REPORT OF THE VIRGINIA COAL AND ENERGY COMMISSION ON

The Study of the Regulation of Independent Power Producers and the Oil and Gas Act

TO THE GOVERNOR AND THE GENERAL ASSEMBLY OF VIRGINIA



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TABLE OF CONTENTS

<u>Page</u>

I.	Introduction	1
II.	Executive Summary	1
ΙП.	Study: Virginia's Oil and Gas Act	2
IV.	Study: The Regulation of Independent Power Producers	13
V.	Acid Rain Legislation: The Offset Requirement	18
VI.	EPA's Policies Regarding the Issuance of Air Permits for Electric Generation Projects in Virginia	18
VII.	Subcommittee Activities	19
VIII.	Appendix Guide	21

I. INTRODUCTION

The 1989 Session of the General Assembly requested that the Virginia Coal and Energy Commission conduct two studies during the summer and fall of 1989. House Joint Resolution No. 364 (1989) requested that a joint subcommittee, composed of the Virginia Coal and Energy Commission's legislative members, study whether any modifications to the Virginia Oil and Gas Act were desirable or necessary. House Joint Resolution No. 438 (1989) requested that the Virginia Coal and Energy Commission study the regulation of independent power producers in the Commonwealth.

The Virginia Coal and Energy Commission met on five occasions between the 1989 and 1990 Sessions of the General Assembly. The Commission's Oil and Gas Subcommittee and Energy Preparedness Subcommittee also held meetings. While most of the Commission's time was devoted to the aforementioned studies, the Commission also considered the following topics:

- 1. The offset requirement provisions of the Bush Administration's proposed acid rain legislation;
- 2. EPA's policies regarding the issuance of air permits for proposed electric generation projects in Virginia; and Funding the Department of Mines, Minerals and Energy's Division of
- 3. Energy with oil overcharge funds.

This document consists of (i) the report of the legislative members of the Commission as required under House Joint Resolution 364 (1989), (ii) the report of the full Commission as required under House Joint Resolution 438 (1989), and (iii) the report of the Commission on its 1989 activities.

II. EXECUTIVE SUMMARY

During 1989, the Virginia Coal and Energy Commission conducted studies on Virginia's Oil and Gas Act and the regulation of independent power producers in the Commonwealth. The Commission also considered the potential impact of the Bush Administration's proposed acid rain legislation on Virginia, as well as the problems being experienced by cogeneration projects in Virginia in receiving air permits. In addition, the Energy Preparedness Subcommittee met to review the status and use by the Commonwealth of oil overcharge funds and the negative implications which the lack of these funds has for current programs which rely on these moneys.

The full Commission held five meetings during the year. Most of the Commission's time was spent developing recommendations for a new Virginia Gas and Oil Act. Public comment was allowed and considered by the Commission at each of its meetings. The Oil and Gas Subcommittee also held a meeting to receive public comment. After extensive review of these comments and consideration of a number of draft proposals, the Commission unanimously agreed to recommend that a new Gas and Oil Act be enacted by the General Assembly. Among other things, the new Act significantly reorganizes the current Act, consolidates the existing Virginia Well Review Board and Virginia Oil and Gas Conservation Board into a single Virginia Gas and Oil Board with statewide jurisdiction, provides a new pooling procedure designed to encourage the production of coalbed methane gas in Virginia, and enhances enforcement efforts by allowing civil penalties and civil charges to be assessed for violations of the Act.

At its first two meetings of 1989, the Commission considered the extent to which independent power producers (IPPs) should be subject to state regulation. While IPP representatives argued that competition makes state regulation unnecessary, officials from the State Corporation Commission suggested that continued regulatory oversight of IPPs in Virginia serves the public's best interest. The Commission made no findings or recommendations on this issue.

The Commission did determine that the "allowance" or "offset" provisions of the President's proposed acid rain legislation would negatively affect electricity costs and the use of coal. In a letter to the two chairmen of the Congressional subcommittees considering the bill, the Commission voiced its concern over these provisions and indicated that such requirements might be unnecessary to ensure that a 10 million ton reduction in sulfur dioxide emissions is maintained.

Commission members were disturbed by testimony which indicated that the issuance of air permits to a number of cogeneration projects in Virginia has been delayed because of an abrupt shift in policy by EPA. Commission members were also bothered by statements which seemed to indicate that EPA's Region III, which encompasses Virginia, was taking a different position on certain policy matters than Region IV, in which North Carolina is located. As a result of this policy shift and Region III's differing interpretation of policy, Commission members were told that investment in these cogeneration projects and the resulting employment and economic benefits may shift from Virginia to North Carolina. The Commission decided to forward a letter to Virginia's Congressional delegation informing them of the unnecessary problems caused by EPA's policy shift and differing interpretations of policy by region.

III. STUDY: VIRGINIA'S OIL AND GAS ACT

House Joint Resolution No. 364 requested that the legislative members of the Virginia Coal and Energy Commission study whether any modifications to Virginia's Oil and Gas Act were desirable or necessary. The Resolution required that the Department of Mines, Minerals and Energy (DMME) serve as staff advisors and that all interested parties be allowed to fully participate in the study. A copy of House Joint Resolution No. 364 is attached as Appendix A.

To allow all interested parties to present their views, the Commission held meetings in Richmond and Southwest Virginia. Public comment was received at four of these meetings and written comments from interested parties were actively solicited throughout the course of the study. In addition, the Oil and Gas Subcommittee received public comment at its meeting, held for the purpose of developing recommended changes to the current Act.

A. Past and Present Regulation of Oil and Gas Development in Virginia.

While the earliest known exploration for oil in the Commonwealth took place in Lee County around 1910, natural gas was not discovered in Virginia until 1931. As commercial development of these resources accelerated during the late 1930's and early 1940's, landowners became increasingly concerned about the fairness of mineral leases which they were being requested to execute. In response to these concerns, the 1940 Session of the General Assembly commissioned a study of oil and gas development. The recommendations from this study eventually led to the Commonwealth's first oil and gas laws, passed in 1948. From 1948 until 1982, these laws focused on the regulation of well work. They required well operators to conduct their drilling and production operations so as not to waste oil and gas resources; placed limitations on the spacing of wells; and allowed various parties to object to the location of a proposed well when the well would produce oil or gas belonging to another party. Disputes which arose over the ownership of well production were either settled by the regulatory agency through the imposition of well spacing limitations or by the contesting claimants themselves.

The Virginia Oil and Gas Act, passed in 1982, dramatically changed the way in which production disputes are resolved. The 1982 Act created the Virginia Oil and Gas Conservation Board and charged it with determining how various parties will share in the production of oil and gas operations. To protect "correlative rights," meaning the rights of each interest owner to share in the production of a well, the Act authorized the Board to (i) regulate the spacing of wells, (ii) establish the boundaries of drilling units within an oil or gas field, and (iii) issue pooling orders which designate an authorized operator in a drilling unit and specify how all parties will share in the costs of drilling.

According to DMME personnel, in its current form the Act establishes standards for the safe, efficient and environmentally sound operation of wells and associated structures. Well operators are required to (i) notify certain surface and mineral owners of their plans to drill a well, (ii) post bonds, (iii) acquire permits for well work, (iv) file site-specific operation plans specifying how they will comply with the Act, (v) provide specific protections for ground water and surface water, (vi) control erosion, (vii) build structures to contain liquid substances on the site, and (viii) properly plug and abandon wells once the work is completed.

DMME's Division of Oil and Gas is responsible for enforcing the Act and regulations adopted thereunder. The Division oversees the operation and plugging of wells and the construction and reclamation of gathering pipelines used to transport oil and gas from well sites to main transmission pipelines. The Division's Oil and Gas Inspector is authorized to issue emergency orders to stop violations. Should a violation continue, the Inspector may revoke the offending operator's bond and plug the well. Decisions of the Inspector may be appealed to the Virginia Well Review Board, which is composed of gubernatorial appointees. Appeals from decisions of the Virginia Well Review Board or the Virginia Oil and Gas Conservation Board are heard by circuit courts.

The production of oil and gas in Virginia has steadily increased since the 1940's. In 1988, sales of natural gas from Virginia wells exceeded \$40 million, while oil sales totaled approximately \$350,000. Recent developments could drastically increase these annual sales totals. A number of companies have indicated interest in producing the methane gas which exists in the deep underground coal seams of Southwest Virginia. Estimates indicate that these seams contain enough coalbed methane gas to satisfy 110 percent of Virginia's demand for natural gas during the next 30 years. A federal tax credit for alternative fuels which expires at the end of 1990 has also stimulated interest in this resource. Furthermore, Texaco recently drilled an exploratory well in Westmoreland County in hopes of finding oil or gas. Previously oil and gas exploration had primarily been conducted in Southwest Virginia.

B. Proposed Changes to the Current Act.

Throughout the study, DMME, oil and gas industry representatives, landowners, environmental group spokespersons, and members of the Commission proposed many changes to the current Act. For purposes of organization, these proposals will be discussed within the framework of the following six topics: the structure and scope of the Act; the roles of the Board(s) and DMME; ownership rights, pooling and conservation; permitting and enforcement; hearings and appeals; and the restoration of orphaned wells. Due to the sheer volume of suggestions and issues the Commission considered, this report will describe only major proposed changes. Copies of any of the written statements which were furnished to the Commission are available from the Virginia Division of Legislative Services in Richmond, Virginia.

1. Structure and scope of the Act.

Although certain individuals testified that the current Act was working well and required few, if any, substantive changes, most comments indicated that the Act should be reorganized so that various provisions dealing with the same subject matter are located in one area of the Act. For example, environmental standards appear in Articles 3, 4 and 6 of the current Act; enforcement provisions in Articles 1, 3, and 7; and provisions relating to correlative rights throughout Articles 1, 2 and 3. Testimony revealed that the current Act's lack of organization makes it difficult for (i) citizens to understand how the law protects them and (ii) operators to understand what they must do to comply with the law. In addition, the current Act's lack of organization creates an economic disincentive to investors who must consider the risks this uncertainty poses.

Comments also characterized the current Act's language as too technical and specific. While industry representatives generally favored the current Act's specific language, other individuals suggested that a statute should provide general guidance to regulatory agencies and Boards which have the expertise and experience necessary to promulgate specific and technical requirements in the form of regulations.

Finally, many individuals urged the Commission to recommend enlarging the Act's scope. Surface owners and environmentalists requested greater standing under the law to object to the granting of permits. The Commission was encouraged to recommend that permits be required to conduct ground disturbing geophysical operations, an activity which the current Act does not cover. It was also suggested that statewide well spacing requirements be set out in statute.

2. Roles of the Board(s) and DMME.

Under the current two-board regulatory scheme, the authority of the Virginia Oil and Gas Conservation Board (VOGCB) and the Virginia Well Review Board (VWRB) depends upon geographic and subject matter jurisdiction. The VOGCB, composed of three citizens, one industry representative and DMME's Director or his designee, has jurisdiction outside of the coalfields to regulate conservation issues; classify wells and pools as oil or gas; set production allowables for pools; establish penalties for violations of production allowables; adjudicate resource conflicts by issuing orders for well spacing and drilling units; establish drilling units after a coal owner has objected to a well location (whether in or outside of the coalfields); force-pool resource owners; and enforce conservation standards by suing to restrain violations. The VWRB, composed of DMME's Director or his designee, a representative of the oil and gas industry, a representative of the coal industry, and two citizen members, has statewide authority to promulgate regulations concerning the powers of the Inspector; establish regulatory standards for well work permits and plats, permit notification, coal protection, safety precautions when wells penetrate noncoal mines and caves, and submission of well work and production records; hear de novo appeals of the Inspector's decisions issued on well work; dissolve or uphold stays issued by the Inspector on existing well work permits; and override decisions of the VOGCB when they conflict with well work permit standards.

Meanwhile, current law authorizes DMME to regulate the exploration for and production and transportation of oil and gas. In addition to advising the VOGCB and VWRB, the Department's responsibilities include requiring records and reports; permitting wells and gathering pipelines; approving standards for the casing and sealing of wells through coal seams; adjudicating disputes and appeals through the informal fact finding hearing process of the Administrative Process Act; and enforcing the Act by issuing, conditioning or denying permits, revoking bonds, and suing to restrain violations.

The Commission received numerous complaints that the current Act fails to clearly delineate the responsibilities of DMME, the VOGCB, and the VWRB. Most commentators suggested that the two boards should be consolidated into one board with statewide jurisdiction. Although such a consolidation would mean fewer appointed positions and would place a considerable demand on new board members' time and expertise, proponents agreed that this solution would eliminate the current confusion over which board has jurisdiction; improve efficiency by streamlining processes; treat citizens equally without regard to the location of their residence; and provide that only one body hears issues concerning the simultaneous development of coal, oil, and gas resources. In addition, the Commission was told that DMME's Director should have the responsibility of promulgating and enforcing regulations concerning environmental protection and public safety.

3. Ownership rights, pooling, and conservation.

Speakers requested a number of changes to the current Act relating to the ownership and conservation of oil and gas resources, as well as the pooling of interests in these resources. Specifically these included:

- 1. Setting statutory minimum statewide spacing requirements based upon the type of well;
- 2. Reducing the percentages charged to carried interest owners;
- 3. Changing the status of oil or gas owners whose identity or whereabouts are unknown from that of carried interest operators to operators whose interests are deemed to be leased;
- 4. Removing the current Act's Pugh lease extension clause and allowing the language of the lease to control; and
- 5. Enacting special pooling provisions for coalbed methane gas.

Under current law, well spacing requirements are set out in regulation and are based upon well type and depth. DMME and other interested parties suggested that minimum statewide spacing requirements should be determined by the legislature, as this is a basic decision which affects the correlative rights of all oil and gas owners. Proponents of statutorily fixed minimum statewide spacing requirements suggested that the new Board should be given the authority to grant variances from these requirements in certain situations to account for the varying types of geological conditions encountered in different areas of the Commonwealth.

A number of individuals with oil or gas ownership interests proposed changes in the percentage of carried interest charges which, by statute, they must pay in certain forced pooling situations. Under the current law, where a carried interest owner is force-pooled, these charges are assessed at the rate of 200 percent on unleased land and 300 percent on leased tracts. Many interest owners characterized these charges as "penalties," especially in relation to unleased tracts. Carried interest charges on unleased tracts have doubled since 1987. However, industry representatives urged the Commission to leave these carried interest charges at their current level because they believe that the current rates are justified based upon the risk involved in such development.

A number of individuals requested that for pooling purposes, the interest of owners whose identity or whereabouts are unknown should be deemed to be leased. Current law classifies such owners as carried interest operators.

Industry representatives voiced concern over the current Act's "Pugh clause," which limits lease extensions on tracts where a portion of the land has been pooled. The Commission was told that the language of the Pugh clause, which appears in subsection C of Va. Code §§ 45.1-308 and 45.1-326, is not only confusing, but impairs the private right of contract. Industry representatives requested that the Pugh clause be repealed and that lease extensions be "left to private contract, lease or title document."

Finally, the Commission received extensive information concerning the potential development and production of the Commonwealth's coalbed methane gas resources. This gas is trapped in the coal seams of Southwest Virginia. In the past, coalbed methane gas has been viewed negatively because of the safety hazards which it presents to coal miners. To avoid the risks of explosions or asphyxiation, coal operators have traditionally expended huge amounts of money to expel this gas from mines through ventilation shafts. However, the recent development of cost-effective technology for extracting this gas from coal seams, a federal tax credit for alternative fuels which makes the production of this gas more profitable, and the tremendous volume of this gas which lies within the Commonwealth's coal seams have stimulated great interest in the commercial extraction and production of Virginia's coalbed methane gas resources.

The Commission learned that a major gas producer was interested in drilling hundreds of coalbed methane gas wells in Buchanan County at a cost of up to \$300,000 per well and associated facilities. Industry representatives explained that such drilling and production would provide a much needed boost to the economy of Southwest Virginia by increasing employment rates and local gas severance tax revenues. By capturing the methane gas which has always been allowed to escape, company officials explained that they would not only be turning a profit, but would also be protecting the environment, as many scientists now believe that methane gas significantly contributes to global warming.

Industry representatives stated that a number of factors would determine whether to drill for and produce coalbed methane gas in the Commonwealth. Among them, as previously indicated, is the federal alternative fuels tax credit, which expires at the end of 1990. Industry officials have acknowledged that the production of coalbed methane gas will be profitable only because of this tax credit. which amounts to approximately 80 cents per thousand cubic feet of gas sold, or almost one-half of natural gas' current spot price. Unless the well is drilled before the end of 1990, the tax credit will not be available. To date, industry has been unwilling to begin production of this resource in Virginia due to coalbed methane gas ownership issues. The Commission was told that Virginia Code § 55-154.1 has created a "cloud on title" with regard to the ownership of this gas. Coalbed methane gas is a migratory gas. Va. Code § 55-154.1, otherwise known as the "Migratory Gas Act," provides that the surface owner, absent other provisions of law to the contrary, is conclusively presumed to be the owner of all migratory gases beneath his surface tract. In addition, the myriad of deeds and leases which have severed mineral estates from the surface estate in Southwest Virginia adds to the problem of determining who owns the coalbed methane gas in question. As a result of this difficulty, industry has been reluctant to drill for and produce this gas for fear of being found civilly liable for a "willful taking" resulting from a bad-faith trespass.

To remove the fear of "willful taking" lawsuits, industry representatives suggested repealing the "Migratory Gas Act" and enacting emergency special pooling provisions for coalbed methane gas. The special pooling provisions would allow for the rapid development of the resource in order to take advantage of the federal tax credit. All proceeds derived from the production of the gas would be escrowed pending a subsequent determination of ownership specifying who would receive what portion of the escrowed proceeds.

Representatives of the coal industry in Virginia were not opposed to the development of coalbed methane gas in the Commonwealth. However, they informed the Commission that the process of fracturing the coal strata in order to remove the coalbed methane gas might make it more difficult or economically unfeasible for the coal operator to mine the seam which has already been fractured. Consequently, they urged the Commission to recommend that in specific situations the coal owner's consent must be obtained by the coalbed methane gas well operator before a gas well could be drilled.

4. Permitting and enforcement.

During its review of the permitting and enforcement provisions of the current Act, the Commission was requested to recommend (i) transferring most permit standards from statute to regulations; (ii) increasing permit application fees and expanding the activities for which permits are required; (iii) increasing the bonding and financial security requirements of the current Act; and (iv) providing for the assessment of civil penalties or civil charges for violations of the Act, regulations or orders.

DMME, consistent with its position that the Act should provide general guidance for regulatory bodies in promulgating regulations, suggested removal of the current Act's specific and technical permitting standard provisions. Industry representatives objected to this proposal, stating that the language of the current Act had been carefully developed in an attempt to balance and protect the sometimes conflicting interests of Virginia's oil, gas, and coal industries. The current Act requires that permits be obtained prior to the commencement of well work or the installation of gathering pipelines. The current fee for such permit applications is \$100. Permits may be held for as long as the operator desires, whether or not the permitted activity has commenced. DMME representatives suggested that permits should expire within 12 months of their date of issuance if the permitted activity has not begun, thereby ensuring that permitted activities are performed according to modern standards. In addition, they also proposed (i) raising permit application fees for permits to drill new wells to \$200, (ii) requiring modification permits (application fee of \$100) for activities to be conducted on permitted sites which are not covered under the existing permit, and (iii) requiring permits for geophysical operations (application fee of \$100).

DMME representatives also recommended an increase in the financial security required of operators using blanket bonds. Under the current Act, an operator may, in lieu of posting a separate bond for each well he owns, post a blanket bond covering all of his operations. The current Act requires that the Inspector determine the amount of this bond and that it be at least \$25,000. Agency representatives explained that the current minimum blanket bond amount is inadequate and suggested that a sliding scale with minimum blanket bond amounts based on the number of wells covered would be preferable. It was also suggested that each permittee operating under a blanket bond should be required to annually pay \$50 per permit he holds under the blanket bond into a fund which the Commonwealth could use to cover the full cost of plugging and restoration in the event of a blanket bond forfeiture. Once the fund's balance reached \$100,000, the responsibility of making payments would cease until the fund's balance dropped below \$25,000, when payments would again be required until the balance of the fund again reached \$100,000.

Finally, to enhance enforcement efforts, the Commission was requested to recommend that courts be allowed to assess civil penalties of up to \$10,000 per day for violations of the Act. It was also suggested that the Board should, with the consent of the violator, be allowed to assess civil charges for violations in lieu of civil penalties. The current Act fails to provide for the assessment of civil penalties or civil charges.

5. Hearings and appeals.

The Commission received many suggestions for changes to the current Act's hearing and appeals provisions. The Commission considered (i) expanding the current Act's notice and standing provisions, (ii) whether appeals of Director's decisions should lie to a board or directly to circuit court, (iii) whether appeals of certain decisions should be heard de novo, and (iv) expanding the type of objections which could be asserted against permit applications and by whom such objections could be made.

The current Act's provisions regarding notice and standing are quite specific. To have standing to object to the issuance of a permit, a person must have been entitled to notice. Environmentalists and surface owners recommended that local governments and the general public receive notice of permit applications. They also encouraged the Commission to give standing to more individuals to object to the issuance of permits and to challenge other decisions of the Director and the Board. Industry representatives opposed expanding the current Act's standing provisions, arguing that those individuals whose property interests could be directly affected by such decisions already had standing under the current Act. These representatives also favored retention of the current Act's specific language regarding the type of objections to permit applications which the Inspector could consider.

Industry also favored the Act's current appeals process whereby directly affected parties could appeal decisions of the Inspector to the VWRB, rather then directly to circuit court. Company representatives maintained that the expertise of a board which was familiar with the technical issues involved in such appeals made the Board a more appropriate forum in which to resolve such matters. They suggested that the current appeals process had worked well and that an aggrieved party with standing could always appeal to the appropriate circuit court. Many individuals expressed concern that by requiring a Board with industry membership to hear appeals, conflict of interest situations might arise. Industry representatives responded that the Board could be structured in such a manner as to avoid potential conflict of interest problems while still retaining industry expertise on the Board.

6. Restoration of orphaned wells.

Prior to 1950, Virginia law did not require well operators to obtain a permit before drilling a well. Consequently, there was no way of maintaining accurate records on where wells had been drilled and no means of requiring well operators to properly plug their wells before abandonment. The Commission was informed that as a result of the lack of regulation of drilling operators prior to 1950, a number of oil wells were abandoned without being properly plugged.

DMME personnel reported that more than 30 such well sites have been discovered in the Commonwealth. Oil is seeping to the surface at most of these sites. These improperly plugged wells not only present surface contamination problems but represent a potential threat to groundwater quality. DMME personnel indicated that because no records exist from which to track down the operators who abandoned these wells, the burden of properly plugging these wells falls on the Commonwealth. However, the Commission was told that DMME's current budget could not handle the costs of plugging and restoration. Furthermore, DMME personnel predicted that more leaking wells might be found in the future and estimated the cost of properly plugging these wells and cleaning up the sites to run from \$3,000 to \$10,000 per well. Commission members suggested that DMME request a budget amendment in order to pay for the costs of plugging and restoration. In the alternative, it was suggested that a special fund be established into which applicants applying for certain new permits would submit a \$50 surcharge. These revenues would be used to pay for the cost of plugging old abandoned wells.

C. Findings and Recommendations.

Because of the nature and number of changes in the current Act which the legislative members of the Commission decided to recommend, it was determined that the current Act should be repealed and replaced with a new Virginia Gas and Oil Act. For purposes of organization, the members' findings and recommendations will be described under the following topics: structure and scope of the Act; roles of the Board and DMME; ownership rights, pooling and conservation; permitting and enforcement; hearings and appeals; and restoration of orphaned wells. Copies of the legislation implementing all of the recommended changes are attached as Appendix B.

<u>1. Structure and scope of the Act.</u>

The members determined that the current Act is difficult to understand because various provisions dealing with the same subject matter appear in different articles. The confusion created by the Act's lack of organization creates an economic disincentive to investors who must consider the risk posed by this uncertainty. Consequently, the existing Act should be repealed and a new Virginia Gas and Oil Act should be enacted which places all related provisions in one article. The new Act should consist of the following three articles: Article 1, containing all of the new Act's general provisions; Article 2, containing all provisions relating to gas and oil conservation; and Article 3, containing all provisions relating to the regulation of gas and oil development and production.

In many cases, the language of the current Act is much too technical, specific, and regulatory in nature. Hence the new Act, with few exceptions, should provide sufficient general guidance to DMME and the Board to enable these entities to promulgate appropriate regulations by using the technical expertise which they have developed in particular subject areas. Commission members believed that by providing sufficient guidance to the agency and Board, the legislature could avoid changing the statute as frequently as would be necessary were technical requirements to be codified. Commission members also determined that the use of general language instead of technical language would provide the regulatory bodies with more flexibility to handle unforeseen future problems which they might lack authority to deal with were specific technical language to be used to describe their powers and duties.

Commission members determined that operators proposing to conduct ground disturbing geophysical operations should be required to obtain a permit. No such requirement exists under the current Act. Statewide well-spacing requirements should also be set out in statute. Members of the Commission believed that this would streamline the current process which requires the Board to approve the spacing of each well. Setting out statewide well-spacing requirements in statute and allowing the Board to grant variances in certain situations will allow operators to have a better idea of where they stand before having to appear before the Board should a variance be necessary.

2. Roles of the Board and DMME.

Due to the current Act's failure to clearly distinguish between the jurisdiction and responsibilities of the VWRB, VOGCB, and DMME, Commission members believed that the new Act should consolidate the duties, responsibilities, and authorities of the VWRB and the VOGCB by combining the two Boards into one Board with statewide jurisdiction over conservation matters. The consolidation of the two Boards into a new Virginia Gas and Oil Board (VGOB) will (i) eliminate past confusion over which Board has jurisdiction, (ii) streamline processes by providing one body with the responsibility of hearing conservation issues which concern the simultaneous development of coal, oil or gas resources, and (iii) treat all citizens equally without regard to the location of their residence. To avoid potential conflicts of interest on an industry-dominated Board, the new VGOB should be composed of four citizens members, two industry representatives, and DMME's Director or his designee. Meanwhile, DMME should maintain its statewide jurisdiction over issues relating to public safety and environmental protection. Furthermore, DMME, which under the current Act has the authority to enforce regulations promulgated by the VWRB relating to public safety and environmental protection, should be given the authority and responsibility of promulgating these regulations as well. As the agency with enforcement responsibilities in these areas, DMME already has the requisite experience and expertise to promulgate such regulations.

3. Ownership rights, pooling, and conservation.

The current procedure used to regulate the spacing of wells provides operators with relatively little guidance in their planning process and requires an excessive amount of Board consideration. Minimum statewide spacing requirements based on well type should be set out in statute and the VGOB should be authorized to grant variances to these requirements in certain circumstances. Such a change will provide more predictability and should streamline the process of determining spacing limitations.

The amount of carried interest charges specified in the current Act should be retained in the new Act. These percentages have been raised recently by legislative action to more accurately reflect the risk factors involved in the development of oil and gas. However, in pooling situations where owners cannot be located or are unknown, the owner's interest should be deemed to be leased, rather than classifying such an owner as a carried interest operator.

Commission members, finding the current Act's Pugh clause to be unclear, determined that lease extensions and limitations should be determined by referring to the lease, private contract, or title document in question. Consequently, the Commission decided not to include a Pugh lease extension provision in the new Act.

The new Act should also encourage the safe and responsible production of coalbed methane gas. The production of this gas represents a potential "shot in the arm" to the economy of Southwest Virginia. To protect the interest of coal owners, the Commission recommended that in certain situations a coal owner's consent should be required before a permit to drill a coalbed methane gas well could be issued. To take advantage of the federal alternative fuels tax credit before its expiration at the end of 1990, while at the same time ensuring that owners of the gas being produced are paid the royalties to which they are legally entitled, a special pooling procedure should be established which requires the escrowing of proceeds derived from the production of these proceeds. These special pooling provisions of the new Act should be effective immediately so that production of coalbed methane gas can commence before the federal tax credit expires. Commission members took no position on whether or not Virginia's "Migratory Gas Act" (Va. Code § 55-154.1) should be repealed.

4. Permitting and enforcement.

Members of the Commission found that many of the current Act's provisions relating to permitting standards were too technical and specific to be placed in statute. Consequently, they recommended that most of these standards be removed from statute and included in regulations to be promulgated by DMME. Commission members recommended that the new Act give general guidance on information required in permit applications and the factors to be considered in determining whether to grant the permit.

The current permit application fee of \$100 was found insufficient to cover DMME's administrative costs. Furthermore, when an operator desires to conduct geophysical operations or activities not presently covered under a valid permit, he should be required to obtain a separate permit for these activities. Permit application fees for new permits should be raised to \$200, and application fees for permit modifications and ground disturbing geophysical permits should be set at \$100.

The current Act does not provide for the expiration of permits, an omission that allows operators to commence permitted activities whenever they choose. From a regulatory standpoint, this is undesirable as technology and other factors may have changed between the time the permit was granted and the date the permitted activity commences. Without a permit expiration date, the regulatory agency remains powerless to mandate the use of new technologies or processes designed to promote safety or environmental protection. Consequently, the new Act should provide that unless a permitted activity commences within 24 months of the date the permit is issued, the permit shall expire.

The current Act's provisions relating to the amount of financial security which operator's must provide under blanket bonds is insufficient should a number of blanket bond forfeitures occur. The amount of a blanket bond should be based on the number of permitted wells covered under the blanket bond. Operators opting to post a blanket bond should be required to post a blanket bond in the following amount:

- 1. For one to fifteen wells, \$25,000;
- 2. For sixteen to thirty wells, \$50,000;
- 3. For thirty-one to fifty wells, \$75,000; and,
- 4. For fifty-one or more wells, \$100,000.

In addition, any operator posting a blanket bond should be required to annually pay \$50 per permit he holds under a blanket bond into a fund to be used by the Commonwealth in case a blanket bond forfeiture occurs and the bond is insufficient to fully cover the costs of plugging and restoration. Once the fund's balance exceeds \$100,000, no further payments should be required until the fund's balance drops below \$25,000, when payments must be resumed until the fund's balance once again exceeds \$100,000.

In order to enhance enforcement efforts and to place DMME and the VGOB on equal footing with entities such as the State Water Control Board, the Pesticide Board, and the Department of Waste Management, Commission members decided that it would be desirable to allow courts to assess civil penalties of up to \$10,000 per day for violations of the Act. In addition, the Board, with the consent of the violator, should be allowed to assess civil charges for such violations in lieu of civil penalties.

5. Hearings and appeals.

Commission members found that the notice provisions of the current Act were insufficient to provide notice of permit applications to local governments and the general public. Notice should be given to the local government of the jurisdiction in which the activity for which the permit application has been filed is to be conducted. To provide notice of the permit application to the public, publication of a notice in a general circulation newspaper which is published in that locality should also be required. However, standing to object to the issuance of a permit should not be expanded beyond that which exists in the current Act. Objections should be limited to certain topics and should be asserted only by those individuals who have a property interest on or underlying the tract or unit where the proposed activity will take place. Any expansion of standing could be construed as interference with contractual rights previously obtained.

Appeals of Director's decisions should be heard by the VGOB. The membership of this Board, as recommended by the Commission, provides it with the technical expertise required to properly decide such matters. Should a party be aggrieved by a Board decision, he should still be entitled to appeal the matter to the appropriate circuit court, as is the procedure under the current Act.

6. Restoration of orphaned wells.

While a procedure exists to require the plugging of all wells drilled subsequent to 1950, as well as funding for this plugging should an operator go bankrupt or refuse to comply, this is not the case with wells drilled prior to 1950. In many cases, there are no means of determining who drilled these pre-1950 wells. No records were kept and no bonds were required to ensure that these wells were properly plugged.

DMME has discovered more than 30 pre-1950 wells which were improperly plugged. Due to their improper plugging, oil is now seeping to the surface. Unless properly plugged, these wells threaten the quality of groundwater and present surface contamination problems. DMME estimates the cost of properly plugging these wells and cleaning up the oil which has already seeped to the surface at these sites at \$3,000 to \$10,000 per well. Because DMME has no money in its current budget with which to pay these costs, the industry as a whole should bear these costs of cleanup. Therefore, each operator applying for a new permit for an activity other than geophysical operations should pay \$50 into a new fund known as the Orphaned Well Fund. From the moneys credited to this Fund, DMME should pay for the plugging and restoration of orphaned well sites. The plugging and restoration of sites which pose an imminent danger to public safety should have the highest priority.

IV. STUDY: THE REGULATION OF INDEPENDENT POWER PRODUCERS

The 1989 Session of the General Assembly adopted House Joint Resolution 438, which requested that the Virginia Coal and Energy Commission study the regulation of independent power producers in the Commonwealth. A copy of House Joint Resolution No. 438 is attached as Appendix C.

A. Background.

An independent power producer (IPP) is a wholesale producer which remains unaffiliated with other franchised utilities located within the region in which the IPP sells power. The term "IPP" excludes "qualifying facilities" (QFs), as defined by the Public Utility Regulatory Policies Act of 1978 (PURPA). Under PURPA, cogeneration plants which produce electricity in conjunction with process steam, as well as small power producers of 80 megawatts or less, are considered QF's. Unlike traditional electric facilities, IPPs do not possess transmission facilities and do not sell power in any retail service territory in which they have a franchise. They sell wholesale electricity to electric utilities. Their profitability depends solely upon their ability to efficiently generate power and to price that power competitively.

Issues surrounding the regulation of IPPs have surfaced due to the State Corporation Commission's (SCC) approval of a policy allowing utilities to use all-source competitive bidding. The SCC adopted this procedure to provide an opportunity for cogenerators and IPPs to participate in the bidding process. Arguably, nonutility power producers which qualify as QFs under PURPA have a distinct advantage in this bidding process over IPPs because QFs are exempt from federal and state utility regulation. To qualify as a QF under PURPA, a facility must use at least five percent of the steam it produces for nonpower generation process. PURPA was enacted to encourage the development of certain types of alternative power producers, improve the overall efficiency of electric power supply, and provide more electrical power sources for the nation. PURPA requires that utilities in need of power offer to purchase that power from QFs at a rate limited by their "avoided cost," defined as the cost that would be incurred by the utility to produce the power or purchase it from another source. Utilities are not required to purchase power from IPPs which are not QFs.

Consequently, today's nonutility power market is largely limited to QFs. Nonutility power producers desiring to obtain the advantages of a QF must purchase a steam host and continue to provide a nonpower generation steam use. Proponents of IPP deregulation argue that by having to qualify as a QF, time and resources are wasted while the price of electricity is increased. They believe that the future development of the nonutility power industry is limited by the number of steam hosts available.

B. Federal and State Regulation.

IPPs are regulated in much the same way at the state and federal levels as are traditional electric utilities; however, many individuals now view the laws and regulations governing IPPs as barriers to the development of this portion of the electrical production industry.

1. Current federal regulation.

IPPs are currently subject to regulation under the Federal Power Act (FPA) and the Public Utility Holding Company Act (PUHCA). While the FPA imposes traditional electric utility cost-of-service regulation and nonprice regulations on IPPs, the PUHCA seeks to curb certain abusive practices of public utility holding companies by (i) imposing limits on their structure and operations and (ii) subjecting them to comprehensive regulation by the Securities and Exchange Commission. Cost-of-service regulation under the FPA provides the utility with the opportunity to recover all of its expenses, yet it prevents the retention of gains realized as a result of greater productivity.

Regulations developed by the Federal Energy Regulatory Commission (FERC) under the FPA ensure that asset and financial transactions of jurisdictional companies do not jeopardize their ability to render adequate service to customers within their jurisdiction. FERC's regulations and policies affect the cost and reliability of electric supply through their impact on availability, cost, prices and choices of wholesale power supply. Congress has charged FERC with the "responsibility of protecting consumers against excessive prices while maintaining competition to the fullest extent possible." If any rate is found "unjust, unreasonable, unduly discriminatory, or preferential," FERC may determine and set a just and reasonable rate. Although FERC has traditionally examined sellers' costs in approving rates, just and reasonable rates have been established on a basis other than cost of service.

The PUHCA prohibits a holding company from investing in generation outside of its own service area and requires that a nonexempt holding company own only businesses which are functionally related to the utility's business. A holding company is exempt under PUHCA if it operates entirely or primarily within a single state. A utility holding company will therefore lose this exemption if it invests in an IPP outside of its own service area.

2. **Proposed federal regulation**

On March 16, 1988, FERC issued a notice of proposed rulemaking designed to streamline the regulation of IPPs. These proposed regulations would:

- 1. Authorize that the rates charged by IPPs be determined through competitive bidding or rate negotiation subject to a price cap, thereby freeing IPPs from cost-based ratemaking requirements while ensuring that such rates fall within a zone of reasonableness;
- 2. Authorize IPPs to file rate schedules without having to provide extensive cost-support information;
- 3. Exempt IPPs from cost-related accounting, reporting and record keeping requirements;
- 4. Streamline the corporate and financial regulation of IPPs;
- 5. Provide for almost automatic authorization to engage in certain corporate activities;
- 6. Revise filing fees;
- 7. Waive annual charges; and
- 8. Adopt an advance certification procedure to qualify as an IPP.

FERC's purpose in proposing these regulations is to increase supply options in the wholesale electric energy market. FERC has indicated that it is exploring options for creating "a regulatory environment in which the most efficient organization form will emerge naturally" and that it intends its regulatory reforms to complement state regulatory efforts by providing utilities with appropriate incentives to select the most economical and reliable supply arrangements from the various opportunities available to them. FERC has indefinitely postponed any action on its proposed rulemaking and has announced that it will continue to consider projects on a case-by-case basis. In recent months, FERC has issued a series of decisions approving market-based rates as just and reasonable for IPPs lacking market power over the buyer or selling through arm's length negotiation.

<u>3. State regulation.</u>

In Virginia, IPPs are generally classified as "public utilities" which "own or operate facilities within the Commonwealth for the generation, transmission or distribution of electric energy for sale" Such a classification brings them within the regulatory purview of Title 56 of the Code of Virginia. Only those IPPs which qualify as QFs under PURPA are exempted from most regulation in Virginia.

To become an IPP in Virginia, a company must incorporate as a public service company. The State Corporation Commission (SCC) has the responsibility of supervising, regulating and controlling all public service companies doing business in the Commonwealth. IPP sales to Virginia utilities are wholesale transactions subject to regulation by FERC, as previously described. The SCC may not review rates determined by FERC to be just and reasonable, but may be able to review the prudence of the buying utility's decision to purchase from that IPP.

IPPs operating in the Commonwealth are also subject to other provisions of Title 56 of the Code of Virginia, such as those relating to financing and securities. They must apply to the SCC for an order authorizing the issuance of securities, bonds, notes or other evidence of indebtedness and may be required to provide certain financial information.

The SCC has certification jurisdiction over all public utilities proposing to build in Virginia, including IPPs. These companies must obtain a certificate of public convenience and necessity before constructing, enlarging or acquiring any facilities for use in public utility service. Such a certificate must also be obtained before the company can furnish service in a particular territory.

In late 1987, the SCC began to consider the use of nonutility generated power by electric utilities to satisfy increased electrical demand. After reviewing comments filed by interested parties, the SCC's staff recommended that an "all-source bidding process be one option available to a utility in acquiring supply in a least cost environment." "All-source" includes QFs, IPPs and other utilities. Staff indicated that the bidding process provides the most "economically efficient method of securing nonutility capacity."

The SCC was the first state public utility commission in the United States to endorse such an all-source bidding system. The system increases competition by opening the market to all classes of producers, thereby rewarding the public utility and eventually its customers with better prices.

C. Proponents of IPP Deregulation.

The Virginia Coal and Energy Commission received testimony from representatives of IPPs interested in doing business in Virginia. These individuals told the Commission that the current extent of state regulation is unnecessary and unwise. They emphasized that the market place (competitive bidding) already serves as an effective overseer of the nonutility generation industry and that competition between IPPs benefits ratepayers of regulated utilities. According to these representatives, over-regulation of IPPs by the State will decrease the number of IPPs willing to build in Virginia. Specifically, representatives of IPPs objected to the possibility that the SCC might consider cost of service information after the IPP had placed its bid, as well as to the requirement which forces IPPs to submit financial reports to the SCC for use in determining what rates should be charged. They indicated that these requirements were expensive and unnecessary because the competitive bidding process serves as an effective price regulator. They explained that having to obtain SCC approval prior to issuing securities or selling assets makes it difficult for IPPs to finance their projects because of the expense and time involved in the public hearing process. The Commission was told that smaller companies and innovative projects may be eliminated by significant regulatory structure. IPP representatives argued that the reliability of unregulated IPPs is already ensured by the substantial penalties which would be incurred by an IPP should it fail to fulfill its contractual obligations with a regulated franchise.

According to Virginia Power's projected demand figures, by the year 2000 an additional 6,000 megawatts of capacity will be required. Building for this projected demand would entail the construction of a system the size of the one currently serving the District of Columbia and a large portion of Maryland. A representative of Virginia Power told the Commission that in order to meet increasing electrical demand at the lowest possible cost, his company was using competitive bidding. However, he explained that the "existing legal and regulatory hurdles" (the PUHCA, the FPA, and state regulation) were forcing IPPs to drop out of the bidding process before it is completed.

The Commission was informed that under the competitive bidding process, an IPP is subjected to the same reliability tests as is a QF. Virginia Power's purchasing contracts are "life of the plant" contracts, usually for a term of 25 years. These contracts are designed to discourage default and are evaluated on the basis of cost and nonprice factors. Each contract includes a "fall back" provision which allows Virginia Power, should the project fail, to obtain the project at fair market value and continue operation of the plant without passing the acquisition costs on to consumers as a rate increase. Furthermore, in order to obtain financing, IPP's must undergo intensive review by lenders. According to Virginia Power representatives, the regulation of an IPP "flows through the utility" and additional regulation by the SCC in unnecessary.

D. Opponents of IPP Deregulation.

Representatives of the SCC informed the Commission that while the SCC endorses the all-source competitive bidding system, it believes that a total reliance on nonutility power plants to meet increasing future demand is a "risky proposition." The SCC favors a more balanced approach of purchasing power and building for capacity. SCC representatives informed the Commission that continued regulatory oversight of IPPs is necessary to ensure that IPP projects are viable, sound, and in the public's best interest.

E. Findings and Recommendations.

Although the Commission received extensive information about the regulation of IPPs in Virginia, the Commission developed no findings or recommendations as a result of this study.

V. ACID RAIN LEGISLATION: THE OFFSET REQUIREMENT

During 1989, the Commission received an update on the contents of the Bush Administration's proposed acid rain legislation. At its October 18, 1989 meeting, the Commission learned that this legislation was before two Congressional subcommittees. Commission members were disturbed by the "allowance" or "offset" provisions of this bill. These provisions would not only require that utilities reduce sulfur dioxide emissions from existing units, but that utilities which add new generation must offset by 100 percent the sulfur dioxide emissions resulting from this new generation with further reductions at existing units. According to a representative of the power industry in Virginia, the "allowance" or "offset" provisions will produce two major effects:

- 1. A utility's ability to increase its generating capacity to provide for new growth will depend entirely upon its ability to create additional offsets or allowances, which eventually will result in a utility's unwillingness to invest in new coal-fired units; and
- 2. They create a strong bias against the use of existing coal units or the acquisition of new ones to meet growing demand.

In response to this information, the Commission forwarded a letter to the Virginia Congressional delegation and the chairmen of the two Congressional subcommittees informing them that the Commission believes that the "offset" requirement (i) will force electricity consumers to pay billions of dollars more than necessary to achieve a 10 million ton reduction in sulfur dioxide emissions, (ii) will reduce the role of coal in providing for future energy needs and deter the use of low-sulfur coal as a means of achieving environmental goals, and (iii) may be unnecessary to ensure that a 10 million ton reduction in sulfur dioxide emissions is maintained. The letter also endorsed the "adjustable rate cap" concept as an alternative means of ensuring that the 10 million ton reduction in sulfur dioxide is maintained. A copy of one of these letters is attached as Appendix D.

VI. EPA's POLICIES REGARDING THE ISSUANCE OF AIR PERMITS FOR ELECTRIC GENERATION PROJECTS IN VIRGINIA

At its final meeting of the year, the Commission received information on the policies of EPA's Region III which relate to the issuance of air permits to electric generation projects in Virginia. Commission members were disturbed by (i) EPA's abrupt shift to a more stringent requirement of preventing significant deterioration (PSD) of ambient air quality and (ii) Region III's unduly aggressive position concerning Best Available Control Technology. The Commission determined that unless EPA's policies are rapidly altered, they will delay and may prevent the development of generating capacity needed for continued reliable electric service in Virginia. Furthermore, because of the apparent differences in policy between EPA's Region III, which encompasses Virginia, and that of Region IV, in which North Carolina is located, investment in generating projects and the resulting employment and economic benefits may shift from Virginia to North Carolina.

By unanimous vote, the Commission decided to forward a letter to Virginia's Congressional delegation informing them of the unnecessary problems caused by EPA's policy shift and differing interpretations of policy by region. A copy of one of these letters is attached as Appendix E.

VII. SUBCOMMITTEE ACTIVITIES

Two of the subcommittees of the Virginia Coal and Energy Commission met during the year: the Oil and Gas Subcommittee and the Energy Preparedness Subcommittee. Because the Oil and Gas Subcommittee met solely for the purpose of discussing proposed changes to the Virginia Oil and Gas Act, a topic discussed in a previous section of this report, this section will focus on the activities of the Energy Preparedness Subcommittee.

The Energy Preparedness Subcommittee held one meeting for the purpose of receiving updates on the use of oil overcharge funds and the activities of the Department of General Services' Division of Buildings and Grounds. Personnel from DMME informed the Subcommittee that DMME's Division of Energy has traditionally received funding from three different sources: federal funds, state funds, and oil overcharge funds. Oil overcharge funds are moneys derived from settlements with oil companies accused of price gouging during periods of price control. These funds are passed to the state and are earmarked for energy conservation and efficiency programs. Since the first settlement, Virginia has received approximately \$100 million in oil overcharge funds. Oil overcharge funds have accounted for approximately 90 percent of the Division's budget, or approximately \$2.6 million. Federal grants currently total \$400,000, bringing the Division's total budget to \$3 million. The Subcommittee was told that oil overcharge funds will be depleted by the end of the biennium. At the suggestion of the Coal and Energy Commission, DMME submitted a budget addendum requesting state general funds. The Commission, by way of a letter to Governor Baliles, endorsed this request and suggested that Texaco and Diamond Shamrock oil overcharge funds be expended for this purpose. A copy of this letter is attached as Appendix F. The Subcommittee was informed that recommendations included in the Administration's budget would provide only \$1 million in general fund moneys. Combined with federal dollars (\$400,000), this would have resulted in a 60 percent reduction in funding for the Division. Following the Subcommittee's meeting, the budget was amended to provide an appropriation of \$2 million in oil overcharge funds to the Division, instead of the \$1 million in general funds. As a result, funding for the Division was cut by only 25 percent.

The lack of available oil overcharge funds will have a significant impact on a number of the Division's programs which were previously funded with these moneys. The Institutional Conservation Program, which provides grants to schools and hospitals for the implementation of energy conservation measures, will continue to have grant moneys available for these projects. However, the 25 percent funding reduction will affect the Energy Conservation Program and the Energy Extension Service Program. These programs target consumers for education regarding energy conservation. Project awards made by these programs during 1989-90 came exclusively from oil overcharge funds.

The Weatherization Assistance Program (WAP) and the Low Income Home Energy Assistance Program (LIHEAP) faired slightly better, although if their use of funds remains consistent over the next two years, the remaining oil overcharge funds will be totally depleted. The WAP assists low income individuals by increasing the energy efficiency of their housing, which results in lower energy costs. The LIHEAP assists low income households with home energy costs when those costs are disproportionate to the household's income.

Personnel from the Department of General Services' Division of Buildings and Grounds provided the Subcommittee with an update on its activities during the past year. They informed the Subcommittee that the Division is currently tracking energy usage at 100 state facilities and has visited at least 20 state facilities which have shown high energy usage. During these visits, Division personnel provide advice and training on energy conservation to the managers of these facilities It is estimated that as a result of each of these visits, a facility saves approximately \$15,000 annually with little or no capital outlay. By monitoring the effects of demand rates on state facilities and keeping records on use and cost, the Division has been able to recommend methods for reducing cost and use rates at these facilities. Such monitoring and record-keeping has allowed the Commonwealth to save approximately \$450,000 in energy costs since the program began. The Subcommittee was informed that over the past four years, the Commonwealth's average expenditures on electricity, natural gas, fuel oil, coal, and steam had increased by only 3.83 percent, whereas from 1974 to 1984, such expenditures increased by an average of 12 to 13 percent.

Finally, the Subcommittee was told that in years past the efforts of the Division's Energy Team had been totally funded through oil overcharge funds. In anticipation that these funds will no longer be available, the team submitted a budget request for funding through general funds. Although at the time of the Subcommittee's meeting the Team's request had not been added to the budget, the budget was eventually amended to provide a \$400,000 appropriation to fund the Team during the next biennium.

Respectfully submitted,

Daniel W. Bird, Jr., Chairman A. Victor Thomas, Vice-Chairman James F. Almand John C. Buchanan Charles J. Colgan J. Paul Councill, Jr. Cynthia J. Dahlin John S. DiYorio, Ph.D. Jerry D. Duane Sandra E. Dysart Virgil H. Goode, Jr. W. Thomas Hudson Glenn B. McClanan Everard Munsey Frank W. Nolen Lewis W. Parker, Jr. Ford C. Quillen Alson H. Smith, Jr. John Watkins Richard A. Wolfe, Ph.D. Donald A. McGlothlin, Sr.

VIII. APPENDIX GUIDE

- APPENDIX A House Joint Resolution No. 364 (1989)
- APPENDIX B Commission Recommendations/Senate Bills 381 and 382 (1990)
- APPENDIX C House Joint Resolution No. 438 (1989)
- APPENDIX D Letter Requesting Changes in Proposed Acid Rain Legislation
- APPENDIX E Letter Regarding EPA's Policies/Issuance of Air Permits
- APPENDIX F Letter Requesting Funding for the Division of Energy

APPENDIX A

GENERAL ASSEMBLY OF VIRGINIA -- 1989 SESSION HOUSE JOINT RESOLUTION NO. 364

Designating the legislative members of the Virginia Coal and Energy Commission as a joint subcommittee to study the Oil and Gas Act.

Agreed to by the House of Delegates, February 24, 1989 Agreed to by the Senate, February 23, 1989

WHEREAS, a comprehensive study of the laws applicable to the exploration for and production of oil and gas in Virginia was undertaken by the Oil and Gas Subcommittee of the Virginia Coal and Energy Commission in 1981 and 1982; and

WHEREAS, the Virginia General Assembly enacted the Virginia Oil and Gas Act during the 1982 Session based in large part upon the recommendations of the Oil and Gas Subcommittee; and

WHEREAS, landowners, lessors, lessees, investors, oil and gas exploration and drilling companies and the state agencies and boards involved in the regulation of oil and gas exploration and drilling have now had several years to work with the provisions of the act; and

WHEREAS, the Department of Mines, Minerals and Energy is responsible for regulating gas and oil activities under the act to encourage the wise use of Virginia's oil and gas resources while providing for protection of the environment, mineral rights and the public safety; and

WHEREAS, that experience with the act suggests a need for additional study to determine whether modifications and refinements are necessary to better serve the citizens of Virginia; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the legislative members of the Virginia Coal and Energy Commission are designated as a joint subcommittee to study whether any modifications to the Virginia Oil and Gas Act are desirable or necessary.

The Department of Mines, Minerals and Energy shall serve as staff advisors for the joint subcommittee and prior to the subcommittee's first meeting shall prepare a report to the subcommittee. The report shall include a summary of the current provisions and procedures of the Oil and Gas Act, and a practical framework to incorporate changes to those sections where all parties agree including enforcement provisions. The joint subcommittee shall provide for the full participation of all interested parties in its study of proposed changes to the Virginia Oil and Gas Act.

The joint subcommittee shall complete its work in time to submit its findings to the Governor and the 1990 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for processing legislative documents.

APPENDIX B

LD2541105

1 SENATE BILL NO. 381 2 Offered January 23, 1990 3 A BILL to amend and reenact §§ 45.1-288, 45.1-318, 45.1-319, and 45.1-320 of the Code of 4 Virginia and that the Code of Virginia is amended by adding in Chapter 22 of Title 5 45.1 an article numbered 6.1, consisting of sections numbered 45.1-357.1 through 6 45.1-357.5, relating to coalbed methane gas. 7 8 Patrons-Bird, Buchanan, Nolen, Colgan and Goode; Delegates: Thomas, Quillen, Councill, 9 Smith and Almand 10 11 Referred to the Committee on Agriculture, Conservation and Natural Resources 12 13 Be it enacted by the General Assembly of Virginia: 14 1. That §§ 45.1-288, 45.1-318, 45.1-319, and 45.1-320 of the Code of Virginia are amended 15 and reenacted and that the Code of Virginia is amended by adding in Chapter 22 of Title 16 45.1 an article numbered 6.1, consisting of sections numbered 45.1-357.1 through 45.1-357.5, 17 as follows: 18 § 45.1-288. Definitions.-As used in this chapter, unless the context clearly indicates **19** otherwise: 20 "Barrel" means forty-one forty-two U.S. gallons of 231 cubic inches each of liquids, 21 including slurries, at a temperature of sixty degrees Fahrenheit; 22 "Bridge" means an obstruction placed in a well at any specified depth: 23 "Carried well operator" means a well operator of a tract included in a drilling unit 24 who elects to share in the operation of the well on a carried basis by agreeing to have his proportionate share of the costs allocable to his interests charged against his share of 25 **26** production from the well; 27 "Casing" means all pipe set in wells except conductor pipe and tubing; 28 "Cement" means hydraulic cement properly mixed with water; 29 "Coalbed methane gas" means occluded natural gas produced from coalbeds and rock 30 strata associated therewith: 31 "Coalbed methane gas well" means a well capable of producing coalbed methane gas: 32 "Coalbed methane gas well operator" means any person who has the right to operate 33 or does operate a coalbed methane gas well; "Coal operator" means any person who has the right to operate or does operate a coal 34 **35** mine: 36 "Coal protection string" means a string designed to protect a coal seam; "Coal seam." "workable coal bed" and "workable coal seam" are interchangeable terms 37 and mean any seam of coal twenty inches or more in thickness, unless a seam of less 38 39 thickness is being commercially worked, or can in the judgment of the Department 40 foreseeably be commercially worked and will require protection if wells are drilled through 41 it; 42 "Combination well" means a well producing both oil and gas; 43 "Conductor pipe" means the short string of large diameter used primarily to control 44 caving and washing out of unconsolidated surface formations; 45 "Correlative rights" means the rights of each owner of oil or gas interests in a single pool to have a fair and reasonable opportunity to obtain and produce his just and equitable 46 47 share of production of the oil or gas in such pool or its equivalent without being required 48 to drill unnecessary wells or incur other unnecessary expense to recover or receive the oil 49 or gas or its equivalent; 50 "Cubic foot of gas" means the volume of gas contained in one cubic foot of space at a 51 standard pressure base of 14.73 pounds per square inch and a standard temperature base 52 of sixty degrees Fahrenheit; 53 "Deviation survey" means any process to determine of deviation, using the surface 54 location of the well as the apex, of the well bore from the true vertical beneath the apex 1 on the same horizontal subsurface plane;

2 "Directional survey" means any process to determine (i) the angle of deviation, using 3 the surface location of the well as the apex, of the well bore from the true vertical 4 beneath the apex on the same horizontal subsurface plane, and (ii) the direction of an 5 imaginary line from the true vertical beneath the apex to the well bore on the same 6 horizontal subsurface plane;

7 "Drilling unit" means, as applicable, (i) the acreage on which one oil or gas well may 8 be drilled under Article 2 (§ 45.1-299 et seq.) of this chapter Θr , (ii) the acreage on which 9 one gas well may be drilled under § 45.1-321, or (iii) the acreage on which one coalbed 10 methane gas well may be drilled under Article 6.1 (§ 45.1-357.1 et seq.) of this chapter;

"Expanding cement" means any cement approved by the Inspector which expands
during the hardening process, including but not limited to regular oil field cements with
the proper additives;

14 "Exploratory well" means a well drilled either in search of a new, and as yet
15 undiscovered, field of oil or gas, or with the expectation of greatly extending the limits of
16 a field already partly developed;

17 "Facility" means any facility utilized in the oil and gas industry in this Commonwealth18 and specifically named or referred to in this chapter, other than a well or well site;

19 "Fluid injection well" means a well drilled or converted for the purpose of introducing
20 water or other fluid pressure into and upon the producing strata for the purpose of
21 recovering the oil contained therein;

"Gas" or "natural gas" means all natural gas whether hydrocarbon or non-hydrocarbon
or any combination or mixture thereof, including hydrocarbons, hydrogen sulfide, helium,
carbon dioxide, nitrogen, hydrogen, casing head gas, and all other fluids not defined as oil
in this section;

26 "Gas-oil ratio test" means a test, by any means generally accepted in the oil and gas 27 industry, to determine the number of cubic feet of gas produced per barrel of oil 28 produced;

29 "Gas operator," as used in §§ 45.1-320 through 45.1-323, means any person who has the 30 right to develop and produce or does develop and produce gas from a pool and to 31 appropriate the gas produced therefrom either for himself or for himself and others. In the 32 event that there is no gas lease in existence with respect to the tract in question, the 33 owner of the gas rights therein shall be considered a gas operator of the gas in that 34 portion of the pool underlying the tract which he owns;

35 "Gas well" means any well which produces or appears capable of producing a ratio of
36 6,000 cubic feet of gas or more to each barrel of oil on the basis of the initial gas-oil ratio
37 test;

38 "Gathering pipelines" means pipelines which are used to transport oil or gas from the
39 well to the transmission line or other line regulated by the Federal Energy Regulatory
40 Commission or the State Corporation Commission;

41 "Gob" means the de-stressed zone associated with any full-seam extraction of coal that 42 extends above and below the mined-out seam.

43 "Initial gas-oil ratio test" means the gas-oil ratio test performed for the purpose of 44 designating a well as an oil well or a gas well;

45 "Inspector" means the Virginia Oil and Gas Inspector appointed to assist the Chief 46 under § 45.1-291 or such other public officer, employee or other authority as may in 47 emergencies be acting in the stead, or by law be assigned the duties of, the Virginia Oil 48 and Gas Inspector;

"Just and equitable share of production" means, as to each person, an amount of oil
and gas or both in the same proportion to the total production from a well as that person's
acreage bears to the total acreage in the drilling unit;

52 "Linear foot" means one foot in a straight line on a horizontal plane;

53 "Log" or "well log" means the written record progressively describing all strata, water, 54 oil or gas encountered in drilling, depth and thickness of each bed or seam of coal drilled through, quantity of oil, volume of gas, pressures, rate of fill-up, fresh and salt
 water-bearing horizons and depths, cavings strata, casing records and such other
 information as is usually recorded in the normal procedure of drilling. The term shall also
 include the electrical survey records or logs if any are made;

5 "Mine" means an underground or surface excavation or development with or without 6 shafts, slopes, drifts or tunnels for the extraction of coal, minerals or nonmetallic materials, 7 commonly designated as mineral resources, excluding oil and natural gas, which contains 8 mineral resources and the hoisting or haulage equipment and appliances, if any, for the 9 extraction of the mineral resources. The term embraces all of the land or property of the 10 mining plant, including both the surface and subsurface, that is used or contributes directly 11 or indirectly to the mining, concentration or handling of the mineral resources;

12 "Mine operator" means any person who has the right to operate or does operate a 13 mine other than a coal mine;

14 "Mud" or "mud-laden fluid" means any approved mixture of water and clay or other 15 material as the term is commonly used in the industry;

16 "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of 17 gravity, which are produced at the well in liquid form by ordinary production methods and 18 which are not the result of condensation of gas after it leaves the underground reservoir;

19 "Oil well" means any well which produces or appears capable of producing a ratio of 20 less than 6,000 cubic feet of gas to each barrel of oil on the basis of the initial gas-oil 21 ratio test;

22 "Operator" means any person who has the right to operate or does operate a well or a 23 mine;

24 "Owner" means (i) when used with reference to any well, any person who owns, 25 operates, or has the right to operate such a well as principal or as lessee, and (ii) when 26 used with reference to any coal seam, any person who owns, leases, operates, or has the 27 right to operate the coal seam;

"Participating operator" or "participating well operator" means a well operator who elects to bear a share of the risks and costs of drilling, completing, equipping, operating, plugging and abandoning a well on a drilling unit and to receive a share of production from the well equal to the proportion which the acreage in the drilling unit he owns or holds under lease bears to the total acreage of the drilling unit;

33 "Person" means any natural person, firm, partnership, partnership association 34 association, company, corporation, receiver, trustee, guardian, executor, administrator 35 fiduciary or representative of any kind and includes any government, political subdivisior 36 or any agency thereof;

37 "Person under a disability" shall have the meaning ascribed to it in § 8.01-2;

38 "Pillar" means a solid block of coal, ore or other material left unmined to support the 39 overlying strata in a mine;

40 "Pipeline" means any pipe above or below the ground used or to be used for the 41 transportation of oil or gas;

42 "Plat" or "map" means a map, drawing or print showing the location of a well o 43 wells, mine or quarry;

44 "Plug" means the stopping of the flow of water, gas or oil from one stratum to anothe 45 in connection with the abandoning of a well in accordance with the requirements of law;

46 "Pool" means an underground accumulation of oil or gas in a single and separat 47 natural reservoir. It is characterized by a single natural-pressure system so that productio 48 of oil or gas from one part of the pool tends to or does affect the reservior pressur 49 throughout its extent. A pool is bounded by geologic barriers in all directions, such a 50 geologic structural conditions, impermeable strata, or water in the formation, so that it 51 effectively separated from any other pool which may be present in the same geologic

52 structure;

⁵³ "Porosity" means a measure of the pore space in a given quantity of bulk roc⁵⁴ expressed as a percentage;

1 "Project area" means the well and any other disturbed area, including roads and 2 off-site disposal, associated with the well;

"Red shales" mean the undifferentiated shaly portion of the Bluestone Formation
normally found above the Pride Shale Member of the formation, and extending upward to
the base of the Pennsylvanian strata, which red shales are predominantly red and green in
color but may occasionally be gray, grayish green and grayish red;

7 "Royalty owner" means any owner of oil and gas in place, or oil and gas rights, to the 8 extent that such owner is not a well operator or a gas operator;

9 "Safe mining through a well" means the mining of coal in a coal seam up to and
10 through a well which penetrates the coal seam but has been plugged pursuant to §§
11 45.1-344 through 45.1-346 so that the casing and plug in the well where the well bore
12 penetrated the coal seam is safely severed;

13 "Shot" or "shooting" means exploding nitroglycerine or other high explosive in a hole to 14 shatter the rock and increase the flow of oil or gas;

15 "Spoil" means any overburden or other material removed from its natural state in the 16 process of preparing or utilizing a well location;

17 "Stimulate" means any action taken by a well operator to increase the inherent 18 productivity of an oil or gas well, including, but not limited to, fracturing, shooting or 19 acidizing, but excluding (i) cleaning out, bailing or workover operations and (ii) the use of 20 surface-tension reducing agents, emulsion breakers, paraffin solvents and other agents which 21 affect the oil or gas being produced as distinguished from the producing formation;

"String of pipe" means the total footage of pipe of uniform size set in a well. The term embraces conductor pipe, casing and tubing. When the casing consists of segments of different size, each segment constitutes a separate string. A string may serve more than one purpose. The classification of a string is based on its primary function. The "surface string" has its upper end at the surface; the "intermediate strings" prevent caving, shut off connate water in strata below the surface string, and protect strata from exposure to lower zone pressures; and the "production string," where used, is the string through which the well is completed and frequently produced and controlled;

30 "Target formation" means the primary geological formation identified by the well 31 operator in his application for a drilling permit filed under § 45.1-311;

32 "Tracts comprising a drilling unit" means all separately owned tracts or portions 33 thereof which are included within the boundaries of a drilling unit;

34 "Tubing" means the small diameter string set after the well has been drilled from the 35 surface to the total depth and through which the oil or gas or other substance is produced 36 or injected;

37 "Waste" means (i) physical waste, as that term is generally understood in the oil and gas industry; (ii) the inefficient, excessive, improper use, or unnecessary dissipation of 38 reservoir energy; (iii) the inefficient storing of oil or gas; (iv) the locating, drilling, 39 40 equipping, operating, or producing of any oil or gas well in a manner that causes, or tends 41 to cause, a reduction in the quantity of oil or gas ultimately recoverable from a pool under 42 prudent and proper operations, or that causes or tends to cause unnecessary or excessive 43 surface loss or destruction of oil or gas; (v) the production of oil or gas in excess of 44 transportation or marketing facilities, the amount reasonably required to be produced in 45 the proper drilling, completing, or testing of the well from which it is produced; except gas 46 produced from an oil well or condensate well pending the time when with reasonable 47 diligence the gas can be sold or otherwise usefully utilized on terms and conditions that *48 are just and reasonable; and (vi) underground or above ground waste in the production or 49 storage of oil, gas, or condensate, however caused ; . The term waste does not include gas 50 vented from methane drainage boreholes or coalbed methane gas wells, where necessary 51 for safety reasons, or for the efficient testing and operation of coalbed methane gas wells: 52 nor does it include the plugging of coalbed methane gas wells for the recovery of the coal 53 estate:

54 "Waste disposal well" means a well drilled or converted for the disposal of drilling

1 fluids, producing waters and other wastes associated with the exploration, development, or 2 production of oil or gas;

³ "Water protection string" means a string designed to protect the fresh water sands;

4 "Well" means any shaft or hole sunk, drilled, bored or dug into the earth or into underground strata for the extraction or injection or placement of any gaseous or liquid 5 substance, or any shaft or hole sunk or used in conjunction with such extraction or 6 injection or placement. The term "well" does not include any shaft or hole sunk, drilled, 7 bored or dug into the earth for the sole purpose of core drilling or pumping or extracting 8 therefrom potable, fresh or usable water for household, domestic, industrial, agricultural or 9 public use and does not include power boreholes, water boreholes, methane drainage 10 11 boreholes, where the methane is vented or flared rather than produced and saved, or any 12 other boreholes necessary or convenient for the extraction of coal or drilled pursuant to a 13 uranium exploratory program carried out pursuant to the laws of this Commonwealth;

"Well operator" means any person who has the right to operate or does operate a well. In the event there is no oil or gas lease in existence with respect to the tract in question, the owner of the oil and gas rights therein shall be considered a well operator of the oil and gas in that portion of the pool underlying the tract which he owns. For purposes of oil and gas conservation under Article 2 (§ 45.1-299 et seq.) of this chapter, "well operator" means any owner of the right to develop and produce oil and gas from a pool and to appropriate the oil and gas produced therefrom either for himself or for himself and others. In the event that the oil is owned separately from the gas, the definitions contained herein shall apply separately to the owners of the respective interests;

23 "Well work" means the drilling, redrilling, deepening, stimulating, pressuring by 24 injection of any fluid, converting from one type of well to another, combining or physically 25 changing to allow the migration of fluid from one formation to another, plugging or 26 replugging of any well.

27 § 45.1-318. Objections by coal owner.—A. In deciding on objections by a coal owner to
28 proposed well work at an existing well, the Inspector shall consider only the following
29 questions:

30 1. Whether the work can be done safely with respect to persons engaged in coal mining31 at or near the well site; and

32 2. Whether the well work is an unreasonable or arbitrary exercise of the well 33 operator's right to explore for, market and produce oil and gas.

B. In deciding on objections by a coal owner to the drilling of a new well, or the stimulation of a coalbed methane gas well, the Inspector shall first consider the following safety aspects, and no drilling permit shall be issued for any drilling location or stimulation of a coalbed methane gas well where the Inspector finds from the evidence that such drilling location or stimulation of a coalbed methane gas well will be unsafe:

39 1. Whether the drilling location is above or in close proximity to any mine opening or
40 shaft, entry, travelway, airway, haulageway, drainageway or passageway, or to any proposed
41 extension thereof, in any operated or abandoned or operating coal mine, or any coal mine
42 already surveyed and platted but not yet being operated;

2. Whether the proposed drilling can reasonably be done through an existing or planned
pillar of coal, or in close proximity to an existing well or such pillar of coal, taking into
consideration the surface topography;

46 3. Whether the proposed well can be drilled safely or whether the proposed coalbed 47 methane gas well can be stimulated safely, taking into consideration the dangers from 48 creeps, squeezes or other disturbances due to the extraction of coal; and

49 4. The extent to which the proposed drilling location or stimulation of a coalbed 50 methane gas well unreasonably interferes with the safe recovery of coal, oil and gas.

51 C. Subject to the distance limitations established in § 45.1-319 of this Code, the Inspector 52 shall also consider the following questions with respect to the drilling location of a new gas 53 well or stimulation of a coalbed methane gas well:

54 1. The extent to which the proposed drilling location or stimulation of a coalbed

1 methane gas well will unreasonably interfere with present or future coal mining operations;

2 2. The feasibility of moving the proposed drilling location to a mined out area, below
3 the coal outcrop, or to some other location;

3. The feasibility of a drilling moratorium for not more than two years in order to
5 permit the completion of coal mining operations;

6 4. The methods proposed for the recovery of coal and gas;

7 5. The practicality of locating the well on a uniform pattern with other wells;

8 6. The surface topography and use; and

9 7. Whether the decision will substantially affect the right of the gas operator to explore10 for and produce the gas.

11 The factors in subsection C of this section are not intended to and shall not be 12 construed to authorize the Inspector, or the Virginia Well Review Board under § 45.1-325 of 13 this Code, to supersede, impair, abridge or affect any contractual rights or obligations now 14 or hereafter existing between the respective owners of coal and gas or any interest therein.

15 § 45.1-319. Distance limitations for certain gas wells.—A. If the well operator and the 16 objecting coal owners present or represented at the time and place fixed by the Inspector for consideration of the objections to the proposed drilling location are unable to agree 17 18 upon a drilling location for a new gas well in Buchanan, Dickenson, Lee, Russell, Scott, 19 Tazewell or Wise Counties or the City of Norton, within the area thereof with outcropping 20 strata of Pennsylvanian age not deeper than specified in subsection B of this section and within 2,500 linear feet of the location of an existing oil or gas well completed to any 21 22 depth not deeper than specified in subsection B of this section or a well for which a permit application is on file, then the Inspector shall refuse to issue a drilling permit. 23

B. The foregoing distance limitation shall apply only to new gas wells for which the target formation is not deeper than the base of the Devonian shale or 5,000 feet, whichever is deeper, plus an additional allowance to the total depth of not more than 300 feet below the base of the Devonian shale if the penetration below the base does not result in production from strata deeper than the base and is to facilitate logging or stratigraphic testing or to permit the stimulation and completion of the well in a pool situated above the base.

31 C. The words "existing oil or gas well" as used in this section shall mean (i) any oil or 32 gas well not plugged within nine months after being drilled to its total depth and (ii) any 33 unexpired, permitted drilling location for such a well.

D. *B.* The minimum distance limitations established by this section shall not apply if the proposed gas well will be drilled through an existing or planned pillar of coal required for protection of a preexisting well drilled to any depth, and the proposed gas well will neither require enlargement of the pillar nor otherwise have an adverse effect on existing or planned coal mining operations.

39 § 45.1-320. Gas drilling unit when permit refused or conditioned; contents; notice.-A. 40 Whenever (i) a well work permit to drill a new gas well subject to the provisions of \S 45.1-319 has been refused on account of objections by a coal owner, or (ii) the Inspector 41 has issued a well work permit upon the condition provided in § 45.1-314 B for drilling a 42 43 gas well in Buchanan, Dickenson, Lee, Russell, Scott, Tazewell or Wise Counties or the City of Norton, within the area thereof with outcropping strata of Pennsylvanian age not deeper 44 than specified in subsection B of § 45.1-319, or (iii) (ii) a royalty owner has raised 45 objections under § 45.1-316, the gas operator may apply to the Virginia Oil and Gas 46 Conservation Board for establishment of a drilling unit encompassing a contiguous tract or 47 tracts if the gas operator believes that such a drilling unit will afford one well location, 48 agreeable to the objecting coal owner, for the production of gas from under the tract on 19 which the permit was sought. **50**

51 B. An application to establish a gas drilling unit shall be filed with the Virginia Oil and 52 Gas Conservation Board and shall contain the following:

53 1. The name and address of the applicant;

54 2. A plat prepared by a registered engineer or certified land surveyor showing (i) the

boundary of the proposed gas drilling unit, (ii) the county or city in which the unit is
 located, (iii) the unit acreage and the boundaries of the unit and the tracts which make up
 the unit, (iv) the owners of record of each tract, (v) the proposed gas well location on the
 unit, and (vi) the proposed gas well location for which the Inspector refused to issue or
 conditioned a drilling permit;

6 3. The names and addresses of (i) the royalty owners of the oil and gas underlying the 7 tracts which make up the proposed unit and (ii) the gas operators of the tracts which 8 make up the proposed unit;

9 4. The approximate depth and target formation to which the well for the proposed unit10 is to be drilled;

5. A statement indicating whether a voluntary pooling agreement has been reached among any or all of the royalty owners of the gas underlying the tracts which comprise the proposed unit and the gas operators of such tracts;

14 6. An affidavit of publication of the notice required in subsection C of this section; and

15 7. Any other relevant information the Virginia Oil and Gas Conservation Board may 16 require by regulation.

17 C. Prior to the filing of an application under this section, the applicant shall cause to
18 be published such notice of intent to file an application to establish a gas drilling unit as
19 may be prescribed by regulation promulgated by the Virginia Oil and Gas Conservation
20 Board.

D. At the time an application to establish a gas drilling unit is filed, the applicant shall forward a copy thereof by certified mail, return receipt requested, to every person whose name and address were included on the application pursuant to subdivisions B 2 and B 3 of this section, together with a notice, in such form as may be prescribed by the Inspector, that the application is being mailed to the recipient pursuant to the requirements of this section. The application and notice need not be forwarded to any royalty owner or gas operator who has previously agreed to voluntary pooling by contractually empowering the gas operator, by assignment or otherwise, unilaterally to declare a unit.

29 30

Article 6.1.

Conservation and Production of Coalbed Methane Gas.

31 § 45.1-357.1. Applicability of Oil and Gas Act provisions.-Except where the provisions 32 of § 45.1-286 through 45.1-361 conflict with or are inconsistent with the provisions of this 33 article pertaining to coalbed methane gas, all provisions of this chapter shall remain 34 effective with regard to coalbed methane gas. Where there is a conflict or inconsistency 35 between this article and other provisions of this chapter, the provisions of this article shall 36 prevail.

\$ \$ 45.1-357.2. Spacing of coalbed methane gas wells.-Except as otherwise provided in
this chapter, no permits shall be issued for the drilling, redrilling, or deepening of any
coalbed methane gas well in Buchanan, Dickenson, Lee, Russell, Scott, Tazewell, or Wise
counties or the City of Norton, unless:

41 1. The proposed location of the coalbed methane gas well shall be at least 500 feet, or 42 in the case of coalbed methane gas wells located in the gob, at least 250 feet, from the 43 nearest tract which will not be pooled or unitized with the tract upon which the well is 44 to be drilled, redrilled, or deepened;

45 2. The proposed location of the well shall be at least 1000 feet from other coalbed 46 methane gas wells, or in the case of coalbed methane gas wells located in the gob, at 47 least 500 feet from other gob wells; and

48 3. The spacing limitations set forth in this section are subject to the provisions of §§ 49 45.1-318 and 45.1-319.

50 § 45.1-357.3. Drilling units for coalbed methane gas wells.—In establishing or modifying 51 a drilling unit for coalbed methane gas wells, and in order to accommodate the unique 52 characteristics of coalbed methane development, the Virginia Oil and Gas Conservation

53 Board shall require that drilling units conform to the mine development plan, if any, and

54 if requested by the coal operator, well spacing shall correspond with mine operations,

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including the drilling of multiple coalbed methane gas wells on each drilling unit.

2 § 45.1-357.4. Pooling of interests for coalbed methane gas wells.-A. When there exist 3 conflicting claims to the ownership of coalbed methane gas, the Virginia Oil and Gas 4 Conservation Board, so as to avoid the drilling of unnecessary wells, to protect correlative 5 rights, and to promote development of coalbed methane gas, upon the application of any $\pmb{6}$ person who proposes to drill a well for the production of coalbed methane gas, shall enter 7 an order pooling all interest or estates included in the application. Each person identified by the applicant as a potential owner shall be listed as a respondent in the application for 8 9 a pooling order and shall be given notice pursuant to § 45.1-304. A pooling order under 10 this section may also pool the interests in the separately owned tracts or interests as set 11 forth in subsection A of § 45.1-302 or § 45.1-322. The Board shall have the authority to 12 order that escrow accounts be established and that reports be submitted in order to carry 13 out the provisions of this section.

B. Any pooling order shall (i) authorize the drilling and operation of a well for the production of coalbed methane gas from the pooled acreage; (ii) designate the coalbed methane gas well operator who is authorized to drill, complete, and operate the well; (iii) prescribe the time and manner in which all other respondents may elect to participate in the operation of the well, subject to final legal determination of ownership, or to exercise their rights of election under subsection D of this section; (iv) provide that all reasonable costs and expenses of drilling, completing, equipping, operating, plugging, and abandoning the well shall be borne, and all production therefrom received, by the coalbed methane gas well operator authorized to drill, complete, and operate the well on behalf of all respondents; and (v) provide for the payment of a reasonable supervision fee to the coalbed methane gas well operator by all respondents who elect to participate therein or who elect to be carried interest owners.

26 C. If any respondent elects to participate in the risk and cost of the well, he shall
27 tender his share of estimated costs to the coalbed methane gas well operator authorized
28 to drill the well. If there are conflicting claims to ownership, the coalbed methane gas well
29 operator shall deposit such share of costs in an escrow account.

30 D. The pooling order shall provide just and equitable alternatives whereby a 31 respondent who does not elect to participate may elect either to:

32 1. Sell or lease his ownership interest or assign his leasehold interest, as the case may
33 be, to the coalbed methane gas well operator authorized to drill, complete, and operate
34 the well on a reasonable basis and for a reasonable consideration, which, if not agreed
35 upon, shall be determined by the Virginia Oil and Gas Conservation Board; or

36 2. Share in the operation of the well as a carried well operator.

37 E. Any respondent who does not make an election under the order pursuant to the 38 provisions of § 45.1-302 shall be deemed, subject to a final legal determination of 39 ownership, to have elected to lease his ownership interest or to assign his leasehold 40 interest, as the case may be, to the coalbed methane gas well operator authorized to drill, 41 as set forth in subdivision 1 of subsection D of this section.

42 F. In those instances where proceeds derived from the sale of coalbed methane gas 43 cannot be paid because title thereto is subject to conflicting claims of ownership, the 44 Board shall require the coalbed methane gas well operator to deposit one-eighth of all 45 such proceeds attributable to the conflicting interest to be credited to the eventual interest 46 owner and deposited in an escrow account. If, prior to final legal determination of 47 ownership, the coalbed methane gas well operator has received out of a carried well 48 operator's share of production from the well, the carried well operator's cost that would 49 have been borne had he participated in drilling, completing, equipping, and operating the 50 well, plus an additional sum of 100 percent, in the case of an unleased tract, or 200 51 percent, in the case of a leased tract, of the share of such costs allocable to the carried 52 interest, then the operator shall deposit the proceeds allocable to the working interest 53 share of the carried well operator, less costs incurred in equipping, operating, plugging, or 54 abandoning the well, in the escrow account described herein. The escrow account may

commingle proceeds received from any lessee or coalbed methane gas well operator,
 purchaser, or other party legally responsible for payment. Payment of principal and
 accrued interest from such account shall be paid to all persons legally entitled thereto
 within thirty days from the date of receipt by the Virginia Oil and Gas Conservation
 Board of the final legal determination of entitlement thereto, or upon agreement of the
 respondents, provided that the carried well operator remits his share of accrued drilling
 and operating expenses to the coalbed methane gas well operator.

8 G. If a respondent has elected to participate in the drilling of the well, such person 9 may, within thirty days from the date of final legal determination of his conflicting claim, 10 or earlier, if agreed upon by the respondents, reimburse the coalbed methane gas well 11 operator in cash for his share of the actual cost of drilling, completing, equipping, and operating the well. Upon the receipt of the participating operator's share of costs, the 12 13 coalbed methane gas well operator shall pay to the participating operator the proceeds 14 allocable to such operator's interests which are in excess of the principal amount of any 15 proceeds in escrow allocable to such interests. Payment of principal and accrued interest 16 of proceeds and costs in escrow shall be paid to the participating operator, within thirty 17 days from the date of receipt by the Virginia Oil and Gas Conservation Board of the final 18 legal determination of entitlement thereto, or upon agreement of the respondents thereto.

19 H. If a respondent has elected to be a carried well operator, the coalbed methane gas 20 well operator shall receive the share of production attributable to the carried well operator 21 until the coalbed methane gas well operator has received out of each share an amount 22 equal to the share of the costs that would have been borne by the carried well operator 23 had he participated in the drilling, completing, equipping, and operating the well, plus an 24 additional sum of 100 percent, in the case of an unleased tract, or 200 percent, in the 25 case of a leased tract, of the share of such costs allocable to the interest of such carried 26 well operator. Any proceeds in escrow allocable to the royalty share of such carried well 27 operator shall be paid to the person legally entitled thereto within thirty days from the 28 date of receipt by the Virginia Oil and Gas Conservation Board of the final legal 29 determination of entitlement thereto, or upon agreement of the respondents.

30 I. If the respondent has elected to sell, lease, or assign his coalbed methane interest 31 pursuant to subdivision 1 of subsection D of this section, he shall not be entitled to 32 participate in the well or share in the operation of the well on a carried basis, unless the 33 coalbed methane gas well operator agrees to such election.

34 § 45.1-357.5. Permitting of coalbed methane gas wells.—A permit issued under § 45.1-311
35 shall be required to drill any coalbed methane gas well or to convert any methane
36 drainage borehole into a coalbed methane gas well. In addition to the requirements
37 contained in § 45.1-311, every permit application for a coalbed methane gas well shall
38 include:

39 1. The names and addresses of all owners of record of coal and coal operators, if any,
40 who have registered an operations plan with the Department, of a coal seam located more
41 than 500 feet but less than 750 feet of the well location. Each such owner or operator
42 shall be notified in accordance with § 45.1-313.

43 2. The method that the coalbed methane gas well operator will use to stimulate the 44 well.

45 3. A signed consent (which may be contained in a lease or other such agreement or 46 instrument of title) from the coal operator of each coal seam which is located within 750 47 horizontal feet of the proposed well location (i) which the applicant proposes to stimulate 48 or (ii) which is within 100 vertical feet above or below a coal bearing strata which the 49 applicant proposes to stimulate. The requirement of signed consent contained in thi 50 section shall in no way be considered to impair, abridge, or affect any contractual rights 51 or obligations arising out of a coalbed methane gas contract or coalbed methane gas lease 52 entered into prior to January 1, 1990, between the applicant and any coal operator, and 53 any extensions or renewals thereto, and the existence of such lease or contractual 54 arrangement and any extensions or renewals thereto shall constitute a waiver of the

1 requirement for the applicant to file an additional signed consent.

- 2 4. The unit map, if any, approved by the Virginia Oil and Gas Conservation Board.
- 3 2. That an emergency exists and this act is in force from its passage.

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1990 SESSION

1 SENATE BILL NO. 382 2 Offered January 23, 1990 3 A BILL to amend and reenact § 45.1-1.5 of the Code of Virginia and to amend the Code 4 of Virginia by adding a section numbered 45.1-92.1 and by adding in Title 45.1 a 5 chapter numbered 22.1, consisting of articles numbered 1 through 3, containing sections 6 numbered 45.1-361.1 through 45.1-361.40, and to repeal § 45.1-92 and Chapter 22 of 7 Title 45.1, consisting of Articles 1 through 8, containing §§ 45.1-286 through 45.1-361, 8 all of the Code of Virginia; the amended, added and repealed sections relating to the 9 regulation and conservation of the Commonwealth's gas and oil resources; penalties. 10 11 Patrons-Bird, Buchanan, Nolen, Colgan and Goode; Delegates: Thomas, Quillen, Councill, 12 Smith and Almand 13 Referred to the Committee on Agriculture, Conservation and Natural Resources 14 15 16 Be it enacted by the General Assembly of Virginia: 1. That § 45.1-1.5 of the Code of Virginia is amended and reenacted and that the Code of 17 Virginia is amended by adding a section numbered 45.1-92.1 and by adding in Title 45.1 a 18 chapter numbered 22.1, consisting of articles numbered 1 through 3, containing sections 19 20 numbered 45.1-361.1 through 45.1-361.40, as follows: 21 § 45.1-1.5. Establishment of divisions; division heads.—The following divisions, through which the functions, powers, and duties of the Department may be discharged, are 22 23 established in the Department: a Division of Mines, a Division of Mined Land Reclamation, a Division of Mineral Resources, a Division of Gas and Oil, a Division of Mineral Mining, 24 25 and a Division of Energy. The Director may establish other divisions as he deems necessary. He shall appoint persons to direct the work of the divisions, and may delegate 26 to the head of any division any of the powers and duties relating to the work of the 27 28 Division that may be conferred or imposed by law on the Director. 29 § 45.1-92.1. Coal or mineral mining; distance from wells; requirements.-A. Any mine 30 operator who plans to remove coal or any other mineral, drive any passage or entry or 31 extend any workings in any mine closer than 500 feet to any gas or oil well already 32 drilled or in the process of being drilled shall file with the Chief a notice that mining is 33 taking place or will take place, together with a copy of parts of the maps and plans 34 required under § 45.1-27 which show the mine workings and projected mine workings 35 beneath the tract in question and within 500 feet of the well. Such mine operator shall 36 simultaneously mail copies of such notice, maps and plans by certified mail, return receipt 37 requested, to the well operator and the Gas and Oil Inspector. Each notice shall certify 38 that the mine operator has complied with the provisions of this subsection. 39 B. Subsequent to the filing of the notice required by subsection A of this section, the 40 mine operator may proceed with mining operations in accordance with the maps and 41 plans; however, without the prior approval of the Chief, he shall not remove any coal or 42 other material, drive any entry, or extend any workings in any mine closer than 200 feet 43 to any gas or oil well already drilled or in the process of being drilled. The Chief shall 44 promulgate regulations which prescribe the procedure to be followed by mine operators in 45 petitioning the Chief for approval to conduct such activities closer than 200 feet to a well. 46 Each mine operator who files such a petition shall mail copies of the petition, maps and 47 plans by certified mail, return receipt requested, to the well operator and the Gas and Oil 48 Inspector no later than the day of filing. The Gas and Oil Inspector and the well operator 49 shall have standing to object to any petition filed under this section. Such objections shall 50 be filed within ten days following the date such petition is filed. 51 CHAPTER 22.1. 52 THE VIRGINIA GAS AND OIL ACT. 53 Article 1. 54 General Provisions

1 § 45.1-361.1. Definitions.—As used in this chapter, unless the context clearly indicates 2 otherwise:

3 "Abandonment of a well" or "cessation of well operations" means the time at which (i) 4 a gas or oil operator has ceased operation of a well and has not properly plugged the 5 well and reclaimed the site as required by this chapter, (ii) the time at which a gas or oil 6 operator has allowed the well to become incapable of production or conversion to another 7 well type, or (iii) the time at which the Director revokes a permit or forfeits a bond 8 covering a gas or oil operation.

9 "Associated facilities" means any facility utilized for gas or oil operations in the 10 Commonwealth, other than a well or a well site.

11 "Barrel" means forty-two U.S. gallons of liquids, including slurries, at a temperature of 12 sixty degrees Fahrenheit.

13 "Board" means the Virginia Gas and Oil Board.

14 "Coalbed methane gas" means occluded natural gas produced from coalbeds and rock
15 strata associated therewith.

16 "Coalbed methane gas well" means a well capable of producing coalbed methane gas.

17 "Coalbed methane gas well operator" means any person who has been designated to 18 operate or does operate a coalbed methane gas well.

19 "Coal operator" means any person who has the right to operate or does operate a 20 coal mine.

21 "Coal owner" means any person who owns, leases, mines and produces, or has the 22 right to mine and produce, a coal seam.

"Coal seam" means any stratum of coal twenty inches or more in thickness, unless a
stratum of less thickness is being commercially worked, or can in the judgment of the
Department foreseeably be commercially worked and will require protection if wells are
drilled through it.

27 "Correlative rights" means the right of each gas or oil owner having an interest in a
28 single pool to have a fair and reasonable opportunity to obtain and produce his just and
29 equitable share of production of the gas or oil in such pool or its equivalent without being
30 required to drill unnecessary wells or incur other unnecessary expenses to recover or
31 receive the gas or oil or its equivalent.

32 "Cubic foot of gas" means the volume of gas contained in one cubic foot of space at a
33 standard pressure base of 14.73 pounds per square foot and a standard temperature base
34 of sixty degrees Fahrenheit.

35 "Disposal well" means any well drilled or converted for the disposal of drilling fluids,
36 produced waters, or other wastes associated with gas or oil operations.

37 "Drilling unit" means the acreage on which one gas or oil well may be drilled.

38 "Enhanced recovery" means (i) any activity involving injection of any air, gas, water 39 or other fluid into the productive strata, (ii) the application of pressure, heat or other 40 means for the reduction of viscosity of the hydrocarbons, or (iii) the supplying of 41 additional motive force other than normal pumping to increase the production of gas or 42 oil from any well, wells or pool.

43 "Exploratory well" means any well drilled (i) to find and produce gas or oil in an
44 unproven area, (ii) to find a new reservoir in a field previously found to be productive of
45 gas or oil in another reservoir, or (iii) to extend the limits of a known gas or oil reservoir
46 "Field rules" means rules established by order of the Virginia Gas and Oil Board that
47 define a pool, drilling units, production allowables, or other requirements for gas or oil
48 operations within an identifiable area.

49 "First point of sale" means, for oil, the point at which the oil is sold, exchanged or 50 transferred for value from one person to another person, or when the original owner of 51 the oil uses the oil, the point at which the oil is transported off the permitted site and 52 delivered to another facility for use by the original owner; and for gas, the point at which 53 the gas is sold, exchanged or transferred for value to any interstate or intrastate pipeline, 54 any local distribution company, any person for use by such person, or when the gas is used by the owner of the gas for a purpose other than the production or transportation of
 the gas, the point at which the gas is delivered to a facility for use.

3 "Fund" means the Gas and Oil Plugging and Restoration Fund.

4 "Gas" or "natural gas" means all natural gas whether hydrocarbon or nonhydrocarbon
5 or any combination or mixture thereof, including hydrocarbons, hydrogen sulfide, helium,
6 carbon dioxide, nitrogen, hydrogen, casing head gas, and all other fluids not defined as oil
7 pursuant to this section.

8 "Gas or oil operations" means any activity relating to drilling, redrilling, deepening, 9 stimulating, production, enhanced recovery, converting from one type of a well to another, 10 combining or physically changing to allow the migration of fluid from one formation to 11 another, plugging or replugging any well, ground disturbing activity relating to the 12 development, construction, operation and abandonment of a gathering pipeline, the 13 development, operation, maintenance, and restoration of any site involved with gas or oil 14 operations, or any work undertaken at a facility used for gas or oil operations. The term 15 embraces all of the land or property that is used for or which contributes directly or 16 indirectly to a gas or oil operation, including all roads.

17 "Gas or oil operator" means any person who has been designated to operate or does 18 operate any gas or oil well or gathering pipeline.

19 "Gas or oil owner" means any person who owns, leases, has an interest in, or who
20 has the right to explore for, drill or operate a gas or oil well as principal or as lessee. In
21 the event that the gas is owned separately from the oil, the definitions contained herein
22 shall apply separately to the gas owner or oil owner.

23 "Gathering pipeline" means (i) a pipeline which is used or intended for use in the 24 transportation of gas or oil from the well to a transmission pipeline or other pipeline 25 regulated by the Federal Energy Regulatory Commission or the State Corporation 26 Commission or (ii) a pipeline which is used or intended for use in the transportation of 27 gas or oil from the well to an off-site storage, marketing, or other facility where the gas 28 or oil is sold.

29 "Geophysical operator" means a person who has the right to explore for gas or oil 30 using ground disturbing geophysical exploration.

31 "Gob" means the de-stressed zone associated with any full-seam extraction of coal that 32 extends above and below the mined-out coal seam.

"Ground disturbing" means any changing of land which may result in soil erosion from
 water or wind and the movement of sediments into state waters, including, but not
 limited to, clearing, grading, excavating, drilling, and transporting and filling of land.

36 "Ground disturbing geophysical exploration" or "geophysical operation" means any 37 activity in search of gas or oil that breaks or disturbs the surface of the earth, including 38 but not limited to road construction or core drilling. The term shall not include the 39 conduct of gravity, magnetic, radiometric and similar geophysical surveys, and vibroseis or 40 other similar seismic surveys.

41 "Injection well" means any well used to inject or otherwise place any substance 42 associated with gas or oil operations into the earth or underground strata for disposal, 43 storage or enhanced recovery.

44 "Inspector" means the Virginia Gas and Oil Inspector, appointed by the Director
45 pursuant to § 45.1-360.4, or such other public officer, employee or other authority as may
46 in emergencies be acting in the stead, or by law be assigned the duties of, the Virginia
47 Gas and Oil Inspector.

48 "Log" means the written record progressively describing all strata, water, oil or gas 49 encountered in drilling, depth and thickness of each bed or seam of coal drilled through, 50 quantity of oil, volume of gas, pressures, rate of fill-up, fresh and salt water-bearing

51 horizons and depths, cavings strata, casing records and such other information as is 52 usually recorded in the normal procedure of drilling. The term shall also include electrical 53 survey records or electrical survey logs.

54 "Mine" means an underground or surface excavation or development with or without

shafts, slopes, drifts or tunnels for the extraction of coal, minerals or nonmetallic
 materials, commonly designated as mineral resources, and the hoisting or haulage
 equipment or appliances, if any, for the extraction of the mineral resources. The term
 embraces all of the land or property of the mining plant, including both the surface and
 subsurface, that is used or contributes directly or indirectly to the mining, concentration
 or handling of the mineral resources, including all roads.

7 "Mineral" shall have the same meaning as ascribed to it in § 45.1-180.

8 "Mineral operator" means any person who has the right to or does operate a mineral
9 mine.

10 "Mineral owner" means any person who owns, leases, mines and produces, or who has 11 the right to mine and produce minerals and to appropriate such minerals that he 12 produces therefrom, either for himself or for himself and others.

13 "Nonparticipating operator" means a gas or oil owner of a tract included in a drilling 14 unit who elects to share in the operation of the well on a carried basis by agreeing to 15 have his proportionate share of the costs allocable to his interest charged against his 16 share of production from the well.

17 "Offsite disturbance" means any soil erosion, water pollution, or escape of gas, oil, or 18 waste from gas, oil, or geophysical operations off a permitted site which results from 19 activity conducted on a permitted site.

"Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of
gravity, which are produced at the well in liquid form by ordinary production methods
and which are not the result of condensation of gas after it leaves the underground
reservoir.

24 "Orphaned well" means any well abandoned prior to July 1, 1950, or for which no 25 records exist concerning its drilling, plugging or abandonment.

26 "Participating operator" means a gas or oil owner who elects to bear a share of the 27 risks and costs of drilling, completing, equipping, operating, plugging and abandoning a 28 well on a drilling unit and to receive a share of production from the well equal to the 29 proportion which the acreage in the drilling unit he owns or holds under lease bears to 30 the total acreage of the drilling unit.

"Permittee" means any gas, oil, or geophysical operator holding a permit for gas, oil,
 or geophysical operations issued under authority of this chapter.

33 "Person under a disability" shall have the same meaning as ascribed to it in § 8.01-2.

34 "Pipeline" means any pipe above or below the ground used or to be used to transport 35 gas or oil.

36 "Plat" or "map" means a map, drawing or print showing the location of a well or 37 wells, mine, quarry, or other information required under this chapter.

38 "Pool" means an underground accumulation of gas or oil in a single and separate 39 natural reservoir. It is characterized by a single natural pressure system so that 40 production of gas or oil from one part of the pool tends to or does affect the reservoir 41 pressure throughout its extent. A pool is bounded by geologic barriers in all directions, 42 such as geologic structural conditions, impermeable strata, or water in the formation, so 43 that it is effectively separated from any other pool which may be present in the same 44 geologic structure. A coalbed methane pool means an area which is underlain or appears 45 to be underlain by at least one coalbed capable of producing coalbed methane gas.

46 "Project area" means the well, gathering pipeline, associated facilities, roads, and any 47 other disturbed area, all of which are permitted as part of a gas, oil, or geophysical 48 operation.

49 "Restoration" means all activity required to return a permitted site to other use after 50 gas, oil, or geophysical operations have ended, as approved in the operations plan for the 51 permitted site.

52 "Royalty owner" means any owner of gas or oil in place, or owner of gas or oil rights, 53 who is eligible to receive payment based on the production of gas or oil.

54 "State waters" means all water, on the surface and under the ground, wholly or

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partially within or bordering the Commonwealth or within its jurisdiction and which affect
 the public welfare.

"Stimulate" means any action taken by a gas or oil operator to increase the inherent
productivity of a gas or oil well, including, but not limited to, fracturing, shooting or
acidizing, but excluding (i) cleaning out, bailing or workover operations and (ii) the use of
surface-tension reducing agents, emulsion breakers, paraffin solvents, and other agents
which affect the gas or oil being produced, as distinguished from the producing formation.
"Storage well" means any well used for the underground storage of gas.

9 "Surface owner" means any person who is the owner of record of the surface of the 10 land.

11 "Waste from gas, oil, or geophysical operations" means any substance other than gas 12 or oil which is (i) produced or generated during or results from the development, drilling 13 and completion of wells and associated facilities or the development and construction of 14 gathering pipelines or (ii) produced or generated during or results from well, pipeline and 15 associated facilities' operations, including, but not limited to, brines and produced fluids 16 other than gas or oil. In addition, this term shall include all rubbish and debris, including 17 all material generated during or resulting from well plugging, site restoration, or the 18 removal and abandonment of gathering pipelines and associated facilities.

19 "Waste" or "escape of resources" means (i) physical waste, as that term is generally 20 understood in the gas and oil industry; (ii) the inefficient, excessive, improper use, or 21 unnecessary dissipation of reservoir energy; (iii) the inefficient storing of gas or oil; (iv) the 22 locating, drilling, equipping, operating, or producing of any gas or oil well in a manner 23 that causes, or tends to cause, a reduction in the quantity of gas or oil ultimately 24 recoverable from a pool under prudent and proper operations, or that causes or tends to 25 cause unnecessary or excessive surface loss or destruction of gas or oil; (v) the production 26 of gas or oil in excess of transportation or marketing facilities; (vi) the amount reasonably 27 required to be produced in the proper drilling, completing, or testing of the well from 28 which it is produced, except gas produced from an oil well or condensate well pending 29 the time when with reasonable diligence the gas can be sold or otherwise usefully utilized 30 on terms and conditions that are just and reasonable; or (vii) underground or above 31 ground waste in the production or storage of gas, oil, or condensate, however caused. The 32 term "waste" does not include gas vented from methane drainage boreholes or coalbed 33 methane gas wells, where necessary for safety reasons or for the efficient testing and 34 operation of coalbed methane gas wells; nor does it include the plugging of coalbed 35 methane gas wells for the recovery of the coal estate.

36 "Water well" means any well as defined in § 62.1-44.85.

37 "Well" means any shaft or hole sunk, drilled, bored or dug into the earth or into 38 underground strata for the extraction, injection or placement of any gaseous or liquid 39 substance, or any shaft or hole sunk or used in conjunction with such extraction, injection 40 or placement. The term shall not include any shaft or hole sunk, drilled, bored or dug into 41 the earth for the sole purpose of pumping or extracting therefrom potable, fresh or usable 42 water for household, domestic, industrial, agricultural, or public use and shall not include 43 water boreholes, methane drainage boreholes where the methane is vented or flared rather 44 than produced and saved, subsurface boreholes drilled from the mine face of an underground coal mine, any other boreholes necessary or convenient for the extraction of 45 coal or drilled pursuant to a uranium exploratory program carried out pursuant to the 46 47 laws of this Commonwealth, or any coal or non-fuel mineral core hole or borehole for the 48 purpose of exploration.

49 § 45.1-361.2. Regulation of coal surface mining not affected by chapter.-Nothing in this'. 50 chapter shall be construed as limiting the powers of the Director relating to coal surface 51 mining operations and reclamation. The provisions of Chapters 17 (§ 45.1-198 et seq.) and 52 19 (§ 45.1-226 et seq.) of this title, including but not limited to requirements for permits 53 and bonds, shall apply to gas, oil, or geophysical operations located on areas for which a 54 coal surface mining permit is in effect and shall be in addition to the requirements for

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7 Control and Reclamation Act of 1979 (§ 45.1-226 et seq.).

§ 45.1-361.3. Construction.—The provisions of this chapter shall be liberally construed so
9 as to effectuate the following purposes:

10 1. To foster, encourage and promote the safe and efficient exploration for and 11 development, production, utilization and conservation of the Commonwealth's gas and oil 12 resources;

13 2. To provide a method of gas and oil conservation for maximizing exploration,
14 development, production and utilization of gas and oil resources;

15 3. To recognize and protect the rights of persons owning interests in gas or oil 16 resources contained within a pool;

17 4. To ensure the safe recovery of coal and other minerals;

18 5. To maximize the production and recovery of coal without substantially affecting the 19 right of a gas or oil owner proposing to drill a gas or oil well to explore for and produce 20 gas or oil; and

6. To protect the citizens and the environment of the Commonwealth from the public
safety and environmental risks associated with the development and production of gas or
oil.

§ 45.1-361.4. Duties and responsibilities of the Director.—A. The Director shall have the jurisdiction and authority necessary to enforce the provisions of this chapter. The Director \$\$ shall have the power and duty to regulate gas, oil, or geophysical operations, collect fees, and perform other responsibilities as may be prescribed in regulations promulgated by the Department or the Board.

29 B. The Director shall appoint the Gas and Oil Inspector.

30 § 45.1-361.5. Exclusivity of regulation and enforcement.—No county, city, town or other 31 political subdivision of the Commonwealth shall impose any condition, or require any 32 other local license, permit, fee or bond to perform any gas, oil, or geophysical operations 33 which varies from or is in addition to the requirements of this chapter. However, no 34 provision of this chapter shall be construed to limit or supercede the jurisdiction and 35 requirements of other state agencies, local land-use ordinances, regulations of general 36 purpose, or §§ 58.1-3712, 58.1-3712.1, 58.1-3713, 58.1-3713.1, 58.1-3713.2 and 58.1-3713.3.

§ 45.1-361.6. Confidentiality.—The Director shall hold confidential all logs, surveys and reports relating to the drilling, completion and testing of a well which are filed by gas or oil operators under this chapter for a period of ninety days after the completion of the well or eighteen months after the total depth of the well has been reached, whichever occurs first. Upon receipt of a gas, oil, or geophysical operator's written request, the Director shall hold confidential this information concerning an exploratory well or corehole for a period of two years after completion of the well or four years from the date such well or hole reaches total depth, whichever occurs first. The Director, for good cause shown by the gas, oil, or geophysical operator, may annually extend the period of time for which information regarding exploratory drilling is held confidential. However, the Director shall upon request provide a copy of any survey or log for strata through the lowest coal seam to the coal owner.

19 § 45.1-361.7 Expenditure of funds.—All funds, except civil charges collected pursuant to **30** § 45.1-361.8, collected by or appropriated to the Department pursuant to the provisions of **31** this chapter shall be expended only for the purpose of carrying out the provisions of this **52** chapter.

53 § 45.1-361.8. Violations; penalties.—A. Any person who violates or refuses, fails or 54 neglects to comply with any regulation or order of the Board, Director, or Inspector, any 1 condition of a permit or any provision of this chapter shall be guilty of a Class 1 2 misdemeanor.

3 B. In addition, any person who violates any provision of this chapter, any condition of 4 a permit, or any regulation or order of the Board, Director, or Inspector shall, upon such 5 finding by an appropriate circuit court, be assessed a civil penalty of not more than 6 \$10,000 for each day of such violation. All civil penalties under this section shall be 7 recovered in a civil action brought by the Attorney General in the name of the 8 Commonwealth. The court shall direct that all civil penalties assessed under this section 9 be paid into the treasury of the county or city wherein lies the gas, oil, or geophysical 10 operation determined by the court to be in violation.

11 C. The Board, with the consent of the gas, oil, or geophysical operator, may provide, 12 in an order issued by the Board against such operator, for the payment of civil charges 13 for past violations in specific sums not to exceed the limit specified in subsection B of 14 this section. Such civil charges shall be instead of any appropriate civil penalty which 15 could be imposed under this section and shall not be subject to the provision of § 2.1-127. 16 Civil charges collected under this section shall be paid into the treasury of the county or 17 city wherein lies the gas, oil, or geophysical operation subject to the order issued by the 18 Board.

19 § 45.1-361.9. Appeals; venue; standing.—A. Any order or decision of the Board may be 20 appealed to the appropriate circuit court. Whenever a coal owner or coal operator is a 21 party in such action, the court shall hear such appeal de novo. The court shall have the 22 power to enter interlocutory orders as may be necessary to protect the rights of all 23 interested parties pending a final decision.

24 B. Unless the parties otherwise agree, the venue for court review shall be the county 25 or city wherein lies the gas, oil, or geophysical operation which is the subject of such 26 order or decision.

27 C. The Director and all parties required to be given notice of hearings of the Board 28 pursuant to the provisions of § 45.1-361.19 shall have standing to appeal any order or 29 decision of the Board which directly affects them. The permittee or permit applicant, the 30 Director, and those parties with standing to object, pursuant to the provisions of \S 31 45.1-361.30, shall have standing to appeal any order or decision of the Board which 32 directly affects them; provided, however, with the exception of an aggrieved permit 33 applicant or the Director, no person shall have standing to appeal a decision of the Board 34 concerning a permit application unless such person has previously filed an objection with 35 the Director pursuant to the provisions of § 45.1-361.35. The filing of any petition for 36 appeal concerning the issuance of a new permit which was objected to pursuant to the 37 provisions of §§ 45.1-361.11 or 45.1-361.12 shall automatically stay the permit until such 38 stay is dissolved or the appeal is decided by the circuit court.

§ 45.1-361.10. Duplicate leases.—Any person, either as principal or agent, who executes
 a lease of land or right therein for drilling for gas or oil, or for the development or
 production of gas or oil, shall do so in duplicate. One copy of the lease, duly executed by
 the lessee, shall be furnished to the lessor.

43 § 45.1-361.11. Objections by coal owner.—A. In deciding on objections by a coal owner 44 to a proposed permit modification or drilling unit modification, only the following 45 questions shall be considered:

46 1. Whether the work can be done safely with respect to persons engaged in coal 47 mining at or near the well site; and

48 2. Whether the well work is an unreasonable or arbitrary exercise of the well 49 operator's right to explore for, market and produce oil and gas.

50 B. In deciding on objections by a coal owner to the establishment of a drilling unit, a 51 permit for a new well, or the stimulation of a coalbed methane gas well, the following 52 safety aspects shall first be considered, and no order or permit shall be issued where the 53 evidence indicates that the proposed activities will be unsafe:

54 1. Whether the drilling unit or drilling location is above or in close proximity to any

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mine opening or shaft, entry, travelway, airway, haulageway, drainageway or passageway,
 or to any proposed extension thereof, in any operated or abandoned or operating coal
 mine, or in any coal mine already surveyed and platted but not yet being operated;

4 2. Whether the proposed drilling can reasonably be done through an existing or
5 planned pillar of coal, or in close proximity to an existing well or such pillar of coal,
6 taking into consideration the surface topography;

3. Whether the proposed well can be drilled safely or the proposed coalbed methane
gas well can be stimulated safely, taking into consideration the dangers from creeps,
squeezes or other disturbances due to the extraction of coal; and

10 4. The extent to which the proposed drilling unit or drilling location or stimulation of 11 the coalbed methane gas well unreasonably interferes with the safe recovery of coal, oil 12 and gas.

13 C. The following questions with respect to the drilling unit or drilling location of a 14 new well or stimulation of a new coalbed methane gas well shall also be considered:

15 1. The extent to which the proposed drilling unit or drilling location or coalbed 16 methane gas well stimulation will unreasonably interfere with present or future coal 17 mining operations;

18 2. The feasibility of moving the proposed drilling unit or drilling location to a 19 mined-out area, below the coal outcrop or to some other area;

20 3. The feasibility of a drilling moratorium for not more than two years in order to 21 permit the completion of coal mining operations;

22 4. The method proposed for the recovery of coal and gas;

23 5. The practicality of locating the unit or the well on a uniform pattern with other 24 units or wells;

25 6. The surface topography and use; and

3 7. Whether the decision will substantially affect the right of the gas operator to 1 explore for and produce the gas.

28 The factors in subsection C of this section are not intended to and shall not be 29 construed to authorize the Director, or the Board under § 45.1-361.36, to supersede, 30 impair, abridge or affect any contractual rights or obligations now or hereafter existing 31 between the respective owners of coal and gas or any interest therein.

32 § 45.1-361.12. Distance limitations of certain wells.—A. If the well operator and the 33 objecting coal owners present or represented at the hearing to consider the objections to 34 the proposed drilling unit or location are unable to agree upon a drilling unit or location 35 for a new well within 2,500 linear feet of the location of an existing well or a well for 36 which a permit application is on file, then the permit or drilling unit shall be refused.

37 B. The minimum distance limitations established by this section shall not apply if the 38 proposed well will be drilled through an existing or planned pillar of coal required for 39 protection of a preexisting well drilled to any depth, and the proposed well will neither 40 require enlargement of the pillar nor otherwise have an adverse effect on existing or 41 planned coal mining operations.

42 43

Article 2.

Gas and Oil Conservation.

44 § 45.1-361.13. Virginia Gas and Oil Board; membership; compensation.—A. The Virginia 45 Gas and Oil Board is hereby established. The Board shall be composed of seven members 46 and shall have the powers and duties as specified under this chapter.

B. The Governor shall appoint, subject to confirmation by the General Assembly, the chairman and six additional members of the Board as follows: two for an initial term of two years, two for an initial term of four years, and three for an initial term of six years. Thereafter, the members shall be appointed for terms of six years. At all times, the Board shall consist of the following qualified members: the Director or his designee; one but not more than one individual who is a representative of the gas and oil industry; one but not more than one individual who is a representative of the coal industry; and four other individuals who are not representatives of the gas, oil or coal industry. All vacancies occurring on the Board shall be filled by the Governor, subject to confirmation by the
 General Assembly, for the unexpired term within sixty days of the occurrence of the
 vacancy. As the terms of office, respectively, of the members expire, the Governor shall
 appoint, subject to confirmation by the General Assembly, to fill the vacancies so
 occasioned, qualified persons whose terms shall be for six years from the day on which
 that of their immediate predecessor expired.

7 C. Each member of the Board shall receive compensation and expenses in accordance 8 with the provisions of § 2.1-20.3.

9 § 45.1-361.14. Meetings of the Board; notice; general powers and duties.—A. The Board 10 shall schedule a monthly meeting at a time and place designated by the chairman. Should 11 no petition for action be filed with the Board prior to such a meeting, the meeting may 12 be cancelled. Notification or cancellation of each meeting shall be given in writing to the 13 other members by the chairman at least five days in advance of the meeting. Four 14 members shall constitute a quorum for the transaction of any business which shall come 15 before the Board. All determinations of the Board shall be by majority vote of the quorum 16 present.

B. The Board shall have the power necessary to execute and carry out all of its duties
specified in this chapter. The Board is authorized to investigate and inspect such records
and facilities as is necessary and proper to perform its duties under this chapter. The

20 Board may employ such personnel and consultants as may be necessary to perform its 21 duties under this chapter.

22 § 45.1-361.15. Additional duties and responsibilities of the Board.-A. In executing its 23 duties under this chapter, the Board shall:

I. Foster, encourage and promote the safe and efficient exploration for and
 development, production and conservation of the gas and oil resources located in the
 Commonwealth;

27 2. Administer a method of gas and oil conservation for the purpose of maximizing
 28 exploration, development, production and utilization of gas and oil resources;

29 3. Administer procedures for the recognition and protection of the rights of gas or oil
 30 owners with interests in gas or oil resources contained within a pool;

31 4. Promote the maximum production and recovery of coal without substantially
 32 affecting the right of a gas owner proposing a gas well to explore for and produce gas;
 33 and

34 5. Hear and decide appeals of Director's decisions and orders issued under Article 3 of
 35 this chapter.

36 B. Without limiting its general authority, the Board shall have the specific authority to 37 issue rules, regulations or orders pursuant to the provisions of the Administrative Process 38 Act (§ 9-6.14:1 et seq.) in order to:

39 1. Prevent waste through the design spacing, or unitization of wells, pools, or fields.

40 2. Protect correlative rights.

41 3. Enter spacing and pooling orders.

42 4. Establish drilling units.

43 5. Establish maximum allowable production rates for the prevention of waste and for 44 the protection of correlative rights.

45 6. Provide for the maximum recovery of coal.

46 7. Classify pools and wells as gas, oil, gas and oil, or coalbed methane gas.

47 8. Collect data, make investigations and inspections, examine property, leases, papers, 48 books and records and require or provide for the keeping of records and the making of 49 reports.

50 9. Set application fees.

51 10. Govern practices and procedures before the Board.

52 11. Require additional data from parties to any hearing.

53 12. Take such actions as are reasonably necessary to carry out the provisions of this 54 chapter.

§ 45.1-361.16. Applicability and construction.—A. The provisions of this article shall
 apply to all lands in the Commonwealth, whether publicly or privately owned. However,
 no well commenced prior to July 1, 1990, shall be required to be plugged or abandoned
 solely for purposes of complying with the conservation provisions contained in this article.
 B. No provision contained in this article shall be construed to grant to the Board the
 authority or power to fix prices of gas or oil.

7 § 45.1-361.17. Statewide spacing of wells.—A. Unless prior approval has been received 8 from the Board or a provision of the field or pool rules so allows:

9 1. Wells drilled in search of oil shall not be located closer than 1,320 feet to any well
10 completed in the same pool;

11 2. Wells drilled in search of gas shall not be located closer than 2,640 feet to any 12 other well completed in the same pool; and

3. A well shall not be drilled closer to the boundary of the acreage supporting the well,
whether such acreage is a single leasehold or other tract or a contractual or statutory
drilling unit, than one-half of the minimum well spacing distances prescribed in this
section.

17 B. Unless prior approval has been received from the Board or a provision of the field 18 or pool rules so allows:

19 1. Wells drilled in search of coalbed methane gas shall not be located closer than 1,000
 20 feet to any other coalbed methane gas well, or in the case of coalbed methane gas wells
 21 located in the gob, such wells shall not be located closer than 500 feet to any other
 22 coalbed methane gas wells located in the gob.

23 2. A coalbed methane gas well shall not be drilled closer than 500 feet, or in the case
24 of such well located in the gob, not closer than 250 feet, from the boundary of the
25 acreage supporting the well, whether such acreage is a single leasehold or other tract or a
26 contractural or statutory drilling unit.

27 3. The spacing limitations set forth in this subsection are subject to the provisions of 28 §§ 45.1-361.11 and 45.1-361.12.

29 § 45.1-361.18. Voluntary pooling of interests in drilling units; validity of unit 30 agreements.—A. When two or more separately owned tracts are embraced within a drilling 31 unit, or when there are separately owned interests in all or a part of any such drilling 32 unit, the gas or oil owners owning such interests may pool their interests for the 33 development and operation of the drilling unit by voluntary agreement. Such agreements 34 may be based on the exercise of pooling rights or rights to establish drilling units which 35 are granted in any gas or oil lease.

36 B. No voluntary pooling agreement between or among gas or oil owners shall be held 37 to violate the statutory or common law of the Commonwealth which prohibits monopolies 38 or acts, arrangements, contracts, combinations or conspiracies in restraint of trade or 39 commerce.

40 § 45.1-361.19. Notice of hearing; standing; form of hearing.-A. Any person who applies 41 for a hearing in front of the Board pursuant to the provisions of §§ 45.1-361.20, 42 45.1-361.21 or 45.1-361.22 shall simultaneously with the filing of such application, provide 43 notice by certified mail, return receipt requested, to each gas or oil owner, coal owner, or 44 mineral owner having an interest underlying the tract which is the subject of the hearing. 45 Whenever a hearing applicant is unable to provide such written notice because the 46 identity or location of a person to whom notice is required to be given is unknown, the 47 hearing applicant shall promptly notify the Board of such inability.

B. Upon receipt of an application for a hearing, the Board shall cause a notice of the hearing to be published in a newspaper of general circulation in the county or city where the land or major portion thereof which is the subject of the hearing is located. Such notice shall be published at least twenty days in advance of the hearing date and shall include, at a minimum, the name of the applicant, a description of the location of the land which is the subject of the hearing, the purpose of the hearing, and the date, time and location thereof. 1 C. The Board shall conduct all hearings on applications made to it pursuant to the 2 formal litigated issues hearing provisions of the Administrative Process Act (§ 9-6.14:1 e 3 seq.). The applicant and any person to whom notice is required to be given pursuant to 4 the provisions of subsection A of this section shall have standing to be heard at the 5 hearing. The Board shall render its decision on such applications within thirty days of the 6 hearing's closing date and shall provide notification of its decision to all parties to the 7 hearing pursuant to the provisions of the Administrative Process Act (§ 9-6.14:1 et seq.).

§ 45.1-361.20. Field rules and drilling units for wells; hearings and orders.—A. In order 9 to prevent the waste of gas or oil, the drilling of unnecessary wells, or to protect 10 correlative rights, the Board on its own motion or upon application of the gas or oil 11 owner shall have the power to establish or modify drilling units. Drilling units, to the 12 extent reasonably possible, shall be of uniform shape and size for an entire pool. Any gas, 13 oil, or royalty owner may apply to the Board for the establishment of field rules and the 14 creation of drilling units for the field. Unless such motion is made or an application is 15 received at least thirty days prior to the next regularly scheduled monthly meeting of the 16 Board, it shall not be heard by the Board at such meeting and shall be heard at the next 17 meeting of the Board thereafter.

18 B. At any hearing of the Board regarding the establishment or modification of drilling 19 units, the Board shall make the following determinations:

20 1. Whether the proposed drilling unit is an unreasonable or arbitrary exercise of a gas
21 or oil owner's right to explore for or produce gas or oil;

22 2. Whether the proposal would unreasonably interfere with the present or future 23 mining of coal or other minerals;

24 3. The acreage to be included in the order;

25 4. The acreage to be embraced within each drilling unit and the shape thereof;

26 5. The area within which wells may be drilled on each unit; and

27 6. The allowable production of each well.

C. In establishing or modifying a drilling unit for coalbed methane gas wells, and in order to accommodate the unique characteristics of coalbed methane development, the Board shall require that drilling units conform to the mine development plan, if any, and if requested by the coal operator, well spacing shall correspond with mine operations, coalbed methane gas wells on each drilling unit.

D. If an order to establish or modify a drilling unit will allow a well to be drilled into or through a coal seam, any coal owner within the area to be covered by the drilling unit may object to the establishment of the drilling unit. Upon a coal owner's objection, and without superseding, impairing, abridging or affecting any contractual rights or obligations rexisting between coal and gas owners, the Board shall make its determination in accordance with the provisions of §§ 45.1-361.11 and 45.1-361.12.

39 E. The Board may continue a hearing to its next meeting to allow for further 40 investigation and the gathering and taking of additional data and evidence. If at the time 41 of a hearing there is not sufficient evidence for the Board to determine field boundaries,

42 drilling unit size or shape, or allowable production, the Board may enter a temporary 43 order establishing provisional drilling units, field boundaries, and allowable production for 44 the orderly development of the pool pending receipt of the information necessary to 45 determine the ultimate pool boundaries, spacing of wells for the pool, and allowable

46 production. Upon additional findings of fact, the boundaries of a pool, drilling units for the 47 pool, and allowable production may be modified by the Board.

48 F. Unless otherwise provided for by the Board, after an application for a hearing to 49 establish or modify drilling units or pool boundaries has been filed, no additional well

50 shall be permitted in the pool until the Board's order establishing or modifying the pool or 51 units has been entered.

52 G. After the Board issues a field or pool spacing order which creates drilling units or a 53 pattern of drilling units for a pool, should a gas or oil owner apply for a permit or 54 otherwise indicate his desire to drill a well outside of such drilling units or pattern of 7

drilling units and thereby potentially extend the pool, the Board may, on its own motion
 or the motion of any interested person, require that the well be located and drilled in
 compliance with the provisions of the order affecting the pool.

\$ 45.1-361.21. Pooling of interests in drilling units.—A. The Board, upon application from
\$ any gas or oil owner, shall enter an order pooling all interests in the drilling unit for the
\$ development and operation thereof when:

I. Two or more separately owned tracts are embraced in a drilling unit;

8 2. There are separately owned interests in all or part of any such drilling unit and
9 those having interests have not agreed to pool their interests; or

10 3. There are separately owned tracts embraced within the minimum statewide spacing 11 requirements prescribed in § 45.1-361.17.

12 However, no pooling order shall be entered until the notice and hearing requirements 13 of this article have been satisfied.

B. Subject to any contrary provision contained in a gas or oil lease respecting the property, gas or oil operations incident to the drilling of a well on any portion of a unit covered by a pooling order shall be deemed to be the conduct of such operations on each tract in the unit. The portion of production allocated to any tract covered by a pooling order shall be in the same proportion as the acreage of that tract bears to the total acreage of the unit.

20 C. All pooling orders entered by the Board pursuant to the provisions of this section 21 shall:

22 I. Authorize the drilling and operation of a well subject to the permit provisions 23 contained in Article 3 of this chapter;

24 2. Include the time and date when such order expires;

25 3. Designate the gas or oil owner who is authorized to drill and operate the well;
26 provided, however, that the designated operators must have the right to conduct
27 operations or have the written consent of owners with the right to conduct operations on
28 at least twenty-five percent of the acreage included in the unit;

29 4. Prescribe the conditions under which gas or oil owners may become participating
 30 operators or exercise their rights of election under subdivision 7 of this subsection;

5. Establish the sharing of all reasonable costs, including a reasonable supervision fee,
 between participating operators so that each participating operator pays the same
 percentage of such costs as their acreage bears to the total unit acreage;

34 6. Require that nonleasing gas or oil owners be provided with reasonable access to 35 unit records submitted to the Director or Inspector;

36 7. Establish a procedure for a gas or oil owner who received notice of the hearing and 37 who does not decide to become a participating operator may elect either to (i) sell or 38 lease his gas or oil ownership to a participating operator, (ii) enter into a voluntary 39 agreement to share in the operation of the well at a rate of payment mutually agreed to 40 by the gas or oil owner and the gas or oil operator authorized to drill the well, or (iii) 41 share in the operation of the well as a nonparticipating operator on a carried basis after 42 the proceeds allocable to his share equal the following:

43 a. In the case of a leased tract, 300 percent of the share of such costs allocable to his 44 interest; or

45 b. In the case of an unleased tract, 200 percent of the share of such costs allocable to 46 his interest.

47 D. Any gas or oil owner whose identity and location remain unknown at the 48 conclusion of a hearing concerning the establishment of a pooling order for which public 49 notice was given shall be deemed to have elected to lease his interest to the gas or oil 50 operator at a rate to be established by the Board. The Board shall cause to be established 51 an escrow account into which the unknown lessor's share of proceeds shall be paid and 52 held for his benefit. Such escrowed proceeds shall be deemed to be unclaimed property 53 and shall be disposed of pursuant to the provisions of the Uniform Disposition of 54 Unclaimed Property Act (6 55-210 L et 200)

54 Unclaimed Property Act (§ 55-210.1 et sea.).

1 E. Should a gas or oil owner be a person under a disability, the applicant for a 2 pooling order may petition the appropriate circuit court to appoint a guardian ad liten 3 pursuant to the provisions of § 8.01-261 for purposes of making the election provided for 4 by this section.

5 F. Any royalty or overriding royalty reserved in any lease which is deducted from a 6 nonparticipating operator's share of production shall not be subject to charges for 7 operating costs but shall be separately calculated and paid to the royalty owner.

8 G. The Board shall resolve all disputes arising among gas or oil operators regarding
9 the amount and reasonableness of well operation costs. The Board shall, by regulation,
10 establish allowable types of costs which may be shared in pooled gas or oil operations.

11 § 45.1-361.22. Pooling of interests for coalbed methane gas wells; conflicting claims to 12 ownership.—A. When there are conflicting claims to the ownership of coalbed methane gas, 13 the Board, upon application from any claimant, shall enter an order pooling all interests 14 or estates in the coalbed methane gas drilling unit for the development and operation 15 thereof. In addition to the provisions of § 45.1-361.21 of this article, the following 16 provisions shall apply:

17 1. Simultaneously with the filing of such application, the gas or oil owner applying for 18 the order shall provide notice pursuant to the provisions of § 45.1-361.19 to each person 19 identified by the applicant as a potential owner of an interest in the coalbed methane gas 20 underlying the tract which is the subject of the hearing.

21 2. The Board shall cause to be established an escrow account into which the payment
22 for costs or proceeds attributable to the conflicting interests shall be deposited and held
23 for the interest of the claimants.

3. The coalbed methane gas well operator shall deposit into the escrow account any money paid by a person claiming a contested ownership interest as a participatin operator's share of costs pursuant to the provisions of § 45.1-361.21 and the order of the Board.

28 4. The coalbed methane gas well operator shall deposit into the escrow account 29 one-eighth of all proceeds attributable to the conflicting interests plus all proceeds in 30 excess of ongoing operational expenses as provided for under § 45.1-361.21 and the order 31 of the Board attributable to a participating or nonparticipating operator.

5. The Board shall order payment of principal and accrued interest from the escrow account to all persons legally entitled thereto pursuant to the provisions of § 45.1-361.21 and the order of the Board. Such order shall be issued within thirty days of receipt of notification of the final legal determination of entitlement thereto or upon agreement of all claimants.

37 6. Any person who does not make an election under the pooling order shall be
38 deemed, subject to a final legal determination of ownership, to have leased his gas or oil
39 interest to the coalbed methane gas well operator as the pooling order may provide.

\$ 45.1-361.23. Appeals of the Director's decisions; notices; hearings and orders.-A. With
the exception of an aggrieved permit applicant, no person shall have standing to appeal a
decision of the Director to the Board concerning a new permit application unless such
person has previously filed an objection with the Director pursuant to the provisions of \$
44. 45.1-361.35.

B. When a person applies for a hearing to appeal a decision of the Director to the Board, the Board shall, at least twenty days prior to the hearing, give notice by certified mail, return receipt requested, to the person making the appeal and, if different, to the gas or operator subject to the appeal.

49 C. Upon submittal of the petition for appeal of a decision of the Director to the Boas 50 the Director shall forward to the Board (i) the permit application or order and associated 51 documents, (ii) all required notices, and (iii) the written objections, proposals and claims 52 recorded during the informal fact finding hearing.

53 D. In any appeal involving a permit of a new well which was objected to pursuant to 54 the provisions of § 45.1-361.11 or § 45.1-361.12, the filing of a petition for appeal shall

stay any permit until the case is decided by the Board or the stay is dissolved by a court
 of record. In all other appeals, the Director may order the permit or other decision stayed
 for good cause shown until the case is decided by the Board or the stay is dissolved by a

4 court of record. An appeal based on an alleged risk of danger to any person not engaged
5 in the oil and gas operations shall be prima facie proof of good cause for a stay.

6 E. The Board shall conduct all hearings under this section in accordance with the 7 formal litigated issues hearing provisions of the Administrative Process Act (§ 9-6.14:12 et 8 seq.). However, all persons to whom notice is required to be given pursuant to subsection 9 B of this section shall have standing to be heard at the hearing. The Board shall render 10 its decision on such appeals within thirty days of the hearing's closing date and shall 11 provide notification of its decision to all parties pursuant to the provisions of the 12 Administrative Process Act (§ 9-6.14:1 et seq.).

13 § 45.1-361.24. Enforcement.—The provisions of this article shall be enforced by the 14 Director pursuant to the provisions of Article 3 of this chapter. In addition, should any 15 person violate or threaten to violate any provision of this article, regulation promulgated 16 thereunder, or order of the Board, the Board may maintain suit to restrain any such 17 violation or threatened violation.

18 § 45.1-361.25. Standing when Director or Board fails to act.—Should the Director or 19 Board fail to take enforcement action within ten days of the Board's receipt of a petition 20 alleging that the petitioner is or will be adversely affected by a violation or threatened 21 violation of any provision of this article, regulation adopted thereunder, or an order of the 22 Board, the petitioner shall have standing to file a complaint in the appropriate circuit 23 court. The Board, in addition to the persons who are violating or threatening to violate 24 any provision of this article, regulation adopted thereunder, or order of the Board, shall be 25 made a party to any such action.

926 § 45.1-361.26. Recording of orders.—The Inspector shall cause a true copy of any order 27 entered by the Board which establishes a drilling unit or pools any interests to be 28 recorded in the office of the clerk of the circuit court of each jurisdiction wherein any 29 portion of the relevant drilling unit is located. Such orders shall be recorded in the record 30 book in which gas or oil leases are normally recorded. The sole charge for recordation 31 shall be a tax equal to ten dollars plus one dollar per page of the order. The recordation 32 from the time noted thereon by the clerk shall be notice of the order to all persons.

33 34

Article 3. Regulation of Gas and Oil Development and Production.

§ 45.1-361.27. Duties, responsibilities and authority of the Director.—A. The Director
 36 shall promulgate and enforce rules, regulations and orders necessary to ensure the safe
 37 and efficient development and production of gas and oil resources located in the
 38 Commonwealth. Such rules, regulations and orders shall be designed to:

39 1. Prevent pollution of state waters and require compliance with the Water Quality
 40 Standards adopted by the State Water Control Board;

41 2. Protect against off-site disturbances from gas, oil, or geophysical operations;

42 3. Ensure the restoration of all sites disturbed by gas, oil, or geophysical operations;

43 4. Prevent the escape of the Commonwealth's gas and oil resources;

44 5. Provide for coal and mineral mining safety;

45 6. Control wastes from gas, oil, or geophysical operations;

46 7 Provide for the accurate measurement of gas and oil production and delivery to the 47 first point of sale; and

48 8. Protect the public safety and general welfare.

49 B. In promulgating rules and regulations, and when issuing orders for the enforcement 50 of the provisions of this article, the Director shall consider the following factors:

51 1. The protection of the citizens and environment of the Commonwealth from the 52 public safety and environmental risks associated with the development and production of 53 gas or oil; and

54 2. The means of ensuring the safe recovery of coal and other minerals without

1 substantially affecting the right of coal, minerals, gas, oil, or geophysical operators to 2 explore for and produce coal, minerals, gas, oil.

3 C. In promulgating rules, regulations and orders, the Director shall be authorized to see 4 and enforce standards governing the following: gas or oil ground-disturbing geophysical 5 exploration; the development, drilling, casing, equipping, operating and plugging of gas or 6 oil production, storage, enhanced recovery, or disposal wells; the development, operation 7 and restoration of site disturbances for wells, gathering pipelines and associated facilities; 8 and gathering pipeline safety.

9 D. Whenever the Director determines that an emergency exists, he shall issue an 10 emergency order without advance notice or hearing. Such orders shall have the same 11 validity as orders issued with advance notice and hearing, but shall remain in force no 12 longer than thirty days from their effective date. After issuing an emergency order, the 13 Director shall promptly notify the public of the order by publication and hold a public 14 hearing for the purposes of modifying, repealing or making permanent the emergency 15 order. Emergency orders shall prevail as against general regulations or orders when in 16 conflict therewith. Emergency orders shall apply to gas, oil, or geophysical operations and 17 to particular fields, geographical areas, subject areas, subject matter or situations.

18 E. The Director shall also have the authority to:

19 1. Issue, condition and revoke permits;

20 2. Issue notices of violation and orders upon violations of any provision of this chapter
21 or regulation adopted thereunder;

22 3. Issue closure orders in cases of imminent danger to persons or damage to the 23 environment or upon a history of violations;

24 4. Require or forfeit bonds or other financial securities;

25 5. Prescribe the nature of and form for the presentation of any information a
 26 documentation required by any provision of this article or regulation adopted thereunder;

6. Maintain suit in the city or county where a violation has occurred or is threatened,
or wherever a person who has violated or threatens to violate any provision of this
chapter may be found, in order to restrain the actual or threatened violation;

30 7. At reasonable times and under reasonable circumstances, enter upon any property
 31 and take such action as is necessary to administer and enforce the provisions of this
 32 chapter; and

8. Inspect and review all properties and records thereof as is necessary to administer
 and enforce the provisions of this chapter.

35 § 45.1-361.28. Powers, duties and responsibilities of the Inspector.—A. The Inspector 36 shall administer the laws and regulations and shall have access to all records and 37 properties necessary for this purpose. He shall perform all duties delegated by the Director 38 pursuant to § 45.1-1.5 and maintain permanent records of the following:

I. Each application for a gas, oil, or geophysical operation and each permitted gas, oil,
 or geophysical operation;

41 2. Meetings, actions and orders of the Board;

42 3. Petitions for mining coal within 200 feet of or through a well;

43 4. Requests for special plugging by a coal owner or coal operator; and

44 5. All other records prepared pursuant to this chapter.

45 B. The Inspector shall serve as the principal executive of the staff of the Board.

46 C. The Inspector may take charge of well or corehole, or pipeline emergency 47 operations whenever a well or corehole blowout, release of hydrogen sulfide or other 48 gases, or other serious accident occurs.

49 § 45.1-361.29. Permit required; gas, oil, or geophysical operations; coalbed methane

50 wells.-A. No person shall commence any ground disturbing activity for a well, gathering

51 pipeline, geophysical exploration or associated activity, facilities or structures without first

52 having obtained from the Director a permit to conduct such activity. Every permit

53 application or permit modification application filed with the Director shall be verified by

54 the permit applicant and shall contain all data, maps, plats, plans and other information

¹ as required by regulation or the Director.

B. New permits issued by the Director shall be issued only for the following activities:
geophysical operations, drilling, casing, equipping, stimulating and producing a well, or
gathering pipeline construction and operation. Applications for new permits to conduct
geophysical operations shall be accompanied by an application fee of \$100. Applications
for all other new permits shall be accompanied by an application fee of \$200.

7 C. Prior to commencing any reworking, deepening or plugging of the well, or other 8 activity not previously approved on the permitted site, a permittee shall first obtain a 9 permit modification from the Director. All applications for permit modifications shall be 10 accompanied by a permit modification fee of \$100.

11 D. All permits and operations provided for under this section shall conform to the 12 rules, regulations and orders of the Director and the Board. When permit terms or 13 conditions required or provided for under Article 3 of this chapter are in conflict with any 14 provision of a conservation order issued pursuant to the provisions of Article 2 of this 15 chapter, the terms of the permit shall control. In this event, the operator shall return to 16 the Board for reconsideration of a conservation order in light of the conflicting permit. 17 Every permittee shall be responsible for all operations, activity or disturbances associated 18 with the permitted site.

19 E. No permit or permit modification shall be issued by the Director until he has 20 received from the applicant a written certification that (i) all notice requirements of this 21 article have been complied with, together with proof thereof, and (ii) the applicant has the 22 right to conduct the operations as set forth in the application and operations plan.

F. A permit shall be required to drill any coalbed methane gas well or to convert any
methane drainage borehole into a coalbed methane gas well. In addition to the other
requirements of this section, every permit application for a coalbed methane gas well shall
include:

27 1. The method that the coalbed methane gas well operator will use to stimulate the 28 well.

29 2. A signed consent (which may be contained in a lease or other such agreement or 30 instrument of title) from the coal operator of each coal seam which is located within 750 31 horizontal feet of the proposed well location (i) which the applicant proposes to stimulate 32 or (ii) which is within 100 vertical feet above or below a coal bearing stratum which the 33 applicant proposes to stimulate. The requirement of signed consent contained in this 34 section shall in no way be considered to impair, abridge or affect any contractual rights 35 or objections arising out of a coalbed methane gas contract or coalbed methane gas lease 36 entered into prior to January 1, 1990, between the applicant and any coal operator, and 37 any extensions or renewals thereto, and the existence of such lease or contractual 38 arrangement and any extensions or renewals thereto shall constitute a waiver of the 39 requirement for the applicant to file an additional signed consent.

40 3. The unit map, if any, approved by the Board.

41 § 45.1-361.30. Notice of permit applications and permit modification applications 42 required; content.—A. Within one day of the day on which the application for a permit for 43 a gas or oil operation is filed, the applicant shall provide notice of the application to the 44 following persons:

45 I. All surface owners, coal owners, and mineral owners on the tract to be drilled;

46 2. Coal operators who have registered operation plans with the Department for 47 activities located on the tract to be drilled;

18 3. All surface owners on tracts where the surface is to be disturbed;

49 4. All gas, oil, or royalty owners within one-half of the distance specified in § 50 45.1-361.17 for that type of well, or within one-half of the distance to the nearest well 51 completed in the same pool, whichever is less, or within the boundaries of a drilling unit 52 established pursuant to the provisions of this chapter;

53 5. All coal operators who have applied for or obtained a mining or prospecting permit 54 with respect to tracts located within 500 feet of the proposed well location or in the case 1 of a proposed coalbed methane gas well location, within 750 feet thereof; and

2 6. All coal owners or mineral owners on tracts located within 500 feet of the proposed
3 well location or in the case of a proposed coalbed methane gas well location, within 750
4 feet thereof.

5 B. Within one day of the day on which the application for a permit modification for a 6 gas or oil operation is filed, the applicant requesting such permit modification shall 7 provide notice of the application to all persons listed in subsection A of this section who 8 may be directly affected by the proposed activity.

9 C. Within one day of the day on which the application for a permit for geophysical 10 operations is submitted, the applicant shall provide notice to those persons listed in 11 subdivisions 1, 2 and 3 of subsection A of this section.

D. All notices required to be given pursuant to subsections A, B and C of this section shall contain a statement of the time within which objections may be made and the name and address of the person to whom objections shall be forwarded. Only those persons entitled to notice under subsections A, B, and C of this section shall have standing to object to the issuance of the proposed permit or permit modification for a gas, oil, or geophysical operation as the use may be.

E. Within one day of the day on which the application for a permit is filed, the applicant shall provide notice to (i) the local governing body or chief excutive officer of the county, city, or town in which the well is proposed to be located and (ii) the general public, through publication of a notice in at least one newspaper of general circulation which is published in the county, city or town where the well is proposed to be located.

23 § 45.1-361.31. Bonding and financial security required.-A. To ensure compliance with all 24 laws and regulations pertaining to permitted activities and the furnishing of reports and 25 other information required by the Board or Director, all permit applicants shall give bond. 26 with surety acceptable to the Director and payable to the Commonwealth. At the election 27 of the permit applicant, a cash bond may be given. The amount of the bond required shall 28 be sufficient to cover the costs of properly plugging the well and restoring the site, but in 29 no case shall the amount of the bond be less than \$10,000 per well plus \$2,000 per acre 30 of disturbed land, calculated to the nearest tenth of an acre. Bonds shall remain in force 31 until released by the Director.

32 B. Upon receipt of an application for permits for gas or oil operations and at the 33 request of the permit applicant, the Director may, in lieu of requiring a separate bond for 34 each permit, require a blanket bond. The amount of the blanket bond shall be as follows: 35 1. For one to fifteen wells, \$25,000.

35 1. For one to fifteen wells, \$25,000.
36 2. For sixteen to thirty wells, \$50,000

36 2. For sixteen to thirty wells, \$50,000.

37 3. For thirty-one to fifty wells, \$75,000.

38 4. For fifty-one or more wells, \$100,000.

39 For purposes of calculating blanket bond amounts, from one-tenth of an acre to five 40 acres of disturbed land for a separately permitted gathering pipeline shall be equivalent to 41 one well. The Director shall promulgate regulations for the release of acreage used to 42 calculate blanket bond amounts for separately permitted gathering pipelines in cases where 43 sites have been stabilized.

44 C. Any gas or oil operator who elects to post a blanket bond shall pay into the Gas 45 and Oil Plugging and Restoration Fund those fees and assessments required under the 48 provisions of § 45.1-361.32.

47 D. This section's minimum requirements for bonding shall be met by all permitted gas 48 or oil operations by July 1, 1991.

49 § 45.1-361.32. Gas and Oil Plugging and Restoration Fund.-A. The Gas and Oil
50 Plugging and Restoration Fund is hereby established as a nonlapsing revolving fund to be
51 administered by the Department pursuant to the provisions of this section. The Fund shall
52 consist of all payments made into the Fund by gas or oil operators, all collections of debt
53 for expenditures made from the Fund and all interest payments made into the Fund
54 pursuant to the provisions of this section. Interest earned on the Fund shall be credited to

6 B. Pursuant to § 45.1-361.31, each gas or oil operator who has posted a blanket bond 7 shall pay into the Fund a fee of fifty dollars per permit held, by July 31, 1990. Each 8 permittee operating under a blanket bond shall annually pay to the Fund an amount equal 9 to fifty dollars multiplied by the number of permits he then holds, such payment to be 10 submitted with the annual report required under § 45.1-361.38, until the payments and 11 interest accruing to the Fund totals \$100,000.

12 C. Disbursements from the Fund shall be used only to supplement bond proceeds in 13 order to pay for the full cost of plugging and restoration in the event of a blanket bond 14 forfeiture.

D. The amount by which the cost of plugging and restoration exceeds the amount of the gas or oil operator's forfeited bond shall constitute a debt of the operator to the Commonwealth. The Director is authorized to collect such debts together with the costs of collection through appropriate legal action. All moneys collected pursuant to this subsection, less the costs of collection, shall be deposited in the Fund.

E. Once the initial balance of the Fund exceeds \$100,000, and thereafter whenever the
Director determines that the Fund's balance has fallen below \$25,000 due to uncollectable
debts, the Director shall assess a fee of fifty dollars per permit per year on all permittees
with blanket bonds until the Fund's balance once again reaches \$100,000.

24 F. No permit shall be issued to a gas or oil operator until he has fully reimbursed the **25** Commonwealth for any debt incurred pursuant to the provisions of subsection D of this **26** section.

§ 45.1-361.33. Expiration of permits.—All permits issued pursuant to this chapter shall
 expire twenty-four months from their date of issuance unless the permitted activity has
 commenced within that time period.

30 § 45.1-361.34. Abandonment or cessation of well or corehole operation; plugging 31 required.—Upon the abandonment or cessation of the operation of any well or corehole, the 32 gas, oil, or geophysical operator shall immediately fill and plug the well or corehole in the 33 manner required by regulations in force at the time of abandonment or the operation's 34 cessation.

35 § 45.1-361.35. Objections to permits; hearing.—A. Objections to new or modification 36 permits may be filed with the Director by those having standing as set out in § 37 45.1-361.30. Such objections shall be filed within fifteen days of the objecting party's 38 receipt of the notice required by § 45.1-361.30. Persons objecting to a permit must state 39 the reasons for their objections.

40 B. The only objections to permits or permit modifications which may be raised by 41 surface owners are:

42 1. The operations plan for soil erosion and sediment control is not adequate or not 43 effective;

44 2. Measures in addition to the requirement for a well's water-protection string are 45 necessary to protect fresh water-bearing strata; and

46 3. The permitted work will constitute a hazard to the safety of any person.

47 C. The only objections to permits or permit modifications which may be raised by 48 royalty owners are whether the proposed well work:

19 1. Directly impinges upon the royalty owner's gas and oil interest; or

50 2. Threatens to violate the objecting royalty owner's property or statutory rights aside 51 from his contractual rights; and

52 3. Would not adequately prevent the escape of the Commonwealth's gas and oil 53 resources or provide for the accurate measurement of gas and oil production and delivery 54 to the first point to sale. 1 D. Objections to permits or permit modifications may be raised by coal owners or 2 operators pursuant to the provisions of §§ 45.1-361.11 and 45.1-361.12.

3 E. The only objections to permits or permit modifications which may be raised by 4 mineral owners are those which could be raised by a coal owner under § 45.1-361.11 5 provided the mineral owner makes the objection and affirmatively proves that it does in 6 fact apply with equal force to the mineral in question.

7 F. The Director shall have no jurisdiction to hear objections with respect to any matter 8 subject to the jurisdiction of the Board as set out in Article 2 of this chapter. Such 9 objections shall be referred to the Board in a manner prescribed by the Director.

10 G. The Director shall fix a time and place for an informal fact finding hearing 11 concerning such objections. The hearing shall not be scheduled for less than twenty nor 12 more than thirty days after the objection is filed. The Director shall prepare a notice of 13 the hearing, stating all objections and by whom made, and send a copy of such notice by 14 certified mail, return receipt requested, at least ten days prior to the hearing date, to the 15 permit applicant and to every person with standing to object as prescribed by § 16 45.1-361.30.

H. At the hearing, should the parties fail to come to an agreement, the Director shall
proceed to decide the objection pursuant to those provisions of the Administrative Process
Act (§ 9-6.14.1 et seq.) relating to informal fact finding procedures.

20 § 45.1-361.36. Appeals of Director's decisions to the Board.—A. Any person with 21 standing under the provisions of \S 45.1-361.30 who is aggrieved by a decision of the 22 Director may appeal to the Board, subject to the limitations imposed by subsection B of 23 this section, by petition to the Board filed within ten days following the appealed decision. 24 B. No petition for appeal may raise any matter other than matters raised by the 25 Director or which the petitioner put in issue either by application or by objections, 26 proposals or claims made and specified in writing at the informal fact finding hearing hele. 27 under § 45.1-361.35 leading to the appealed decision.

§ 45.1-361.37. Persons required to register; designated agents.—A. Any person who owns a well, drills a well, completes well work, operates any well or gathering pipeline, conducts ground disturbing geophysical explorations, or who transports gas or oil up to and including the first point of sale shall register with the Director and shall provide his name and address and the name, address and official title of the person in charge of his operations in the Commonwealth.

B. Any person registering under subsection A of this section shall designate the name and address of an agent who shall be the attorney-in-fact of the registrant for the purposes hereinafter set forth. The designated agent shall be a resident of the Commonwealth. Notices, orders, other communications and all process issued pursuant to this chapter may be served upon or otherwise delivered to the designated agent as and for the operator. Any designation of an agent shall remain in force until the Director is notified in writing of a designation termination and the designation of a new agent.

41 § 45.1-361.38. Report of permitted activities and production required; contents.—Each 42 holder of a permit for gas or oil wells or gathering pipelines shall file monthly and annual 43 reports of their activities as prescribed by the Director. These reports shall be for the 44 purpose of obtaining information regarding the production and sale of gas and oil 45 resources, as well as information concerning the ownership and control of permitted 46 activities. Filing of these reports by a permittee shall be a condition of such permit. Every 47 annual report filed by a permittee shall contain a certification that such permittee has 48 paid all severance taxes levied under the provisions of §§ 58.1-3712, 58.1-3712.1 and 49 *58.1-3713*.

50 § 45.1-361.39. Developing a gas or oil well as a water well.—Should any well drilled for 51 gas or oil not produce commercial or paying quantities of either resource, the well may be 52 developed as a water well upon the request of the surface owner of the property on 53 which the well is located. Any development of such a water well shall occur only after 54 notice is given to the Director and his approval has been received. Such development of a § 45.1-361.40. Orphaned Well Fund; orphaned wells.—A. The Orphaned Well Fund is hereby established as a nonlapsing revolving fund to be administered by the Department pursuant to the provisions of this section. The Orphaned Well Fund shall consist of such moneys as are appropriated to it by the General Assembly. Interest earned on the Orphaned Well Fund shall be credited to the Orphaned Well Fund. The Orphaned Well fund shall be established on the books of the Comptroller and any funds remaining in it at the end of the biennium shall not revert to the general fund but shall remain in the Orphaned Well Fund. In the event of a discontinuance of the Orphaned Well Fund, any amounts remaining in it shall be placed in the Gas and Oil Plugging Restoration Fund. Moneys from the Orphaned Well Fund shall be used only for purposes of restoration and plugging of orphaned wells.

16 B. The Director shall conduct a survey to determine the condition and location of 17 orphaned wells in the Commonwealth. He shall establish priorities for the plugging and 18 restoration of the identified orphaned wells. The plugging and restoration of orphan well 19 sites which pose an imminent danger to public safety shall have the highest priority.

20 C. In performing his duties under this section, the Director shall make every 21 reasonable effort to identify and obtain the permission of a surface owner prior to 22 entering onto the surface owner's land. In all cases, the Director shall as soon as 23 practicable cause to be published in a newspaper of general circulation in the county or 24 city wherein an orphaned well is located a notice of the proposed plugging and restoration 25 work to be conducted on the property.

26 D. Each operator who applies for a new permit for any activity other than geophysical
27 operations shall pay a fifty dollar surcharge per permit into the Orphaned Well Fund.
28 Such surcharge shall continue until the Director determines all orphaned wells in the
29 Commonwealth are properly plugged and their sites are properly stabilized.

30 2. That § 45.1-92 and Chapter 22 of Title 45.1, consisting of Articles 1 through 8, containing
31 §§ 45.1-286 through 45.1-361, all of the Code of Virginia, are repealed.

32 3. That the regulations of the Virginia Oil and Gas Conservation Commission, the Virginia
33 Well Review Board, and the Chief of the Division of Mines and Quarries entitled Rules and
34 Regulations for Conservation of Oil and Gas Resources and Well Spacing, VR 480-22-05,
35 shall remain in force and effect until repealed by the Virginia Gas and Oil Conservation
36 Board or the Department of Mines, Minerals and Energy.

37 4. That all field rules and orders issued pursuant to the provisions of any section being38 repealed by this act shall remain in force and effect until modified or revoked pursuant to39 the provisions of this act.

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	Passed By The Senate without amendment with amendment substitute substitute w/amdt	Passed By The House of Delegates without amendment with amendment substitute substitute w/amdt		
	Date:	Date:		
	Clerk of the Senate	Clerk of the House of Delegates		

APPENDIX C

GENERAL ASSEMBLY OF VIRGINIA -- 1989 SESSION HOUSE JOINT RESOLUTION NO. 438

Requesting the Virginia Coal and Energy Commission to study the regulation of independent power producers.

Agreed to by the House of Delegates, February 2, 1989 Agreed to by the Senate, February 23, 1989

WHEREAS, a competitive market for supplies of electric generating capacity has developed and is growing in the United States: and

WHEREAS, competition in the supply of electric generating capacity can foster efficient energy production and the lowest costs compatible with reliable electric supply; and

WHEREAS, changes in federal policy are likely to make independent power producers without qualifying status under the Public Utility Regulatory Policies Act of 1978 more important factors in the competitive capacity market; and

WHEREAS, Virginia continues to be a national leader in utilizing the competitive/ market for the benefit of the Commonwealth's electric customers; and

WHEREAS, pursuant to policy adopted by the State Corporation Commission, Virginia electric utilities can make purchases in competitive capacity markets to fulfill their service obligations; and

WHEREAS, independent power producers participating in competitive markets are currently subject to state regulation similar to that of monopoly utilities; and

WHEREAS, entities with characteristics similar to those of independent power producers, but which have the status of Qualifying Facilities under the Public Utility Regulatory Policies Act of 1978, are exempt from such regulations; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Virginia Coal and Energy Commission is requested to study the regulation of independent power producers in the Commonwealth.

The Commission shall complete its work in time to submit its findings and recommendations to the Governor and the 1990 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for processing legislative documents.



COMMONWEALTH of VIRGINIA

COAL AND ENERGY COMMISSION

POST OFFICE BOX 3-AG RICHMOND, VIRGINIA 23208 General Assembly Building 910 Capitol Street

IN RESPONSE TO THIS LETTER TELEPHONE (804) 786-3591

December 22, 1989

Representative John Dingell Chairman, Committee on Energy and Commerce U.S. House of Representatives 2221 Rayburn House Office Building Washington, D.C. 20515

Re: Proposed acid rain legislation

Dear Mr. Chairman:

The Virginia Coal and Energy Commission urges that the acid rain legislation now under consideration in Congress <u>not</u> include a requirement for the offset of sulfur dioxide emissions from new electricity generating units. This provision is so damaging in its effects on consumers and on the efficient use of the nation's energy resources that a better means must be found to ensure that environmental goals are achieved.

1. With the offset requirement, electricity consumers will pay billions of dollars more than is necessary to achieve a 10 million ton reduction of sulfur dioxide emissions.

The offset requirement makes allowances to emit sulfur dioxide an indispensable asset for utilities to provide for increases in future demand. We are aware that many utilities have advised the Congress that they will be unwilling to trade away allowances that they may need for their own growth and that a number of regulators have stated that they would not permit allowances needed for future growth to be traded across state lines.

The proposed offset requirement will prevent or severely limit interstate trading in emissions allowances. This, in turn, will mean that sulfur dioxide reductions will not be made where they can be accomplished at the lowest cost. Studies have showr that a freely operating trading system can reduce control costs by 40 percent or more -- representing a multibillion dollar savings that will be lost or greatly reduced by the effects of the proposed offset requirement.

We do not believe the electric ratepayers of Virginia or other states should be forced to incur these unnecessary costs. Letter to Congressman John Dingell December 22, 1989 Page 2

2. The proposed offset requirement will reduce the role of coal in providing for future energy needs and will deter the use of low-sulfur coal as a means of achieving environmental goals.

Coal is a secure, abundant, and low-cost resource for meeting America's energy needs. With clean coal technology, coal can meet all reasonable environmental standards. However, an offset requirement that effectively establishes a zero sulfur dioxide emissions rate for new coal units will discourage the use of coal because of the cost and, in some cases, the difficulty of obtaining the allowances needed for the offset.

Use of low-sulfur coal can in many situations be the most economical means of complying with the requirements of acid rain legislation. We support that portion of the Administration's bill which embraces the principle that utilities should be able to meet the required standards in whatever way they determine to be best, including switching to low-sulfur coal. But for a utility with demand growth, the need to provide offsets will tend to make the effective emissions rate on its existing units so low that compliance can be achieved only by scrubbing.

3. The offset requirement may be unnecessary to ensure that a 10 million ton reduction of sulfur dioxide emissions is maintained.

A study prepared for the Environmental Protection Agency shows a wide range in projected sulfur dioxide emissions in the absence of acid rain legislation -- from a decrease of 1.7 million tons to an increase of 2.2 million tons by the year 2010. Furthermore, there is evidence that the proposed legislation will reduce utility emissions by more than 10 million tons below 1980 levels (perhaps by as much as 12 million tons). If the initial reductions will substantially exceed 10 million tons, the EPA's own projections suggest that offsets are unnecessary. As it appears highly unlikely that the initial reduction levels will be eroded in the future, we question the advisability of including a control mechanism with such damaging effects. Obviously, if the emissions growth trends were at or below the EPA midrange projections, these controls would have been needlessly applied.

4. <u>A better means is available to ensure that the 10 million ton</u> reduction in sulfur dioxide is maintained.

William W. Berry, Chairman of Dominion Resource, Inc. and Virginia Power, has proposed an "adjustable rate cap" concept that would allow emissions trading, avoid penalizing the use of coal, and ensure that the 10 million ton reduction would not be eroded. This concept would (1) control emissions by a uniform unit (1.2 pounds per million BTUs of heat input) that would be applicable to the affected electricity generating units of all utilities and (11) authorize the EPA, subject to statutory standards, to lower the rate, if and when necessary, to maintain the 10 million ton reduction. A remedy of this type is necessary because minor adjustments will not cure the fundamental problems of the proposed offset requirement. Letter to Congressman John Dingell December 22, 1989 Page 3

We believe that the proposed offset requirement is a serious mistake which we hope Congress will correct as the legislative process moves forward.

Sincerely,

Doniel W. Birg, fr.

Daniel W. Bırd, Jr. Chairman Virgınıa Coal and Energy Commission

cc: The Honorable John Warner The Honorable Charles S. Robb The Honorable Herbert H. Bateman The Honorable Owen B. Pickett The Honorable Thomas J. Bliley, Jr. The Honorable Norman Sisisky The Honorable L.F. Payne, Jr. The Honorable James Randolph Olin The Honorable D. French Slaughter, Jr. The Honorable Stanford E. Parris The Honorable Frederick C. Boucher The Honorable Frank Wolf

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APPENDIX E



COMMONWEALTH of VIRGINIA

910 CAPITOL STREET SECOND FLOOR RICHMOND, VIRGINIA 23219 COAL AND ENERGY COMMISSION General Assembly Building January 26, 1990

IN RESPONSE TO THIS LETTER TELEPHONE (804) 786-3591

Honorable Charles S. Robb Untied State Senate Washington, D.C. 20510

Dear Senator Robb :

The Virginia Coal and Energy Commission is concerned that EPA's policies which affect the issuance of air permits to electric generation projects in Virginia may needlessly cause serious damage to the Commonwealth. Unless quickly corrected, these policies will delay and may prevent the development of generating capacity needed for continued reliable electric service in Virginia. Because of apparent differences in policy between EPA's Region III, with encompasses Virginia, and that of Region IV, in which North Carolina is located, investment in generating projects and the resulting employment and economic benefits may shift from Virginia to North Carolina.

There are two principal problems:

1. <u>EPA has shifted abruptly to a more stringent requirement of</u> preventing significant deterioration (PSD) of ambient air quality.

Until recently, Virginia projects have been able to analyze the effects of ambient air quality using the assumption that sources existing at the time the PSD requirements were enacted would emit SO_2 at the rate of their actual emissions.

In late 1988, Virginia, in response to EPA pressures, began requiring that modeling of emissions be based on the assumption that sources would emit at their maximum allowable rate. This policy change was made without notice to the public and did not become apparent until project developers began filing air permit applications during 1989. In March of 1989, EPA advised the states that modeling on the basis of allowable emissions would be required by October, 1989. As indicated above, such a policy had already been implemented in Virginia.

Many cases in Virginia show that a wide gulf exists between actual and maximum allowable emissions. Therefore, EPA's shift in policy represented a drastic change that would become effective while a number of projects that had been planned and sited under the previous policy were in the process of development. Letter to Senator Robb January 26, 1990 Page 2

The reason for EPA's policy change is obvious: EPA has no assurance that existing units will not significantly increase their emissions. A more long term solution to the problem has already been proposed by Virginia: the states should develop operating permits for existing sources that will provide more realistic limits on allowable emissions.

However, this long-term solution does not solve the immediate and more pressing problem being experienced by units currently under development. We believe EPA should offer a transitional policy which assumes, in the absence of evidence to the contrary, that sharp increases in emissions from existing units are unlikely, and which allows emissions to be modeled on the basis of actual emissions plus a reasonable percentage. Such a policy will adequately preclude any significant deterioration of ambient air quality. This transitional rule could be applied to projects already under development, defined as independent power projects having power purchase contracts with a utility or utility projects that have received approval from the Virginia State Corporation Commission.

<u>I would emphasize that the Commission does not guarrel with EPA's apparent</u> objective. However, this rule's unnecessarily large impacts and the lack of adequate notice to affected parties requires a prompt adjustment in this policy.

2. <u>EPA's Region III appears to be unduly aggressive in its positions</u> concerning Best Available Control Technology (BACT).

While we understand that BACT determinations are case-specific, Region III appears to be seeking technologies providing 95 to 99 percent SO_2 removal that have not been adequately demonstrated to be effective and economic for the same type of generating unit. Relatively stringent controls are also being sought on nitrogen oxide emissions. As noted above, these positions of Region III are more demanding than those of other EPA regions. Furthermore, the positions being pursued by Region III appear unnecessary in view of the Clean Air Bill now pending before Congress and are inconsistent with EPA positions on that bill.

Specifically, the acid rain provisions proposed by the Bush Administration provide a cap on total SO_2 emissions and a requirement to offset emissions from new units so that those units effectively have zero emissions. Due to EPA representations that a cap on total SO_2 emissions is needed to maintain a 10 million ton reduction after the year 2000, we believe that it is unlikely that Congress will entertain amendments that do not retain a cap in some form. Assuming that a cap is retained, total SO_2 emissions will be controlled regardless of how BACT requirements are applied. Although BACT will affect the emissions in any particular location, such emissions are subject to ambient air controls.

If the offset requirement is included in the final bill, no purpose is served by forcing developers to a higher level of control on new units than they consider economic. On the contrary, a key principle underlying the President's proposals is that the control be achieved at the lowest cost. Developers should be able to choose between higher levels of control at new units and smaller reductions at existing units or vice versa, depending upon Letter to Senator Robb January 26, 1990 Page 3

which option is more economical. Some EPA statements predict that controls on new projects will on average rise to 95 percent. This may be so, but that level of control should not be required, either directly or indirectly, if an offset requirement 1s in effect. It is not obvious that the BACT requirement should even be retained in the law.

If an adjustable rate cap is substituted for the allowance and offset system, continuation of BACT requirements is probably justified. But those requirements need not be applied in the aggressive manner adopted by Region III, as the rate cap will assure maintenance of the targeted total SO_2 reduction.

We understand that the policies advocated by EPA in the acid rain legislation are based on an assumption of 90 percent control at new units. If EPA continues to press administratively for control levels of 95 to 99 percent, that action would call into question the need for a cap on new sources. EPA has stated that their "analyses indicate that net emissions from new sources built after the bill's enactment will increase by 0.3 - 0.8million tons between the years 2000 and 2010. This assumes that some of the demand for allowance from new sources will be offset internally through 95% SO_2 removal technology being installed at new power plants, . . . " (Testimony of William G. Rosenberg, Energy and Power Subcommittee, House of Representatives, October 11, 1989, Answer to Question 12A)

In that event, it would be possible to increase initial control by slightly reducing the 1.2 pound rate, including some industrial sources, or some combination of those measures, thereby providing for an assured 10 million ton reduction without a cap on new sources. Removing the cap on new sources might well have the very important effect of allowing the emission trading system to actually work and thereby provide customer savings, as the President originally contemplated.

For these reasons, we believe EPA should either recede from its insistence on high levels of SO_2 control at new units or change its position on the new source cap.

We believe this is a matter of considerable urgency and importance to Virginia. We would appreciate your efforts to explore these issue with EPA and to obtain reasonable relief for existing projects while protecting the quality of Virginia air.

Sincerely,

Doniel W. Berd, Jr

Daniel W. Bird, Jr., Chairman Virginia Coal and Energy Commission

APPENDIX F



COMMONWEALTH of VIRGINIA

COAL AND ENERGY COMMISSION

POST OFFICE BOX 3-AG RICHMOND, VIRGINIA 23208 General Assembly Building 910 Capitol Street

IN RESPONSE TC THIS LETTER TELEPHONE (804) 786-359

December 22, 1989

The Honorable Gerald L. Baliles, Governor Commonwealth of Virginia Capitol Square Richmond, VA 23219

RE: Department of Mines, Minerals and Energy, Division of Energy Funding

Dear Governor Baliles:

At its last meeting, the Virginia Coal and Energy Commission reviewed a request by the Southern States Energy Board with regard to the funding status of the Virginia Division of Energy. Since 1986-87 the Commonwealth has replaced lost federal funds with an equal appropriation of oil overcharge revenues. The Division of Energy now receives approximately \$2.5 million annually (or about 85% of its budget) from oil overcharge revenues in support of its energy programs.

According to Kenneth Nemeth, Executive Director for the Southern States Energy Board, when the Commonwealth began funding additional projects from the oil overcharge revenues, those monies were depleted for other purposes. Now, the future of the Division of Energy depends upon (i) appropriation of either the remaining oil overcharge funds or (ii) general funds. We are fully aware of the revenue situation facing the state's general fund and do not wish to compound those problems. Therefore, we recommend that the Division of Energy's programs be continued with oil overcharge funds, provided sufficient oil overcharge monies are available.

The Department of Mines, Minerals and Energy has submitted a 1990-92 financial proposal to continue these valuable energy services and maintain Virginia's energy presence at level funding amounts from the oil overcharge funds. As Chairman of the Virginia Coal and Energy Commission, I would like to inform you that the Commission, by unanimous vote, endorses the The Honorable Gerald L. Baliles December 22, 1989 Page Two

Department's financial proposal. We suggest that Texaco and Diamond Shamrock oil overcharge funds be set aside to support the Division of Energy, provided such funds are sufficient.

Sincerely,

Doriel W. Buil, J.

Daniel W. Bird, Jr.

cc: Mr. Kenneth Nemeth Hon. Curry Roberts Mr. Paul Timmreck Mr. Stuart Connock Mr. Gene Dishner Hon. Hunter Andrews Mr. John Bennett Hon. Dorothy McDiarmid Hon. Robert Ball Hon. Robert Schultze Ms. Becky Covey