## STATEMENT OF ALICE M. RIVLIN DIRECTOR, CONGRESSIONAL BUDGET OFFICE

Before the
Subcommittee on Energy and Foundations of the
Finance Committee
United States Senate

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Mr. Chairman, I am pleased to appear before this Subcommittee to discuss some aspects of the Administration's proposals for the phased decontrol of domestic oil and a windfall profits tax. The Congressional Budget Office (CBO) recently completed a preliminary study of the energy and economic effects of the Administration's plan and is now preparing a more comprehensive analysis. In general, our preliminary conclusions are quite similar to those of the Administration in terms of the oil import reductions and increased inflation likely to result from the plan. In my remarks today, I will discuss three issues that I believe are important to the tax and revenue aspects of the Administration's proposals:

- o The potential producer revenues and tax receipts that the proposals would generate;
- o The nature of the incentives for accelerated oil exploration and development; and
- o The pros and cons of creating an Energy Security Fund.

## THE POTENTIAL PRODUCER REVENUES AND TAX RECEIPTS

CBO estimates that, between June 1, 1979 and September 30, 1981, the proposal for phased decontrol would generate about \$14 billion (in current dollars) in increased wellhead oil revenues, as compared to a continuation of the present system of controls. From October 1, 1981

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through the end of 1985, decontrol would increase revenues by another \$49 billion. If the revenues generated by new supply are included, producer revenues would increase about \$62 billion for this period.

If enacted by the Congress, the Administration's proposal for a windfall profits tax (which is essentially an excise tax) would return about \$4.2 billion of the increased revenues to the Treasury by September 30, 1981 (on an accrual basis). Through the end of 1985, the windfall profits tax would generate an additional \$17.3 billion. After deducting the windfall tax and an assumed 7 percent of the gross increase in revenues for state and local taxes, including severance taxes, about \$9 billion would be subject to federal income taxes through the third quarter of 1981. Through the end of 1985, an additional \$28 billion would be subject to federal income taxes.

The estimated amount of federal income taxes to be paid on these increased profits is a controversial issue. The portion of the \$9 billion that would actually be paid in taxes (on an accrual basis) by the end of 1981 is likely to be very small—probably less than 20 percent. The reason for this is straightforward. If the producers re-invest a large portion of these revenues in oil drilling and exploration, the investment in the initial period would result in large tax write-offs for drilling expenses, rapid depreciation of capital equipment, and federal tax credits for part of the initial investment. In all likelihood, very little newly discovered oil would flow in

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this period and, therefore, there would be no increase in revenues and thus in taxable income during this early period.

In subsequent years, however, the discoveries from the exploration and development expenditures result in oil production, the tax liability of the companies would grow. How much tax revenue would actually result depends on a variety of factors, including the success of new drilling, the amount of production still shielded by the remaining oil depletion allowances, future investment expenditures by the companies, and so forth. The Treasury Department has assumed that, over the long term, after deducting windfall and state taxes, the oil producers would pay 40 percent of the remaining increased revenues resulting from decontrol in federal taxes. We believe this is an overestimate. Reports filed with the Securities and Exchange Commission and annual reports for crude oil producers and integrated companies suggest that, since 1975 when the percentage depletion allowance was eliminated for large producers, these companies have accrued between 34 and 36 percent of their net operating revenues in taxes of all forms. Subtracting 7 percent for state and local taxes leaves about 28 percent of the net operating revenues paid as federal income taxes. Thus, 28 percent represents the long-run income tax rate for producers, as revenues from new production increase, unless drilling expenditures continue to accelerate.

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Over the long run, the combination of the proposed windfall tax, the state and local taxes, and the corporate income tax (with CBO's assumed 28 percent corporate income tax rate) would result in about 55 percent of the increased revenues being paid in taxes, leaving 45 percent with the producers. The role of the windfall profits tax is key. Without it, the government (including state and local governments) would collect only about 30 percent of the increased revenues in taxes.

## INCENTIVES FOR EXPLORATION AND DEVELOPMENT

Are the incentives proposed by the Administration adequate to promote an acceleration of oil exploration and development over the next few years? Most economists view this question in terms of the prices allowed for new oil production: If the price of oil is high enough, rational investors will undertake the investment required for production. All the investment funds need not come from oil companies' internal cash flow, they argue, for the high price will be enough to attract the necessary capital, through borrowing. Viewed in this context, the incentives proposed by the President to encourage new oil exploration and development are most certainly adequate. For truly new oil, the producers would be allowed the world price, currently over \$16.00 per barrel. For marginal wells and other old oil, which may require additional investment to increase production, the

Administration would more than double the allowed price, from \$6.00 to about \$13.00 per barrel over the next six months. For tertiary recovery, the marginal revenue to the producers would actually exceed the world price, since producers undertaking tertiary projects would also be allowed more rapid decontrol for already flowing oil production. It appears, therefore, that in terms of price incentives, the Administration's proposals would be adequate to encourage a significant amount of new investment.

Some producers, along with segments of the banking community, have argued that, because oil exploration and development is relatively risky investment, it is difficult to obtain external financing and internally generated funds are a necessity. Therefore, they reason, without the additional cash flow, the required investment for exploration and development will not occur. Recent studies, however, tend to contradict the view that cash flow determines the level of investment in petroleum exploration. One study, for example, which examined both major oil companies and independents, found only a weak relationship between internal cash flow and investment in exploration and development. Also, this study found evidence of considerable borrowing by both major oil producers and independents for exploration and development. While we believe that the price of oil is the critical factor in determining investment in exploration and development, it may be helpful to consider the additional cash flow that would be generated

by the Administration's proposals and compare this to the potential for new drilling.

Although there has been a slight decline in drilling activity in the past three to four months, in 1978 there was more oil drilling in the United States than any other year in the past two decades. Although complete data are not yet available, total expenditures for exploration and development may well have exceeded \$19 billion in 1978, compared to \$16.3 billion in 1977. It appears that significant expansion is possible for future drilling and exploration. On the basis of industry-supplied data, which includes rapid construction of new rigs and equipment in the next few years, we estimate that drilling rates might be expanded by a maximum of 25 to 30 percent by 1981 over last year's levels. The key constraint to even more rapid expansion is the limited number of available drilling rigs. In dollar terms, after allowing for inflation in drilling costs, CBO estimates that total expenditures for oil exploration and development might rise to as much as \$25 to \$27 billion by 1981.

How then does the increase in cash flow generated by the Administration's pricing and taxing proposals compare to the funds that the industry could productively use for drilling in the next few years? Projections of this sort are necessarily speculative because of increases in drilling costs and other factors, but based on our analysis, a minimum of \$6-7 billion in new

after-tax cash flow would accrue to the industry under the Administration's plan over the 1979-1981 period. Depending on the amount and type of new investment that takes place, the potential cash flow during this period could be even somewhat higher. In the post-1981 period, of course, the revenues will rise considerably. We estimate that this increased cash flow would finance at least two-thirds and possibly all of the maximum additional exploration and development that could occur between now and 1981. Consequently, even if one accepts the view that cash flow determines investment in exploration and development—which we do not—the additional revenues to the oil industry are more than adequate to provide for maximum drilling and exploration over the next several years. Lack of drilling equipment appears to be the major limiting factor.

## THE PROS AND CONS OF AN ENERGY TRUST FUND

The Administration has proposed that the Congress establish an Energy Security Trust Fund to redistribute the tax revenues both to low-income households to soften the burden of higher oil prices and to mass transit and energy research and development to foster the transition to a more energy-efficient economy.

Although such a trust fund has the advantage of providing a mechanism to assist low-income households in offsetting higher energy prices, it has some disadvantages from budgetary and policy coordination standpoints. First, trust funds, with their long-term earmarking of funds, limit budgetary control since they are only marginally affected by budget resolutions and the appropriations process. Second, since both energy investments and mass transit currently have relatively large federal programs, additional expenditures from a trust fund would create some coordination problems for the Congress in their authorization and appropriation processes and for the executive agencies in the administration of these programs.

Further, if OPEC prices did not increase in real terms, the revenue flow into this fund would decrease over time and would, in fact, drop off sharply by the mid-1980s when old and new oil was exhausted. Such a phaseout of the funding source might cause problems in managing these programs, particularly those for energy investments which are long-term capital projects.

Mr. Chairman, I would be happy to respond to any questions from your Subcommittee.