

Confidential

The Mackenzie Intelligence Advisory - January 1992

Canada's Oil Shortage Contingency Plan

Executive Summary

Oil supply for Canada is not assured through the coming years, especially as dependence on overseas supplies for East and Central Canada grows. Canada's membership in the International Energy Agency could also result in the implementation of domestic oil shortage contingency plans in the event of a shortage elsewhere. However, the Canadian contingency plans are seriously flawed.

Editor's Notes

This Intelligence Advisory explores threats to the West's supply of oil, as well as International and Canadian approaches to dealing with an oil shortage. To our knowledge, this is the first non-governmental, non-government-commissioned examination of the Canadian Oil Shortage Contingency Plan. Much of the material which follows is sourced from reports, interviews, manuals, and documents from the Industry, the International Energy Agency (IEA), the Government of Canada, and the Government of Ontario.

Introduction

Seventeen months after Iraq invaded Kuwait the world's oil markets are suffering from a glut. However, today's surplus does not insure tomorrow's ample supply. The industrialized world's heavy dependence on OPEC oil will increase as non-OPEC supplies are depleted. This increased reliance on OPEC comes at a time when geopolitical and regional instability bring into question the security of oil supplies from the Middle East and the former Soviet Empire.

By all accounts it is likely that the West will be subject to short term shortages of oil during the 1990s and the early part of the next century. If the health of the Canadian economy is to be assured during an oil shortage, the Canadian business community should have a sound understanding of how the Federal government intends to deal with any crisis.

IEA Dependence on OPEC

The West has a voracious appetite for crude oil. The members of the IEA consume 33 million barrels of oil per day (mb/pd). This is approximately 60 percent of the world's daily consumption. The IEA consists of all the member countries of the Organization of Economic

Cooperation and Development (OECD) except for France, Finland, and Iceland.

The heavy oil consumption by IEA members has led to a substantial foreign dependence. As a group the IEA countries produce 51 percent of their crude oil requirements. Yet, dependence on foreign oil is not shared equally among IEA members. Canada, Norway and the UK are net exporters of oil and have only a modest dependence on imports. On the other hand, Belgium, Ireland, Portugal, Sweden and Switzerland have no indigenous production of oil and are entirely dependent on foreign supplies.

IEA Import Origin Statistics - 1989

Figures reflect 000's of metric tons. 1989 is used to illustrate recent figures unaffected by the Iraqi invasion of Kuwait and the accelerating decay of the Soviet Empire.

IEA Country	Total Imports	% OPEC	% Russia
✕ Australia	14,319	61.4	0.3
✕ Austria	9,647	43.3	6.7
✕ Belgium	41,616	42.3	11.5
✕ Canada*	33,722	30.0	0.0
✕ Denmark	9,194	36.5	7.7
✕ Germany	109,557	12.3	9.6
✕ Greece	18,927	63.7	11.0
✕ Ireland	4,249	0.0	4.5
✕ Italy	99,992	61.6	14.8
✕ Japan	245,307	72.0	0.3
✕ Luxembourg	1,477	0.0	0.0
✕ Netherlands	88,850	48.0	9.4
✕ New Zealand	3,416	78.3	0.0
✕ Norway*	3,981	3.8	8.9
✕ Portugal	13,886	54.3	0.9
✕ Spain	59,044	56.5	10.4
✕ Sweden	22,062	14.2	13.4
✕ Switzerland	12,061	8.5	4.5
✕ Turkey	20,413	90.2	5.7
✕ UK*	58,976	1.1	8.7
✕ USA	402,067	53.6	0.5

* Denotes Net Oil Exporter

For a majority of nations, dependence on foreign oil ultimately translates into dependence on the Organization of Petroleum Exporting Countries (OPEC). These are Indonesia, Ecuador, Venezuela, Gabon and Nigeria plus the Middle Eastern nations of Algeria, Libya, Saudi Arabia, Iran, Iraq, Kuwait, Qatar and the United Arab Emirates. Of

21 IEA countries, 14 depend on OPEC oil for at least 30 percent of their import requirements. Nine depend on OPEC for at least 50 percent of their oil imports, and three depend on OPEC for at least 70 percent of their import needs.

OPEC's influence on global trade in oil is undeniable. The 13 members of the Cartel produce 60 percent of the world's crude oil, and are responsible for 90 percent of the world's crude exports. Moreover the Cartel controls 67 percent of the world's proven conventional oil reserves.

In the intermediate and long term OPEC's control over oil markets, and Western dependence on the Cartel, will increase. Even Canada cannot escape this trend. According to figures published by the Federal Department of Finance, Canada's current production of crude oil stands at about 1.7 mb/pd. With a total estimated reserve of 8.3 billion barrels, this level of production can only be sustained for 13 years. Even if new deposits of oil are discovered in the High Arctic or off the East Coast their exploitation would be dependent on world oil prices.

Most energy analysts agree that the importation of OPEC oil would be more economical than attempting to extract remote deposits in Canada. This opinion is supported by the Ontario Ministry of Energy which in a confidential report states, "...as Canadian domestic reserves are depleted, Ontario may have to begin importing foreign oil. The Province's dependence on foreign oil may reach 25 percent by 1995 and could exceed 80 percent by 2005."

OPEC, Questionable Security of Supply

In the IEA countries questions are being raised about the future security of supply from the Cartel. The eight Middle Eastern OPEC members account for over 75 percent of OPEC's proven reserves. There are several disturbing developments in the Middle East which, if inflamed, have the potential to seriously disrupt oil supplies from that region: The ensuing itemization provides a skeletal framework.

Item 1: The Breakdown of Pan-Arab Unity

The Gulf War shattered the remains of the myth of pan-Arab unity. The Arab world is now divided into two camps; those states that joined the Coalition, and those that sympathized with Iraq. Poorer and fundamentalist Arabs (i.e. the Jordanians, Yemenese, Sudanese, Palestinians, et al) resent the alliance between the Gulf Emirates and the West. Moreover, they are angered by the withdrawal of social and economic assistance, and the expulsion of migrant workers from the Gulf.

Even the Arab countries that sided with the Coalition are annoyed with the Gulf Sheikdoms. While paid handsomely for their services, they are denied the opportunity to fill the jobs vacated by Palestinians and Yemenites

during the War. Instead the Saudi and other Gulf governments now prefer to hire Asian workers. These tend to be cheaper, hard working, and - being generally non-Muslim - possess extremely limited rights under Islamic Law. Asians can be readily dismissed and deported without the political price that would be incurred for Arab and Muslim workers. Moreover, hiring Asians limits the threat of infiltration of the Gulf societies by non-Saudi approved varieties of Islamic fundamentalism.

Traditionally, poorer Arab countries exported labour to their affluent neighbors. This alleviated domestic pressures to create employment and supply social services. Secondly, because the majority of migrant workers send money home to support their families, the government is provided with a valuable hard currency source, and their domestic economy is stimulated by the influx of funds.

The new preference for Asian workers places enormous strains on governmental resources. The repatriation of workers and lost foreign earnings and aid equals increased unemployment, eroded social services, and a shortage of housing. Added to this is a high birth rate (Regional Average population growth is 3 percent per year, one of the highest in the world). The result is massive social unrest and attendant instability - a breeding ground for radical Islamic fundamentalism.

Item 2: Conflict Over Water

In 1979 Egyptian President Anwar Sadat stated, "*The only matter that could take Egypt to war again is water*". A similar comment was made by King Hussein of Jordan in 1990. These views underscore the scarcity of fresh water in the Middle East. Three regions are of particular concern, the Tigris-Euphrates and Nile Drainage Basins, and the Yarkon/Taninim mountain aquifer in the West Bank.

The Tigris-Euphrates and Nile drainage basins share common characteristics with regard to the political conflict over these systems. Both systems cross several international boundaries and are directly controlled by several countries. In the case of the Tigris-Euphrates the countries involved are Turkey, Syria and Iraq. The principal parties with the Nile are Kenya, Tanzania, Uganda, Sudan, Ethiopia and Egypt. All the countries involved are concerned over security of access and supply to their respective water systems.

Turkey, which controls the headwaters of the Tigris-Euphrates, in 1983 proceeded with the development of the South East Anatolia Development Project (GAP). This mega-project is constructing myriad irrigation systems and hydroelectric sites, including the mammoth Ataturk Dam. Syria and Iraq claim the GAP project will seriously stem the volume of water delivered by the Tigris-Euphrates, severely limiting their agricultural and industrial development. Iraq also objects to several Syrian water diversion projects.

The Nile drainage basin has been plagued by a decade-long drought. In 1988 the Nile River dropped to its lowest level in 100 years. With a population growth rate of one million people every eight months, Egypt's demand for water is increasing. Egypt consumes approximately 64.5 billion cubic meters of water per year - 86 percent of that is supplied by the Nile. Further reductions in the Nile could result in significant food shortages (Egypt produces only 50 percent of its food requirements), and may force the Government to curtail oil exports in order to cover losses to the electrical energy supplied by the Nile - currently 28 percent of Egyptian requirements.

Comprehensive water resource management plans exist, but the Nile countries lack the political will, convergent interests and the financial resources to implement them. Political instability in Sudan and the breakup of Ethiopia only exacerbate the problem.

The Yarkon/Taninim Mountain Aquifer is perhaps the least known and most important drainage system in the region. It is a central issue in the Middle East Peace Talks, and may cause their failure. The Yarkon/Taninim aquifer straddles the Israeli Green Line between Israel and the Occupied Territories. Over half of Israel's fresh water supply is sourced from this aquifer. However from 20 to 80 percent (depending on whose figures are cited) of the aquifer lies in the Occupied Territories. No Israeli government will transfer control of this strategic resource to the Palestinians. Moreover, Israel is currently using its fresh water resources 15 to 20 percent beyond the natural replenishment rate. In the future Israel will probably be forced to exploit the Jordan River to a greater degree. This would renew Jordanian/Israeli hostilities.

Item 3: The Rearmament of the Fertile Crescent

One of the most notable threats to the stability of the Middle East is the rearmament of the region. The presence of high technology, chemical, biological and nuclear weapons could allow any local conflict to spill over into neighboring countries and, possibly, into the entire region.

Iran has made major arms purchases from the disintegrating ex-Soviet army and is pursuing a nuclear research program with the help of China and other countries. The possibility exists that, if Iraq is sufficiently weakened, Iran may re-initiate hostilities in order to procure territorial concessions.

Iraq is said to be continuing its nuclear weapons program as well as secretly re-equipping its armed forces with Soviet made weaponry. Notwithstanding its disastrous war with the Coalition, Iraq still has a potent military force. Presently its military power stands about where it did in the early 1980s and is still capable of posing a major threat to Kuwait and Saudi Arabia. The recent Saudi request for America to again enter Iraq and depose of Saddam Husain is understandable.

Other nations in the region are, proportional to population, the most heavily armed states in the World. Israel, Saudi Arabia, the Gulf Emirates and Syria carry enormous stocks of modern weaponry. In the Fall of 1991, for example, Syria purchased from ex-Soviet and Czech stocks some 2,300 artillery pieces, 300 tanks, 48 MiG-29s, and 24 Sukhoi-24s. Likewise, 60 to 80 Scud-C missiles were purchased from North Korea. Syria already had some 3,000 artillery pieces, 4,300 tanks, 650 combat aircraft and 72 surface to surface missiles.

From Pakistan to Morocco, nine nations own ballistic missiles, and four separate R&D projects are underway. Including Iraq, at least seven possess chemical weapons (and three have used them). One nation has used biological weapons and others may possess them. Two nations own nuclear weapons and at least three are working towards indigenous nuclear arms.

It is unlikely that American and European efforts will be able to stem the flow of arms to this region. In the foreseeable future, the Middle East is destined to remain an armed camp.

The Ex-Soviet Oil Situation

The economic free fall of the Commonwealth of Independent States (CIS) seriously jeopardizes crude oil production in the old Soviet Empire. From a production high of 12 mb/pd in the late 1970s, current production has fallen to 10 mb/pd - a 10 percent drop. 1992 production is expected to drop by a further 1-2 mb/pd - but this optimistic estimate is only based on economic and material considerations in a region perched on the edge of social and political chaos.

The scale of the Russian and Caspian Sea Republics' oil production problems is staggering. Some 16,000 wells in the oil rich Tyumen region are unusable because of equipment and cash shortages. This is typical. Production problems throughout the CIS are exacerbated by outdated equipment, an aging infrastructure, shoddy maintenance, and practically no capital investment. Added to these problems are government squabbles over control and ownership of oil fields, refineries, and production facilities. The ingredients are mixed for a major industrial failure.

The greatest threat to CIS oil production may come from Boris Yeltsin's reform program. The reforms which took effect on January 2nd, 1992, resulted in unprecedented price increases for essential consumer goods. Yeltsin's promise that price liberalization will increase the availability of consumer goods may not materialize for some time. Russians, however, have seen a dramatic decline in their purchasing power and are in genuine fear of starvation.

The average Russian is angry. If Russians face another winter like this one, mass social and political unrest is bound to occur. Such a revolt could be supported - or led

- by CIS oil workers. The precedent has been set by 300,000 coal miners who walked off the job for several weeks in 1989 to protest pathetic working conditions and the lack of consumer goods - especially soap. The fear of revolt is echoed by Mr. Georgi Matyuhkin, Russia's Central Bank Chairman, who recently told the Washington Post that "[Yeltsin's Reform Program] is *wrongly conceived and could lead to social unrest*".

The breakdown of the CIS may not have a direct impact on IEA oil imports. The ex-Soviet Union only exported 62,493,000 metric tons of oil in 1989. However, a collapse of political and social order in the CIS could spill over into the Middle East as ethnic Muslims call for aid from their co-religionists in Iran and elsewhere.

The other danger of anarchy in the CIS comes from the collapse of oil exports to Poland, Czechoslovakia, eastern Germany, the Baltic Republics, Hungary and the Balkan nations. Basic or emergency demands in these countries would still have to be met. Moreover, aid requirements and increased military activity to monitor the situation would make extra draws on non-CIS oil supplies.

The IEA

In 1974, following the Oil Crisis of the previous year, sixteen members of the OECD, excluding France, Finland, and Iceland, created the International Energy Agency.

This governmental organization has ten stated goals, one of which may be classified as principal, "...to take common effective measures to meet oil supply emergencies by developing an emergency self-sufficiency in oil supplies, restraining demand and allocating available oil among their countries on an equitable basis,...".

To achieve this objective the International Energy Program (IEP) was established: it is administered through the IEA.

International Energy Program

The IEP is the IEA's blueprint for dealing with an oil shortage. The program is founded upon three pillars; the maintenance of emergency crude oil reserves, an effective demand restraint program, and the sharing of available crude stocks during a time of shortage. It is assumed by the IEA that the flexible application of these levers will allow it to weather any oil shortage.

Under the terms of the IEP member countries must stockpile crude oil equal to, but not limited to, 90 days of net imports. This figure is derived by calculating the volume of net imports during the preceding base period. According to Chapter 3, Article 18 of the International Energy Program Treaty the term 'base period' is defined as, "*the most recent four quarters with a delay of one quarter necessary to collect information*".

The Emergency Reserve Commitment (ERC) may be satisfied by oil stocks, fuel switching capability, and stand-by oil production. Normal commercial inventories do not qualify. Those member countries which are net exporters of crude, such as Canada, are not required to maintain an emergency reserve. Once the Governing Board of the IEA declares the activation of emergency measures each country draws down its emergency reserves at specified rates.

To complement the ERC, all IEA members are required to develop a crude oil demand restraint program which enables the reduction of their 'final consumption'. Under the Treaty 'final consumption' is defined as the total domestic consumption of all finished petroleum products.

The amount by which each member country must reduce its final consumption hinges on the total crude oil supply shortfall experienced by the IEA as a group. When the IEA expects a reduction in its daily rate of oil supplies equal to at least 7 percent of its average daily rate of its final consumption during the base period, each member country must reduce its final consumption. This is done via the implementation of demand restraint measures equal to 7 percent of its final consumption during its base period. The 7 percent in reduction of supply is also referred to as the 'trigger mechanism' because it triggers the activation of the contingency plans of the IEP.

If the IEA sustains or expects to sustain a group shortfall of 12 percent the level of demand restraint required rises to 10 percent. It should be noted that 10 percent is the highest level of demand restraint that can be required without the unanimous consent of the Governing Board, on which each member country has a seat. The IEP does not dictate the method, or form, of demand restraint measures. That decision is left up to individual members. Canada's demand restraint measures are provided for federally under the Energy Supplies Emergency Act of 1979. The repercussion of this Act will be dealt with shortly.

The third element of the IEP is the Emergency Sharing System (ESS). Unlike the ERC, and demand restraint measures, which are designed, administered and coordinated strictly on a national basis, the ESS requires the cooperation of all IEA member countries and their respective oil industries for its implementation. The ESS is an agreement between IEA members to share all available crude oil during a time of shortage, according to a specific criteria. Under the ESS member countries have allocation rights and/or obligations. Some members have the right to extra supplies of available oil while others have an obligation to supply it. Apart from crude oil, for the purpose of satisfying allocation rights and obligations, member countries may provide petroleum products, refinery feedstocks, and all finished products in association with natural gas and crude oil.

Under the terms of the ESS each member country is subject to a supply right which is calculated on the following basis.

- Permitted Rate of Consumption minus Draw-down of Emergency Reserves equals Supply Right

Once the ESS is triggered, member countries must cut their final consumption of oil to their permitted rate of consumption (PRC). A country's PRC constitutes its base period final consumption rate minus the volume of oil designed to be saved by the implementation of demand restraint measures (either 7 or 10 percent).

The difference between a country's PRC and the supply of oil available to the IEA as a group is made up by each country drawing down of its emergency reserves. Therefore each member's PRC, minus its drawdown on emergency reserves, equals its supply right. If a member country's available oil is less than its supply right, the country receives oil from the IEA. A surplus must be surrendered to the IEA. Member countries, such as the U.S.A. and Japan, which maintain emergency reserves in excess of the amount required by the Treaty do not have the surplus considered part of available supplies for ESS purposes.

The Canadian Approach

The Canadian approach to dealing with an oil shortage is embodied in the Energy Supplies Emergency Act of 1979 (ESE). This act is designed to work in concert with IEA contingency plans. However, the Act may be invoked independently to address purely national energy emergencies. The Act provides for the creation of the Energy Supplies Allocation Board (ESAB) and defines the Mandatory Allocation Program and the Rationing Program.

The Energy Supplies Allocations Board

The ESAB is composed of a Chairman and six members who represent Canada's five major regions as well as Canada's oil producing and consuming regions.

Before the declaration of an emergency it is the responsibility of the ESAB to prepare, maintain, and review Canada's demand restraint plans. It must also ensure that Canada is prepared to meet any oil shortage emergency. Once the Government of Canada declares an emergency by Order in Council, it is the function of the Board to oversee, implement and administer the Mandatory Allocation Program, and, if required, the Rationing Program.

The Mandatory Allocation Program

In the event the IEA declares an oil shortage, or if the Governor in Council invokes the ESE Act, the Mandatory Allocation Program (MAP) takes effect on the first day of the following month after the invocation of the Act. At that time the Crude Oil Allocation Program and the Products Allocation Program take effect. Both programs can be brought on line in as little as seven days, however the Products Allocation Program does not become fully

operational for 60 days. Nevertheless these programs are complementary and jointly make up the Mandatory Allocation Program.

Under the Crude Oil Allocation Program the ESAB takes control over the distribution of all crude oil at the refinery level, irrespective of origin or corporate ownership. For the purposes of this program Canada is divided into five regions; the Maritimes; Quebec; Ontario; the NWT and the Prairies; and British Columbia and Yukon. The Board redistributes the crude to refineries throughout Canada to ensure the full utilization of available resources and, as far as possible, provide for equitable distribution. To minimize the disruption to corporate market share, crude oil is to be distributed in proportion to historical amounts utilized in the absence of a shortage.

The Petroleum Products Allocation Program controls the volume of products refiners and other suppliers may sell to wholesale customers over a given period, in accordance with their historical consumption and priority category as defined by the Board.

The controlled products are:

- Motor and Aviation Gasoline
- Furnace Fuel Oil
- Stove Oil/Kerosene
- Diesel Fuels
- Heavy Fuels No. 4,5, and 6
- Jet A and B
- Petrochemical Feedstocks derived from Crude Oil
- Asphalt
- Lubricants and Solvents.

The Board has classified all users of petroleum products into one of three categories depending on the customer's end-use of a controlled product. It is the responsibility of refiners, processors, and marketers to inform their customers of their priority category and to supply them accordingly.

The categories are as follows;

- Category A: Concerned with the health, welfare, and security of the citizens of Canada.
- Category B: Concerned with the economic stability of Canada.
- Category C: Concerned with the maintenance of a standard of living.

According to an official in the Department of Energy, the above categories are not allocated at a fixed proportion relative to available supplies. It is safe to assume the Categories are serviced in order of rank. The following table summarizes Priority of Use categories for wholesale customers.

Column 1 consists of controlled products except those used for space heating & cooling. Column 2 consists of controlled space heating & cooling products.

Col. 1 / 2. Consumer

- ▣ A C Agriculture & Food
- ▣ A C Air Flights (in and to remote areas)
- ▣ A C Commercial Fishing
- ▣ A C DND Operations
- ▣ A C Emergency Services
- ▣ A A Hospitals & Health Care
- ▣ B C Car & Truck Rental
- ▣ B C Construction
- ▣ B C Manufacturing
- ▣ B C Garbage Collection
- ▣ B C Postal Service
- ▣ C B Hotels & Motels
- ▣ B C Taxis
- ▣ C C Retail Outlets (Gasoline)
- ▣ B C Retail Outlets (Diesel)
- ▣ C C Marinas

The MAP will not formally take effect in the Northwest Territories or Yukon. Due to the climate in the North petroleum products shipments are sometimes limited to annual deliveries, and any allocation program would have extremely limited effect. Northern residents will be advised of the shortage situation and will be expected to conserve within the limits permitted by the climate.

While the Mandatory Allocation Program seems sufficient for the needs of Ontario, the North and Western Canada, there are serious doubts over the Program's ability to meet the requirements of Quebec and the Maritimes. Unlike the rest of Canada which relies principally on Albertan oil, Atlantic Canada and Quebec depend on imported supplies. Quebec's dependence on foreign oil averages 70 percent, while Atlantic Canada's dependence is 100 percent.

The Board plans to meet Quebec and Maritimes oil requirements by arranging oil swaps with the United States. A set volume of Western Canadian oil would be shipped to the Western US in return for an equal volume of oil being shipped up from the Eastern United States to Quebec and the Maritimes. Other strategies for Eastern Canada include the shipment of crude by pipeline from Alberta to Vancouver, Sarnia, or Montreal and then the trans-shipment by lake or ocean tankers. Rail tankers may be utilized, as well as the cartage of refined fuel by tanker trucks from Ontario. During a severe shortage these methods will only be able to service Eastern Canada's needs to a limited extent. If a shortage materializes during the winter months the logistical problems of supplying Eastern Canada would be intensified.

Unlike other IEA members, Canada does not maintain strategic stockpiles of crude oil. This is a grave error on the part of government planners. At the very least, the establishment of strategic reserves in Quebec and Atlantic Canada could prevent unnecessary hardship.

The Rationing Program

The majority of Canada's crude oil is utilized in the production of automotive fuels. In Ontario six out of every ten barrels of oil is expended on the transportation of people and goods. If a future oil shortage leads to a critical deficiency of crude oil it is highly probable that the Board would be forced to introduce a system of mandatory gasoline and diesel fuel rationing.

A system of mandatory fuel rationing ultimately dictates the mass issue of ration coupons. Ration coupon entitlement would be subject to motor vehicle ownership, and in the case of corporate users, will be dependent upon past consumption and priority of use. Once the business community's needs are satisfied, the remaining supply is to be divided equally amongst 'discretionary' users who would all receive the same entitlement for a given month.

The number of fuel coupons a driver could legally obtain monthly would remain constant. However, the amount of fuel each coupon could be redeemed for will vary in relation to the overall supply situation. A redemption system would be established whereby a network of local offices would distribute coupons on a monthly basis. These would be exchanged for fuel at retail service station, and then used to establish credit for re-supplying the station. The purchase and sale of coupons on the 'white market' would be permitted.

Government Demand Restraint Measures

Government allocation and rationing programs are obvious demand restraint measures. However, the Federal Government, in conjunction with provincial authorities, plans to impose several mandatory demand restraint measures. Some of the more apparent measures include reduced speed limits, Sunday driving bans, and the prohibition of single passenger vehicles in specified areas. The following are some of the more unusual demand restraint methods.

Demand Restraint Measures

- ▣ Allow van pools within transit systems
- ▣ Control the supply and cost of parking to encourage use of public transit.
- ▣ Create exclusive lanes and roadways for buses and other high occupancy vehicles.
- ▣ Mandate work schedules for larger employers.
- ▣ Abolish taxi cruising.
- ▣ Increase truck load and length limits.
- ▣ Deregulate for-hire trucking industry.
- ▣ Ban recreational vehicles and boats.
- ▣ Introduce minimum gasoline purchases to reduce tank topping.
- ▣ Reduce building heating temperature and increase cooling temperature.
- ▣ Relax air emission standards.
- ▣ Invert the school year.

Evaluating The Shortage Contingency Plan

The IEA and Canadian oil shortage contingency plans should be adequate to deal with a sudden, modest, and short term oil shortage. A protracted or severe shortage would probably challenge the plans beyond their design specifications.

The International Energy Program Treaty was established 18 years ago. At the time, American leadership of the West in most matters was readily acknowledged and actively encouraged. The awesome threat posed by the USSR and its subordinates supported American leadership by providing a unifying threat and constant concern. Much has changed.

The international system is changing from a bi-polar to a multi-polar world. The USSR has been dismantled and economic chaos reigns from one end of its former domains to the other. By the end of 1992 the European Common Market is supposed to be fully integrated. However, much of the West is slowly emerging from a recession. The Uruguay Round of the GATT Talks has made little progress on the issue of agricultural subsidies and, if left unresolved, could spark an EC-American trade war. This may turn the World into a series of regional trading blocs. The New World Order is not yet one of peace, prosperity, the rule of law and the triumph of democratic capitalist principles. Instead, the Hobbesian world of the 1920s and 30s could be back with a vengeance.

The relative economic decline of the US over the next decade is already resulting in dwindling American military power and reduced overseas military commitments. As America retreats, so too does its influence over its allies.

The development of regional trading blocs, and the materialization of significant economic and political rifts between America, Japan, and the EC would seriously threaten IEA agreements. A severe and protracted oil shortage under these circumstances might result in attempts to abrogate or reduce commitments by IEA members with substantial oil stockpiles (Japan and the US) or the net oil exporters such as Canada. This "beggar thy neighbour" policy might receive widespread domestic support in such circumstances.

Domestic Flaws

The implementation of the Canadian Oil Shortage Contingency Plan presents several logistical and structural obstacles.

The Plan's approach to Eastern Canada's needs poses the greatest problems. Several oil industry experts consulted for this Advisory dismissed the Government's plans for transporting Albertan oil to Vancouver and then shipping it to the Maritimes via the Panama Canal as absurdly expensive and impractical. The same individuals favoured contingency oil swaps with the US but doubted that sufficient supplies would reach the Maritimes in a protracted or severe crisis.

Supplying Eastern Canada by rail would be feasible yet would also be a formidable logistical undertaking. Local shortages would exist and the entire region would be subjected to a 20 percent shortfall. This precarious situation would be exacerbated if the Maritimes were caught with low local inventories when a shortfall of oil imports began.

By placing freight transportation in Priority Category B, the Plan seriously threatens the economic viability of major urban centres such as Toronto. Approximately 55 percent of all industries in the Toronto area operate on a "just in time" inventory basis. Unreliable deliveries due to fuel shortages in the trucking industry could grind the economy to a halt.

In order to achieve greater fuel savings, the Ontario Government's strategy is to provincially mandate increased truck load and length limits, and to reduce back-haul restrictions. This is unlikely to be successful. The Ontario trucking industry, despite years of lobbying efforts, has been unable to increase current length restrictions from 23 to 25 metres. Yet the Government expects this industry to suddenly increase truck lengths during an emergency. It is perhaps unduly optimistic to expect freight haulers to stockpile a supply of illegal length containers and trailers against the day of a distant fuel shortage.

Contingency plans optimistically hope for a significant fuel saving by reducing highway speed limits to 90 kph. Yet all experienced Canadian drivers know the present 100 kph limit is a fiction - drivers generally average 115 kph. Significant police resources would be needed to enforce a 90 kph limit, but the manpower is simply not present to cover the vast Canadian highway network. Moreover, studies by European governments (and the American Teamster experience in 1974) show that fuel savings experienced with speed limit reductions diminish over time - especially if they are voluntary or poorly enforced. A document from the Dutch government states *"...after three months the savings achieved by a carfree Sunday are 90% of the savings of the first carfree Sunday, after half a year 60% and after one year ... less than 35% compared to the first carfree Sunday"*. Similar trends, at least, could be expected in Canada.

Federal government studies indicate that fuel rationing will hit Canadians differently. Rural residents would be hardest hit because of their high car dependence. The impact will decrease with proximity to well developed high density urban areas. However, reality is not reflected in the Government's ration coupon allocation calculations.

Finally, under the Energy Supplies Emergency Act, provincial governments have the responsibility of developing an emergency oil shortage contingency plan which compliments the Federal plan. A senior official implied, however, that only the larger provinces have well developed plans. The smaller provinces have not allo-

cated significant resources to the issue. Maritimers should be especially concerned.

Comment

As Canada depletes its domestic supplies of commercially accessible crude oil, Canadians will become increasingly aware of their dependence on foreign, specifically OPEC, supplies. With that dependence will come the uncomfortable feeling of insecurity.

If Canadians want to reclaim their energy security then concerted public and private action should decrease our dependence on oil and exploit alternative fuels. Canadians might want to develop a systematic approach to energy conservation.

The majority of Canada's oil requirements are consumed in the transportation sector. Oil can readily be supplanted from this sector by the widespread introduction of natural gas. Canada's proven natural gas reserves amount to approximately 94.3 trillion cubic feet (TcF), with a reserves to production ratio of 27.2:1. Currently Canada produces about 3.5 TcF annually.

It is important that Canadians act while they have the time and flexibility to adapt.

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Update on Previous Mackenzie Advisories

Celebrating one's own achievements is not highly regarded and "I-told-you-so" statements are frowned upon. Nevertheless, here we go...

Native Militants - Summer of 1991

A copy of this advisory was passed to the Solicitor General of Canada just after publication. We observe that a leaked CSIS report drafted in September mirrored our observations about the spread of militant activism to other Ontario bands after the Oka Crisis. More concretely, our information about factions within the Oneida and Chippewa Bands near London Ontario appears to have led to a series of RCMP raids for firearms and narcotics.

For the future, members of the Mohawk Warrior's Society have kept most of their arsenal intact and are continuing to generate extensive revenues from cigarette smuggling. Martial arts and para-military training is being conducted by members of the Mohawk community.

The 500th Anniversary of the Columbus Landfall occurs on October 12th, 1992. This is too good a symbol for native militants and their political allies in the hard left to miss. Look for an upsurge in protest in early Autumn of 1992. Companies such as Daishowa and those affiliated with Quebec Hydro might face picket lines and harassment.

As road and rail blockades are a common form of native protest, there may be a series of road blockades around Canada in October. This may include a commemorative blockade of bridges and highways around Mohawk reserves. In and around the week of October 12th, 1992 there is a possibility of some minor acts of terrorism by some of the more extremist elements of the American Indian Movement and Canadian confederates.

Animal Rights - Autumn of 1991

This advisory warned that the Animal Liberation Front would become active again. Two days after its release, the Edmonton branch of the Animal Liberation Front committed minor acts of vandalism. In December they caused \$100,000 in damage after an arson attack on the delivery trucks of an Edmonton Fish Merchant. In January, calling themselves the Animal Rights Militia, they initiated the Cold Bar Hoax (The injection of oven cleaner in a high energy brand of chocolate bar).

In Toronto, Anarchists associated with Canadians Against Furs have dropped out of sight. A logical assumption is that this is preparatory to a renewal of activity in Central Canada. An interview with a former ALF member supported this interpretation - but an assumption is still not fact. As yet, there is no clear idea of which industry might be marked for ALF's attentions.

Before dismissing ALF and the Animal Rights Militia, remember that the UK branch has caused over \$14,000,000 in direct damages. Indirectly, many small businesses can no longer afford their higher insurance premiums. ALF members in the US have not yet been as successful - but they have committed murder. The Dean of a Kentucky Veterinary School was shot to death in February of 1991. In June of 1991, ALF members in the UK attempted to murder two researchers with car bombs.

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