
Drilling for Dollars: The Federal Oil-Lease Lottery Program

Abraham E. Haspel

THE LEASING OF federal lands is known as a controversial subject because of the recurring debates over coal and offshore oil and gas leases. But there is another large federal energy leasing program that poses equally important policy issues, though it seldom gets onto the front pages. This is the program for leasing "onshore" federal lands for oil and gas drilling. In 1983, onshore leases in the contiguous forty-eight states covered more than 146 million acres that produced 150.6 million barrels of oil—considerably less than offshore wells, but almost 4 percent of total U.S. domestic oil production—as well as almost 6 percent of U.S. natural gas. These leases brought the federal government more than \$1 billion in revenues in 1983, far more than any other activity on onshore federal lands. In addition, the federal lands are estimated to contain one-sixth of the country's still-undiscovered oil and gas resources.

Abraham E. Haspel is with the economics staff, Office of Policy Analysis, U.S. Department of the Interior. The views here are his own.

In this policy debate, unlike some others, all the parties agree that leasing should occur; the question is how. Congress is now considering making its most important changes in the basic leasing system in thirty-eight years, but there are unfortunate signs that the lawmakers are ignoring important lessons from the history of public land management.

A Tale of Two Systems

In 1920 Congress decided that the government should follow two different systems in leasing onshore lands: one for parcels with proven oil and gas reserves and a second for other parcels. Competitive leasing would apply to lands in a "known geological structure" of a producing oil and gas field, abbreviated to KGS in leasing jargon. On all other lands, leases would be awarded without competition to "the first qualified applicant," which meant any U.S. citizen or company that did not already have the legal maximum number of acres under lease. This

noncompetitive system was intended to encourage exploration on the less promising lands. Except for the decade following 1935, this competitive-noncompetitive division in the leasing system has operated ever since. According to an Interior Department report to Congress, noncompetitive leases were responsible for 82.4 percent of the oil and 95.9 percent of the natural gas produced from federal leases in 1981.

The first-come-first-served leasing system developed an irritating problem: would-be lessees engaged in furious battles with the government and each other in an effort to be the first to file claims on lands that had been canceled, terminated, or relinquished by earlier leaseholders. These were not KGS lands, for the most part, which is why they were not thrown open to competitive bidding, but nonetheless had cachet among investors for several reasons. Some leases were relinquished by developers when early test wells proved unsuccessful, even though the underlying geologic structure was still inherently promising. Other leases were relinquished even after oil and gas had been found, because the discovery did not seem at the time to be economical for that lessor to produce. By the late 1950s, although the system was still relatively manageable, the accumulated disruption had led the government to look for a new way of re-leasing federal lands.

In 1959 the Bureau of Land Management (BLM), the government's leasing agency, decided to select lessees for these previously leased lands by holding a lottery for each parcel. First-come-first-served leasing was retained for lands that attracted no lottery applications, as well as for newly leased lands, as before.

In the case of many sought-after parcels, "winners" of the new lottery possessed a valuable commodity. They only had to pay a \$10 application fee and \$1 an acre as the first year's rental payment, and then could sell the leases to any other qualified party, often for considerable sums. There are countless examples of lottery leases that were later resold for hundreds of thousands of dollars. Of course, there are also many examples of lottery leases that were never resold.

In setting up its lottery system, BLM had made a fateful decision. It decided to charge only a nominal fee for a ticket, and it imposed a limit of one ticket per U.S. citizen. It reasoned

that each ticket should have an equal chance of winning just as each citizen would have only one place in line while trying to be the first

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Problems Arise

Windfalls seldom lie around on the ground for long. Someone picks them up. By 1980 an inventive scheme to capture some of the windfall gains was in full operation. In exchange for a drink or some small payment, individuals approached by middlemen in bars or by mail would sign blank or "dummy" application forms (which did not at that point indicate the parcel being applied for), along with assignment forms yielding their claim to any possible winnings. Middlemen thus accumulated "stables" of dummy application forms bearing the signatures of real U.S. citizens. Oil companies could then call the middlemen and place orders—for example, twenty applications on parcel 101, fifty on parcel 321, and so on. The middlemen took the appropriate number of presigned forms, filled in the parcel number, sent them to the appropriate BLM state office, and then, if the entries won, signed them over to the oil companies. The whole episode was reminiscent of the problems in the nineteenth-century homesteading program, in which timber barons and others used multiple filings to accumulate tracts much larger than the 160-acre plots then allowed each individual.

Another type of middleman that sprang up, the "filing service," posed a less direct chal-

lenge to the rules but caused more trouble to ordinary citizens. These services would recruit clients and then, for a fee, file lottery applications on their behalf for dozens or hundreds of sites. A typical such ad in a newspaper or magazine read:

OIL LOTTERIES CAN MAKE YOU RICH!

A little known law allows the federal government to hold bi-monthly lotteries for oil and gas rights to federal land. As an adult U.S. citizen, you have the right to participate in these lotteries. And millions of dollars worth of oil and gas is found every year on Government lands. Learn how you can use tax dollars to secure oil and gas leases of your own—and possibly receive up to \$100,000 or more plus overriding royalties. Minimum participation \$2650. ALL COSTS 100% TAX DEDUCTIBLE. Send now for FREE information.

A number of filing services took advantage of uninformed members of the public and charged service fees amounting to several hundred percent of filing costs. Some even claimed to "guarantee" their clients would be winners. The guarantees proved to be nothing of the sort, and many gullible citizens lost thousands of dollars in savings.

To make matters worse, scandals were alleged in the late 1970s and again in 1983 concerning the bureau's classification of geological formations. In 1983 a parcel in the Amos Draw region of Wyoming was disposed of by lottery; it had not been classified as lying within a designated KGS (the category of promising formations) even though there was oil and gas production nearby. The winner paid less than \$10,000 (\$75 plus the first year's rental), and reportedly assigned the lease for \$5 million. As it turned out, the lands should have been in a KGS.

In another instance, Texas Oil and Gas Corporation was the first to apply for, and thus receive, leases on 33,000 acres at Fort Chaffee, Arkansas, for \$1 an acre. Arkla Exploration Company later disclosed its willingness to pay almost \$150 an acre for the same lease. The result in this case was a suspension of leasing on military acquired lands and a lawsuit in which both a district and appeals court found that Interior had misclassified the tracts as non-KGS lands and thus kept them out of competi-

tive leasing. To date, the Fort Chaffee leases have still not been issued.

Interior's Response

These incidents did not pass without response. When the dummy-application scam was uncovered in 1980, BLM suspended the lottery for three months. There were calls for basic change, but the agency merely acted to prevent that specific kind of fraud from recurring.

More fundamental changes came in reaction to the filing service frauds that were directed at members of the public. The Interior Department takes the position that since such fraud is a criminal offense in most states, it is more appropriately addressed by the state in which the fraud is occurring or by the Federal Trade Commission than by Interior. Nevertheless, twice in the past three years Interior has sought to limit the opportunity for fraud in the leasing lottery. In October 1981, Secretary James Watt raised the filing fee from \$10 to \$75 per application. The number of applications immediately fell from about 5 million to 1.2 million a year, with most of the drop assumed to be attributable to a reduction in filing service activity. In addition, federal filing fee revenues rose by \$50 million a year to almost \$100 million.

In 1984, Secretary William Clark, in a further jab at the filing services, ordered that the first year's rental payment of \$1 an acre would have to accompany each application, with the money refunded after the drawing to losing entrants. This means the average lease applicant has to put down \$1,500 of earnest money up front. In its first year, this reform reduced lease applications by two-thirds to less than 400,000 a year, while cutting overall filing revenues by three-quarters to \$28.7 million, not counting the ten-week interest float the government gets from holding the earnest money of applicants.

In response to the recent Amos Draw incident, BLM suspended the lottery once more. Although this suspension was intended to last only six weeks, it ultimately went on for ten months, during which period the agency reviewed both its classification procedures and its actual boundary drawings. It adjusted some of the KGS boundaries, expanding them in some cases to the limits of the entrapping geo-

logical structure and in other cases to similar entrapping structures, and adopted other new procedures. In August 1984 the lottery was resumed.

Support for a Competitive System

Many have concluded that a simpler and more effective system would be to institute competitive bidding across the board. The states in which leasing now occurs certainly support such a change, and for an obvious reason. Currently they receive half of the bonus payments from competitive lease sales, but none of the lottery application fees. A shift to all-competitive leases could increase their revenues between \$50 million and \$125 million annually.

In 1979, during the Carter administration, Secretary of the Interior Cecil Andrus decided to seek legislation to implement an all-competitive system, but promptly learned that Congress, led by its western senators, was not receptive. So instead he proposed to broaden the categories of land in which competitive leasing could occur. S. 1637, introduced in 1979 by the late Senator Henry Jackson (Democrat, Washington), would originally have extended competitive bidding to (1) all lands within a three mile "halo" around a KGS, (2) anywhere the secretary of the interior believed because of geological indicia that oil and gas might be present, and (3) wherever competitive interest was found. Hearings were held, but the bill never emerged from committee.

In recent years, Senator Dale Bumpers (Democrat, Arkansas) has been the champion of the all-competitive system. Citing the Fort Chaffee case in his home state and the filing service frauds, he has introduced all-competitive legislation in each of the last three congresses. In a letter to his fellow senators, he argued that "competitive bidding for leases would guarantee the government fair return for public resources" and "eliminate much of the fraud that characterizes the noncompetitive system." His first two bills were defeated in Senate votes; the third, S. 373, is now pending.

What should Congress be doing? The answer is somewhat more complicated than it may at first appear. In general, a truly competitive auction requires that there be more than one well-informed buyer interested in the prop-

erty, and that the auctioned item be valuable enough that it makes sense for buyers to prepare bids in the first place.

Competition would probably work for the more sought-after categories of land. But many if not most of the parcels now offered in the lottery are not attractive enough to provoke much interest. If a competitive bidding system for onshore leasing followed the pattern used in coal and offshore oil and gas leasing, BLM would specify minimum submissible bids. Many tracts would then not receive any bids because the expected value of the lease would not equal the minimum bid, at least after the costs of applying were deducted. Many other tracts would attract one bid, but few would receive more than one.

The reasons are not hard to find. While the cost of an average lottery "bid" now amounts to about \$.08 an acre, which seems a rather cheap gamble, the odds are long. Even when the geologic data are promising, there is still a high risk that no deposits will be found. The overall probability of striking a commercial deposit on onshore lands in the United States has proved to be about one in forty. Moreover, potential bidders will typically have very different views and different information about the promise of a given tract, further limiting the potential for efficient competitive bidding.

There is, in addition, the matter of "inventory demand." Many companies maintain diverse inventories of land either to ensure a share in the benefits should a competitor make a strike on a nearby tract, or for purposes of trading. Such inventory lands generally would not command much interest in a competitive auction, however, since no immediate exploration on them is contemplated.

The Wyoming Story

One state has already experienced these problems in practice. In July 1983, Wyoming switched from a noncompetitive lottery to an all-competitive bidding system for oil and gas leasing of state lands. Wyoming's leases are similar to the federal leases in that state, which are among the most productive in the federal system.

In the six months before this switch, the average tract brought Wyoming \$36 an acre in

revenues, with half of the tracts bringing more than \$15 an acre. After the switch, average bids fell. An Interior Department study found that the six lotteries in the first half of 1983 (375 parcels offered) brought the state government an average \$28.86 an acre, while seven subsequent competitive sales (1,188 parcels offered) brought only an average of \$24.32. That loss of \$4.54 an acre is statistically significant, and suggests that the state may potentially have lost a total of \$2.55 million on the 561,023 acres it offered through these competitive sales. Thirty-six percent of the tracts brought either a bid of \$1 an acre, the minimum allowed, or no bid at all. In Wyoming's January 1985 sale, 57 percent of the tracts attracted no bids and 14 percent attracted bids of \$1 an acre.

Altogether, between August 1983 and September 1984, more than 50 percent of the leases offered competitively received bids of less than \$5 an acre. The high bids for the most sought-after parcels were, as had been hoped, higher than the highest totals of lottery application fees for tracts under the old system. For lower-valued tracts, however, bids usually fell below the amount that might be collected from a lottery. While some of the decline can be attributed to falling oil and gas prices and to a higher royalty rate, much of it can be laid to the change in the leasing method.

The federal competitive bidding system has shown some similar patterns even in the presumably "hot" KGS areas. In 1983, of 766 competitive tracts offered nationwide, only 628 received bids. Of that number, almost 20 percent received only one bid. In other words, more than one-third of KGS lands—lands presumed by BLM to have high value—elicit little or no competitive bidding. Even in Wyoming, 30 percent of federal competitive offerings between June and October 1983 received high bids of less than \$25 an acre.

Why Competitive Bidding Falls Short

In principle, the low value of a tract should in itself pose no fundamental obstacle to a competitive bidding system. Bidders should enter appropriately low bids and the government and general public should have no reason to complain. But political considerations intrude. By policy tradition and, for some minerals, by stat-

ute, the federal government insists that the winners of competitive lease auctions—but not the winners of lease lotteries—pay "fair market value" for the lease. BLM accordingly has to appraise the fair value of each tract it wishes to dispose of through competitive bidding. To do so it uses either of two methodologies, one based on sales of comparable tracts and the other on the discounted cash flow of leases. Unfortunately, the cost of making these calculations is high, about \$3.50 an acre in 1983. By contrast, a lottery system with no such calculations costs only about 35 cents an acre to administer, according to recent Interior Department experience.

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The alternative, of course, is for the government to invite competitive bidding but do away with the appraisals. Indeed, Senator Bumpers believes that under an all-competitive system no appraisals would be necessary. But the recent controversy that engulfed the competitive coal leasing program suggests that the political climate would not tolerate such an arrangement. Visible controls to prevent any whiff of impropriety are apparently so crucial to political legitimacy that they override the putative goals of the program itself in raising federal revenue and making energy supplies available.

In addition, moving to an all-competitive system would not necessarily end filing service frauds. When Alaskan oil and gas leases were offered competitively, for example, filing services bid and won numerous low-value but large tracts. They subsequently broke them up into forty-acre parcels and sold them to the unsus-

pecting public as valuable leases in sight of the Trans-Alaska pipeline. Any valuable investment is fair game for the confidence man.

Thus the present lottery, irrational though it may seem at first glance, is not so easy to dismiss. Moreover, so long as there is a competitive private after-market that will ultimately deliver each tract to the party who values it most, the lottery will be more socially efficient than a public competitive sale requiring costly and slow fair-market-value determinations across the board. It will also raise more revenues for the government and do so faster. Finally, it will lead to higher energy production. Many seemingly unpromising tracts leased through the lottery have yielded significant amounts of oil and gas. Yet, because it was not possible to identify which tracts contained oil and gas prior to leasing, none of them would have attracted much bidding competition.

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Compare, also, the incentives involved in the lottery plus private after-market against those in an all-competitive system with fair market value determinations. When a private citizen who has won a lottery negotiates to sell his lease to an oil company, he has only one set of incentives: to reach the best deal he can and to master whatever information is needed to make the deal work. He need not spend money simply to maintain the appearance of propriety. Thus private negotiation should transfer tracts to their highest-valued user. Public agencies, having a weaker incentive to strike good deals, must expend valuable resources to assure the public that they do not strike excessively bad ones.

Lotteries have another advantage, too—which is that the major source of government leasing revenue is not what is bid for the lease or paid to enter the lease lottery, but the royalties that are paid once production starts. These

royalties accounted for more than 80 percent of the government's onshore oil and gas revenues in 1983. A lottery is likely to put more

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acreage under productive lease faster and thus bring in more revenue than an all-competitive system with cumbersome tract appraisals. The states in which the production occurs would share in the increased royalty revenues just as they would share in the increased bonus revenues under an all-competitive system.

The federal government has grappled with some of these problems before. In 1976 Congress enacted the Federal Coal Leasing Amendments Act, which permitted only competitive sales of federal coal leases. By 1984, however, a congressionally mandated commission concluded that in many situations the conditions necessary for successful competition in coal lease sales simply do not exist. The commission recommended noncompetitive alternatives—direct bilateral negotiation between buyer and seller—where reasonable attempts at obtaining competition have failed.

A Flexible Multi-Tier System

A better solution may be to keep the current competitive and noncompetitive systems, but change the way lands are allocated between them. The current system uses one geologically based dividing line to separate proven high-prospect from "wildcat" low-prospect lands. This inevitably lumps some prospectively valuable tracts together with low-valued ones, resulting in the "giving away" of these miscategorized lands.

For the economist, there are only two kinds of oil and gas lands—lands that people believe are valuable and lands without honor among the oil and gas prophets. The distinction is economic, not geological. Thus, a better and less expensive way for BLM to segregate the

tracts would be to use a market test. Suppose the agency were to set a minimum submissible bid, at a value below which it would not be worth the agency's resources to evaluate the tract. All oil and gas tracts would then be offered competitively. High bids above the minimum would be accepted.

Tracts that did not receive minimum bids would immediately be made available for leasing through some noncompetitive means, without further appraisal by the agency. Tracts that had not been leased before would be leased to the first applicant. Previously leased lands that did not attract minimum bids could be released by lottery—a system that can handle large amounts of low-value land quickly and cheaply. Unlike the current lottery, which limits tickets to one per customer, there might be no limit on the number of filings that an individual applicant could make for each tract. An applicant eager to obtain a particular tract would be likely to file more applications, and theory predicts that the total of the filing fees on each tract would tend to approach its fair market value. Assuming a predetermined minimum submissible bid of \$25 an acre, this system could generate what internal Interior estimates show to be as much as \$400 million in upfront revenues, of which \$115 million would go to the states in which the leases are located.

A lottery played by these rules might also reform, if not drive out of business, the "filing services." Each lottery ticket would represent not a windfall but a simple (though risky) business investment, without an abnormally high return. The get-rich-quick appeal would be blunted in a different way, too. The only tracts offered in the lottery would be those that originally attracted no competitive bids above the minimum.

THE CURRENT DEBATE about onshore leasing has been confined to a false choice: either the status quo or an all-competitive proposal. Instead, the debate should accept the need for flexibility, for competitive leasing in some cases and noncompetitive leasing in others. If Congress can establish the proper dividing lines between the two methods and find the best ways to conduct noncompetitive leasing, it can reconcile all its goals—energy production, federal revenue, and assurances of the appearance of propriety—without too much trouble. ■

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The Economy at Midyear

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The rapid expansion of the economy that characterized the first half of 1985 has been followed by a period of slow growth that has lasted one year. Since the second quarter of 1984 real output has risen at an annual rate of only 1.9 percent, far below the 7.5 percent annual rate of increase from the recession trough in the fourth quarter of 1982 to the second quarter of 1984. Output in the first quarter of 1985 was essentially unchanged from the fourth quarter of 1984, and in its percentage change it fell to the lowest level since the American GNP's reported a second quarter rate of increase of 1.7 percent. National GNP over the year has risen 5.1 percent, an improvement with a rate of 1.7 percent over the first six quarters of output.

Since last summer the expansion in real output has been accompanied by a gradual unemployment rate that has fluctuated on a fairly steady course around 7.5 percent. While unemployment has increased by 1.4 million and the total civilian labor force has grown almost as much, the net loss of jobs in the first quarter of 1985 was smaller than the net gain in the second quarter. The net loss of jobs in the first quarter of 1985 was smaller than the net gain in the second quarter of 1984.

Since the AEI's annual survey of business opinion in 1984, the AEI's index of business confidence has risen from 100 to 110. The index of business confidence is a composite of three indicators: the index of business confidence, the index of business expectations, and the index of business sentiment. The index of business confidence is a composite of three indicators: the index of business confidence, the index of business expectations, and the index of business sentiment. The index of business confidence is a composite of three indicators: the index of business confidence, the index of business expectations, and the index of business sentiment.

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