

## Energy Insider by William Engdahl

### Soviets face new oil crisis

*The cost of producing exportable gas and oil is soaring, while the prices they receive in the West are collapsing.*

**R**ussia is now facing a severe crisis in energy production. So far it has remained beneath the surface, as total oil and gas output holds at 1984 peak levels. But, according to Western European experts, in the coming two to five years, Moscow will be in a devastating energy "scissors crisis."

During the 1970s, "boom years" of soaring Western energy prices, Moscow made a mammoth commitment of its scarce industrial resources to exploration and development of its oil and gas reserves. The result was an impressive 36% increase in crude oil production from 1973 to 1981, making Russia the world's largest single producer of oil at 12.5 million barrels per day—significantly larger than Saudi Arabia. Pipelines stretching 2,780 miles were extended to Western Europe from the vast Urengoi field in the Arctic Circle, to annually pump some 30 billion cubic feet of Siberian natural gas to West German, French, and Italian industry and homes, built on credits from German and French banks.

The cost of that mammoth project alone was estimated to far exceed \$10 billion. But it seemed worth the cost. By 1981 world oil prices had peaked at between \$36-40/barrel and Western Europe needed natural gas. By 1982, Moscow reported that Western oil and gas sales had gained them \$45 billion a year, and were increasing at a rate of 15% annually. Fully 80% of Russian hard currency earnings was coming from the export of oil and gas.

The problem is that, by 1988, fully 80% of Soviet hard currency revenue, by best Western estimates, is still de-

rived from these sales, but the earnings are declining. This is forcing sharp cuts in imports of Western machinery and industrial goods, which are increasingly needed to offset staggering technical and infrastructure problems in maintaining the oil and gas flows. It was already the case by the mid-1980's that Moscow was dumping an estimated 2 million barrels a day onto already surfeited Western markets, to capture and hold market share and revenue amid falling prices.

When Saudi Arabia detonated the reverse "oil shock" of 1986, by flooding the world with its oil, Moscow was hit with a devastating blow it could ill afford. As early as mid-1984, according to a report by the Swiss oil consulting firm Petroconsultants, the Soviet Ministry of Petroleum had initiated a crash program to remedy problems in oil production in Tyumen, while output from the Komi Autonomous Republic field was half that planned. The collapse of export earnings from oil and gas severely restricted the ability to finance needed infrastructure and new exploration.

The results have just begun to show. Over the next several years, they should become crippling, further encouraging political and likely military reactions from Moscow.

The entire 1970s long-term investment strategy of the Soviet Petroleum Ministry was based on expectation of ever-increasing revenues from exports. Costs were considerable, but so, too, appeared the benefits. Plans were based on expectation of continuing the rate of discovery of huge accessible oil and gas fields equal to the

giant fields in Eastern Siberia developed in the 1970s.

The problem for Moscow is that reality did not oblige the planners. New fields in Western Siberia and the North Caspian Basin have been developed at skyrocketing costs, according to Western European petroleum engineers familiar with the Soviet industry. All fields developed since the mid-1970s have been of small to medium size, necessitating the drilling of many more wells for the same volume of oil. And the new wells have also been deeper and more difficult to develop.

The result is that the marginal per barrel cost of the oil now replacing the older depleted reservoirs has soared. Conservative estimates are that drilling costs have increased fully 100% per well drilled since the end of the 1970s.

The annual output of the new North Caspian Sea field is approximately one-third that of the older Siberian reservoir. But worse, while Western Siberian oil lies at a relatively accessible average depth of 7,500 feet, that of the Caspian is estimated at 15,000 feet or deeper. Costs of drilling, owing to the enormous pressure and temperature problems and snapping of drill pipes, increase exponentially with depth.

The new fields also have many associated problems, such as gas intrusion, which often cause deadly explosions in the wells.

So, the Russian non-military economy is simply not able to produce needed equipment, and hard currency to import it is disappearing, as Western oil prices have plummeted from \$40 per barrel seven years ago, to \$12 this September.

In this situation, it is no wonder that Moscow is dramatically increasing its menacing presence in the Persian Gulf, especially in Iran.