OVERVIEW

In 1976 Congress amended the Mineral Leasing Act of 1920 (MLA) to bar the issuance of any new Federal onshore mineral lease to any person or company that owns a nonproducing coal lease and has held it for 10 years after August 4, 1976. This provision, section 3 of the Federal Coal Leasing Amendments Act of 1976 (FCLAA) (also known as section 2(a)(2)(A) of the MLA)¹, was adopted as a result of congressional concern over the large number of Federal coal leases that were being held without production and the recent acquisitions of Federal coal leases by the major oil companies and other large energy conglomerates. On August 4, 1986, the 10-year section 3 holding period will end for 331 leases and the owners of as many as 197 nonproducing Federal coal leases could be disqualified. Over the next decade the owners of another 103 nonproducing leases could also become ineligible to acquire new mineral leases unless they sell or relinquish their old nonproducing coal leases.

Legislation to repeal or modify the section 3 nonproduction penalty has been introduced in Congress. Section 3 relief legislation has become a high priority for many coal lessees and especially for those with oil and gas operations because of section 3's applicability to Federal onshore oil and gas leases. The Department of the Interior has endorsed repeal or replacement of section 3 with economic penalties. But legislation repealing or modifying section 3 raises a number of difficult issues concerning the management of Federal mineral resources. To allow additional time for consideration of legislation, Congress has delayed the effect of section 3 disqualifications from August 4, 1986 to December 31, 1986.²

At the request of the House Committee on Interior and Insular Affairs, OTA has prepared this special report assessing both the potential impacts of enforcement of section 3 and the possible consequences of amendment or repeal. OTA examined the availability and effectiveness of other mechanisms for promoting timely development of Federal coal leases and analyzed a range of possible legislative alternatives for congressional consideration.

In 1976 there were some 533 Federal coal leases with over 16 billion tons of recoverable reserves; only 59 of the leases were being mined. Federal coal production in 1974 was 20.6 million tons, scarcely 3 percent of national production. At the same time, the Federal Energy Administration Project Independence Blueprint report projected that national coal demand in 1980 could grow to 895 million tons under a business as usual scenario and to as much as 1.376 billion tons under an accelerated development scenario. Western coal production was also projected to increase steeply. Thus, when FCLAA was under consideration it appeared that Federal coal reserves, while substantial, were not contributing proportionately to meeting rapidly expanding national energy needs. There was also concern that the benefit of any future increase in the value of the Federal coal reserves would not flow to the Federal Treasury and the States, but would accrue to private lessees who had acquired Federal leases at little or no initial cost and held them without production. As a result of these concerns, FCLAA contains several provisions intended to encourage early production from new Federal leases and to limit the potential for speculative gain, Competitive bidding and payment of fair market value are required for all new leases; any new lease not producing within 10 years will be terminated. Congress dealt with the existing nonproducing leases by restricting the future acquisition of

¹ Public Law 94-377, 90 Stat. 1083, Aug. 4, 1976, 30 U.S.C. 201(a)(2)(A).

²H.J. Res. 465, 99th Cong., 1st sess, Dec. 19, 1985, (Public Law, 99-190).

Federal mineral leases by lessees who did not bring their coal leases into production within 10 years of acquiring the lease. The Department of the Interior also began to enforce statutory development obligations in Federal leases by adopting regulations in 1976 that required all existing Federal coal leases to produce 2.5 percent of lease reserves by June 1, 1986 under threat of cancellation.

In the years since enactment of FCLAA, both the coal leasing program and the market outlook for western coal have changed. The number of producing leases has increased to 118. In 1985, a total of 298 existing Federal leases were in permitted mines or associated with them; but 250 leases still remained undeveloped. Federal coal production in fiscal year 1984 was 104 million tons or about 12 percent of total U.S. production in the same period. Forecasts of greatly expanded western coal demand have been scaled back as plans for new coal fired powerplants and synthetic fuels facilities have been cancelled or delayed. Coal production reached 830 million tons in 1980 and is now projected expected to reach 894 million tons in 1985 by the Energy Information Administration. Actual production levels are well below some projections of the mid- 1970s.

The Department of the Interior now favors the maintenance of a large inventory of leased reserves as a hedge against dramatic, unanticipated future increases in coal demand and has accordingly relaxed the 1986 production deadline imposed by regulation on all existing coal leases in 1976. The Department substituted instead, a diligence system that requires old leases to produce 1 percent of recoverable reserves within 10 years of the first lease readjustment after passage of FCLAA shifting the diligent production deadlines for most pre-1976 leases to the 1990s. As a result of administrative actions, section 3 disqualification is now, in effect, the only penalty that might be imposed on most nonproducing pre-FCLAA leases before the mid-1990s absent enforcement of either specific lease minimum production provisions or the more general statutory diligent development requirement. Section 3 is the only statutory requirement that might force the holders of most nonproducing old leases to either mine coal from the leases or to give them up during the next decade.

Section 3 and Production Requirements for Federal Coal Leases

From 1920 to 1976, Federal coal leases were issued for indeterminate periods on the conditions of diligent development and continued operation of the mine or mines under lease. The leases were further subject to the revision or "readjustment" of specific lease terms, conditions, rentals, and royalties at the end of of the initial 20-year term and every 20 years after unless provided otherwise at the expiration of such period. Federal coal leases could be revoked for noncompliance with requirements imposed by statute, lease provisions, or general regulations in force on the date of lease issuance. Revocation was accomplished through cancellation proceedings in Federal district court, an administratively cumbersome and potentially expensive enforcement process for all parties.

In 1976, the law was changed. New coal leases are issued for an initial term of 20 years and may be extended beyond that initial term only for as long as the lease is producing coal annually in commercial quantities. Rentals, royalties and other lease conditions may be readjusted at the end of the 20-year primary term and subsequently every 10 years if the lease is extended. New leases must begin producing within 10 years of lease issuance or the lease is terminated automatically by operation of law. Cancellation proceedings must still be used for violation of other statutory and lease provisions. A new disqualification penalty was added for lessees that held leases for more than 10 years without producing.

WHAT IS SECTION 3 AND WHAT DOES IT REQUIRE?

Section 3 provides that, subject to certain limited exceptions, the Secretary shall not issue a lease under the terms of the MLA to anyone who holds and has held a Federal coal lease for 10 years after August 4, 1976, unless the coal lease is producing in commercial quantities. Section 3 is thus a general qualification provision for Federal onshore mineral leases. The disqualification attaches to the nonproducing lessee and to all entities "controlled by or under common control with" the noncomplying lessee, such as parent or subsidiary corporations, and affiliates. OTA has concluded that section 3 prevents issuance of all new leases for coal and for oil, gas, oil shale, phosphate, potash, sulfur, sodium, or gilsonite on Federal lands (both public domain and acquired lands). Federal offshore oil and gas leases are not affected by section 3 because these leases are issued under the Outer Continental Shelf Lands Act, not the MLA.³

Section 3 was directed primarily at "old" leases (leases issued before passage of FCLAA) and particularly at the large nonproducing lease holdings of major oil companies, large coal companies, and other energy conglomerates. The disqualification extends to oil and gas and other mineral leases to deter these firms from holding undeveloped Federal coal leases by threatening their participation in other leasing activities. The legislative history makes clear that the provision was adopted in response to concern that these companies might sit on their leases waiting for the price of coal to go up in the future instead of producing coal from them to meet more immediate energy needs. Passage of FCLAA followed on the first OPEC oil embargo and a doubling of the average domestic price of coal from 1974 to 1976. Real coal prices have remained relatively stable since then.

The Department's 1982 regulations and final guidelines on section 3 and logical mining unit (LMU) formation have made section 3 compliance more difficult for some producing lessees. The delay in issuing guidelines has put lessees at a disadvantage in preparing and getting approval of assignments, relinquishments, and LMUS before the section 3 disqualification will start for many lessees. The Department has effectively created three different section 3 compliance schedules and commercial quantities production levels based on whether or not the lease has been adjusted or amended to include the post- FCLAA production and royalty provisions. While this disparity creates some inequity among nonproducing lessees, it does allow the Department a second chance to amend the leases that were not readjusted to include the statutory royalties and 1982 diligent development terms, provided that the lessee also agrees to the amendment as the price of section 3 compliance.

OTA believes that the Department has ample discretion to allow coal lessees who are actually producing from the lease or LMU to comply with section 3. This discretion is found in interpreting such terms in section 3 as "holds and has held", "producing in commercial quantities", and "controlled by or under common control with" the lessee, and in determining the availability of exceptions in section 7(b). The Department has only extremely limited discretion to assist nonproducing lessees in complying with section 3.

Both old leases and new leases are subject to section 3. The threat of disqualification is a strong incentive to develop leases or to transfer them. For most old leases, the 10-year section 3 production deadline will come years before any production requirement imposed under the 1982 diligence system. It is also a backup production requirement for new leases once such leases

³ OTA has also concluded that section 3 would bar the issuance of a preference right lease for coal or other minerals to an applicant with a noncomplying coal lease. OTA's conclusions are in general agreement with those of the Department of the Interior in its Solicitor's Memorandum M-36951, Feb. 12, 1985. The Department has not yet reached an opinion on the effect of section 3 on preference right lease applications or its effect on acquired land leases.

have met the initial 10-year production requirement and can no longer be terminated. Section 3 could be used to encourage production, assignment, or relinquishment of such leases before the primary 20-year term expires if the leases are not producing and advance royalties can no longer be accepted in lieu of continued operation.

Section 3 "enforcement" is not discretionary. Implementation of section 3 is not contingent on rulemaking or guidelines. If the Department does not move effectively to establish qualification procedures, unsuccessful applicants for oil and gas leases will certainly use DOI's failure to determine section 3 eligibility as one basis for challenging new oil and gas leases even where it is not apparent that the successful applicant in fact holds any coal leases.

Section 3 has already affected the pattern of leaseholdings of some major oil companies and large energy companies. Section 3 has forced some companies to reevaluate their lease inventories and to assign or relinquish some leases with unfavorable short-term development prospects in order to comply.

What Must A Lessee Do To Comply With Section 3?

OTA reviewed the MLA, FCLAA and its legislative history, and Department regulations. guidelines, and other documents to determine the availability of exceptions to the section 3 producing in commercial quantities requirement. We found several statutory provisions that confer extensive, but not unlimited, discretion on the Secretary of the Interior to resolve man\ of the difficulties that Federal coal lessees may face in complying with section 3. OTA identified at least eight ways for a lessee to avoid disqualification.

1. The lessee can produce coal in commercial quantities from the lease.

"Commercial quantities" is defined by regulation as production of 1 percent of lease or LMU reserves. However "producing in commercial quantities" for section 3 purposes is defined differently depending on whether or not a lease is subject to the 1982 "diligence system" and whether it is part of an approved LMU. Under Department guidelines, section 3 compliance may require production of as much as 1 percent of lease reserves annually or mere 1>' "producing toward" 1 percent of lease (or approved LMU) reserves over a period that may be as long as 10 years after the new lease is issued. The use of an inflexible 1 percent as commercial quantities may mean that some producing lessees with very large reserves or that have just started production will not comply with section 3. FCLAA does not define what is meant by commercial quantities, but OTA believes that section 3 requires that the lessee must actually produce some coal from the old lease or LMU before qualifying for a new lease.

2. The lessee can pay advance royalties in lieu of continued operation under section 7(b) of the MLA.

The MLA allows payment of advance royalties in lieu of production to satisfy the statutory requirement of continued operation. This exception is available only if the lessee has already developed the mine and produced commercial quantities of coal to comply with the diligent development requirement and has thus triggered the statutory continued operation obligation. The Department has interpreted this section 3 exception as referring only to advance royalties paid under section 7(b) as amended by FCLAA and thus available only *if* a lease has been readjusted or modified to include the FCLAA advance royalties *and* the lessee has satisfied its diligent development condition by producing. OTA estimates that about 133 pre-FCLAA leases are scheduled for readjustment between August 4, 1976 and August 4, 1986, and might qualify for this exception, but other pre-FCLAA leases would not unless the leases were

amended voluntarily to include the FCLAA advance royalties and other requirements. However, as discussed below, not all leases have been effectively readjusted as scheduled. As a result, even fewer than 133 lessees would initially be able to pay advance royalties to comply with section 3.

3. The [essee might obtain a force majeure suspension of the lease under section 7(b) of the MLA.

If the lease operations are interrupted because of strikes, the elements or casualties not attributable to the lessee, the diligent development and continued operations obligations can be suspended. The Secretary's approval of a *force majeure* suspension is not discretionary. "Casualties not attributable to the lessee" have not in the past been interpreted to include ordinarily foreseeable risks of doing business, such as ordinary delays in acquiring permits or in delivery of equipment, or the lack of markets. The Department has decided that section 7(b) *force majeure* suspensions as exceptions to section 3 are only available for leases that have been readjusted or otherwise amended to include all FCLAA terms and conditions.⁴

4. The lessee can transferor assign the lease to an unrelated entity.

If the lease is assigned, the lessee no longer "holds" the lease and the disqualification is lifted. Coal lease assignments become effective following approval by the Department. The assignment must be an arm's-length transaction between the lessee and a new owner that is not controlled by or under common control with the lessee for it to remove the lessee and related business entities from the threat of a section 3 disqualification. If the lessee (or a related entity) later reacquires the lease, the new holding period is added to the previous tenure for section 3 purposes. There may be several mechanisms that would allow the lessee to assign the nonproducing lease, or its producing leases, to another entity while still keeping some interest in the leased Federal reserves and avoiding section 3 problems. The lessee might, for example, convey the lease to a trust or to the firms financing mine development, while retaining the rights to mine the lease under an operating agreement.

5. The lessee can relinquish all or part of the noncomplying lease.

Relinquishments take effect on approval by the Department, however the effective date may be made retroactive to the date the application was filed. As a precondition, all rents and royalties due must be fully paid and the lessee must be in compliance with all terms and conditions of the lease. The regulations provide that the Secretary must find that "relinquishment would not impair the public interest." Examples of relinquishments that might not be in the public interest are where it would result in "high grading," bypass, or wastage of Federal coal, or where abandoned mine workings have not yet been successfully reclaimed in compliance with lease obligations. OTA estimates that at least 44 currently nonproducing leases were mined before passage of the Surface Mining Control and Reclamation Act (SMCRA) and were never permitted. The coal lease terms may perhaps be the only effective reclamation obligations for these disturbed areas. Even after a relinquishment application has been filed on such a lease, it may take several growing seasons to determine if the surface restoration has been sufficient to allow approval of the relinquishment.

'Nondiscretionary force majeure suspensions are still available for unadjusted leases under specific lease provisions and the authority of MLA section 7 in effect when the lease was issued or last readjusted. These suspensions do not however lift the section 3 requirement.

6. The lessee can obtain a suspension of the lease in the interests of conservation under section 39 of the MLA.

The Secretary can suspend operations and production on a lease "in the interests of conservation of the resource" under section 39. During the suspension, the rights and obligations of the lease are held in abeyance. No development or production activities can take place, no rent is due. (FCLAA amended section 39 to provide that it could not be used to suspend or reduce section 7(b) advance royalties.) A section 39 suspension might be justified for a nonproducing lease that would not be mined for a number of years and could not be mined except from the lessee's operation instead of forcing relinquishment to comply with section 3. (In such a situation, LMU formation or an order barring wastage of the leased coal could also be used to prevent the actual bypass of Federal coal.) Suspension allows the lessee to preserve many of the advantages of pre-FCLAA leases, It delays readjustment and the imposition of higher royalties, and extends the section 3 holding period for the length of the suspension. An important restraint is that section 39 suspensions are not available for purely economic reasons alone, such as failure to find a buyer for the coal.

7. The lease can be combined with other Federal leases or non-Federal coal into a producing logical mining unit (LMU).

Under section 5 of FCLAA, production anywhere in an approved LMU can be used to satisfy the production requirements for any Federal leases in the LMU. The Department has determined that LMU production can be used to satisfy the section 3 "producing in commercial quantities" requirement. An LMU can only be approved if it promotes maximum economic recovery of the coal, if all lessees consent, and if the all areas within the LMU are contiguous, can be mined as a single operation, are under the effective control of one operator and total less than 25,000 acres. A public hearing may be required before approval. An LMU mine plan must provide for the LMU reserves to be mined out in no more than 40 years. The Department has imposed additional conditions on LMU formation that may make use of this option unattractive for some lessees.

The Department's section 3 and LMU guidelines and 1982 regulations may make it more difficult than previously anticipated for some producing mines to satisfy the section 3 requirement for all leases within the mine without forming an LMU. The LMU approval includes some additional obligations that some lessees may want to avoid, such as: an apparent requirement to mine at an average rate of 2.5 percent of LMU reserves annually; provisions for canceling the LMU if that rate is not met; and the relinquishment or segregation of lease reserves excluded from the LMU. It is therefore possible, but not likely in most cases, that some lessees with active mines will not combine nonproducing leases into an LMU for section 3 compliance. These lessees may choose to live with a short-term section 3 disqualification or to relinquish the leases rather than create an LMU.

The statutory requirement that the areas within the LMU must be contiguous may bar LMU formation for a few mining operations. OTA found two mining operations, one in Colorado, one in North Dakota, where noncontiguity might prevent LMU formation for active mines that meet all other LMU requirements and where LMU formation is necessary to comply with section 3. OTA believes that the Secretary probably has sufficient administrative discretion, under section 5 and section 39 for example, to allow the lessees to keep the leases intact and to avoid section 3 noncompliance. The contiguity requirement could in the future present problems in LMU formation in North Dakota because scattered Federal coal tracts are intermingled with larger areas of fee coal. Moreover, mining operations in North Dakota sometimes include several pits that are separated by lands that will not be mined. The amount of Federal land and coal involved, however, is small.

8. The lease can reconsolidated with a producing Federal coal lease.

The Secretary of the Interior has general administrative authority over coal leases and could approve the consolidation of two or more coal leases into a single lease in appropriate cases. There are currently no regulations governing this action. OTA notes that lease consolidations have been made in the past and would allow lessees to comply with section 3 without forming an LMU and subjecting a lease to the LMU requirements. There is no requirement for notice or public hearings for a lease consolidation.

How Has the Interior Department's Implementation of Section 3 Guidelines Affected the Ability of Companies to Comply With Section 3?

The Department of the Interior has contributed to the potential adverse impacts of section 3 on Federal coal lessees by making it more difficult for many lessees to understand and comply with section 3 within the time remaining before August 4, 1986 (or by December 31, 1986, the delayed effective date of disqualifications). Proposed guidelines on section 3 were not published until February 1985, and related guidelines on LMU formation were not proposed until April 1985. The final guidelines were issued, largely unchanged in September 1985. The Department's delay has left many lessees less than a year to apply for and obtain approval of any administrative actions needed to comply with section 3, such as lease relinquishments, assignments, suspensions, and LMU approvals.

The Department has made compliance more difficult for some producing lessees by limiting the availability of statutory exceptions, and interpreting the producing in commercial quantities requirement as a kind of additional continuous production requirement of 1 percent per year for some lessees, while giving others up to 10 years to produce 1 percent of reserves. Under the guidelines, the section 3 production bracket for some lessees could extend up to 10 years after a new lease is issued. The Department has tied the availability of section 3 exceptions and its definition of producing in commercial quantities to whether or not a lease has been readjusted to include the 1982 diligence regulations. Lessees who have held nonproducing leases for 10 years are treated differently on this basis. This distinction is not found in section 3, but is probably within the Secretary's discretion in implementing the law.

Conditions placed on approval of LMUS and penalties for LMU failure are disincentives for some lessees to form LMUS. These requirements in the 1982 regulations and LMU guidelines, in OTA's opinion, go beyond what is required by section 5 of FCLAA for LMU formation, but are fully within the discretion accorded to the Secretary in implementing the law. LMU approval is an extremely powerful and flexible tool for promoting the most efficient development of Federal coal reserves and for resolving any difficulties created by different lease provisions for Federal lands in the LMU.

Several important issues in section 3 enforcement have been left unanswered. The Department has failed to define how it will interpret "controlled by or under common control with" language of section 3 to determine when the 10-year holding period begins and ends and what affiliated firms might be precluded from acquiring leases. This is particularly important for leases that are held by companies that were acquired by and subsequently merged into other companies. There have been more than 16 corporate acquisitions involving more than 150 leases since 1976. The Department has merely advised that "common principles of corporate law" would apply to determining control and that only 100 percent arm's-length assignments would restart the section 3 clock. This suggests that corporate acquisitions would not restart the section 3 clock for the acquired lessee, and that a subsequent merger, or reassignment of the leases to the acquiring corporation would also not restart the clock. The Department has not

suggested how section 3 would be applied to the sale or spin off of a coal leasing subsidiary to an independent company. OTA believes that the section 3 clock would not be restarted in such a case under the suggested interpretation.

The concept of "control" was included in section 3 and in the MLA's coal lease acreage limitations to prevent these restrictions from being avoided by devices of corporate and other business organization. The Department however has not clarified whether it will apply the same attribution principles used for acreage limitations for section 3 purposes. The Department has not yet indicated how it will determine control for other noncorporate business entities that hold leases, such as partnerships and various kinds of business trusts. The Department intends to make "control" determination on a case by case basis that, at present, will leave some non-coal lessees unsure about their section 3 compliance status.

Several major leaseholding corporations own stock in nonsubsidiary companies that also hold Federal coal leases. The Department has not offered any clear guidance on when stock participation might impose a section 3 disqualification on the stockholder lessee or on the nonsubsidiary/affiliate. For example, Chevron owns Gulf Oil Corp. and more than of 20 percent of AMAX, and the Williams Companies own Western Slope Carbon, a coal lessee, and over 30 percent of Peabody Holding Co. If control is interpreted as stock ownership and the ability to dictate the affairs of the company, 20 percent would in many companies give the holder substantial influence over the company, but not dictatorial control. How and when section 3 sanctions might apply to the companies involved is still apparently unresolved. Ownership of 10 percent or less of corporate stock has been interpreted as a "controlling" interest for purposes of disclosure on corporate qualifications statements and calculating total allowable acreage holdings. In the absence of any published Interior Department guidance on this matter, OTA did not attribute noncompliance status to stockholders of a corporate lessee except for wholly owned subsidiaries or joint ventures involving two or three companies. OTA believes however that the Department could, but may not be required to, find control for section 3 purposes in stock ownership above a minimal amount, such as for example 5 percent of a publicly traded company.

If the conclusions are changed on how section 3 holding periods and control are to be determined, the compliance deadlines for some major lessees are extended significantly. If DuPont's acquisition of Conoco (parent company of Consolidation Coal Co.) restarts the section 3 clock, Consolidation Coal Co. will have a section 3 deadline in 1991 instead of 1986. Gulf Oil, which owns Pittsburgh and Midway Coal Co., bought Kemmerer Coal Co. from the Lincoln Corp. in 1981. Kemmerer was then dissolved and its major assets, including its coal leases, were distributed to its shareholder Gulf Oil Corp. The lease title records reflect the assignment to Gulf Oil Corp. However, at the time of the transfer, (as best we can determine) this was not an arm's-length transaction between independent entities because Gulf owned all of Kemmerer. In 1984 Chevron acquired Gulf, which is now being merged into Chevron. Will Chevron be charged with Kemmerer's section 3 holding period and be disqualified from obtaining Federal oil and gas leases because of the nonproducing leases that Gulf acquired with Kemmerer? We think that is the proper result, because of the nature of the assignments transferring title to the leases. If corporate acquisitions are viewed as restarting the section 3 clock however, Chevron, and one would assume its subsidiary Gulf, would not face a possible section 3 penalty until 1992 when the 10-year holding period ends for Chevron's 50 percent interest in a Montana lease.

DILIGENT DEVELOPMENT AND OTHER PRODUCTION REQUIREMENTS FOR FEDERAL COAL LEASES

The expectation of a profit to be made from mining and selling coal is clearly the most powerful incentive for any lessee to develop a mine, however, there are times when

nondevelopment may be economically preferable. For example, if the lessee expects the price of coal to increase, deferring production might offer the potential of greater profits later. In other instances, low growth market conditions and an excess of capacity in existing mines may significantly reduce the probability that a lessee can successfully find a buyer for the coal if development proceeds without an assured contract. A risk-averse lessee may prefer to wait until the perceived probability of success improves. But the lessor's interest may not be served by this delay if receiving royalty payments from production is the lessor's major benefit from the lease. Early production or return of the lease so it can be sold to another who might be more successful at developing a mine and generating revenues would be more advantageous to the lessor. The public interest is also served by encouraging more development so that competition among coal suppliers will tend to keep fuel prices low. To protect the economic interests of the lessor and to balance them against those of the lessee, the legal concept of diligent development of mineral leases arose.

Mineral leases under Federal law and common law contain either an express or implied promise that the lessee will make a reasonably "diligent" effort to develop and market the mineral under lease so that production royalties will be paid to the lessor. These "diligence" provisions come in many forms and are intended to protect the interests of the lessor by encouraging production or forcing relinquishment of a nonproducing lease. Not all leases require actual production as evidence of the lessee's diligence, however. For example, some leases allow the lessee to keep the lease by paying a holding fee instead of producing. Such a payment requirement does not however relieve the lessee indefinitely of all obligation to develop the lease. Other examples of diligence requirements are minimum production and minimum investment conditions, advance or minimum royalties, and short primary lease terms. OTA found that many of the same diligence conditions used in private leases have also been used in Federal coal leases. The effectiveness of these provisions in Federal leases has historically been hampered by lack of prompt and efficient enforcement methods.

The diligence requirement for Federal coal leases is found in section 7 of the MLA. Originally and in its current amended form, section 7 provides that every Federal coal lease is held under the conditions of diligent development and continued operation of the mine or mines on the lands under lease. Section 7 originally imposed no time limit for development, but a lessee who failed to develop the lease could be sued for violation of the statutory requirement and the lease forfeited. Federal coal leases until the mid- 1970s typically included a provision requiring minimum production to begin in the fourth or sixth year of the lease. The minimum production obligation could be waived on payment of advance royalties with the approval of the Secretary. These advance royalties were usually equal to and credited against the annual rental so that no additional payment was required to delay production. There was no statutory or lease provision that authorized waiver of the diligent development condition by payment of advance royalties, however. OTA found some evidence that lessees were reminded of the diligence obligation as late as the early 1960s, but there is no record of any lessee actually being sued for nonproduction. This was, perhaps, because cancellation required the Attorney General to sue the lessee in Federal district court, a relatively costly and time-consuming process. In FCLAA, diligence requirements were made more stringent. New Federal coal leases must begin producing within 10 years of issuance or they are terminated. Lease suspensions and LMU formation are probably the only exceptions to the new statutory diligent production provision.

Section 3 is effectively an "independent" diligence requirement because it creates an incentive to produce from the lease or get rid of it. But, section 3 is different from other diligence provisions in that it is not a term or condition of a lease and does not directly impose any penalties on a lessee unless a new lease is sought. (To avoid confusion in this report, when we refer to diligence obligations, we mean the requirements imposed under section 7 of the MLA and not the production requirement of section 3.)

The effectiveness of current diligent production requirements for old or pre-FCLAA coal leases is now uncertain, largely as the result of a more than 20-year history of nonenforcement of existing lease provisions by the Department and the 1982 relaxation of 1976 regulations which would have required most old leases to be producing by 1986 under threat of cancellation. The 1982 diligence regulations provide that pre-FCLAA leases are governed by the production provisions in the lease until the lease is readjusted or voluntarily amended to include the new terms required by FCLAA and the "1982 diligence system". The 1982 regulations require production of commercial quantities (defined as 1 percent of lease reserves) within 10

years of the first post- FCLAA lease readjustment. Similar diligence requirements are applied to LMUs. Under the 1982 system, old leases thus face production deadlines between 1987 and 2007, and in some cases later, depending on when and whether the Department readjusts the

leases.

There are two major weaknesses in the 1982 diligence system as currently administered. First, it is almost entirely dependent on timely and effective readjustment of pre-FCLA.A leases. Second, the current lease form does not include specific production amounts or deadlines, but merely states that the lessee must satisfy diligent development and continued operations requirements as defined in applicable regulations (which can be changed). This enforcement scheme thus suffers from many of the same infirmities that the Department attributed to the 1976 regulations that, ostensibly, required the 1982 rules changes, such as, lack of specific lease production obligations and potential modification of lease terms through changes in regulations.

OTA has learned that the Department has failed to adjust in an effective or timely manner an undetermined number of more than 130 leases that were scheduled for readjustment since FCLAA. The Department in some cases failed to send required notices on time, or attempted to readjust the leases several years after the scheduled readjustment dates. Some lessees consented to the changes and did not contest the readjustments. Other lessees however appealed the decisions administratively to the Interior Board of Land Appeals (IBLA) (a special hearings board established by and acting for the Secretary of the Interior) and to the Federal courts. Some of the attempted readjustments were reversed or sent back to the Bureau of Land Management for review. As a result, the leases involved were not conformed to the FCLAA requirements or to the 1982 diligence system. In September 1981, then Interior Solicitor William Coldiron issued an opinion that coal leases are only "subject to" adjustment under the MLA and that the Secretary is not therefore required to readjust any leases at the end of their current terms to include FCLAA provisions. (It is and has been the Department's policy to do so, however.) Under this interpretation, if the Department either fails or declines to readjust a pre-FCLAA lease, none of the provisions of FCLAA are made applicable to the old lease, and the lease could continue under the old royalty provisions for another 10 years, and in some cases 20 years. To date the Secretary has not reviewed the decisions of IBLA reversing the readjustments. There also appears to be no institutional mechanism for the Bureau of Land Management or others to appeal decisions of IBLA reversing lease readjustments. 5 These readjustment decisions have important implications for future enforcement of diligence provisions, but more significantly in the case of producing leases, they could result in the loss of millions of dollars in increased production royalties to the Federal Government and the States.

Under the MLA, each public land State, except Alaska, receives 50 percent of the revenues from mineral lease sales, rentals, and royalties on Federal lands in the State. (Alaska receives 90 percent of mineral leasing revenues from Alaska Federal lands.) The States obviously have a significant financial interest in lease readjustments. They are not, however, currently parties to cases involving readjustments and, thus, may have no notice or opportunity to appeal reversals.

OTA has previously analyzed the prospects that lessees will comply with the diligent development requirements imposed by the 1982 regulations. We did not however analyze how the problem with lease readjustments might affect these results. This analysis included 502 leases in Colorado, Montana, New Mexico, North Dakota, Utah, and Wyoming. OTA found that:

- o 272 leases with 11.4 billion tons of reserves are likely to meet the 1 percent diligent production requirement by the end of the new individualized diligence period;
- o 169 leases with 4.5 billion tons of reserves face uncertainties in meeting the 1 percent production requirement at the end of the new individual diligence periods; and
- o 61 leases with 0.5 billion tons are unlikely to satisfy the diligent development requirements of the 1982 regulations.

The 1982 regulations made it more likely that pre-FCLAA leases would comply with diligence obligations by reducing the amount of coal required to be produced and extending the production deadlines from 1 to 20 years from the June 1, 1986 deadline imposed under the prior 1976 regulations. Unlike the 1976 regulations, the 1982 diligence system does not provide discretionary extensions to the diligence deadline for lessees who have very large mines, difficult mining conditions, or unanticipated problems or delays in mine development. Continuation of current low growth trends in western coal markets may make compliance more unlikely for some leases that OTA classified as uncertain in our 1983 analysis.

Federal Coal Leases and Section 3 Compliance

WHAT IS THE DEVELOPMENT STATUS OF FEDERAL COAL LEASES?

In preparing this report, OTA reviewed a total of 648 Federal coal leases, including all leases currently in effect and leases that have been relinquished or exchanged since 1980. Our major focus was on the 616 leases in the States of Colorado, Montana, New Mexico, North Dakota, Oklahoma, Utah, and Wyoming. We also looked at the 32 leases in other States (Alaska, Alabama, California, Kentucky, Oregon, Pennsylvania, Virginia, and Washington). Table 1 shows the distribution and the current development status of the leases reviewed.

There are 298 leases with approved mine plans. This represents about 48.8 percent of the 616 leases in western States and over 60 percent of total leased reserves in these States. Most of these leases are either producing or associated with active mining operations. There are also several permitted mines that either have not yet begun commercial operations or are temporarily idled because of market or other conditions. (See table 2.) Total reported production from Federal coal leases was 104 million tons in fiscal year 1984.

⁶ See statement of Karen L. Larsen, Senior Analyst, Office of Technology Assessment, before the Subcommittee on Mining, Forest Management, and Bonneville Power Administration of the House Committee on Interior and Insular Affairs, June 7, 1983, at 13

⁷OTA's December 1981 report, An Assessment of Development and Production Potential of Federal Coal Leases, analyzed the status of Federal coal leases then in effect and was the starting point for our analysis in this study.

STATE	DEVELOPMENT STATUS	NO. LEASES	%	ACRES	%	RECOVERABLE RESERVES	% .
Colorado		04	F F 40/	00 455	FO (0)	4 450	
	Approved	81	55.1%	88,155	52.6%	1,153	43.6%
	Pending	6	4.1%	20,891	12.5%	136	5.1%
	Undeveloped	54	36.7%	55,246	33.0%	1,295	48.9%
	Relinquished	6	4.1%	3,355	2.0%	62	2.4% 100%
Montono	Subtotal	147		167,647		2,646	100%
Montana	Approved	19	70.4%	25 5/0	79.6%	074	E0 00/
	Approved Pending	2	70.4%	35,548	2.7%	974 150	59.9% 9.2%
	Undeveloped	6	22.2%	1,198 7,893	2.7% 17.7%	503	30.9%
	Relinquished	0	0.0%	1,073	0.0%	0	0.0%
	Subtotal	27	0.070	44,639	0.070	1,627	100%
New Mexico	Subtotui			44,007		1,027	100 /0
IN CW WICKICO	Approved	17	54.8%	33,275	72.6%	314	66.9%
	Pending	1	3.2%	2,044	4.5%	60	12.8%
	Undeveloped	12	38.7%	9,287	20.3%	75	15.9%
	Relinquished	1	3.2%	1,240	2.7%	21	4.5%
	Subtotal	31	0.270	45,846	2.770	470	100%
North Dakota		٠.		.0,0.0			
	Approved	16	76.2%	15,198	79.2%	220	82.7%
	Pending	0	0.0%	0	0.0%	0	0.0%
	Undeveloped	4	19.0%	3,914	20.4%	46	17.2%
	Relinguished	1	4.8%	80	0.4%	0	0.0%
	Subtotal	21		19,192		266	100%
Jtah				·			
	Approved	77	35.2%	95,548	30.1%	1,210	34.6%
	Pending	20	9.1%	23,885	7.5%	300	8.6%
	Undeveloped	108	49.3%	174,841	55.1%	1,645	47.1%
	Relinquished	14	6.4%	22,844	7.2%	341	9.8%
	Subtotal	219		317,118		3,496	100%
Wyoming							
	Approved	82	68.3%	166,884	64.2%	8,323	74.4%
	Pending	3	2.5%	3,580	1.4%	268	2.4%
	Undeveloped	26	21.7%	78,242	30.1%	2,387	21.3%
	Relinquished	9	7.5%	11,438	4.4%	216	1.9%
	Subtotal	120		260,144		11,194	100%
Oklahoma	_						
	Approved	6	11.8%	•	10.6%	6	2.9%
	Pending	3	5.9%	4,900	6.0%	15	7.4%
	Undeveloped	40	78.4%		82.0%	179	89.5%
	Relinquished	2	3.9%	1,120	1.4%	0	0.0%
	Subtotal	51		81,537		201	100%
Tatal Wast							
Total West	A	200	40 40/	442 274	47 40/	12 200	/1 20/
	Approved	298	48.4%	443,274	47.4%	12,200	61.3%
	Pending	35	5.7%	56,498	6.0%	928	4.7%
	Undeveloped	250	40.6%	396,274	42.3%	6,130	30.8%
	Relinquished	33	5.4%	40,077	4.3%	641	3.2% 100%
	Subtotal	616		936,123		19,899	100 /0
Other States							
East	not determined	24		17.0/0			
Other West	not determined not determined	24 8		17,868 9,173		64 39	
ottier west	Subtotal	32		27,041		103	
Total All Leases		648		963,164		20,003	
NOTE: All reserve	s in millions of						
SOURCE: Office of	Technology Asses	ssment					

Table 2
PRODUCTION STATUS OF FEDERAL COAL LEASES
IN SEVEN WESTERN STATES

		•	<u>Total</u>		<u>In</u>	<u>Permit</u>	<u>Outside</u>	Permit
Development <u>Status</u>	Production Status	No. <u>Leases</u>	Acres	Reserves	No. Lease	es Acres	No. Leases	Acres
Approved	Producing Mined Out	226	333,277	9,676	190	288,094	36	45,183
Permit	Inactive	а 39	12,908 50,644	12 515	8 34	12,908 42,745	0 5	0 7,899
	Contracts No Contracts	6 s 19	14,679 31,766	1,226 806	6 19	14,679 31,766	0 0	0 0
	Subtotal	298	443,274	12,236	257	390,192	41	53,082
Pending	Contracts	4	6,944	75	4	6,944	0	0
Permit	No Contracts Subtotal	31 35	49,544 56,498	835 928	26 30	33,108 40,052	5 5	16,446 16,446
Undeveloped	No Production	206	366,785	5,863				
	Past Prod. Subtotal	44 250	29,489 396,274	267 6,130				
TOTAL		583	896,046	19,294				

All reserves in millions of tons.

NOTE: Totals exclude leases that have been relinquished and 32 leases outside of the seven Western States. Individual column entries may not add to totals because of independent rounding.

SOURCE: Office of Technology Assessment

There are 35 leases with 928 million tons of reserves in mine plans undergoing active permit review in 1984-85. Thus, by 1985, 333 leases, over half of the western leases, and over 65 percent of leased reserves had an approved or pending mine plan. Not all leases that are permitted or have submitted a mine plan will necessarily be mined. Mine development or operations may be reduced, deferred, or abandoned if mining conditions become uneconomic or there are no customers for the coal produced.

There are 250 undeveloped leases with about 6.1 billion tons of recoverable reserves. These undeveloped leases include a significant number of leases on which little or no development activity has taken place and 44 leases that were mined before SMCRA and may not Yet be reclaimed.

OTA found that 33 leases with over 640 million tons of reserves have been turned back through relinquishments, exchanges or consolidation since 1981 and are no longer in effect. For the most part, the relinquished leases had poor short term development potential and were unlikely to be mined because the amount or quality of the reserves, or the location made them uncompetitive in today's market. There are some additional relinquishments awaiting approval which are not included in this category. Exchanges sometimes resulted in the issuance of new leases to replace the lands turned back. (In this report, we generally refer to all leases that have been turned back for whatever reason as "relinquished.")

HOW MANY FEDERAL COAL LESSEES WILL COMPLY WITH SECTION 3?

Excluding the 33 relinquished leases, there remain 489 pre-FCLAA western leases that, theoretically, could create section 3 disqualifications for their owners in 1986 and after. (Table 3 shows the development status of pre-FCLAA leases in the seven major western coal States.) These "old" or "pre-FCLAA" leases are the ones most likely to impose a section 3 disqualification penalty on the lessee. (A post- FCLAA or "new" lease terminates if is not producing 10 years after it is issued, so few of these leases will survive to cause later section 3 problems.)

Table 3
DEVELOPMENT STATUS OF PRE-FCLAA LEASES
IN SEVEN WESTERN STATES
AUGUST 1985

STATE	DEVELOPMENT	NO.	01	ACRES		RECOVERABLE	0,
0.1	STATUS	LEASES	%		%	RESERVES	%
Colorado	A		FF 00/	70.004	(0.00/	001	40.50
	Approved	60	55.0%	72,934	60.2%	921	48.59
	Pending	3	2.8%	6,162	5.1%	12	0.69
	Undeveloped	46	42.2%	41,973	34.7%	967	50.99
	Subtotal	109	100%	121,069	100%	1,900	100
Montana							
	Approved	11	61.1%	29,303	80.7%	805	62.99
	Pending	2	11.1%	1,198	3.3%	150	11.79
	Undeveloped	5	27.8%	5,797	16.0%	325	25.49
	Subtotal	18	100%	36,298	100%	1,280	100
New Mexico							
	Approved	15	55.6%	28,491	71.8%	218	61.99
	Pending	1	3.7%	2,044	5.2%	60	17.09
	Undeveloped	11	40.7%	9,127	23.0%	74	21.09
	Subtotal	27	100%	39,662	100%	352	100
North Dakota	Subtotui		10070	37,002	10070	002	100
North Dakota	Approved	11	73.3%	12,449	76.1%	187	80.39
	Pending	0	0.0%	12,447	0.0%	0	0.09
	Undeveloped	4	26.7%	3.914	23.9%	46	19.7
	Subtotal	15	100%	16,363	100%	233	100
Utah	Subtotal	13	100%	10,303	10076	233	100
utan	Annround	65	35.3%	70.01/	32.7%	1 122	39.0
	Approved			78,916		1,123	
	Pending	19	10.3%	23,245	9.6%	300	10.49
	Undeveloped	100	54.3%	139,213	57.7%	1,460	50.69
	Subtotal	184	100%	241,374	100%	2,882	100
Wyoming							
	Approved	68	73.1%	141,437	69.5%	7,334	78.39
	Pending	3	3.2%	3,580	1.8%	268	2.99
	Undeveloped	22	23.7%	58,514	28.7%	1,768	18.99
	Subtotal	93	100%	203,531	100%	9,371	100
Oklahoma							
	Approved	5	11.6%	8,526	11.7%	6	3.29
	Pending	3	7.0%	4,900	6.7%	15	8.0
	Undeveloped	35	81.4%	59,596	81.6%	163	88.89
	Subtotal	43	100%	73,022	100%	184	100
All West		005	40.40	070.057	E0 00:	40.504	
	Approved	235	48.1%	372,056	50.9%	10,594	65.49
	Pending	31	6.3%	41,129	5.6%	804	5.09
	Undeveloped	223	45.6%	318,134	43.5%	4,803	29.69
	TOTAL	489	100%	731,319	100%	16,201	100

OTA projected section 3 compliance for the 489 western pre-FCLAA leases still in effect. These results are shown in table 4. About 331 leases have a section 3 deadline of August 4, 1986; because of lease assignments, section 3 dates for the remaining leases fall between August 5, 1986 and about January 1995 (assuming that the current lessees do not sell or relinquish the leases before the section 3 dates). Table 5 shows the major reasons why leases will or will not comply with the section 3 production requirement.

OTA found that there are 189 leases with 8.3 billion tons of reserves that are likely to comply with section 3. At least 169 of these leases are in mines currently producing at an average rate of 1 percent or more of reserves per year. Another 13 leases with 1.6 billion tons of reserves will be producing in commercial quantities at the end of their 10-year holding periods. Seven pre-FCLAA leases in permitted operations have already been mined out and are probably under reclamation. In classifying leases as producing, OTA assumed that a lessee would form an LMU if necessary to continue to qualify for new Federal mineral leases.

OTA estimates that 244 leases with over 6.2 billion ton of reserves will not comply with the section 3 producing in commercial quantities requirement. Lack of markets is the dominant reason why 178 noncomplying leases with over 4 billion tons of reserves are not likley to be in production. Another 13 leases with 1.2 billion tons of reserves are suitable only for onsite uses, such as power generation or synthetic fuels production. Unfavorable development potential was the reason why 53 leases with 900 million tons of reserves will not comply.

TABLE 4

SECTION 3 DATES FOR PRE-FCLAA FEDERAL COAL LEASES
IN THE SEVEN WESTERN STATES

SECTION 3	SECTION 3	NO. OF		
DATE*	COMPLIANCE	LEASES	ACRES	RESERVES**
Aug. 4, 1986	In Compliance	134	228,477	7,491
	Uncertain	27	42,307	942
	Noncompliance	170	247,404	5,035
	Subtotal	331	518,188	13,468
Aug. 5, 1986				
to Aug. 4, 1991	In Compliance	23	21,715	293
_	Uncertain	10	18,457	344
	Noncompliance	39	57,904	536
	Subtotal	72	98,076	1,173
After Aug. 4, 1991	In Compliance	32	41 #934	522
•	Uncertain	19	34,390	355
	Noncompliance	35	38,731	683
	Subtotal	86	115,055	1,561
	TOTAL	489	731,319	16,201
	In Compliance	189	292,126	8,306
	Uncertain	56	95,154	1,641
	Noncompliance	244	344,039	6,254

NOTES:

- All reserves in millions of tons
 - Section 3 date is earliest section 3 date for lease, if there is more than one lessee.
- * Total recoverable reserves include pre-FCLAA reserves only; total reserves may include some associated reserves with later section 3 dates because reserves data were sometimes not available on a lease by lease basis.

OTA found 56 leases with 1.6 billion tons of reserves where compliance was uncertain because of potentially insufficient production levels, delays, or the need to combine Federal leases in an LMU with non-Federal coal. Under current DOI guidelines and regulations, some of these lessees may have to relinquish a portion of their Federal lease reserves or agree to amended lease terms in order to comply with section 3. We believe that most of these lessees will eventually be able to satisfy the producing in commercial quantities requirement and avoid any extended disqualification.

The section 3 penalties will not be imposed at the same time on nonproducing lessees. OTA estimates that as many as 197 leases are either uncertain or unlikely to comply with section 3 on August 4, 1986, thus disqualifying their owners from further new leasing. (See Another 103 nonproducing leases were acquired by the current lessees by table 4.) assignments after FCLAA and thus have later section 3 deadlines: 49 leases have section 3 dates between August 5, 1986 and August 4, 1991 and 54 leases have section 3 deadlines after August 1991. Section 3 disqualifications attach to lessees not leases. These 300 leases in the uncertain or unlikely to comply categories are held by about 120 different leaseholders. If leaseholdings are attributed back to parent corporations and joint ventures, about 87 separate entities are affected.

TABLE 5 **REASONS FOR PROJECTED SECTION 3 COMPLIANCE STATUS** FOR PRE-FCLAA LEASES IN SEVEN WESTERN STATES

STATUS	LEASES	%	ACRES	%	RESERVES	<u>% .</u>
Likely to Comply	189	38.7%	292,126	39.9%	8,306	51 .3%
Producing commercial quantities	169	34 .6%	248,364	34 .0%	6,686	41 .3%
Will produce commercial quantities	s 13	2.7%	30,994	4.2%	1,610	9.9%
Reserves "mined out"	7	1 .4%	12,768	1 .7%	10	o. 1%
Uncertain to Comply	56	11 .5%	95,154	13.0%	1,641	10. 1%
Limited coal demand	35	7.2%	64,066	8.8%	978	6.0%
Non- Federal LMU approval required	21	4.3%	31,088	4.3%	663	4.1%
Unlikely to Comply	244	49.9%	344,039	47.0%	6,254	38.6%
Limited coal demand	178	36.4%	266,980	36.5%	4,085	25 .2%
Suitable for onsite use only	13	2.7%	19,093	2.6%	1,264	7.8%
Unfavorable development potent i a 1	53	10.8%	57,966	7.9%	905	5 .6%
TOTAL	489	100.0%	731,319	100.0%	16,201	100.0%

A 11 reserves in millions of tons.

IS 10 YEARS ENOUGH TIME TO BRING A MINE INTO PRODUCTION?

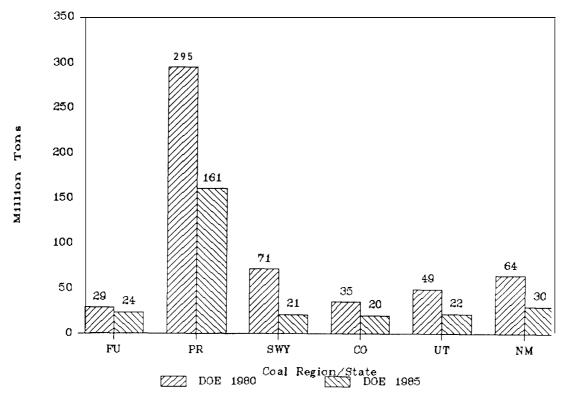
A central element in the reasonableness of both section 3 and the section 7 diligent development requirement is that the lessee has sufficient time to develop the mine and thus comply with the statutory obligations. OTA has previously testified that 10 years provides enough time to bring a lease into production if the question is limited to technical constraints. There is ample time within 10 years to conduct the necessary reserves delineation, environmental baseline studies, mine plan design and preparation, permitting, and construction and to initiate commercial operations (production of coal at a more or less continuous rate for sale or captive use). From lease acquisition or the decision to develop an existing lease, OTA found that an average of about seven years is necessary to bring a large mine into initial commercial operation; less time is needed for small mines. More time is needed to reach full mine capacity. Timing of that scale up is related to the design of the individual mine and the requirements of the operator's coal supply contracts. OTA found that it is feasible to acquire a lease and to develop a mine and initiate production in amounts necessary to satisfy current diligent production and continued operations requirements within the allotted 10 years and many existing mines have in fact done so. The 10-year period thus is a reasonable, but tight schedule for mine development except in very unusual circumstances, such as very large mines with complex mining conditions, or mines that are essentially captive to an associated powerplant or synthetic fuels facility. We note that when FCLAA was under consideration, Department of the Interior experts advised the congressional committees that from 3 to 5 years were needed to bring a lease into production.

Technical considerations are not the only relevant consideration in deciding on the appropriateness of a 10-year production deadline. Perhaps the question might be rephrased for policy purposes as how long should a Federal coal lessee reasonably be allowed for marketing the coal under lease?

Ten years may not be enough time for markets to develop to allow all coal lessees to develop their leases profitably. Given the current excess of reserves over the amount of coal to meet long term demand, even the better tracts may not be brought into production in 10 years. Indeed, if policies persist which favor aggressive leasing of Federal coal to assure competition for coal supply contracts, all coal leased will not be developed within 10 years of leasing. The coal glut will tend to keep prices low. This in turn may induce some producers to defer development in hopes of getting a more favorable return later. Policies such as the 10-year diligent production deadline and the section 3 disqualification act to curb any tendency to delay production under such conditions. OTA estimates that the 10-year production periods under section 3 and section 7 of FCLAA allow a lessee at most from 3 to 5 years to seek a customer for the coal to be produced from the lease before making a decision to commit significant effort and resources into developing a new mine in time to meet the diligence schedule. Some lessees have testified that they will not proceed with development without first securing a contract for the coal to be mined. This approach may now be out of step with the contracting practices of A producer might take a risk that a customer will be found later and proceed with mine plan design and permitting to within two to three years of the 10-year production deadline, but at that point, mine construction must begin in order to be producing even at the modest levels required for commercial quantities. There are western producers who have in fact begun mine development without contracts. For some the gambit has been successful, but others are now experiencing difficulty in finding enough contracts under existing market conditions to increase production to planned capacity levels. It is now fairly certain that most leases that are not permitted and under mine construction, or affiliated with a producing mine will not be able to satisfy the section 3 commercial quantities test by August 1986.

Figure 1

Forecasted 1990 Demand



HOW HAVE COAL MARKET CONDITIONS AFFECTED PROSPECTS FOR SECTION 3 COMPLIANCE?

When FCLAA was enacted, substantial increases in western and Federal coal production were anticipated. This has in fact occurred with the Rocky Mountain and Northern Great Plains States increasing their share of total U.S. coal production from 12.1 percent in 1975 to 25.8 percent in 1984. Similarly, Federal coal production in these States increased from 4.8 to 11.6 percent of total U.S. production over the same period.

The very dramatic increases in demand for western Federal coal projected in some high range forecasts in the late 1970s and early 1980s have not materialized. Recent years have seen a scaling back of coal demand projections for the next decade. (See figure 1.) Three major factors have contributed to this:

- 1. The decline in the growth of electricity demand leading to cancellation and deferral of powerplants in western market areas;
- 2. High rail transportation costs for western coal which have effectively foreclosed some potential market areas; and

3. The failure of coal to make significant gains in the industrial markets or in synthetic fuels production.

Moreover, there is some evidence that utilities have modified their coal purchasing behavior to take advantage of the "buyers' market" for coal and are deferring commitments for coal contracts until shortly (2 to 3 years or less) before the plant is scheduled to come on line. Some powerplants with initial contracts signed in the mid-1970s have yet to be built and scheduled deliveries have been deferred under escape clauses. Rather than entering into a coal supply contract before building the plant, utilities can narrow their choices to one or more potential supply markets where there are ample amounts of coal are available and where there are few uncertainties that might contribute to cost increases. The utility can then delay the actual coal purchase contracts until shortly before the plant begins operation. The long lag time between signing a coal supply contract and actual deliveries to a newly built plant may no longer serve the economic interests of the buyer or seller.

For a coal lessee with uncommitted and undeveloped reserves today, there is little likelihood for any significant growth in coal demand to materialize in the next 5 to 10 years given the lead times for coal powerplant construction and the fact that very few new plants will be ordered during that period. Perhaps the major opportunity for a nonproducing lessee is to compete with existing mines in the spot market and for contract renewals and reofferings. Production from some existing mines could be displaced by new entrants with lower cost reserves. Without production, these lessees face loss of their leases, either voluntarily to avoid section 3 sanctions or eventually, involuntarily through enforcement of diligence requirements.

The chronic overcapacity and low demand growth have important implications for proposed section 3 relief and diligence legislation. If aggressive leasing policies to assure competition are continued, and there are many policy reasons that favor such "overleasing", a significant amount of reserves leased will not be brought into production even if the lessee makes substantial and "diligent" efforts at seeking a market and developing the lease. Among the implications of these trends are:

- 1. Lessees will lose leases through diligence enforcement or termination, or through relinquishment (assuming that leases are readjusted to include effective diligent production requirements and that these provisions are vigorously enforced).
- 2. Pressure for legislative relief from production requirements will continue. However, this pressure may subside or be counterbalanced with an increase in the number of lessees who either have satisfied diligence obligations or have new leases with stringent diligence requirements and thus have some interest in seeing that their competitors are subject to similar requirements.
- 3. Lessees will tend to lower lease bonus bids if they think they will not be able to mine or keep the lease. (Statutory fair market value requirements offset this tendency and should, if strongly implemented, prevent leasing of coal with little near term prospects of development.)
- 4. The reserves posture of producing lessees will be enhanced as only those lessees who can satisfy section 3 and diligence requirements will be able to assemble large reserves holdings by combining them with the producing leases in an LMU. Small amounts of production are enough to hold the lease. These lessees also will be tempted to bid low for new leases because of the anticipated lack of interest from disqualified lessees and other potential competitors if low growth market conditions continue.

5. There may well be a reduction in the total amount of Federal coal under lease as companies choose not to lease coal for inventory purposes. A reduced private inventory of Federal reserves in private hands makes the reliability and quality of periodic offerings of new Federal leases more important in assuring an adequate future supply of coal both to meet energy needs and to place competitive pressure on the prices charged by coal producers to coal consumers. It also makes it more critical that the coal leasing program be able to respond rapidly to any great increases in coal demand by offering tracts that are suitable for development and production within the time allotted for diligent development.

WHAT WILL BE THE LIKELY EFFECTS OF SECTION 3 ENFORCEMENT?

The effects of section 3 are already being felt in lease relinquishments and sales. More relinquishments and assignments can be expected as the section 3 deadlines near. Some lessees were prompted to reexamine their inventory of Federal leases and to decide which leases have near term development potential and are worth keeping. Leases that did not pass this internal screening were relinquished or offered for sale. As a result the overhang of total leased reserves has been reduced somewhat and the general quality of what remains has improved. A reduction in the amount of undeveloped reserves under lease may make it easier politically for the Department to justify more large scale lease offerings in the future.

Companies most affected by section 3 will be large oil companies and conglomerates who are involved both in coal and in Federal onshore oil and gas leasing. Not all major oil and gas producers hold nonproducing Federal coal leases, however, and there are many companies in the petroleum industry with no coal holdings at all. The major impact on noncomplying oil and gas company lessees will not be the ban on acquiring additional coal leases, but rather will be their exclusion from direct participation in the Federal onshore oil and gas leasing program. Disqualification from competitive oil and gas leasing and from the lottery may not have significant adverse impacts on the major oil and gas companies since many of them do not acquire their Federal leases directly through these methods. Oil and gas leases will continue to be available by assignments from other operators or from lease brokers through transactions as yet unrestricted by section 3. The greatest impact of section 3 on noncomplying major oil and gas lessees will be in their inability to obtain new, noncompetitive, over the counter leases for lands in frontier areas that have not previously been leased. (These "frontier areas" are lands that do not contain known producing geologic structures and where the oil and gas potential is unknown. The Overthrust Belt of Wyoming was such an area when many of the Federal oil and gas leases in that area were originally acquired noncompetitively .)8

Overall the impact of section 3 enforcement on the coal industry and the supply of coal to consumers will be slight. Producing mines are largely unaffected. In our 1981 study we found few active mines on Federal leases nearing exhaustion of mine life reserves that would require more coal to stay in operation. (We note that many operators do take advantage of emergency, production maintenance, and bypass leasing provisions to acquire additional reserves adjacent to their operations and mine them before moving to areas of existing leases with higher mining costs.) The potential effects of section 3 on competition in the coal industry

⁸OTA did not analyze what the impacts of section 3 might be if the Federal oil and gas leasing program were changed to a mostly competitive system. We think it probable that section 3 impacts might be slightly greater since it is expected that companies will be forced to compete directly for high potential tracts in frontier areas and elsewhere.

are by no means clear cut. Section 3 enforcement could enhance competition by making more Federal coal available for acquisition by potential competitors if noncomplying leases are sold. The better quality tracts will probably be assigned, and the lessees may see some profit from the sale. The tracts might however be sold to other complying lessees and thus might not result in more competing firms. Another possibility is that some noncomplying oil and gas companies may, at least temporarily, get out of mining Federal coal by selling or spinning off their coal subsidiaries. This could in the long run increase the number of firms that could potentially mine and sell coal, since the oil and gas companies could later reenter the industry. On the other hand, it is also possible that some large energy firms will drop out of the Federal coal leasing program to avoid exposure to a potential section 3 disqualification and would thus reduce the number of competing firms in some areas.

Among the 300 leases that were ranked as uncertain or unlikely to comply with section 3, there are several permitted mines with section 3 difficulties because they have been idled or are not yet producing sufficient quantities of coal. But most of the noncomplying leases are undeveloped tracts. Lessees will probably try to retain the noncomplying tracts with favorable near term development potential as long as possible. However, there are many noncomplying properties that have low near term development potential because there are no buyers for the coal to be produced; these are most likely to be relinquished or sold.

Among the potentially noncomplying properties are leases where development also poses environmental problems. Section 3 enforcement might cause these leases to be turned back. There are over 1.4 billion tons of undeveloped leased coal in Southwestern Utah, an arid area where there is no existing coal transportation network to serve large scale development and where any development activities are environmentally sensitive and controversial because of the proximity to Bryce Canyon, Canyonlands, Grand Canyon, Capitol Reef, Arches National Parks, Glen Canyon National Recreation Area and BLM roadless areas under review for possible wilderness designation. Several nonproducing leases in the San Juan basin of New Mexico are associated with pending preference right lease applications and are close to the Chaco Canyon National Monument and its outliers.

The nonproducing leases also include some 3 billion tons of reserves in the Powder River basin of Wyoming. About half of these reserves are only suitable for onsite use for power generation or synthetic fuels production because the coal is generally of poorer quality than coal elsewhere in the basin making these reserves noncompetitive in out of state markets. Finally there are some 53 nonproducing leases in scattered small undeveloped tracts with poor development potential. Many of these are held by individuals who are unlikely to be affected by section 3 disqualification.

By far the major reason why lease reserves held by major coal producing companies are not in production is lack of markets. There is simply more coal under lease than can be mined and sold in response to current and projected demand. In the West today, there is in excess of 100 million tons of excess annual production capacity in mines with Federal coal leases. The coal industry has historically displayed chronic overcapacity and it is likely that that situation will continue. The perceived seller's market for coal of the early to mid-1970s that prompted many long-term supply contracts appears now to have been an abnormal situation.

Section 3 impacts are being felt by lessees that were the primary targets of the provision: large energy companies and lessees with many leases which were acquired in the 1960s and 1970s and that are still undeveloped. Moreover, as a result of various mergers and acquisitions, the potential impacts of section 3 on oil and gas leasing are possibly more far reaching than

anticipated in 1976. Since 1976 at least some of the public and legislative concerns over the involvement of these firms in the leasing program, which led to adoption of section 3, may have shifted. Much of the concern of the mid-1970s about the involvement of oil majors in the coal industry has subsided. Several major oil company lessees have aggressively developed and marketed their coal and are now among the West's largest producers. Some actually started producing in less than 10 years after acquiring the leases. The patterns of involvement of the major oil companies in the Federal coal leasing program are varied. Some hold only a few leases, all of which are producing, and have no inventory of undeveloped coal except that associated with operating mines. Other companies have some producing mines and a large inventory of undeveloped reserves. The latter companies (or their corporate predecessors) have historically preferred to acquire and hold a large inventory of reserves in excess of demand, including reserves in areas with no developed markets. One consequence of such a strategy is that it is often possible to acquire such reserves at a low initial cost and to wait for the market to develop and the price to increase. For this strategy to be successful, the firm must be able to hold the reserves until they become competitive, which could be decades after acquisition. This practice of "sitting on reserves and waiting for the market to develop" was seen as a form of speculation by coal producers which, while fairly common in private coal transactions, was criticized as inappropriate for Federal resources in the congressional debate over FCLAA. The perception that some corporate lessees were engaged in long term strategic or speculative holding of Federal reserves without any clear production plans was one reason for the imposition of section 3 and the 10-year diligent production period for Federal leases.

TABLE 6 OWNERSHIP OF FEDERAL COAL LEASES BY INDUSTRY CATEGORY - 1975, 1980, AND 1984

BUSINESS CATEGORY	I OWNERSHIP Acres	1975 I (%	OWNERSHIP Acres	1980 I %	OWNERSHIP Acres	1984 %
Utilities	142.077	19% I	163,259	21% I	204,567	22%
Other Co's.	70,124	9 % I	84,367	10% I	189,159	20%
Oil majors	138,409	18% I	155,024	20% I	141,157	15%
Nonres. Divers. Co's.	12,580	2%	35,675	5% I	85,211	9%
Oil & Gas Co's.	42,193	5%	45,926	6% I	70,365	8%
Steel Co's.	49,448	6%	60,015	8% I	61,986	7%
Coal Co's.	92,825	12%	87,601	11% I	55,247	6%
Metals & Mining Co's.	49,377	6%	17,620	2% I	40,229	4%
Natural Gas Co's.	32,522	4%	36,317	5% I	36,231	4%
Peabody Holding Co.	68,923	9%	62,009	8% I	20,382	2%
Individuals	66,515	8%	43,215	4% I	18,553	2%
TOTAL	764, 993	100%	791,028	100% I	923,087	100%

NOTE: Acreage includes all existing Federal coal leases, but excludes relinquishments.

WHO CONTROLS FEDERAL COAL LEASES?

There are currently about 220 different individuals or firms that hold title to Federal coal leases. Many of the corporate lessees are actually owned or controlled by other companies. OTA first analyzed ownership of Federal coal leases in our 1981 technical memorandum, Patterns and Trends in Federal Coal Lease Ownership 1950-80. Table 6 provides updated information on Federal coal lease ownership for 11 different industry categories from 1975 to 1984. Table 7 shows the section 3 compliance status for the same industry categories.

While useful for historical and policy purposes, recent corporate mergers have made the original OTA industry category patterns slightly misleading for section 3 analyses. Conoco, an oil major, and its subsidiary Consolidation Coal Co. were acquired in 1981 by DuPont and were shifted to the nonresource-related diversified company category. If Conoco's holdings are added to those of other major oil companies, the oil majors become the largest leaseholding category and their noncomplying reserves is increased to 53 percent.

OTA has analyzed the reserve holdings and section 3 status of the 20 major Federal coal reserve holders. These 20 companies control a total of 264 Federal coal leases and over 65 percent of all Federal reserves under lease. They include major coal producers, major oil companies, utilities, a steel company, and metals and mining companies. Table 8 summarizes those reserves holdings and projected section 3 status of these companies.

TABLE 7 SECTION 3 COMPLIANCE STATUS OF WESTERN PRE-FCLAA FEDERAL COAL LEASES BY INDUSTRY CATEGORY

BUSINESS CATEGORY	I ALL LEASES I	LIKELY TO COMPLY			POTENT	TIALLY NON	COMPLYING
	Acres	Leases	Acres	% Acres	Leases	Acres	% Acres
				,			
Other Co's.	148,336	32	56,730	38% `	64	91,606	62X
Utilities	151,552	50	76,924	51%	48	74,628	49%
Nonres. Divers. Co's.	78,552	5	6,603	8%	41	71,919	92%
Oil majors	130,774	39	66,836	51%	₁ 51	63,938	49%
Steel Čo's.	55,014	9	14,568	26%	31	40,446	74x
Metals & Mining Co's.	37,821	7	9,542	25%	28	28,279	75%
Coal Co's.	37,677	18	15,584	41%	23	22,093	59%
Oil & Gas Co's.	35,904	16	18,636	52%	13	17,268	48%
Peabody Holding Co.	20,257	6	7,907	39%	4	12,350	61%
Natural Gas Co's.	28,949	17	18,596	64%	7	10,353	36%
Individuals	6,513	3	200	3% j	17	6,313	97x
TOTAL	731,319	189	292,126	40% I	300	439,193	60%

- 2. Total acreage does not include post-FCLAA leases or leases located outside the seven major western States, or relinquished leases.
- 3. The number of leases includes all leases for which one or more of the lessees parent companies fall into the designated industry category. The number of leases in each category reflects the total of all leases held by lessees in each category and exceed the total of pre-FCLAA leases because jointly held leases owned by companies indifferent categories appear in each category. The total number of leases has been adjusted to avoid double counting of these 40 leases. Acreages have been prorated to reflect the ownership percentages of joint Tessees.
- 4. All ownership data is current as of Sept. 1, 1985.

Table 8 THE TOP 20 FEDERAL RESERVE HOLDERS **SECTION 3 COMPLIANCE STATUS**

	ENT COMPANY OF SEES	TOTAL NUMBER OF LEASES	RECOVERABLE RESERVES UNDER	NON	ENT I ALI	NG
			LEASE (m.t.)	LEASES	KE:	SERVES*
1	Exxon Corp.	5	1,490	0	0	0%
2	Pacific Power & Lig	ht Co. 3 1	1,453	10	427	27%
3.	Amax, Inc.	6	1,261	0	0	0%
4.	Atlantic Richfield	Co. 13	1,242	3	51	4%
5.	DuPont¹b	35	1,135	31	1,049	93%
6.	Peabody Holding Co.	. ' 11	1,019	4	800	79 %
7.	Broken Hill Prop. L	.td. d 30	930	25	624	67%
8.	Texaco, Inc. '	17	927	5	800	86%
9.	Chevron Corp. f	38	803	24	725	90%
10.	Kerr-McGee Corp. g	5	736	3	398	54%
11.	The Sun Co. h	8	643	6	97	15%
12.	Shell Oil Corp.	4	641	2	240	37%
13.	Peter Kiewit Sons,	Inc. i 13	582	3	70	12%
	Kaneb Services, Inc. Northwest Life Insu	. & 2	445	0	0	0%
15.	United States Steel	Corp. 19	438	12	339	83%
16.	Mobil Corp. J	1	424	0	0	0%
17.	Swanton Corp.	16	361	16	361	100%
18.	Arizona Public Serv San Diego Gas & El Southern Ca. Edison	ectric	345	21	345	100%
19.	Idaho Power Co.	3	329	0	0	0%
20.	Montana Power Co.	9	287	1	0	0%
	TOTAL**	264	12,593	150	5,976	47%

NOTES

- All reserves in millions of tons.
- Totals have been adjusted to avoid double counting of jointly held reserves.
- Includes joint ventures.
 Includes 14 leases in which CONOCO, subsidiary Consolidation Coal Co., and Chevron's Gulf Oil subsidiary each own 50%. The leases total 23,890 acres with 241 million tons of reserves.
- Totals exclude leases and reserves on which relinquishments and assignments have been approved or are currently pending.
- Includes subsidiaries Utah International, Inc. and Energy Reserves Group, Inc.
- Includes Texaco's Lake DeSmet holdings and leases held by Getty Minerals, but does not reflect recently announced sale of Getty's coal operations to Cyprus Mining or sale of Getty's 50% share of the Skyline Mine in Utah to Coastal States Energy Co.
- Includes 14 leases in which Chevron's Gulf Oil subsidiary and Dupont's Consolidation Coal Company subsidiary each own 50%. The [eases total 23,890 acres with 241 million tons of reserves.
- Does not include adjustments for pending 1-90 [ease exchange of part of the East Gillette tract in Wyoming.
- Does not include Sun's recently announced purchase of Soldier Canyon mine in Utah from California Portland Cement.
- Includes joint ventures.
- Total leases reflect two Mobil leases in the Rojo Caballo Mine now
- reconsolidated into a single lease.
- Includes joint venture Bridger Coal Co. with Pacific Power & Light Co.

Who Faces Section 3 Penalties and Why?

OTA found that leaseholders facing a section 3 penalty in 1986 include 15 of the top 20 Federal reserves holders. (See table 8.) The potentially noncomplying leases include those that are uncertain or are unlikely to comply with section 3. The 15 noncomplying lessees hold over three quarters of the potentially noncomplying reserves. There are several lessees who hold substantially greater share of nonproducing leases than others and who would be particularly affected by section 3 or any modifications to it. These companies are: Consolidation Coal Co. (a subsidiary of Conoco, which is owned by E.I. du Pent de Nemours & Co. (DuPont); Chevron Corp. (which in 1984 acquired Gulf Oil Corp which had previously acquired Kemmerer Coal Co. a major Federal coal leaseholder); and Utah International, Inc., (acquired by the Australian company Broken Hill Proprietary Ltd. from General Electric Corp.) There are other firms with a significant portion of their lease reserves at risk of noncompliance, but pending assignments and relinquishments could resolve most of their problems. Still other major reserves holders will be unaffected by potential disqualification because they have no immediate need for additional coal reserves and have no involvement in other Federal mineral leasing.

Among all lessees, table 7 shows that individuals, nonresources -related diversified companies, steel companies, metals and mining companies, Peabody Holding Co., coal companies, and "other" companies all have over 50 percent of their leased acreage at risk of noncompliance.

WHAT IS THE REVENUE GAIN OR LOSS TO THE FEDERAL GOVERNMENT FROM SECTION 3 ENFORCEMENT OR REPEAL?

OTA believes that it is not practicable to calculate the value of the specific gain or loss from enforcement or repeal because of the countervailing effects of such actions and the extensive assumptions of fact that would have to be made. However we can discuss the issue in a more general manner. If section 3 is enforced, leases will be relinquished, the government will lose annual rental payments, and possibly royalties from leases that might have been mined. If the relinquished leases were resold later and brought into production, there might be an intervening revenue loss. On the other hand, any loss of revenues from relinquishments would be offset by bonus payments on resale of the new leases and higher post-FCLAA royalties on production. (Bonus revenues, even if only at the current regulatory minimum bid level of \$100 per acre would be significantly higher than the \$1 to \$3 per acre annual rental paid on nonproducing leases.) OTA does not believe that all of the leases that might eventually be relinquished will be reoffered for lease in the next 10 to 15 years, particularly those outside of currently producing coal fields and those with poor quality reserves. It is unlikely that there would be much interest in them if payment of a fair market value bonus were required. We also doubt that all of the noncomplying section 3 leases will be relinquished. Lessees probably can find buyers for the better quality tracts and, in some cases, the transfer would create little delay in the tract's overall development schedule. In such cases, there might be little direct loss to the Federal Government because rentals would continue and royalties would be paid on production. It can be argued that if the lease were assigned rather than relinquished, that the coal might be mined at the lower pre-FCLAA royalty rates. OTA believes that, given the 3 to 7 years needed to bring an unpermitted lease into production, it is likely that any period during which lower royalties would be paid would be short. (There is one notable exception to this finding of minimal potential revenue loss. An undetermined number of pre-FCLAA leases were not readjusted properly or on time, and some readjustments were reversed on appeal. If these decisions are left unchallenged, these leases might carry pre-FCLAA royalty rates of 15 to 20 cents per ton for 10 to 20 more years. Some of these leases may have section 3 compliance

problems. Repeal or modification might remove one option left to the Department to correct at least some of the failed readjustments by inducing the lessees to amend their leases to include the FCLAA requirements to comply with section 3. This potential loss in royalty revenues from these leases is not, however, due directly to section 3.)

Repeal or modification of section 3 without requiring a significant payment obligation on nonproducing leases as the price of relief would represent a lost opportunity for generating additional revenues to the government from pre-FCLAA leases by reselling relinquished leases or by allowing payment of holding fees as a means of compliance. Does repeal create a windfall for the lessee? There is no direct financial transfer to the lessee. To find such a windfall, one must assume that repeal makes the leases more valuable, but this increase would be hard to measure. One might assume that the effect of repeal would create a gain for the lessee of the amount that the original lease value may have been discounted to reflect the risk that it would lost for nondevelopment after 10 years. The gains would be realized in a higher resale value of the lease, or in some increased profit in developing the lease later. Such a theory, if valid in practice, would be more directly applicable to the Department's 1982 relaxation of the 1986 diligence deadline for pre-FCLAA leases than to section 3. Any discount for the risk of nondevelopment for section 3 purposes is likely to be small as section 3 does not deprive a lessee of the lease as a penalty. Moreover, the lessee can be purged of the section 3 disqualification by selling the lease, perhaps even at a profit. A lessee would probably relinquish the lease only as a last resort.

We think that it is unlikely that lessees in fact have discounted the value of their leases for the potential impacts of either section 3 or 7 (or the 1976 diligence regulations). For the largest group of noncomplying lessees, those lessees facing a section 3 disqualification in 1986, such discounting is particularly unlikely since they would have to have foreseen events occurring after they acquired the leases in order to reduce the amount they paid for them originally. We also think it unlikely that such lessees would have foreseen the full extent of applicability of section 3. For leases sold or transferred after passage of FCLAA, there does not appear to be any discernible pattern of discounting for future nonproduction penalties. The reasons for this may be that:

- 1. The lessees fully expected to be able to mine or resell the reserves within the time allotted; or
- 2. The reserves were already underpriced when they bought them; and/or
- 3. The lessees did not expect that either Congress or the Department would actually enforce section 3 or any diligence provisions applicable to the leases.

Alternative Legislative Options for Section 3

OTA examined a range of possible legislative options for amending section 3. The options, their advantages and disadvantages are discussed in this paper and summarized here. OTA found the contributions of the participants at its May 1985 section 3 workshop were extremely useful in developing and assessing these options,

In evaluating various proposals for amending the Federal coal leasing laws, it is helpful to keep two facts in mind.

First, how long and under what conditions a lessee should be allowed to hold a Federal coal lease without production is fundamentally a political decision. The decision will largely depend on one's views of the relative importance of sometimes conflicting policy goals underlying the Federal coal leasing program and on how vigorously the diligent development

requirements should be enforced for a resource that is abundant and an industry that historically suffers chronic overcapacity.

Second, in the "normal" competitive structure of western coal operations there is a significant excess of production capacity over current production. There is simply more coal under lease than can reasonably be mined and sold or committed under long-term contract in the next 5 to 15 years. This situation is not likely to change, because leasing policies over several administrations have tended for various reasons to favor leasing of Federal coal reserves well in excess of amounts needed to meet projected demand. As a result there will be many Federal leaseholders that will not be able to mine their leases despite even their most "diligent" efforts at marketing and development.

OTA considered several factors in evaluating the options. Among these considerations were: the extent the option provides relief from section 3 disqualification for noncomplying lessees; whether the option advances the various policies inherent in section 3 of encouraging production, deterring speculation, and discouraging the extensive holding of nonproducing coal leases by large energy conglomerates; and how easily and predictably the option can be implemented and administered. The major legislative options for amending section 3 include the following:

Option 1: Keep section 3 unchanged.

Option 2: Repeal section 3.

Option 3: Limit section 3 to new coal leases only.

Option 4: Extend the time to comply with section 3.

Option 5: Modify section 3 to allow achievement of lease development milestones as alternatives to producing in commercial quantities requirement.

Option 6: Remove the 10-year holding period for section 3 and make the disqualification applicable to anyone holding a nonproducing lease that is more than 10 years old.

Option 7: Allow qualifying payments to be made annually in lieu of production to maintain eligibility for new leases.

Option 8: Impose a surcharge on all new leases acquired by a noncomplying lessee.

Option 9: Require turnback of an equivalent amount of noncomplying lease reserves or acreage to qualify for each new lease.

Option 10: Allow relinquishment of all noncomplying old leases in exchange for section 3 relief and a preferential option to purchase new leases for the same lands if they are reoffered after being subject to land use planning, environmental screening, and surface owner consent ("Lease Rollover" Option).

The results of OTA's analysis of these options are summarized in table 9.

Several of the options are similar to proposed legislation, however OTA's discussion of the options does not deal with the specifics of individual bills, but rather contrasts different generic approaches. OTA's analysis disclosed several options that are more or less likely to

promote the various goals of section 3 legislation, depending on which goal is given priority. Several options would provide relief to nonproducing lessees in complying with the producing in commercial quantities requirement, while at the same time maintaining the policy that leases are to be held for development and production, but the balance between these goals is struck differently.

Option 1 - keeping and enforcing section 3 unchanged is most consistent with the purposes for which it was enacted, particularly since the Department of the Interior has substantially relaxed, or even nullified, most production requirements for pre-FCLAA leases. The Department has ample discretion to resolve the compliance difficulties for any lessees that are producing or have produced coal from their leases or that have experienced unusual delays in mine development. Keeping section 3 would maintain fairness for lessees who have already relinquished or sold leases in order to comply.

Option 7, the adoption of annual holding fees for noncomplying leases, maintains the underlying policies of section 3 but gives the greatest degree of flexibility to lessees and the Department in avoiding the section 3 disqualification. Option 7 would allow a lessee to make qualifying annual payments on all noncomplying leases in order to retain eligibility for new leases. An economic penalty would be imposed for nonproduction, but lessees would be allowed to keep old leases and acquire new ones at a cost. (This economic penalty could be reinforced by requiring similar nonproduction payments from all old leases on the next lease readjustment.) There are several formulas on which such holding fees could be based, acreage, reserves, minimum production, or ad valorem. OTA finds that a relatively simple payment structure should be used since many lessees can be expected to use this option. Moreover the holding fee should be substantial enough to force some leases to be relinquished and to lessen the assignment value of others, thus discouraging speculation. An annual payment of one cent per ton of recoverable reserves, for example, would be easy to administer and offers predictability and flexibility for lessees. OTA found that payments at that level would measurably affect the economics of holding leases in virtually all regions and thus would provide at least some economic pressure to develop or get rid of a lease. The holding fee option has an additional benefit that section 3 currently does not -- the qualifying payments would provide some preproduction revenues to the Federal and State governments.

Option 1 and Option 10 appear likely to return a significant number of nonproducing leases to the government. It is likely some leased lands where development is environmentally unsuitable or controversial will thus be removed from the threats imposed by mining. Other valuable coal tracts may be reoffered for lease at fair market value. Option 10, the lease rollover option, would give the relinquishing leaseholder priority in purchasing a new lease on the same lands at fair market value and would allow the lessee to retain at least some of the benefit of any initial development work on the lease.

Repeal of section 3 (Option 2) or limiting the disqualification to coal leases only (Option 3) would provide the greatest relief from the effects of section 3 enforcement. These options would allow lessees to maintain their inventory of leased reserves for development or sale. These options also remove or lessen the only statutory incentive for the major nonproducing lessees to either begin mining coal from their leases or get rid of them before the mid-1990s when current diligence regulations might be enforced. Given the uncertainty over what diligence requirements are applicable to pre-FCLAA leases and when, if ever, they must be enforced, these options may effectively remove the only restraint on continued holding of these leases without production. These two options therefore appear to be inconsistent with the intent of section 3 were either to be adopted without substantial counterbalancing changes in section 7 diligence requirements for pre-FCLAA leases, (One possible example would be the automatic imposition of substantial holding fees for nonproducing leases on the date they become subject

to readjustment and a clear statutory provision terminating pre-FCLAA leases that do not begin producing within ten years.)

The lease turnback, Option 9 is administratively workable only if section 3 is limited to coal leases. Turnback offers the greatest benefit (next to repeal of section 3) to lessees with large amounts of nonproducing acreage or reserves. These lessees would be able to hold onto nonproducing reserves until new coal lease is sought, and then would only be required to turn back that amount of acres or reserves necessary to qualify for the new lease, while keeping the rest of the nonproducing leases.

Option 8 would impose a surcharge on new coal leases sought by a noncomplying leaseholder and would be an attractive option for some major noncomplying lessees, particularly if only a small amount of additional acreage or reserves is needed.

Lessees who are or are almost producing, but for some reason cannot satisfy the section 3 producing in commercial quantities test as structured by the Department would be aided most by three options: Option 4, an extension of the section 3 deadline; Option 7, qualifying payments in lieu of production; and Option 5, achievement of alternative mine development milestones to comply with section 3.

Option 6 would magnify the impact of section 3 by making it apply to all nonproducing leases. This would go beyond the original scope of section 3 and reverse in part the Department's relaxation of diligent production rules. Option 6 would create even more pressure for legislative relief, unless it were combined with additional exceptions, such as the holding fee, turnback, rollover, or alternative development milestones approaches.

OPTIONS FOR PROMOTING TIMELY PRODUCTION FROM FEDERAL COAL LEASES COMPARISON OF SECTION 3 OPTIONS AND POLICY OBJECTIVES

YES MAYBE MAYBE MAYBE YES YES	YES NO NO NO	YES YES NO MAYBE YES NO	YES MAYBE MAYBE
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MAYBE MAYBE MAYBE MAYBE YES	YES NO NO YES YES	YES YES YES MAYBE MAYBE	MAYBE NO NO
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YES YES YES YES NO	YES NO NO NO	N N N N N N N N N N N N N N N N N N N	YES YES YES YES SEE
MAYBE YES YES YES NO YES	YES NO YES YES YES	NO NO NO NO NAYBE MAYBE	MAYBE YES NO YES PO Of
YES YES MAYBE YES NO YES	YES NO YES YES MAYBE YES	NO NO YES NO NO MAYBE MAYBE	MAYBE YES MAYBE YES YES ' goal,
YES NO NO NO NO	NO N	NO VES	NO NO YES YES YES Sy goal. Sy goal.
YES NO NO NO NO	N YES N/A N/A N/A N/A	YES YES YES YES YES YES	YES NO NO YES Idders YES NO NO YES AS effect or advances policy goal. Impact of option not certain and/or depends on icable.
YES YES YES YES YES	N N N N N N N N N N N N N N N N N N N	N N NO	YES YES NO YES Ct or adve
Requires legislation Encourage production Encourage turnback Deter speculation Generate revenue Promote diligence policy Ease of administration	increases burden decreases burden decreases burden Provide flexibility to Department to Lessees Give additional time to all lessees to leases under	development provide relief from penalty to all lessess to oil and gas lessess to producing lessess needing time to meet CQ to lessess with many noncomplying leases Make lease retention an economic decision Reduce lease inventory Maintain lease inventory	for or for nge l b