

demand is low and more at times when demand is high (such as late afternoon). Such a system (similar to Bell Canada's rate structure) would encourage a more even use of generating capacity and reduce the requirement for generating equipment to meet peak power demands. Reconsideration of electricity pricing practices is likely to occur in all Canadian markets as the introduction of alternative energy forms alters the demand for electricity for home, commercial and industrial use.

The historical trends in energy pricing described here cannot be expected to continue, given the changes that have taken place in the international oil market, the anticipated scarcity of petroleum and the intensifying concern over the environmental implications of increasing energy use.

## 2. FUTURE ENERGY PRICES AND THEIR IMPLICATIONS

Future energy prices will be important in Canada's energy system because these prices and their rates of change will influence which alternative energy forms can be commercialized and the timing of their introduction. Also, energy prices will directly influence the quantities of energy consumed and the proportion of incomes available for non-energy consumption and investment. There are limits to the size of the energy expenditure which we can afford and still maintain our standard of living, our commitment to social programs and our industrial momentum. Having some idea of future energy prices, and thus some notion of the proportion of personal and national income which will be devoted to energy in decades to come, is important if we are to plan for our economic future and make appropriate decisions today.

While this Report cannot give any precise timetable for the introduction of alternative energy forms, we can state that the rate of increase in energy prices — particularly oil prices — will influence the rate of development and commercialization of alternative energy. High rates of increase in real oil prices during the next decade will certainly accelerate the process of incorporating alternative energy sources and technologies into our energy system.

Ideally we would like to know in advance what future trends in energy prices will be in order to estimate their impact on the economy and to assess the urgency of developing alternatives. Furthermore, the way in which we go about encouraging conservation will depend on the extent to which higher prices help us reduce the growth in demand for energy. But one cannot know the future and therefore we must examine the various effects which a number of *possible* future energy price trends might have on the energy sector and on the whole economy. In order to project future energy

prices, one must assess such pricing determinants as domestic energy policy, demand and supply trends, world economic conditions and political developments. While a broad margin of error may be attached to any forecast of world prices, it is necessary to make some estimation because of the impact that future prices will have on all Canadians.

In the course of its work, the Committee initiated economic analyses using three crude oil world price schedules. These analyses, performed by the Economic Council of Canada, covered the decade of the 1980s. The highest world price schedule considered was based on a 7% annual increase in real terms to 1990. The minimum price schedule thought likely to characterize the present decade was a 1 to 1.5% annual real increase. The third pricing scenario, simulating the type of international price shock which occurred in 1973-74 and again in 1979-80, incorporated a \$15 per barrel real price increase in 1986 (superimposed on a 1 to 1.5% annual real increase during the 1980s). Pricing schedules similar to those used in the analyses are included in Table 5-2. The Committee believes that the upper and lower price scenarios represent an envelope likely to encompass future world oil prices.

On the other hand, the future *domestic* price of oil is known with more certainty because *The National Energy Program 1980* has set out a schedule of price increases to 1990. These prices are also included in Table 5-2. The wellhead price of a conventional Alberta crude (38° API gravity) will increase in current dollar terms by almost 300% from 1980 to 1990. This may seem like a large increase but, allowing for inflation, it is expected to roughly represent a 65% real increase in price over the decade. The reader should keep in mind too that these scheduled prices are not immutable; domestic or international circumstances change and the domestic pricing program may have to adapt to new conditions.

*The National Energy Program 1980* establishes a pricing regime for natural gas which improves its competitive position relative to oil over the coming three years. This pricing policy will encourage a shift to gas from oil, both reducing Canada's requirement for foreign crude and addressing Western Canada's excess natural gas productive capacity. As part of this program, the Federal Government will set city-gate prices for natural gas at the same level in Toronto, Montreal, Quebec and Halifax to promote the extension of the gas distribution system into Eastern Quebec and the Maritimes. The future pricing of natural gas is summarized in Table 5-3.

Prices for electricity are expected to increase at a rate which will be about 1.2% more than the rate of increase in the Consumer Price Index (personal communication, Department of Energy, Mines and Resources, 1981).