September 1, 1978

Export Alaskan Oil?

A long parade of witnesses, including California's governor, testified before a Congressional subcommittee last week in San Francisco, regarding possible means of overcoming the West Coast's "glut" of Alaskan oil. (That so-called "glut" refers to a surplus of Alaskan crude-oil production relative to the current requirements of West Coast refineries.) A number of witnesses argued for lifting the legal ban against exporting Alaskan North Slope oil, so that it could earn precious foreign exchange in Japan. They also claimed that the present export ban frustrates the goal of energy self-sufficiency – and national security – by retarding the further development of Alaska's oil resources. But the case is more complex than would appear from that argument.

Energy self-sufficiency implies that domestic sources should supply as much of a given level of domestic consumption as possible. But shipping Alaskan oil that is surplus to West Coast needs overseas, rather than to other areas of the U.S. where it is needed, reduces the amount of domestically-produced supplies available to meet U.S. consumption. This proposal consequently should be seen, not as a means of reducing the nation's dependence on foreign oil, but rather as an expedient method of dealing with the transportation problems and higher costs involved in shipping Alaskan oil by tanker around the Panama Canal to Eastern U.S. markets. Exporting this oil to Japan under a swap arrangement would have one favorable result – a reduction in transportation costs to the East and Gulf Coasts – as Japan-bound OPEC oil is diverted there in exchange for the Alaskan oil shipped to Japan. It would thus provide for a more efficient allocation of oil worldwide by reducing the transportation costs involved in supplying U.S. and Japanese refineries.

The export of Alaskan oil does not imply a threat to the OPEC price structure, as some proponents have argued. The recent increase in production from Alaskan and North Sea fields has boosted non-OPEC world oil production, and to that extent has temporarily reduced the demand for OPEC oil and thereby undermined the cartel's posted prices. But we should not expect any net impact on world oil prices if Alaskan exports were merely to be exchanged for a corresponding amount of OPEC oil diverted to the East and Gulf Coasts.

Import problem

In terms of the national goal of increased energy self-sufficiency, Alaskan oil should be analyzed within the context of the nation's overall oil-import situation, which had worsened considerably in the period before North Slope oil finally began to flow. Despite the nearly five-fold increase in world oil prices over the 1972-77 period, the U.S. by late 1977 had made no real progress in slowing the import flow. On the contrary, imports of crude and refined products almost doubled over that period, to a record high of 8.7 million barrels a day. Over the five-year period, imported oil rose from 29 to 47 percent of the nation's

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total petroleum requirements, and OPEC oil jumped from 20 to 42 percent of total consumption. Between 1972 and 1977, oil imports in value terms jumped from $5 billion to $45 billion, and thus accounted for a major share of the nation's deteriorating foreign-trade balance.

The rise in import volume reflected the growing disparity between domestic consumption and production. Between 1972 and 1977, U.S. consumption of refined petroleum products rose by 12 percent, while domestic crude production dropped by 13 percent. The declining production trend was not halted until Prudhoe Bay supplies came on stream late last year.

Alaska's contribution

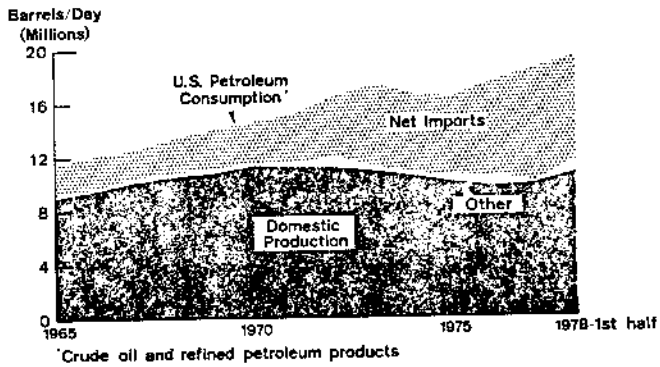
North Slope oil at that point began to displace some foreign crude of comparable sulfur content and gravity, not only in the West but in other areas of the nation. Imports of crude and refined products fell 13 percent, both in volume and value terms, between the first half of 1977 and the first half of 1978. This displacement has occurred because North Slope producers have priced their crude competitively with comparable-quality foreign oil on a delivered-cost basis, and because refineries purchasing North Slope crude have been granted the same entitlement benefits for Alaskan as for foreign oil.

Nonetheless, the entire North Slope production – 1.1 million barrels/day – offsets only a modest amount of the total U.S. oil import flow, which had reached an annual high of 8.7 million barrels/day last year. Moreover, North Slope oil will curb the import trend only temporarily. As domestic consumption continues to grow, dependence on foreign oil will again increase, in the absence of an unlooked-for upsurge in total domestic production, emanating from Prudhoe Bay or other U.S. fields.

Why the glut?

But if all this is true, why is there a "glut" today? The answer is that there is no glut in terms of the nation's total oil requirements, but only in terms of Western refinery consumption. At present consumption rates, West Coast (District 5) refineries are able to absorb only about 550,000 barrels/day of North Slope crude, after allowing for supplies from other Western fields, the refineries' product mix, and their technical capability for processing high-sulphur Alaskan crude. Thus, roughly half of the Prudhoe Bay output is surplus to the West Coast's needs. But the important point is that this is not a nationwide surplus – otherwise the U.S. would not be so heavily dependent on foreign imports. Rather, the so-called "glut" is a localized problem arising from the technical and output characteristics of West Coast refineries – and from the lack of the necessary pipelines to transport the West Coast surplus most efficiently (i.e., at lowest cost) to deficit areas of the nation.

While Alaskan oil is surplus to the needs of Western refineries, refineries in the Northern Tier states bordering Canada (such as Montana, North Dakota and Minnesota) face the prospect of a serious crude-oil shortage. Some



of these refineries are almost wholly dependent upon Canadian crude, which the Canadian government plans to stop exporting by 1982 in order to meet that nation's own requirements. North Slope crude could help make up for that shortfall if the pipeline proposed to carry Alaskan oil to that region were in place.

Where to ship?

At the present time, however, the only real alternative is for producers to ship the surplus Alaskan oil by tanker to the Gulf and East Coasts via the Panama Canal – the approach that is currently being followed. Shipping the oil to Japan or other markets overseas is forbidden under terms of the legislation authorizing the construction of the Alaskan Pipeline, but that alternative remains attractive to North Slope producers. If the ban were lifted, exchange agreements could be made by Alaskan producers and Japanese refineries, with North Slope oil being exported to Japan and Japan-bound crude from the Middle East being diverted to the Gulf and East Coasts.

This type of swap arrangement would help reduce our large trade deficit with Japan, and also result in some transportation cost savings on the part of producers, which might be passed on to refiners and ultimately to consumers in the Eastern United States. However, it would not improve our overall trade position, nor would it reduce the nation's dependence on foreign oil. For every barrel of Alaskan oil shipped to Japan instead of around the Panama Canal, an equivalent amount of Middle Eastern oil would have to be imported. In fact, it would conflict with the Administration's goal of supply security, which would call for the greatest possible substitution of Alaskan for imported oil in domestic markets. Partly for that reason, and partly to encourage the construction of domestic pipelines for carrying Alaskan oil, the Administration has opposed the removal of the legal ban on Alaskan crude exports as well as any moves to shut-in capacity at Western fields.

Indeed, a number of proposed pipelines that would link West Coast ports with refineries further East are now under consideration by various Federal and state regulatory agencies. The most likely possibilities include a Northern Tier pipeline extending from Port Angeles, Washington to Clearbrook, Minnesota, and a SOHIO pipeline extending from Long Beach, California to Midland, Texas. Completion of one or both of those pipelines would provide a lower cost transportation alternative than shipments by tanker around the Panama Canal. Also, by providing a higher return at the wellhead, their completion might also encourage North Slope producers to make the investments required to raise production at the existing Prudhoe Bay reserve to its full potential of 1.6 million barrels/day – and perhaps even spur further exploratory drilling. But in the absence of some Federal or state decision – either to approve the construction of proposed pipelines or to permit Alaskan oil exports to Japan – North Slope producers will continue to be faced with the highest cost transportation alternative, thus reducing their net return at the wellhead.

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