the Division's desk audit procedures, we examined each determination package for the supporting evidence required to substantiate eligibility under the approved price category.

Our review at the Division disclosed one Section 108 determination failed the substantial evidence test because oil production data was not reported. Stripper well qualifications limit the amount of oil that can be produced in association with gas, thus oil production data is essential to establishing Section 108 eligibility. According to a Division official, this determination should have been tolled. Our followup disclosed that the oil production data was available at the agency and was within the limits prescribed for stripper eligibility.

Based on our sample results, we can conclude with 95 percent confidence that out of the 54,500 determinations affirmed by the Division between 0.1 and 5.0 percent would fail the substantial evidence test based on evidence available in Division files but could be substantiated from evidence available in agency records.

The rate of unsupported agency determinations found by the Division through June 30, 1980 was no greater than the estimated rate of unsupported determinations found in our audit of a sample of determinations affirmed by the Division. The Division questioned about 2 percent and reversed about 0.1 percent of the determinations for lack of required support. Our sample showed between 0.1 and 5.0 percent of the determinations affirmed by the Division lacked some required support. In our opinion, these results demonstrate that the process for supporting determinations with the required evidence is as effective as the Division's review procedures.

FERC CAN ACCOMPLISH
OBJECTIVES MORE EFFICIENTLY

By consolidating the desk audits for sufficiency of evidence with those for accuracy of evidence and monitoring agency determination procedures on a sample basis, FERC can reduce its annual personnel budget requirements by about \$368,000.

FERC's review objective is to decide whether or not agency determinations are supported by substantial evidence. This objective can be effectively accomplished, in our opinion, by monitoring the adequacy of the well determination process

through statistically sampling cases selected at random from the universe of determinations made by each agency.

FERC advised us that it plans to continue the desk audit of all agency determinations. FERC said that this practice contributed to making the determination process reliable and is cost effective because

- overcharges of about \$21 million could have resulted annually without its review which found 382 wells not qualified through May 1981 and
- the incremental staffing needed to review all determinations appears warranted because many of the positions would still be required for a review based on statistical sampling.

In our opinion FERC's findings justified reviewing all determinations during the initial period of the NGPA's implementation, but do not justify continuing 100 percent reviews now that the jurisdictional agencies' review procedures are relatively effective.

Our analysis of FERC's records show that 104 or about 27 percent of the 382 well determinations cited by FERC were withdrawn either by the jurisdictional agencies or by the producers without being questioned by FERC. Additionally, approximately 71 percent of the potential \$21 million annual overcharge cited by FERC to justify continuing its 100 percent review involved agency determinations made in calendar year 1979 during the initial period of NGPA's implementation. The error rate found by FERC on determinations made during this initial period was about 5.1 times greater than found on determinations made in 1980 and about 10.5 times greater than found on determinations made during the 5 month period ended May 31, 1981. This downward trend in the error rate is illustrated in the following table.

<u>Period</u>	<u>Number of Determinations</u>		
	<u>Determinations made by agencies</u>	<u>FERC Found Not Qualified</u>	<u>Error Rate (percent)</u>
Through December 1979	32,800	270	0.8232
January 1 to December 31, 1980	58,700	94	0.1601
January 1 to May 31, 1981	23,000	18	0.0783

In terms of impact on consumer prices, we estimate that the potential overcharge found during the last 5 month period would increase residential use costs less than one cent a year.

Thus, the declining error rate indicates that the potential overcharges expected by continuing a 100 percent review will be substantially less than found during earlier implementation periods, and will have a negligible effect on consumer prices.

In our opinion, none of the 16 staff presently assigned to desk auditing all determinations are required for a review based on statistical sampling. By consolidating the audit responsibilities, and having the Review and Compliance Branches audit the same determinations for both sufficiency and validity of evidence FERC can eliminate personnel requirements budgeted for the Jurisdictional Agency Reports Branch to desk audit all determinations for sufficiency of evidence and save about \$368,000 a year. This relates to salary only and does not include fringe benefits or other support costs such as office space, furniture, equipment and supplies. Other costs, which might be avoided by eliminating the 100 percent desk audits, include reproducing, handling and storing all applications along with their supporting documents.

FERC also said that over 3,000 applications for determinations were withdrawn at the jurisdictional agency level and that many of these withdrawals were due to the careful review process at both the jurisdictional agencies and FERC.

We believe that desk auditing a statistically valid sample of agency determinations will not detract from FERC's careful review process or from its ability to assure the continued effectiveness of the jurisdictional agencies' review process.

In fact sampling can provide more accurate and reliable results than a 100 percent desk audit. Because fewer observations are needed, the quality and uniformity of the review can be better controlled.

In our view, sampling is a viable and effective alternative to FERC's 100 percent desk audits and warrants adoption because of the potential budget cuts involved.

CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

The natural gas well determination process is working well for the most part but can be made more effective at less cost to the Government. Too much is being done in reviewing applications for required supporting evidence but not enough is being done to validate the supporting evidence for accuracy and completeness.

FERC's policy of desk auditing all determinations for required supporting evidence virtually duplicates a portion of the agencies' review procedures at a cost of about \$368,000 a year. Although the policy may have been justified during the early stages of NGPA's implementation, it is no longer warranted. In our opinion, the results of our tests and FERC's review demonstrate that the agencies' review procedures for required evidence are as effective as FERC's, and it is unnecessary for FERC to desk audit all determinations for the same evidence.

We believe FERC can effectively accomplish its objectives of monitoring jurisdictional agency determinations by reviewing them on a sample basis.

In addition, we believe these audits can be accomplished by the Review and Compliance Branches in conjunction with its presently assigned responsibility of verifying the supporting evidence for accuracy and completeness. This would eliminate the personnel requirements budgeted for the Jurisdictional Agency Reports Branch to desk audit all determinations and reduce costs about \$368,000 a year.

Furthermore, the deficient agency verification procedures and the failure of Division auditors to verify supporting evidence to producers' records has weakened the effectiveness of the well determination process in assuring compliance with the NGPA requirements for maximum prices. In our opinion, at least on a sample basis, the agencies should be verifying the supporting evidence as part of their well determination process, particularly when the information can be verified against State or other records available to them. However, when purchaser or producer records are the only available source of the supporting data, we believe the NGPA Compliance Division can better accomplish the validation process in conjunction with its contract pricing audit activities.

Recommendations to the Chairman, FERC

To reduce personnel requirements budgeted for monitoring jurisdictional agency determinations, we recommend that FERC discontinue desk auditing all determinations for sufficiency of evidence and direct that the NGPA Compliance Division:

--monitor the adequacy of agency procedures based on reviewing a statistically valid sample of determinations for both sufficiency and accuracy of evidence, and

--consolidate the reviews for sufficiency and accuracy of evidence in one Branch.

Furthermore, to strengthen the effectiveness of the well determination process in assuring compliance with NGPA requirements for incentive prices, we recommend the Chairman of FERC encourage the jurisdictional agencies to validate supporting evidence as part of their well determination process and direct that the NGPA Compliance Division

--give guidance to the jurisdictional agencies for use in implementing validation procedures, and

--coordinate its overall compliance activities with the jurisdictional agencies and review producer records when they are the only source of the supporting evidence.

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