Other important industries not making the headlines, such as paperboard and aluminum, turned decidedly downward as the 1981 year drew to a close. During the three months ending in November 1981, aluminum output was running more than 10 percent below the 1980 depressed levels. But new orders for aluminum showed an even worse picture, falling 31 percent below year earlier levels. And in the paperboard industry, despite a 6.5 decline in output in December, compared to the year before, inventories at box plants in November were 26 percent above year earlier levels.

Unemployment

Although final industrial production figures for December are not in as of this writing, the explosion in unemployment for that month indicates that it was dismal indeed. Unemployment shot up to 9.44 million in December, from a level of 9 million. In fact, hidden in the unemployment numbers from the Department of Labor (DOL), is the fact that the size of the labor force on non-agricultural payrolls fell from 98 million to 97.2 million, a drop of 800,000 and far larger than the officially registered increase of 458,000 in unemployment for the month.

The DOL's Bureau of Labor Statistics' attempts to cover itself on this point by reporting that there was a rise of 150,000 unemployed workers in December, who allegedly told the Department of Labor that they were "too discouraged" to look for a job. The DOL, then claimed that those "too discouraged to look for work" were no longer in the labor force.

At the same time, there was a striking 0.8 percent increase in the jobless rate for adult men, to 8.0 percent in December, with the category of blue-collar workers even worse hit with an unemployment rate rising to 12.9 percent in December.

Finally, for the first 10 days of January, domestic auto sales of the Big Three automakers plunged 20.3 percent below last year's bombed-out levels.

Some people are still saying that the worst is over. Many of them foresee a consumer-based recovery, because consumer purchases account for two-thirds of all purchases in the U.S. economy. These pundits should consider that the consumer spending level for December rose a scant 0.2 percent; and for those who think that it will be a capital spending-led recovery, should consider the fact that railroad equipment purchases fell 34 percent in 1981, while the construction of new plant and equipment fell in real terms in 1981, and will not rise with long-term bond rates heading upward again.

Without consumer or capital spending, the economy is left with the prospect that the moment that interest rate goes higher, the economy gets even worse. For the short-term, the rally in the bond market, indicated by the fall in 91-day T-bill rates, is definitely over.

Siberian pipeline: model for growth

by Renée Sigerson

Sometime between 1983 and 1985, a landmark will be reached in world economic events. One day in those years, natural gas from deposits in the Yamal region of western Siberia in the Soviet Union will begin to be pumped along a 3,600-mile pipeline, to factories and power generating stations in 12 nations in Western Europe. In discussions of the project, called the Yamal-Urengoi pipeline, over the years, Soviet officials have proudly noted that the pipeline is "the largest project in recorded history."

The primary importance of the pipeline lies in its ambitious scope, and the way that its construction is drawing upon the industrial-technological capabilities of countries across Europe, as well as Japan. At this juncture of world developments, when the onset of a global economic depression has already triggered mass unemployment in every Western nation, the pipeline provides a model of the kind of economic cooperation and development programs that would reverse the depression.

It is from this standpoint that the opposition of the Reagan administration to the construction of the pipeline needs to be evaluated. President Reagan, with advice from Secretary of State Alexander Haig, has undertaken an aggressive action aimed at postponing construction of the pipeline, if not actually halting it. On Jan. 10, the White House announced it is preventing General Electric Company from exporting a turbine component to firms in West Germany and Italy, which need the component for their building and for export of 41 compressor stations which are to be constructed to pump the gas. Economics Minister Otto von Lambsdorff recently told the German cabinet that Bonn will do nothing to hinder West German companies from sidestepping the effect of U.S. sanctions on the gas deal, so long as secondary suppliers only are involved and not "prime suppliers"—a direct reference to the GE component. It remains to be seen which firm abroad is prepared to produce the compressor part.

The White House explained the move as part of its sanctions policy against the U.S.S.R. in connection with the imposition of martial law in Poland. On other occasions, Reagan personally attacked the pipeline for being a channel through which the Western countries participating in its construction are indirectly helping develop the Soviet military.

The history of Yamal-Urengoi, however, which goes back to the 1960s, documents that U.S. opposition to the pipeline and related infrastructural development in Siberia really has little to do with the current crisis in Poland—nor really with Soviet military development narrowly viewed. Reagan's misguided opposition to the pipeline is rather a result of the profound challenge which realization of the pipeline poses to the American economy—a challenge which has been perceived by influential forces around Washington since the 1960s when the pipeline was first announced. To the degree that Washington has failed to take up this challenge, Washington influentials are understandably fearful of the Soviet and European commitment to complete the deal.

The challenge posed by the pipeline was precisely identified in June 1980 in an article by Rand Corporation analyst Thane Gustafson in *Science* magazine. Discussing Yamal-Urengoi, Gustafson compared ongoing Soviet projects for waterway development in the region of Yamal to the North American waterway blueprint called NAWAPA. In terms of its geological constraints and potential, the dry regions of the Western United States, Gustafson noted, pose the same scale of challenge to engineering knowledge as the Arctic regions of the Soviet Union. As early as the beginning of the 1960s, the Soviets took up this challenge and began to develop Siberia economically, including ambitious waterway development. The United States canceled NAWAPA.

Moreover, even prior to approaching Western European companies with offers of helping them to develop Siberia in the early 1970s, the Soviets first negotiated with U.S. firms—including Tenneco and Texas Eastern Transmission—on equipment imports for the Urengoi field. In 1974, this U.S.-Soviet cooperation was killed by the infamous Jackson-Vanik amendment, which imposed sanctions on U.S.-Soviet trade.

The current consortium of Western European corporations involved in helping the Soviets to build Yamal-Urengoi was put together beginning in 1978. These firms include the utility companies Ruhrgas (Germany); Gaz de France; ENI (Italy); Mineralölverwaltung (Austria); and the engineering firm AEG, and many others. Financing for the deal has been arranged by a grouping of 10 European banks, led by West Germany's Deutsche Bank.

In May of 1978, West German Chancellor Schmidt and Soviet party chief Brezhnev signed a 25-year economic cooperation accord, which defines the principle that through economic development, world peace can be secured.

For Western Europe, the pipeline constitutes at this point a crucial line of defense against a seriously worsening economic depression. Thousands of jobs across the continent, as well as in Japan, are being secured by the exports which the construction project has generated.

The equipment requirements, for example, include 4 to 5 million tons of steel pipe and 41 compressor stations in the first phase. In the second phase, to begin in 1986 when the Soviets will expand their internal gas pipeline network, 232 further compressor stations will have to be built, most of which the Soviets will order from Western firms.

Beginning this year, West Germany and Japan will export 1 to 1.5 million tons annually of steel pipe to the U.S.S.R., part of the agreement. Since Siberian gas development began in the early 1970s, the Soviets have been able to supply 23.5 billion cubic meters of gas annually to Western Europe. By 1990, these deliveries will rise to 30 percent of Western Europe's total natural gas requirement, or 53 billion cubic meters of gas.

Washington officials have often argued that Western Europe could acquire the same level of new natural gas deliveries from Norway and Alaska. The fraud in this argument is underlined however by the complete lack of commitment in the United States to generating the financial and capital equipment outlays which would bring such Western gas sources to fruition.

For example, while the Soviets are planning to borrow a total of $15 billion from Western sources for completion of its pipeline network, the Soviets themselves are allocating $30 billion in expenditures over the coming years to financing of the infrastructural development needed to make the pipeline work. These expenditures do not even include Soviet financial and resource commitment to such centers of research as the Novosibirsk university center in Siberia, whose physicists and engineers were the original braintrust behind Yamal-Urengoi.

An Eastern complement to the pipeline, the Baikal-Amur extension of the Trans-Siberian railroad, is expected to bring an economic windfall to Japan. A country entirely dependent on imports of raw materials, Japan will be linked by the railway to Siberia's unlimited natural resource wealth.

When the first phase of Yamal-Urengoi is completed in 1986, the U.S.S.R. will also become, interestingly, a major financial power. Expected Soviet foreign exchange earnings from the natural gas sales are expected to range from $10 to $15 billion annually. With these earnings, the Soviets will have no trouble in repaying the loans taken out to finance Western imports. In addition, these revenues, within a few short years, will give the Soviets substantial financial leeway to completely reorganize the $80 billion worth of debt owed by East bloc countries to Western banks.