

Energy Policies Haven't Worked

Costly Experiments Aren't the Way To Go

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With California's rolling electrical blackouts as a backdrop, Congressional leaders have initiated discussion on designing a national energy policy. In the abstract, the concept provides consumers with a sense the resulting policy will chart a national course toward predictable and stable energy sources.

Given the federal government's record in developing usable energy policies, a plan is not easily successful.

Faced with petroleum shortages and escalating gas prices, both Republican and Democratic administrations developed national energy policies during the 1970s. Both failed.

During the Nixon/Ford administration, John Sawhill, then federal energy czar, released a study evaluating "the nation's energy problems and provid[ing] a massive framework for developing a national energy policy."

The November 1974 study optimistically forecast the following future: "World oil prices (then \$12.72 per barrel) are highly uncertain and might fall somewhat lower. ... Major OPEC cutbacks would be required to sustain world oil prices. ... Nuclear power is expected to grow from 4.5% to 30% of total energy power generation (by 1985)."

The 1974 study's statistical models failed to forecast the detailed shifts in the marketplace. The price of a barrel of oil went from \$12.72, in constant dollars, to \$21.66 a barrel in 1985 -- a 70% increase. Nuclear power grew to just over 15% of total electrical power generated in 1985. Nuclear power represented nowhere near the estimated 30%.

The 1974 report's optimistic predictions ran into problems due to many of its underlying assumptions. For example, the report predicted that tax policies then in effect for the energy industry would not change -- but they did six years later with the enactment of the windfall profits tax.

The Carter administration tried its hand at forecasting energy supply and demand in April 1977, adopting a pessimistic outlook. With its statistical model, the administration estimated a 3% annual

growth in U.S. petroleum consumption. Roughly six years later, the United States imported less than half the level predicted in the plan. In 1985, the United States was consuming almost 17% less petroleum than in 1977 (30.92 quadrillion BTUs in 1985 versus 37.12 quadrillion BTUs in 1977).

Within a 2.5-year period, these two, very different, national energy policies were developed:

- In 1974, the study projected the United States could become independent of foreign energy sources by 1980. Two and a half years later, experts no longer viewed that as possible.

- In 1974, the study predicted nuclear power could provide 30% of consumed energy in the United States in 1985. This projection was reduced to 20% in the 1977 forecast.

- In 1974, it was projected coal could only moderately contribute to expanded energy production. In 1977, it was forecast that coal production could expand significantly.

Each policy, when published, was viewed by experts as accurately depicting America's future energy course. Each was crafted in pursuit of the national interest. Two decades later, their shortcomings continue to have real fiscal liabilities for U.S. taxpayers.

The Great Plains Coal Gasification plant in North Dakota highlights the shortcomings of national energy policies that need to be avoided when structuring the 2001 national energy policy.

During the 1970s, the federal government concluded the United States was running out of natural gas. In response, construction began on a \$2.1 billion coal gasification plant in North Dakota, with \$1.5 billion in federally subsidized loans.

In 1984, the plant began converting lignite coal into natural gas, a synthetic fuel. One year later, the U.S. Department of Energy took over the plant after the owners defaulted on the taxpayer loans.

To repay the federal loans, the plant needed to sell its synthetic fuel at roughly \$10 per thousand cubic feet. However, energy prices plummeted. In order to

compete with other energy sources, the plant sold its gas for just under \$6 per thousand cubic feet in 1985.

In August 1988, the government sold the plant for \$85 million to Dakota Gasification Co. As part of the purchase agreement, Dakota Gasification agreed to waive its right to use federally available energy production tax credits, valued at \$600 million. However, faced with continued operating difficulties, the U.S. Energy Department allowed Dakota Gasification to sell \$140 million worth of tax credits in March 1999.

To meet with success, a national energy policy needs to address macroeconomic issues that encourage private-sector ingenuity, leaving the microeconomic issues to the financial community.

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