SUBJECT: Reappraisal of the Soviet Oil Outlook to 1985

There have been several recent press reports of a major reassessment by the CIA of its earlier views on the Soviet oil outlook. These earlier views were contained in several published CIA documents (The International Energy Situation to 1985, and Prospects for Soviet Oil Production, both published in April 1977; and The World Oil Market in the Years Ahead, published in August 1979).

Recent discussions with Soviet energy experts in the U.S. intelligence community in Washington revealed some of the differences as well as similarities between the expert's latest and earlier assessments of the Soviet oil outlook.

The bottom line of the two 1977 documents was that oil production in the Soviet Union (USSR) would peak at 11.0-11.8 million B/D in 1980 and would drop to 8-10 million B/D by 1985. To offset this decline in production and meet the expected growth in demand the Soviet Bloc's foreign oil trade position would shift from a net export surplus of 0.9 million B/D in 1976 to a net import deficit of 0.3 million B/D by 1980 and 3.5-4.5 million B/D by 1985.

The CIA August 1979 document on the short-term world outlook again predicted that USSR oil production "almost certainly will be in rather sharp decline in the early and mid-1980's. The best the

*USSR plus Communist Eastern Europe including Yugoslavia.
Soviets can probably count on is oil output of 10 million B/D in 1985. If things go poorly, output could fall as low as 8 million B/D." Regarding the foreign oil trade, however, the 1979 document was significantly less pessimistic than the earlier one, predicting Soviet Bloc net exports of 0.4 million B/D in 1980, turning to net imports of 0.7 million B/D by 1982 and "almost 1 million B/D in 1985 (assuming Soviet production of 10 million B/D)."

Officials who had worked on both these studies have since explained unofficially that the published 1977 study presented a 'worst case' scenario rather than the most likely case and that this should probably have been indicated in the text. These officials have also pointed out that the net Soviet import figures in both studies represented the perceived notional gap between domestic supply and demand in the Soviet Bloc which was not necessarily synonymous with actual Soviet import requirements, since the gap could also be filled by a reduction in demand.

The CIA has now taken another look at Soviet oil supply/demand to 1985 but has apparently no immediate plans to publish its findings. From recent discussions with a number of Soviet energy experts in the government intelligence community, it appears the new findings differ significantly from the earlier ones. They are still essentially pessimistic about the outlook for Soviet oil but the magnitude of the expected decline is smaller and occurs later than had been assumed in the previous studies.
Part of this revision reflects of course simply the fact that the earlier forecasts for 1980 have turned out to be wrong. Thus current (1981) official production of 12.2 million B/D (not disputed by the experts) is 400,000 B/D higher than the CIA's high forecast for the presumed peak year 1980. For 1985 the new forecast predicts a production level of 10-11 million B/D. This compares with the official Soviet 5-year Plan (1981-85) target of 12.4-12.9 million B/D of which Soviet planners are said to consider the lower figure the more likely one. Apparently, some intelligence analysts in the U.S. Defense establishment view the 10-11 million B/D as too pessimistic and believe the current 12 million B/D can be approximately maintained through 1985.

There is general agreement among the experts that all Soviet production increases will come from western Siberia. During 1977-78 many Soviet officials expressed very pessimistic views about the west Siberian oil potential. This may have had an impact on U.S. intelligence analysis. More recently, Soviet appraisals of the region's recoverable potential were "much less pessimistic", according to the U.S. analysts.

The problem in western Siberia is that productivity per well is declining rapidly. It was about 640 B/D in 1978, dropped to 500 B/D in 1980 and will average only 265 B/D during the 1981-85 period.
The 5-Year Plan expects to offset this decline by a sharp increase in development drilling. During the last 5 years (1976-80) a total of 28 million meters of development drilling (slightly less than the Plan target) took place in western Siberia. In the new 5-Year Plan this is to be increased to 75 million meters. This would require 25,000 new development wells. Since last year only 2,700 such wells were drilled in western Siberia the analysts seriously doubt that the official target can be reached.

Exploratory drilling in western Siberia which had slacked significantly in the 1970's is being raised. Much of this raise is required merely to keep existing production from dropping too rapidly since recovery rates of existing reserves are declining. They have recently dropped to under 40% and are expected to move gradually towards the U.S. average rate of 32%. Altogether, in the last several years, total Soviet oil producing capacity has declined at an annual rate of 15%, or 2 million B/D per year, largely because of depleting reserves.

Regarding western Siberia's, and the Soviet Union's, largest oil field, Samotlor, its output has not yet started to fall (current production is 3 million B/D) but is expected by the U.S. intelligence experts to do so after 1982. In 1979 when Samotlor produced 2.9 million B/D the CIA forecast that "...a sharp decline in the field's output will set in by 1980-81." In its 1977 report the CIA had estimated that Samotlor was "scheduled to peak at 2.6 million B/D in 1977-78...."
Outside of Siberia the Soviet 5-year Plan projects a 1 million B/D drop by 1985. The U.S. analysts think the drop will by 1.5 million B/D. They see the possibility of significant offshore finds in the Caspian Sea but this might require foreign offshore drilling equipment. In general the experts foresee increasing well depth and declining quality (lower API gravity) for Soviet oil, making this oil both more costly and less valuable.

On the economically and geopolitically paramount question (for Western oil importers) of the Soviet Bloc's future oil trade balance, the current Intelligence assessment is substantially more optimistic than the two previous ones. In 1980 the Soviet Bloc (USSR plus Eastern Europe, including Yugoslavia) had actual net oil exports of 1 million B/D. Of this 100,000 B/D went to Cuba, the other 900,000 B/D to non-Communist countries. It is now expected the net figure will be the same for 1981.* The experts think the Soviet Bloc net export volume will decline. It could be zero by 1983/84 and turn into a net Soviet oil import requirement of 0.5-1.0 million B/D by 1985. However, there seems to be considerable support among the experts for the thesis that the Soviet-Bloc might still be a small net oil exporter in 1985 because lower economic growth (due to manpower and investment constraints), more energy conservation and the priority given by the Soviet government to maintaining a high level of hard currency exchange earnings could combine to achieve such a result.

*The net figure includes some 400,000 B/D of OPEC oil going to East European countries, half of it to Rumania.
It is pointed out in this connection that the Energy/GNP ratio in the USSR has not yet shown the positive changes that have been recorded in most western industrial countries since the mid-1970's. The Soviet government, however, is now putting a high priority on energy conservation. With total Soviet energy production projected to grow at only 1% annually over the next 5 years, substantial improvement in energy conservation will become essential if the USSR's economic growth target is to be achieved or even approached.

Regarding other Soviet energy sources, natural gas production which amounted to 18.9 tcf in 1980 is projected by the intelligence experts to rise to a maximum of 212 tcf by 1985 which would be in line with the lower end of the official 5-year target range of 21.2-22.6 tcf for 1985. Coal production which has fallen for the last two years will increase very slightly (about 0.5% annually to 1985) and nuclear power will rise from 1% to 3% of total Soviet energy supply over the next 5 years, according to the U.S. intelligence experts.

In summary, then, if the new U.S. Intelligence assessment of the Soviet energy balance is correct, the Soviet Bloc will not be an important factor in non-Communist oil supply and demand for at least the first half of the 1980's. This represents a significant reappraisal of the view propounded by the CIA on this subject since 1977.

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This memorandum should be treated confidentially.