

The Arctic National Wildlife Refuge: Alaska North Slope Bidding Realities v. CBO Federal Revenue Projections

- **It is unrealistic to expect that leasing the 1002 area of the Arctic Refuge will bring \$2.4 billion into the Federal Treasury.**
- **CBO's conclusion that the federal government can count on \$2.4 billion in bonus payments for leasing on the Arctic Refuge Coastal Plain is not supported by historical bidding trends in Alaska, or in the Gulf of Mexico.**
- **If estimated revenue from leasing on the Arctic Refuge Coastal Plain is included in the budget reconciliation package, then any shortfall in those revenues – that is, the difference between \$5.0 billion and the amount actually received in lease bonus bids – will actually INCREASE (rather than REDUCE) the federal deficit. In this event, the federal government and the taxpayers will not get the deficit relief promised by budget reconciliation.**

***Richard A. Fineberg, Principal Investigator
Research Associates – Ester, Alaska 99725
September 26, 2005***

Contents:

***Page 1: The Arctic National Wildlife Refuge: Alaska North Slope Bidding Realities
v. CBO Federal Revenue Projections (Summary)***

Page 2: Alaska North Slope Petroleum Lease Revenues, 1961-2010 (Real [2005] \$)

Page 3: Alaska and Gulf of Mexico Lease Revenues, 1961-2010 (Nominal \$)

***Page 4, 5: The Arctic National Wildlife Refuge: Alaska North Slope Bidding Realities
v. CBO Federal Revenue Projections (Discussion and References)***

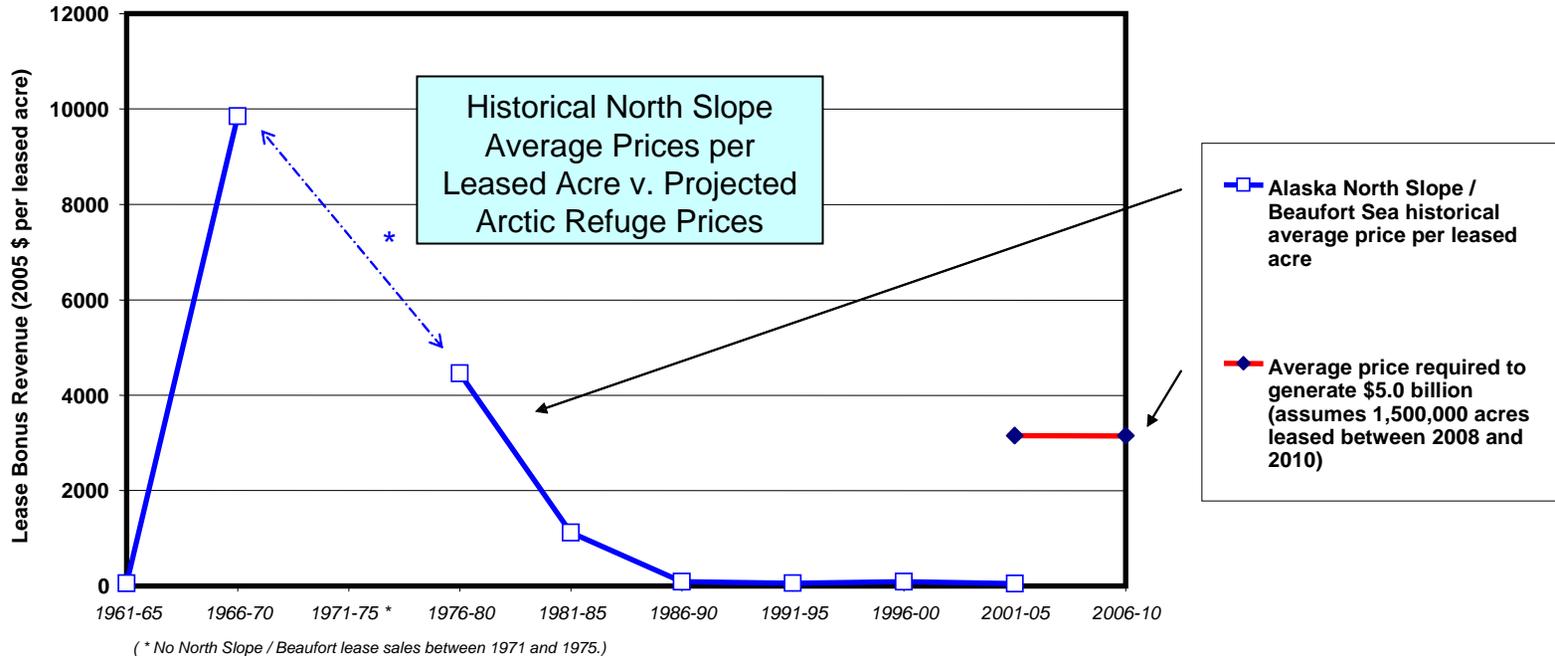
Alaska North Slope Petroleum Lease Revenues, 1961 - 2010

(Real [2005] \$)

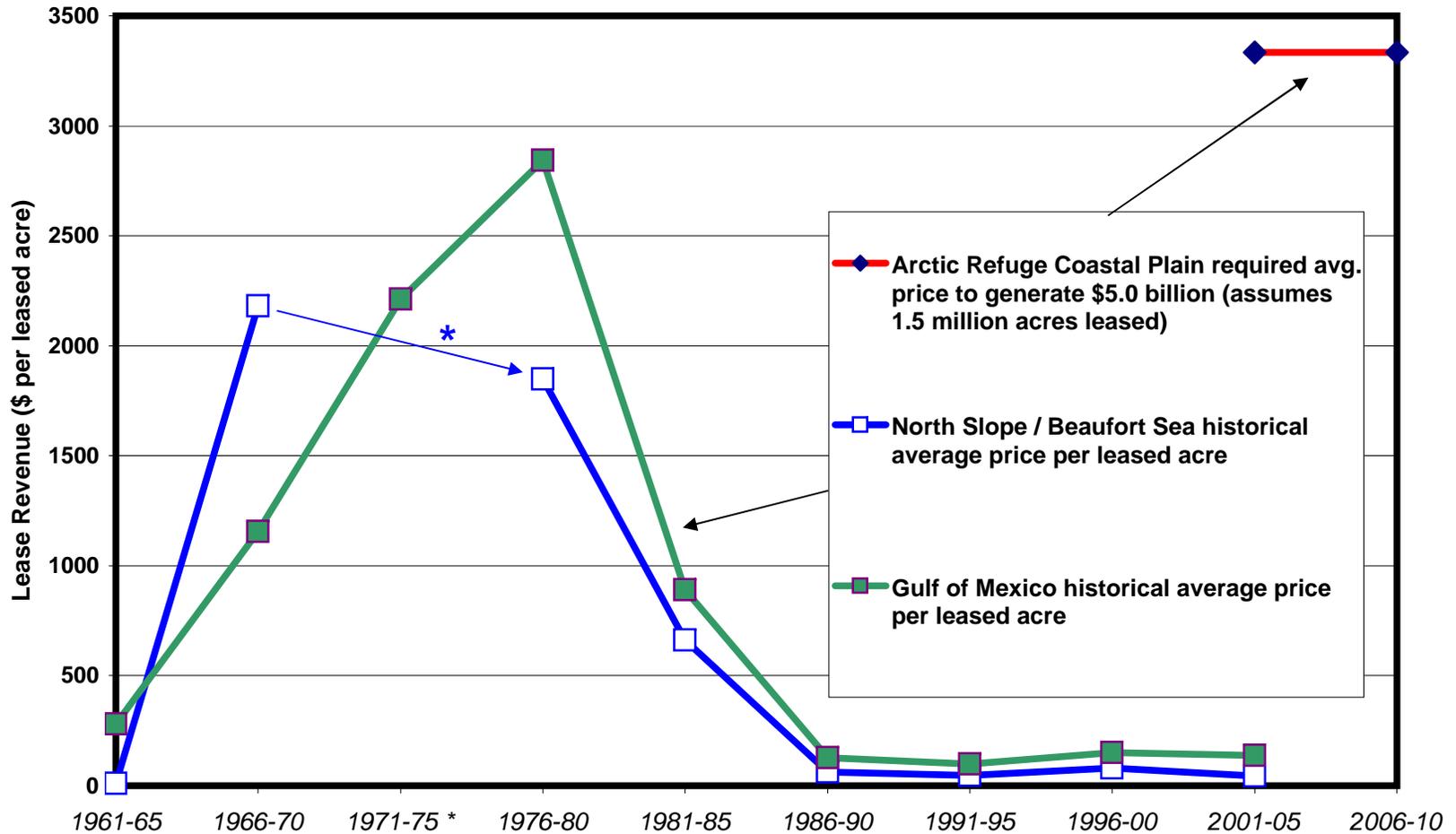
There is a significant disparity between the consistently low Alaska North Slope bonus bids during the last two decades (blue line on chart) and the amount that the Congressional Budget Office (CBO) anticipates companies will pay for exploration rights on the Arctic Refuge Coastal Plain (red bar at lower right).

CBO's estimate that Arctic Refuge leasing will contribute \$2.5 billion to federal deficit reduction ignores factors that caused the steep decline in North Slope bidding during the 1980s and the subsequent pattern of significantly reduced Lease bonus bids. (See: Richard A. Fineberg, *Projected Bonus Payments from Proposed Leasing on the Arctic Refuge Coastal Plain*, Jan. 15, 2005 at <http://www.finebergresearch.com>.)

In March 2005, a federal lease sale just off the Arctic Refuge coast offered tracts with significant deposits of discovered oil. Despite high oil prices, to secure the rights to an estimated 200 million barrels of discovered oil, the industry was willing to spend approximately one-sixth the amount, per barrel, that CBO believes the industry will bid for the right to explore for undiscovered oil on the Arctic Refuge Coastal Plain.



Alaska and Gulf of Mexico Lease Revenues, 1961 - 2010 (Nominal \$)



* No North Slope / Beaufort lease sales during 1971-1975 period.

The Arctic National Wildlife Refuge: Alaska North Slope Bidding Realities v. CBO Federal Revenue Projections

In the two preceding graphs, the historical five-year averages for Alaska North Slope bonus bid payments since 1961 and CBO's estimate of leasing revenues from the Arctic National Wildlife Refuge Coastal Plain are shown in nominal and real (inflation-adjusted) dollars.¹ Despite the fact that Alaska North Slope lease bonus bids have averaged only \$55 per leased acre in 38 sales since 1990, the Congressional Budget Office (CBO) estimates that leasing on the Coastal Plain of the Arctic National Wildlife Refuge will bring in \$5.0 billion in bonus bids. To generate that amount, oil companies would have to pay \$3,333.00 for each and every acre of the 1,500,000-acre federal (1002) area.²

Responding to a bipartisan group of 11 senators who asked CBO to explain the disparity between its projections and the clearly established bidding pattern on the North Slope, CBO referred to an anomalous North Slope sale held more than two decades ago that generated more than \$3,000.00 per leased acre, noting that in today's dollars those lease bonus payments would be much higher.³ But CBO neglected to say that that this extraordinary sale produced no oil and is infamous in trade circles as the most expensive dry hole in history. After this disastrous experience industry interest in the North Slope quickly declined, sending bonus bid payments to low levels, from which they have not recovered.⁴

More recent lease sales also suggest that CBO's projections are derived from theoretical calculations that are not supported by real-world experience:

- Following the discovery of the Alpine field to the west of Prudhoe Bay in 1994, bidding interest in that vicinity increased. Too small to be seen in the real dollar chart but visible as a slight elevation in the nominal-dollar chart during the period between 1996 and 2000, three lease sales in the vicinity of Alpine averaged approximately \$117.00 per leased acre.⁵ This amount represented an increase over the average rates for the last 15 years. Nevertheless, the post-Alpine bids were only one-twenty-fifth the amount that each and every acre of the Arctic Refuge Coastal Plain would have to bring in to meet CBO's expectations.

¹ For a list of the amounts received from Alaska North Slope leases since 1961 between 1961 and 2004, see: Richard A. Fineberg, *Projected Bonus Payments from Proposed Leasing On the Arctic National Wildlife Refuge Coastal Plain Greatly Exceed North Slope Historical Trends*, report to the Alaska Wilderness League, Jan. 15, 2005, Figures A1 and A3-A5 (<http://www.finebergresearch.com>; updated data available from author).

² Presumably, Alaska North Slope lease bonus revenue would be split between the state of Alaska and the federal treasury.

³ CBO's letter and additional information can be accessed at www.finebergresearch.com.

⁴ See: *Projected Bonus Payments from Proposed Leasing On the Arctic National Wildlife Refuge Coastal Plain Greatly Exceed North Slope Historical Trends*.

⁵ *Projected Bonus Payments from Proposed Leasing On the Arctic National Wildlife Refuge Coastal Plain Greatly Exceed North Slope Historical Trends*, pp. 10-12 and Figures A1 and A5.

- In March 2005, the Minerals Management Service offered large tracts in the near-shore waters off the Arctic Refuge coast, including two known oil deposits of more than 200 million barrels each. One might expect that companies counting on Arctic Refuge development would be eager to obtain rights to known deposits nearby that could be shipped with any oil that might be discovered on the Arctic Refuge Coastal Plain. Nevertheless, Shell Oil acquired the rights to this already-discovered oil at bargain prices, paying approximately \$500.00 per leased acre in the immediate vicinity of one deposit and \$35.00 per leased acre for the other.⁶ While it is difficult to identify the specific factors that determined the bidding on these known deposits, these results do not augur well for projections of bids in excess of \$3,000.00 per acre for each and every acre of the 1,500,000 acres that comprise the 1002 area of the Arctic Refuge Coastal Plain.⁷

The historical trends identified in these charts argues against the speculative possibility that high oil prices and the relatively large volumes of oil that may (or may not) lie beneath the Arctic Refuge Coastal Plain could cause bid prices on the Arctic Refuge Coastal Plain to rise to the heights assumed by CBO. Two observations are central here:

- Despite the discovery and development of large quantities of oil in the Gulf of Mexico in recent years, over the last two decades bonus bid payments in that province have also fallen dramatically; the Gulf of Mexico historical trend is congruent with that of Alaska's North Slope.
- Although oil prices have risen steadily since January 1999, during this period average bonus bid prices in both provinces have not.

The facts presented here underscore the discrepancy between historical realities and CBO's projections, as well as the difficulties inherent in forecasting industry performance in future oil and gas lease sales. Despite these problems, drilling advocates want to apply the federal share of projected Arctic Refuge lease bonus revenues to the deficit reduction totals in the budget reconciliation package. Under their proposal, if lease bonus revenues fall short of the \$5.0 billion projected by CBO, the federal portion of that shortfall must be added to the increase in the federal deficit caused by the budget reconciliation package.

⁶ For eight leasing tracts comprising nearly 46,000 acres contiguous to the tracts immediately over the Hammerhead deposit, Shell paid approximately \$503.00 per leased acre. Shell acquired the second discovery, known as Kuvlum, for approximately \$35.00 per leased acre (see U.S. Minerals Management Service, Alaska OCS Region, "Beaufort Sea Sale 195 – Sale Day Statistics," Mar. 30, 2005). Translated into the rate an oil company might be willing to pay for a discovered barrel of oil, the bids on the Hammerhead deposit brought in approximately \$0.08 per barrel for discovered oil – less than one-fifth the rate a company would have to pay for the right to explore for the estimated 10 billion barrels of undiscovered oil the Arctic Refuge might contain. Kuvlum netted less than \$0.01 per barrel of discovered oil.

⁷ A significant factor to consider in this regard is that a three-year assessment of the production potential of the Arctic Refuge Coastal Plain by the U.S. Geological Survey (USGS) virtually precludes discovery of a super-giant field. Rather, USGS and the U.S. Energy Information Administration (EIA) expect Arctic Refuge production to come from fields ranging in size from 1.4 billion barrels in reserves to 0.3 billion barrels, in addition to an unknown number of smaller satellite fields. (See: E. D. Attanasi and J. H. Scheunemeyer, "Frontier areas and resource assessment: the Case of the 1002 Area of the Alaska North Slope" [USGS Open File Report 02-119, March 2002], p. 10 and EIA, "Analysis of Oil and Gas Production in the Arctic National Wildlife Refuge" [Report No. SR/OIAF/2004-04, July 2005], pp. 6-8.) The absence of the likelihood of a super-giant field exerts a downward pressure on speculative bidding.