Policy Impact Report: Federal Offshore Leasing

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INTRODUCTION

The Institute for Policy Integrity's multi-year effort to encourage the Department of the Interior account for "option value" in its natural resource leasing decisions recently led to meaningful change. In its new draft Proposed Program for offshore oil and gas leasing from 2017-2022, the Department's Bureau of Ocean Energy Management (BOEM) devotes 12 pages to option value and related resource valuation concepts. Much of this language closely resembles the arguments Policy Integrity has made to the agency repeatedly since 2009. The end result may be less offshore leasing in regions with the greatest environmental and social uncertainty, higher minimum bids and revenue for the American public, and an opportunity to expand this effort to additional federal land management agencies.

On the heels of this success come new challenges: BOEM's Proposed Program also identifies a portion of the mid and south-Atlantic for possible offshore leasing in 2021. This would open an area to offshore drilling that has never before been commercially developed, and for which no safety record of development exists. Our forthcoming comments on the Proposed Program will note that these large uncertainties raise serious questions about the desirability of proceeding with leasing off the East Coast, as well as in other regions, such as the Arctic. Further, the agency currently uses only a qualitative assessment of option value; quantifying the environmental option value would provide more information on environmental and social costs.

SUMMARY OF OUR PAST WORK

Policy Integrity has long argued that incomplete and flawed economic analysis leads the government to sell resource leases too quickly and too cheaply, potentially costing the American public billions of dollars, and leading to aggressive, higher-risk drilling. We have suggested that government agencies engaged in leasing decisions should consider option value—a financial concept widely used in markets that analyzes the value of delaying irreversible decisions until more information is available to inform whether a current decision to exploit the resource is socially desirable. The value associated with the option to delay can be large, especially when there is a high degree of uncertainty about price, extraction costs, and/or the social costs imposed by drilling.

Our work on this issue began in 2009, when Policy Integrity sent comments to the Minerals Management Service (the precursor to BOEM at the Department of the Interior) requesting that the agency incorporate option value into its assessments of offshore drilling lease sales. Those comments later formed the basis for an article by Michael Livermore in the Colorado Law Review, "Patience is an Economic Virtue: Real Options, Natural Resources, and Offshore Oil." Policy Integrity is also serving as counsel for the Center for Sustainable Economy in a lawsuit filed in the U.S. Court of Appeals for the D.C. Circuit against BOEM. The case, Center for Sustainable Economy v. Jewell, focuses on BOEM's 2012-2017 leasing plan for the Gulf of Mexico and the Alaskan coast. A ruling is expected soon, and the case could have significant implications for other government natural resource leasing programs.

POLICY INTEGRITY'S IMPACT ON THE DEPARTMENT OF THE INTERIOR'S OFFSHORE LEASING PROGRAM

Here is a brief overview of the impact of our work on BOEM's 2017-2022 Draft Proposed Program for offshore leasing:

(1) BOEM includes a significant section on option value in its Draft Proposed Program and notes that environmental and social cost uncertainties can affect the size, timing, and location of offshore leasing.

Beginning in 2009, Policy Integrity submitted comments and correspondence to the Department of the Interior, advocating for BOEM and its precursor agency to consider environmental and social uncertainty when deciding upon the time, size, and location of leasing.

Now, for the first time, BOEM devotes 12 pages to option value and related resource valuation concepts. To our knowledge, this is the first time that any federal agency has analyzed option value in connection with the leasing of natural resources on federal lands.

First, BOEM explains that option value exists, and in general, can be a component of the fair market value of a lease. Next, BOEM acknowledges that "[a]s part of the decision on size, timing, and location, the Secretary can consider the state of available environmental and social cost uncertainties." (Draft Proposed Program at 8-8).

(2) BOEM acknowledges that environmental and cost uncertainty can "greatly affect the Net Social Value" of offshore leasing in each Outer Continental Shelf (OCS) planning area.

Since 2009, Policy Integrity has advocated for a change in how the agency calculates "Net Social Value" of each planning area, to account for price uncertainty, as well as for environmental and social cost uncertainty.

For the first time, BOEM concludes that the Net Social Values for each planning area "are rooted in uncertainty at many levels beyond just price . . . there is also resource uncertainty, extraction cost uncertainty, environmental and social cost uncertainty, and others." (Draft Proposed Program at 5-20).

However, the agency does not indicate whether different levels of uncertainty actually changed its Net Social Value calculations. Instead, in a later section, the agency points to the difficulty of quantifying option value. This is a shortcoming that Policy Integrity plans to address in future research and advocacy.

(3) BOEM's Draft Program tentatively schedules the Alaskan lease sales later in the five-year period.

Policy Integrity has repeatedly suggested that the agency use an option value analysis to help it determine the optimal timing, size, and location of offshore leasing. We noted that in the Arctic or in deepwater environments, there is greater uncertainty around drilling, which the government should take into account when developing its 5-year leasing plan. Greater environmental and social uncertainty should tip the scales towards less leasing in those locations in the near-term.

In its current form, the Draft Program would allow one lease sale each in the Beaufort Sea (2020), Cook Inlet (2021), and Chukchi Sea (2022) Planning Areas off the coast of Alaska. BOEM states, "To that extent, there may be option value in waiting to drill while the research is being performed. This was partly the rationale supporting the 2012–2017 Program decision for scheduling Alaska lease sales late in the program while environmental studies are being conducted. It is conceivable that the wait for information could extend beyond the 5-year timeframe of a given leasing program. . ." (Draft Proposed Program at 8-10.)

It is not entirely clear that the government based its Alaskan lease sale schedule on an option value analysis; however, BOEM does note that there may be option value in waiting to drill while more research is performed. Policy Integrity has also advocated for the agency to consider deferring lease sales in OCS planning areas with the greatest amount of uncertainty beyond this 5-year term.

(4) BOEM discusses the possibility of raising minimum bids in lease sales to account for option value.

In Policy Integrity's reports and comments to the agency dating back to 2010, we advocated for adjusting the minimum bids required for lease sales, to account for environmental and social uncertainty.

Here, for the first time, BOEM notes that fiscal terms for leases can be tailored at the lease sale stage to improve the timing of activities where option value is found to be significant. BOEM notes that raising the minimum bid may increase buyer selectivity, and thus "the efficiency of the lease sale process," and that "the minimum bid can be adjusted to improve timing of activities where option value is found to be significant." (Draft Proposed Program at 8-19).

This Draft Proposed Program is the first step in the agency's offshore leasing process. Policy Integrity intends to monitor or comment on future offshore lease sales and the agency's fair market calculations, to assess whether it does, in fact, use option value to tailor the fiscal terms of its leases.

(5) BOEM uses a hurdle price analysis, which Policy Integrity previously advocated for.

Policy Integrity's previous comments prompted the agency to use some form of hurdle price analysis, which we described in our 2011 report, "The BP Gulf Coast Oil Spill, Option Value and the Offshore Drilling Debate." A "hurdle price" analysis is an economic method used to calculate the price above which an investment makes sense and below which it does not. In federal natural resources leasing, hurdle price analysis should account for uncertain environmental and social costs, as well as economic uncertainty.

Now, BOEM calculates hurdle prices for each planning area at the program development stage, and states that it plans to re-evaluate them during the lease sale planning process. (Draft Proposed Program at 8-12). BOEM states that it uses this hurdle price to ensure that every area included in the Program is expected to convey rights to at least one field where prompt exploration during the Program is consistent with an optimal allocation of resources.

Nevertheless, the agency's hurdle price analysis is flawed, because it does not account for environmental and social cost uncertainty—only economic uncertainty. This is a major shortcoming in the current approach, and Policy Integrity will continue to advocate that it be improved in the final plan.

(6) BOEM conducts a qualitative assessment of option value, but does not conduct a quantitative analysis.

In Policy Integrity's prior comments and subsequent litigation, we urged the agency to quantify the option value for each OCS planning area.

While the agency conducts a qualitative assessment of option value, it fails to quantify this option value. BOEM states that "it is surpassingly difficult to specify and estimate a useful, empirical model of that type." (Draft Proposed Program at 8-9).

Policy Integrity is pursuing opportunities to assist the agency in quantifying the option value by developing an empirical model. This model would further inform the agency's decisions with respect to the time, size, and location of offshore leases.