



Telephone: (212) 867-0052

Petroleum Industry Research Foundation, Inc.

122 EAST 42nd STREET

New York, N. Y. 10168

**COMMENTS ON THE WORLD OIL OUTLOOK AND THE
TREASURY'S TAX REFORM PROPOSALS**

Statement before the
Environment, Energy, and
Natural Resources Subcommittee
of the
Committee on Government Operations
U.S. House of Representatives

by

John H. Lichtblau
President

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Thank you for inviting me to testify at your hearings on the world oil outlook. You have also asked for comments on other subjects such as the Treasury Department's tax reform proposals affecting the oil industry. I will briefly comment on this issue following my discussion on the world oil outlook.

1984, as you know, was the first year since the historic peak of 1979 that oil demand in the Non Communist World (NCW) showed an increase rather than a decrease. From 1979 to 1983 NCW world oil demand had dropped by 13% or 6.6 million B/D. All of the decline had occurred in the OECD group of industrial nations. In the developing countries consumption had risen by 2 million B/D or nearly 12%.

The global decline was unique in postwar history, as was the oil price rise which triggered it. It is noteworthy that 60% of the total decline in NCW oil consumption during this period was registered by one product, residual fuel oil. The decline in this product was due more to substitution by other fuels, such as coal, nuclear power and gas, than to conservation.

In 1984 the down trend was reversed as consumption rose by 1 million B/D or 2.3%. Directionally we expect the reversal to continue. But its magnitude was increased by two special factors: the exceptional growth of the U.S. economy and the British coal strike. The U.S. GNP rose by 7% last year and industrial production by 11%. The unusual increases in economic activity caused U.S. oil demand to rise by 3.1% or nearly 1/2 million B/D. The British coal strike caused an increase in heavy fuel oil for power generation of nearly 300,000 B/D. If there had been a more normal GNP growth rate in the U.S. (3.5-4.0%) and

no U.K. coal strike, the increase in world oil demand may have amounted to only about half of what it actually was. Given last year's exceptional growth, consumption in 1985 is unlikely to show any significant further growth and may even be flat, both in the U.S. and the rest of the world.

What demand level can we expect by 1990? The answer requires of course a price assumption, which is a rather heroic undertaking under current conditions of structural uncertainty in the oil market. However, rather than spend pages discussing OPEC's strength and weaknesses, let us assume as one plausible scenario maintenance of the existing price level in nominal dollars for the next two years and then its maintenance in real dollars to 1990. In today's environment this must be viewed as a somewhat optimistic scenario. A slow further erosion of nominal oil prices during the next few years is almost equally likely. In both cases real oil prices in 1990 will be lower than in 1985. In the erosion case the real price could be as low as \$22 (in 1985 \$) for Arab light type crude. Our price maintenance scenario assumes that OPEC will continue to keep most of its excess producing capacity off the market and will maintain its self-imposed role as a swing producer because any alternative would be far worse for all members. We also assume some reduction in the dollar exchange rate during this period which would lower oil prices in local currencies in most importing countries other than the U.S.

How this price assumption will affect supplies will be discussed later. On the demand side it is likely to mean a very

modest global increase on the order of 1.0-1.3% annually from 1985 to 1990, with most of the growth in the developing countries. In the industrial countries other than the U.S. residual fuel oil demand will continue to decline while demand for gasoline and other transportation fuels will increase. In the U.S. the large decline in residual fuel oil (53% or 1.6 million B/D since 1978) is likely to end in 1985. However, gasoline consumption will continue to fall over the period to 1990 despite a 9-10 million increase in passenger cars and a 13-14% increase in total passenger car miles, because of the increased fuel efficiency of the U.S. automotive fleet. Altogether, we expect U.S. oil demand to rise at an annual rate of about 0.5% between 1985 and 1990. Total NCW oil demand by 1990 should be 49-50 million B/D, or 3-4 million B/D above last year's level under this scenario.

After 1990 demand in the industrial countries may rise somewhat faster. Outside the U.S. the principal reason would be the completion of the residual fuel oil substitution process by then, allowing for a greater impact of the increase in transportation fuel demand on total oil demand. In the U.S. a major factor would be the declining rate in automotive fuel efficiency improvement after 1990 which could cause the drop in gasoline demand to level off. Another major factor is the growth in diesel fuel demand for transportation purposes.

Where will the supplies to meet this demand come from? Looking first at non-OPEC supplies, there should be increases in production in several developing countries such as Egypt, Colombia, Mexico, Malaysia, Brazil, India, etc. Collectively the

developing countries' production may increase by 1.5-2.0 million B/D between 1984 and 1990. However, production in two major industrial oil producing countries, the U.K. and the U.S. can be expected to drop significantly during this period. U.K. production is forecast by the government to peak this year at about 2.6 million B/D. By 1990 it could even be below 2 million B/D, according to current forecasts. Increased Norwegian and other North Sea production is expected to offset only about half of this decline.

How much U.S. production will decline is of course in part a function of U.S. tax policy which I will discuss later. But given the steady decline in the U.S. reserve/production ratio from 11 years in 1977 to 10 years in 1980 and 9 years in 1983 and the decline in the oil and gas finding rate of exploratory wells in the U.S., it is unlikely that our current production rate can be maintained much longer, particularly in view of the expected drop in the number of wildcat wells drilled this year. The maintenance of production in the last few years has been a function of the substantial increase in well drilling since 1980. This effort appears to be diminishing, primarily because of declining prices. Thus, the production level in the lower 48 may not be maintained much longer. It may be worth pointing out in this connection that in the two 5-year periods 1970-75 and 1975-80 lower-48 production dropped by 1.2 million B/D in each period. Since 1980 lower-48 production has levelled off at around 7 million B/D. Another production decline of about one million B/D, in the next 5 years is quite possible. In that case our

gross oil imports would be near 7 million B/D in 1990, compared to 5.4 million last year.

Another supply source which may decline between now and 1990 is the Communist countries (incl. China) whose net exports last year amounted to a record 1.9 million B/D, a 7% increase over the previous year. However, last year was also the first in the postwar period to register a decline in Soviet production--0.6%. In the first two months of 1985 the decline was much steeper, though probably due in part to weather conditions. However, 1985 may again show a small overall decline in production. On this basis we assume Communist country net exports are likely to diminish modestly between 1984 and 1990, particularly since the Soviet Union's increased natural gas exports would more than offset the resulting foreign exchange losses.

Our estimated total non-OPEC oil supplies available to the NCW amount to 27.5 million B/D by 1990, slightly less than in 1984. This would require an OPEC crude oil supply of about 20 million B/D in 1990. While this would be a substantial improvement over this year's likely 16.5 million B/D requirement (the group's lowest production level since 1967), it would still leave OPEC with 7.5-8.5 million B/D excess producing capacity. Thus, in 1990 the world will still have a substantial oil surplus and pressure on prices will continue to be mainly downward. Hence our assumption that real oil prices will be lower in 1990 seems reasonable.

Directionally, the situation for OPEC will improve after 1990 because non-OPEC supplies can be expected to decline further while, as we have seen, world oil demand will continue to rise.

By 1995 OPEC's crude output is likely to be in the 22-24 million B/D range. While this would still be significantly below its producing capacity, nearly all excess capacity would be centered in 3 or 4 Persian Gulf countries. This should give these countries a substantially better control over prices than they have now. The result is likely to be an increase in prices in the post-1990 period, at least in line with inflation, probably somewhat faster.

Let me conclude this discussion of the world oil outlook by reiterating that the scenario I have described is not a prediction of actual future supply, demand and prices but one plausible hypothetical path these forces might take. Other plausible scenarios might move along different paths.

My comments on the Treasury's tax proposals are not unrelated to the scenario I have just described. We see real oil prices dropping during the next several years and domestic oil production declining, the two being of course interrelated. The proposed elimination of percentage depletion and expensing of intangible drilling costs would inevitably accelerate the reduction in U.S. crude oil production. The two provisions are effective tax incentives for oil and gas drilling. Whenever an effective incentive is removed, other things being equal, the activity for which it was designed will decline. One can argue whether this is good or bad. One cannot argue that the decline would not occur.

Neither can there be any doubt that less drilling will lead to less production. From 1970 through 1979 when lower-48

production declined at an average annual rate of nearly 250,000 B/D, total oil drilling averaged 15,300 wells annually. During the following 5 years when production remained stable the average annual number of oil wells more than doubled to about 35,000. One can perhaps debate whether the result was worth the effort. But there is no doubt that the increase in the drilling rate arrested the decline in production, thereby contributing to the reduction in our dependency on foreign oil.

The industry has long argued that the tax provisions under question are required to compensate for the inherently high risk in finding oil or gas. The risk is real. 70% of all exploratory wells and 21% of all development wells are dry. In 1983 the direct cost of these wells amounted to \$7.75 billion, equal to 31% of total U.S. drilling and well equipping expenditure.

The Treasury has suggested in its comments that in the absence of the two provisions, the risk element in oil and gas drilling would be reflected in higher wellhead prices. In the long run this may well be true. But, given the continuing global world oil surplus I have referred to earlier, it is unlikely that world oil prices will be sensitive to even a significant U.S. production decline and consequent import increase until the early 1990's.

The Treasury's calculations assume that the total additional tax payments resulting from the abolition of the two provisions will average \$9 billion annually for the period 1987-90, if the abolition goes into effect in 1986. To the extent to which companies react by cutting back on their domestic exploration

expenditures, they could offset part of the impact of the higher tax liability on their earnings for some time. The Treasury's proposed reduction of the marginal tax rate would also have this effect. One likely result of these measures and counter measures would be a shift in capital expenditures from exploratory drilling to oil and gas reserve acquisitions, particularly by the larger oil companies. The question then is whether the resulting reduction in U.S. oil production and consequent rising level of imports is in the national interest, regardless of what it does or does not do to oil company earnings.

It is noteworthy in this connection that the Administration has decided to stop filling the Strategic Petroleum Reserve by the end of the current fiscal year at 489 million barrels, which is substantially below the previously intended target. The decision must assume that our import dependency will not rise substantially. Yet, the Treasury's tax reform proposals, if enacted, make almost sure that it will rise at an accelerated rate.

Some other points regarding the Treasury's tax reform proposal are contained in a letter we sent to Secretary Hodel last December. I would like permission to have a copy of this letter entered into the record of these hearings.

NON-COMMUNIST WORLD OIL SUPPLY/DEMAND, 1983-1990

(Million Barrels Per Day)

	<u>1984</u>	<u>1990 Estimate</u>
<u>Oil Demand</u>		
United States	15.7	16.2
OECD Europe	12.2	12.3
Japan	4.5	4.8
Other OECD	<u>2.2</u>	<u>2.2</u>
Total OECD	34.6	35.5
LDC's	11.6	14.3
Total NCW	46.2	49.8
<u>Oil Supply</u>		
United States	10.4	9.4
Other	<u>15.7</u>	<u>16.9</u>
Total	26.1	26.3
Communist Countries		
Net Exports	1.9	1.3
OPEC: Crude	17.3	20.2
NGL/Cond.	<u>1.4</u>	<u>2.0</u>
	18.7	22.2
Total Supply	46.7	49.8
Stock Change	+0.5	-