Cuban-Mexican Oil Cooperation: Loosening the Tie that Binds?

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Editor's Note: Among the papers awarded prizes in the essay competitions sponsored by various of the Agency's Learned Organizations, there are those which, we feel, merit wider dissemination within the NSA community than they might otherwise receive. We are therefore pleased to publish this paper which was awarded Second Prize in the 1983 Essay Contest sponsored by the International Affairs Institute. It aptly demonstrates the scope and depth of knowledge and interests our analysts bring to bear in their daily activities.

I. INTRODUCTION

Petroleum, the finite natural resource upon which most modern industrial societies depend, may well constitute the strongest link between Havana and Moscow. Cuba, which is struggling to become a developed, industrial nation, relies entirely on imports of petroleum to meet its domestic consumption and industrial needs, and these imports are supplied almost exclusively by the Soviet Union. The functioning of the Cuban economy revolves around imported petroleum and petroleum products and hence is bound in a totally dependent relationship with the USSR. No other viable supply options exist, and dependency will continue unless Cuba can achieve energy self-sufficiency. This is not to say that discoveries of indigenous petroleum deposits would transform revolutionary socialist Cuba into a thriving capitalist democracy, but such a discovery could weaken the tie that binds Fidel Castro's island to the Soviet Union.

Cuba currently depends on the USSR to supply 98 percent of its crude oil needs. Although countries such as Libya, Mexico and Iraq appear willing to export oil to Cuba, none will do so at the concessionary prices charged by the Soviet Union. Without Soviet subsidies, Cuba could not maintain its current import levels at international market prices – which are more than double those that Moscow imposes under a complex system of price subsidies and barter arrangements. Cuba's estimated 1981 hard currency export earnings, for example, would have financed only one-half of the nation's petroleum consumption at the average OPEC[1] posted price.

Cuba has no adequate domestic source of power generation. Its coal deposits are minimal, and the island's hydroelectric potential is negligible. The nation's only significant nonpetroleum energy source, bagasse – a by-product of sugar cane

[1] Organization of Petroleum Exporting Countries. A 13-member cartel of oil-producing nations.

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processing [specifically, the crushed juiceless remains of sugar cane as it comes from the mill, often used as fuel in the mill] – provides approximately 18 percent of Cuba's energy needs. Due to its bulk, however, bagasse's only feasible use is in sugar-harvesting activities.

Clearly Cuba's need for petroleum imports will not diminish in the near future. Even alternate energy sources such as nuclear power are not expected to have a noticeable impact on Cuban energy needs for the remainder of this century. The question, then, is: could alternative supplies of petroleum – preferably domestic supplies – be expected to help Havana break the Soviet Union's stranglehold on Cuba's economy? If so, is Fidel Castro pursuing a course which could lead to the acquisition of petroleum from other-than-Soviet sources?

II. BACKGROUND

Since petroleum was first struck in 1954, Cuba has produced oil in limited quantity. Early estimates of Cuba's oil-producing potential were optimistic, but recent domestic production, estimated at less than 200,000 tons per year (tpy) in 1976,[2] is far below the country's fuel requirements. The major share of Cuba's oil production comes from some twenty to twenty-five producing wells in western Camaguey Province. This region accounts for approximately 60 percent of domestically pumped crude oil, with the remaining 40 percent located in small fields along Cuba's northern coast. The oil refining industry in Cuba, which dates back to the 1941-58 period of heavy U.S. investment, has a refining capacity much greater than the country's productive capacity, and depends heavily on imported petroleum.

The above petroleum production figure (200,000 tpy) must be considered as a rough estimate only, for, as the U.S. Department of the Interior's Bureau of Mines asserts, "published information (on Cuban productive capacity) is conflicting."[3] Obviously, statistics provided by the Cuban government – a typically Soviet-style closed system – cannot be accepted at face value. Government officials have a vested interest in portraying the economic health of the young socialist republic as further anticapitalist propaganda. Thus, lack of reliable data precludes precise calculations on Cuba's productive capacity in the oil sector. What little is known, however, confirms that domestic oil production is grossly insufficient to meet Cuba's energy needs. Production levels have increased somewhat in recent years, but unless improved recovery rates are achieved, and/or new oil deposits are discovered, fuel requirements will have to be met through continued imports.

[2] Jan Knippers Black, et al., *Area Handbook for Cuba*, 2d ed. (Washington, D.C.: American University, Foreign Area Studies Division, 1976), p. 410.

[3] Orlando Martino, *Mineral Industries of Latin America*, United States Department of the Interior (Washington, D.C.: Bureau of Mines, 1981), p. 43.

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III. PETROLEUM SUPPLIES: THE SOVIET CONNECTION

Despite the heavy use of bagasse in the sugar-processing cycle, petroleum and petroleum products play the major roles in fueling the Cuban economy. Petroleum is the energy source used in the generation of electricity, the transportation sector, and all nonsugar industrial activities. It also plays a significant role in the sugar industry. Former Cuban President Osvaldo Dorticós captured the essentiality of petroleum to the Cuban economy in these statements:

> Without petroleum there is no sugar.... Without petroleum there is no transportation;... sugar cane cannot be transported because there would be no gasoline for trucks, for agricultural equipment, and [for] sugar cane lifters.... Our economy begins with petroleum, continues with electricity and goes on from there.... Without petroleum there is no economy. There is nothing left.... The country would be paralyzed immediately.[4]

From almost its beginning, the Republic of Cuba has relied on the import of petroleum to satisfy domestic requirements. Prior to Castro's revolution, and up until 1960, much of it was obtained by the international oil companies (Texaco, Esso, and Royal-Dutch Shell) which operated refineries in Cuba, from their affiliates. Under a bilateral trade and payments agreement signed by Cuba and the Soviet Union in early 1960, however, Havana began to receive petroleum, foodstuffs, and industrial goods from Moscow in exchange for Cuban sugar.

The first shipment of Soviet crude arrived in April 1960 for processing at the Cabaiguán refinery.[5] Shortly after its arrival, the international oil companies were informed by Cuban officials that they would each have to purchase and process Soviet crude for the remainder of 1960 (and presumably, from thence forward). When the internationals refused, the Cuban government seized the refineries – a move which sped up the chain of events culminating in the breaking of diplomatic and consular relations between the United States and Cuba in 1961. At that point, the Soviet Union stepped in to become Cuba's primary trade partner, and for all practical purposes, its sole supplier of petroleum and petroleum products.

As in the 1960 agreement, subsequent trade protocols between the USSR and Cuba focused sharply on the sugar-petroleum exchange. A study conducted by Jorge Pérez-López analyzing Cuban-Soviet terms of trade, with emphasis on the sugar-petroleum exchange,[6] finds that, during the period 1960–74, terms of trade were generally favorable to Cuba. Due to reductions in the cost of Cuban imports of petroleum and petroleum products, and favorable fixed prices for Cuban exports of sugar to the Soviet Union, Cuba – on the whole – benefited from the exchange. Specifically during the period 1973–74 "Cuban-Soviet terms of trade with

[4] Osvaldo Dorticós, as quoted in Jorge F. Pérez-López, "Sugar and Petroleum in Cuban-Soviet Terms of Trade," *Cuba in the World*, eds., Cole Blasier and Carmelo Mesa-Lago (Pittsburgh: University of Pittsburgh Press, 1979), p. 275.

[5] A small refinery operated by the Instituto Cubano del Petróleo, S.A.

[6] Pérez-López, op. cit.

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reference to sugar and petroleum and petroleum products were strongly in favor of Cuba. . .as a result of booming export prices for sugar and modest rises in the import price of liquid fuels. Upward adjustments in the export price of Soviet crude oil as of January 1975 reversed this trend. . . ."[7] For it was in January 1975, upon renewal of trade agreements with its COMECON[8] partners, that the USSR revised its petroleum prices upward to reflect trends in the world oil market.

Thus, the sharp increase in world oil prices occasioned by OPEC's geometric price hikes in 1974 affected not only Free-World markets but also heavily subsidized barter arrangements between socialist nations. Soviet crude oil prices, pegged to reflect changes in OPEC posted prices, rose sharply in the mid-70s, at precisely the same time world sugar prices plummeted. These factors led to an increase in the degree to which the Soviet Union had to subsidize prices in Cuba's favor in the two countries' trade relations across-the-board. Using price subsidies as its principal method of dispensing economic assistance to the island nation from 1974 onward, the USSR – in 1979, for example – paid Cuba five times the world price for sugar; slightly higher than the world price for nickel, another of Cuba's major exports; and "supplied virtually all of Cuba's 200,000 barrels per day (b/d) petroleum needs either directly (or indirectly through Venezuela) at $12.80 per barrel, about one-third the OPEC price of $35 per barrel."[9]

The dramatic impact of these trade price subsidies is reflected in Cuba's 1978 global trade deficit of a mere $187 million – which without Soviet subsidies would have registered $2.8 billion. The net effect of Soviet price subsidies, however, goes beyond figures. Cuban dependence on Soviet aid, most particularly economic aid as embodied in petroleum subsidies, has become overwhelming. The strongest link in the economic chain that binds Fidel to Moscow is petroleum.

Clearly the financial burden that would accrue if Cuba were to replace Soviet oil with free-market imports is insupportable. Using 1980 oil imports as an example, Theriot points out that "replacing. . .Soviet deliveries with free market oil at the current OPEC price of $35 a barrel would cost [Cuba] $2.84 billion, [which is] $1.8 billion more than the cost from the Soviets and $700 million more than Cuba's estimated record high 1980 hard currency export earnings."[10]

[7] Pérez-López, "Sugar and Petroleum in Cuban-Soviet Terms of Trade," p. 293.

[8] Council of Mutual Economic Assistance (CMEA). Composed of the USSR, its East European satellites, and other nation

[9] Lawrence H. Theriot, "Cuba Faces the Economic Realities of the 1980's," U.S. Department of Commerce, International Trade Administration, Office of East-West Policy and Planning, December 1981, p. 15.

[10] Ibid., p. 28.s under Soviet influence, such as Cuba.

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IV. COOPERATION WITH MEXICO: OPENING THE DOOR TO ECONOMIC INDEPENDENCE?

As early as 1975, press sources began reporting growing cooperation in the oil sector between Cuba and Mexico. Preliminary indications speculated on a "triangular trade" agreement, whereby Mexico would supply oil to Cuba, the Soviet Union would pay Mexico market rates for the crude, and Moscow would supply oil to Spain – one of Mexico's crude oil customers. This arrangement would serve to cut transportation costs of the crude, thus benefiting all four participants to the agreement. Similar discussions for regional supplies to Cuba were reportedly undertaken with Venezuela.[11] The level of interest in such an arrangement has fluctuated over the years, but even if such a "swap deal" were permanently implemented, it would not effectively reduce Cuban dependence on Soviet oil price subsidies since Moscow would still be "footing the bill."

What is of considerably more interest is the prospect for increased domestic oil production. Cuba has long maintained the existence of significant oil resources offshore. These claims have never been substantiated, and "U.S. industry sources generally describe the prospects as marginal."[12] Mexico's oil company, PEMEX,[13] apparently does not concur in the U.S. assessment. In 1981 PEMEX announced plans to begin offshore oil exploration in Cuban waters. In view of PEMEX's offshore exploration and exploitation successes in the Bay of Campeche, its interest in Cuban offshore oil potential merits attention. Mexico possesses the technological expertise in petroleum matters which Cuba lacks. It would appear doubtful that PEMEX would proceed with expensive and time-consuming exploration efforts merely on the basis of Cuban claims.

Cuba's geographic proximity to the abundant Mexican offshore oil reserves in the Bay of Campeche, and its general location vis-a-vis U.S. and Mexican oil successes in the Gulf of Mexico and Venezuelan petroleum deposits in the Caribbean area, certainly must be factored into any assessment of its overall oil potential.

It is certain that the political gains for Mexico – if any exist – in assisting joint exploration efforts off the Cuban coast could not, at least in the short term, offset the economic expense of such a venture. Mexico currently faces economic problems of crisis proportions – as witnessed by an $80–90 billion international debt[14] – and it is unlikely to be willing to allocate scarce financial and technological resources in search of *unpromising* prospects for Cuban oil. It can be inferred, then, that PEMEX does not consider the prospects of finding offshore oil deposits near Cuba "unpromising." In fact, the Mexican newspaper *Excelsior* reported in May 1981 that PEMEX had discovered substantial oil reserves off the north coast of Cuba, at a depth of 3,000 meters, and believed the deposits to be "part of the same formation responsible for Mexico's offshore oil fields." Although

[11] *New York Times*, 26 March 1975, p. 67, col. 2, and *Los Angeles Times*, 28 May 1978, p. 1, col. 5.

[12] Theriot, p. 29.

[13] Petróleos Mexicanos. The Mexican state-owned oil monopoly.

[14] *Washington Post*, 15 May 1983, p. F1, col. 1.

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these "discoveries" are still unconfirmed, PEMEX's continued interest in Cuban offshore exploration lends credence to assessments that Cuba has a creditable oil-producing potential.

V. OUTLOOK

Cuba's potential for achieving energy self-sufficiency through domestic oil production has, of course, yet to be documented. In view of current activities and the interest exhibited by such a prestigious oil-producing nation as Mexico, however, increased Cuban oil production is not as illusory a concept as once was thought. If significant discoveries are made, what implications will they have – primarily for Cuba's economic independence, but also on a strategic level – for Cuba's relations with the Soviet Union and the Western world?

It must first be noted that dependence on the Soviet Union for petroleum supplies is not the only malady afflicting the Cuban economy. Tied closely to it, as explained earlier, is Cuban dependence on Moscow as a market for Cuban sugar exports. Reduction or elimination of Soviet oil imports would not necessarily carry with it a substitute market for Cuba's main export. Today's depressed sugar market would not make for an easy solution to this problem. Other import and export markets affecting the Cuban economy are more elastic, and adjustments could be made in Western markets to reintegrate Cuba into the Free-World marketplace.

All of this is speculative, of course, and deals only with the international economic aspects of Cuba's dependence on the Soviet Union. What would remain to be seen in the event that Cuba could attain energy self-sufficiency is how much of an impact that would have on politico-military relations between the two. But, in terms of U.S. strategic policy interests, any loosening of the bonds between Havana and Moscow can only be viewed as a positive development.

Mexico's involvement in Cuban oil exploration, then, need not be viewed by U.S. policymakers as a threat to American interests. Mexico's "new, bolder foreign policy," as the *Financial Times* describes it,[15] could very well work toward U.S. national interests, rather than against them. William F. Buckley has urged U.S. government officials to terminate aid to Mexico if that country "continues to drift toward Cuba."[16] In my opinion, this would be a serious mistake, which would not only perpetuate Latin America's view of the United States as "big brother" dictating policy to its Southern Hemisphere neighbors, but might also obviate the best opportunity in recent history to move Cuba slightly closer to the West.

[15] *Financial Times* (London), 23 July 1980, p. 4, col. 1.

[16] National Review, 17 September 1982, p. 173, col. 2.

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