NEW DIRECTIONS FOR ALASKA ENERGY POLICY

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INTRODUCTION

Dramatic changes have occurred in world energy markets in the last nine months, changes that will have far-reaching consequences for energy policy in Alaska. The precipitous drop in the world price of oil has sharply reduced the discretion of the state to fund energy-related projects. It has shifted the immediate prospects for the economic viability of private energy projects. Most importantly, it has altered the perceptions of experts as to the long-term evolution of supply and demand for petroleum, and with it the price of oil, the single-most important variable which has been driving energy policy making in Alaska.

The possibility of a sudden fall in the price of oil was totally ignored in the formulation of energy policy in Alaska. Decisions have been made on the basis of an ever increasing price of oil, an assumption which makes Alaska energy more attractive, valuable, and expensive with the passage of time. The sudden and complete negation of the validity of that assumption in a few short months has left people reeling. Many people see neither the immediate implications of this change nor the longer-term implications for state energy policy. This change is so basic, however, that it is necessary to completely rethink what Alaska energy policy can and should be in a world where oil is just another commodity, rather than a magic liquid with a forever increasing price.
The result is that market adjustments to petroleum price changes take many years to reach a new equilibrium. This final equilibrium will be at a lower price and greater supply than initially anticipated. The period since the increase in the price of oil in 1979 is a good example of this adjustment process. Consumption growth has been curtailed, and supply growth has accelerated in response to the price increase. Some members of OPEC have decided that the price was too high to allow them to maintain their market share. Consequently, one interpretation of recent events within OPEC is that it represents a calculated attempt to set the price at a level which will reduce not only conventional sources of oil outside of OPEC but also the incentive to invest in new supply and alternative energy sources and the incentive to pursue conservation.

Using this rationale, the OPEC ideal price for oil is one that maximizes the revenues they will receive over the long run—not so high that it induces either serious alternative resource developments or excessive conservation and not so low that they are giving the oil away as a cheap substitute for coal. It appears now that a price of $30 rising in real terms over time would be high enough to induce those adjustments, and consequently there is at least one economic, as opposed to political, reason for OPEC to adopt a strategy which keeps prices within the range of $12 to $20 in real 1985 dollars over the next ten years.
The most obvious implications for state energy policy of oil prices in the $12 to $20 range for the next ten years are as follows:

- The amount of public money available to subsidize energy projects and programs will decline sharply.

- Energy demand growth will be much slower than it has been historically because of slower economic growth, reducing the need for large-scale projects to meet the demand.

- Market forces will resurface as the most important factor in the allocation and consumption of energy in the state.

- The need to subsidize energy programs and projects will decline as the real price of energy goes down relative to other goods and services and income.

- The viability of development of Alaska energy resources for export will be reduced.

- Energy conservation will continue to be an important method for reducing the cost of living and the cost of doing business in the state.

REVIEW OF CURRENT POLICY

The objective of energy policy is to provide energy at the lowest possible cost while ensuring that all citizens have access to at least minimum amounts of energy. Because of the vast amounts of money available to state government in recent years, however, cost never was the primary consideration in policy decisions. Income
At the same time that the state was subsidizing the construction of high-cost hydropower in the Southeast and Southcentral, it has been giving consumers in rural Alaska money through the power-cost equalization program to consume high-cost electricity. Like the construction of hydropower, the apparent purpose of this program is to help consumers to pay the least-price possible for their electricity. The result is that the cost of electricity now appears to be low to consumers, and they use a lot of it. There is no incentive for consumers to conserve on the consumption of a commodity that is costly. This puts additional demand on generating capacity, and new capacity is added to the system. Since the government rather than the consumer is picking up most of the cost, however, there is little or no incentive for the utility to get the cheapest or most efficient generating unit. Investments in conservation which should be made are not made, and investments in additional capacity which should not be made are made.

The third policy is the energy audit program. Under this program, households and businesses could have an audit of their energy consumption patterns performed, which included an analysis of savings from both the installation of different energy-saving devices and the institution of various conservation practices. Grants were available for the purchase of equipment and supplies which could be shown to be cost efficient. This program was designed to produce rational energy-use decisions by being targeted toward purchases which would make energy consumption more
THE LEGACY OF BAD POLICY

The problem with these policies has not been that they resulted in the creation of construction jobs or that they provided increases in income to construction workers, auditors, and households in rural parts of the state. These may be valid ways to spend public money if there is money left over after necessities such as education and public safety have been funded. The problem is that by furthering these objectives under the guise of an efficient energy policy (delivering the jobs and the income through programs that subsidized the uses of energy), not only were job creation and income transfers provided inefficiently but also, as a consequence, we now have an inefficient stock of energy-using capital and distorted consumer behavior with regard to energy consumption. We could have simultaneously done a better job of creating jobs and transferring income, while at the same time creating a legacy of more efficient capital stock to meet future energy needs based upon the real cost of energy.

It is important to recognize a significant difference in the impact of the two energy programs for subsidizing consumption—the subsidization of large capital-intensive projects and the subsidization of consumption in rural Alaska. This relates to the ability of the state to continue subsidizing these programs when revenues drop. The large capital projects are in place and have been paid for. They are relatively cheap to operate and, although costly to construct, the rates based on operating costs are low.
businesses. This is a perfect example of how the availability of a lot of public money has reduced the efficiency of the economy by allowing the government to temporarily change the price structure in such a way as to channel investments and consumption into irrational ways. Consequently, the government has an obligation not to terminate this program abruptly, leaving the affected communities with the dual burden of inefficient electric-generating facilities to pay off through high rates as well as an inefficient private capital stock.

NEW ENERGY POLICY

If $15 to $20 a barrel is a reasonable prognosis for the future of the price of oil and this slows the growth of the Alaska economy, the general outlines of a new energy policy emerge. This policy is less ambitious than past efforts for the simple reason that there will be less money to devote to the problem. It is more rational because it is a policy divorced from the objectives of job creation and income distribution. It is also more efficient because it places the primary responsibility on the energy industry and the private sector to make energy production and consumption choices based upon market-determined prices.

1. Market Reliance. The market should allocate energy because it can do it most cost effectively. Market prices, in general, reflect the real cost of producing and consuming different types of
For example, the objective of a utility is to provide energy to the consumer at the lowest possible cost consistent with safety and reliability considerations. In reality, the success of a utility is often measured by the absence of rate increases. However, for the consumer, the lowest possible energy cost need not be consistent with the lowest possible rate for utility-provided power.

Consider a hypothetical electricity conservation device which could be installed at nominal cost in a house and reduce utility electricity demand by 50 percent. Most households would be interested in such a device because it would reduce their need for utility power. The utility would not be interested in such a device, however, because if a household installed one, demand and with it revenues would fall, and rates would need to rise to cover fixed costs of plant and equipment. This rate increase, of course, would not bother the consumer with the conservation device whose total bill for energy services is still lower than before, even with a higher rate for energy from the utility. Government may have a role in the stimulation of conservation in this case and in adjusting the "rules of the game" of the marketplace in general.

Finally, market information is not always available to all consumers and producers because the collection of information involves a cost. It may be cheaper for government to collect and disseminate information about options and costs of alternatives.
energy or in anticipation of the exhaustion of existing sources of energy is no longer valid. Demand growth uncertainty will continue in Alaska, impacted both by the changed prospects for the growth of the economy and by the increased availability and incentive to use energy-saving devices. Alternative supply sources for electricity can be examined at a more leisurely pace if the growth of demand is slower, as existing supplies will last for a longer time. Decisions on new capacity can be postponed, allowing time for the development of new techniques for generating power in new, different, and more efficient ways. When expansion does become necessary, new capacity should be the most cost effective over the life of the facility, assuming both reasonable energy prices and energy demand.