Energy Insider by William Engdahl

Russia wants Western oil technology

Soviet oil production is starved of investments and rapidly declining, but changes under way could boost production.

The difficulties of the world's largest petroleum producing country, the Soviet Union, have received a lot of high-profile coverage in Western media. But there are some aspects of that situation which should also be reckoned into the calculus.

First the gloom. The Soviet oil sector is a mess. Partial decontrol of the state-run oil supply and equipment industries more than a year ago allowed the factories to sell a major share of output to whomever they chose, at what price they could get. But the price the state allowed the State Petroleum Ministry to pay its vendors was fixed by Moscow, as was the price of its oil. Supplies to the oil sector in recent months have become chaotic as a result. Poor housing for workers in the severe living conditions in the Siberian fields, which contain some 60% of current Soviet production, have created labor and morale problems. Forest fires sweeping the huge Tyumen oil fields didn't help matters any. Old wells have started to deplete output, while new fields are far smaller and deeper than the giant fields of Tyumen, which absorbed the enormous Soviet oil investment gamble of the past 20 years.

According to official Soviet data, Soviet crude oil production fell 2.5% in 1989 to 12.2 million barrels per day (mbd), still a far cry above the 9.2 mbd rate in the U.S. that year, but a worrisome trend since oil and gas exports account for some 66-70% of all U.S.S.R. hard currency earnings. In recent days, Moscow has notified Czechoslovakia, Hungary, Poland, and other former Eastern European clients, that they must pay in dollars or find other crude, leading Western media to expect the worst.

Soviet oil has problems which make one's hair stand on end. Pipelines rushed into operation in the 1980s under pressure to meet the Five-Year Plan or reap Western price earnings, have predictably begun exploding or otherwise collapsing, most notable and tragic being the June 1989 Urals rail disaster, when a natural gas pipeline exploded as two trains were passing, killing 190.

However, some little-noticed changes could create a "revolution" in U.S.S.R. energy supply in a far shorter time than many Western commentators realize.

The Soviet Union holds what are reckoned to be some of the world's largest pools of untapped petroleum, known in the industry as "elephants," at least 77 billion barrels, according to one U.S. geological calculation. The problem is to get it out of the ground in the most efficient and least costly way. Moscow knows that Western oil multinationals have something they need—state of the art oil geophysics and production technology.

In late May, the Soviet Ministry of Oil and Gas Industry lifted a decades-long policy and gave France's Elf Aquitaine sole right to explore for oil on some 13,000 square miles of promising unexplored area in Kazakhstan north of the Caspian Sea. Twelve days later, Chevron announced it had signed a contract to study feasibility of co-development of the huge Tenghiz field, "probably the single largest field discovered in the last decade," according to Chevron's Richard Matzke, perhaps holding as much as 25 billion barrels of oil. That's two-and-a-half times the size of Alaska's entire Prudhoe Bay field.

Under terms of the Chevron-Moscow Protocol of Intentions, the study could lead to a joint 50-50 venture to develop the Tenghiz field with the Soviet partner firm, Tengizneftegaz, on 23,140 square kilometers in the northeast Caspian Sea region. Depending on how quickly things proceed, Western experts estimate oil production from the new development could begin flowing in less than two years, a welcome prospect for beleaguered Russian energy supplies.

But Moscow isn't putting all its eggs in Chevron's basket. Royal Dutch Shell recently sent a high-level technical team to discuss major joint venture deals, and British Petroleum is in serious talks as well as Amoco. Further, in April of this year, the Soviets asked for Japanese help in developing offshore fields off the coast of the Soviet island of Sakhalin north of Japan. That project was first signed in 1974 but was scrapped because of the ensuing world oil "glut" and political frictions between Moscow and Tokyo.

The Russians are now dangling the huge untapped oil reservoirs at such places as Tenghiz and demanding that Western joint venture partners show their "good faith" by helping to solve considerable problems in maintaining production in older fields, known as "enhanced recovery." Until very recently, the Russians simply paid little heed to such problems. Now, in a joint venture between Shell and Canada's Fracmaster Corp., Tyumen fields run by Uganskneftigaz have begun to increase production levels as a result of the advanced enhanced recovery technology.