

U.S. Natural Gas, Heating Oil Crises Are a Policy Crisis

by Marcia Merry Baker

On Nov. 9, the U.S. Labor Department released the Producer Price Index, showing that natural gas prices were up 5.2% for October, food prices underwent the highest rise in six months, and other prices were rising. Despite notorious fakery in official figures (energy and food are considered “non-core” inflation markers), these latest statistics point to what is plain for all to see: Energy prices are high, and rising. The impact, along with other aspects of financial and economic breakdown, is hitting hard throughout the economy.

Not just gasoline at the pump, but prices for heating oil, natural gas, propane, electricity, and energy in all forms are soaring. With only one month of Winter gone (October is the first of the U.S. Energy Department’s six official months of Winter), there are shortages of fuel oil and propane, and threats of shortages of natural gas deliveries.

In recent issues of *EIR*, we have documented certain must-know factors behind this energy crisis: There is the role of speculation, the “paper oil” traded over and over in London and New York financial markets. There is the inadequacy of U.S. refinery capacity. There is the sweeping policy shift into deregulation and globalization of energy supplies, prices, and production.

To cap it all off, there is the corporate consolidation. The whole process makes for a chokehold over energy, and for making a killing off shortages. One example makes the point: In 1998, British Petroleum and Amoco merged; in April this year, BP Amoco bought Arco. On Nov. 7, BP Amoco announced that its third-quarter profit jumped 94%!

Thus, the question is neither a matter of mythical “supply and demand,” nor is it a matter of depletion of resources. This is a crisis of policy.

LaRouche Forewarning: Commodities Grab

In the mid-1990s, Lyndon LaRouche pointed out the threat and implications of the commodities grab that was already then under way, by “smart money” financial circles, which were exiting paper-asset bubbles, and moving into hard assets. He commissioned that this process be documented, and at an international conference in Virginia in September 1995, he presented charts and documentation. There, he said, “You want to talk about corruption? . . . Then you take metals, petroleum, coal, natural gas, all kinds of raw materials. Precious metals, iron, steel: Who controls these? Well, look at your charts. Again and again, it’s the London-based cartel. So, are the British unimportant? Are the British, which together with the Mobil system in the United States, the Standard Oil system in the United States, which is an extension of the British, the London marketing cartel, what used to be called the Seven Sisters, which controls the bulk of the world’s petroleum, the London Metals Exchange, which controls the bulk of the world’s strategic minerals, unimportant? The London This and the London That, control this and that. So, *the great control of the life and death of the people of this planet, has been locked up in the hands of a few dirty oligarchs.*”

Changing Policy Course

Confronting today’s immediate energy crisis, LaRouche issued a policy memorandum on Sept. 19, entitled “On the Subject of Emergency Action by Governments To Bring the Present Petroleum-Price Inflation Under Control” (see *EIR*, Oct. 13, 2000, and www.LaRouchespeaks.com), outlining the scope of the world financial breakdown crisis, and specifying

FIGURE 1

Major Natural Gas Producing Basins



Source: Energy Information Administration.

in detail, national-interest emergency energy measures. Only this kind of approach is “realistic.”

In December, such an approach is scheduled to be debated before the Boston City Council, where Councilman Chuck Turner has introduced a resolution to that effect. Excerpts of the resolution are printed below, along with a survey article on the energy vulnerabilities of states in New England, the Midwest, and Mid-Atlantic.

Councilman Turner’s initiative stands in contrast to the grandstanding of many Congressmen, and others, who complain of the energy prices, and call for studies, but will not grasp the reality of the epic economic and financial breakdown under way. On Oct. 19, Rep. Dennis Kucinich (D-Ohio) and Rep. Steven LaTourette (R-Ohio) asked for an investigation of natural gas prices in Ohio.

Providing genuine national leadership is State Sen. Joe Neal (D-Nev.), whose intervention this Summer effected a stay in implementation of energy deregulation in the state. Neal circulated an *EIR* dossier on the fraud and harmfulness of energy deregulation (“Deregulation Strikes: Buying Energy

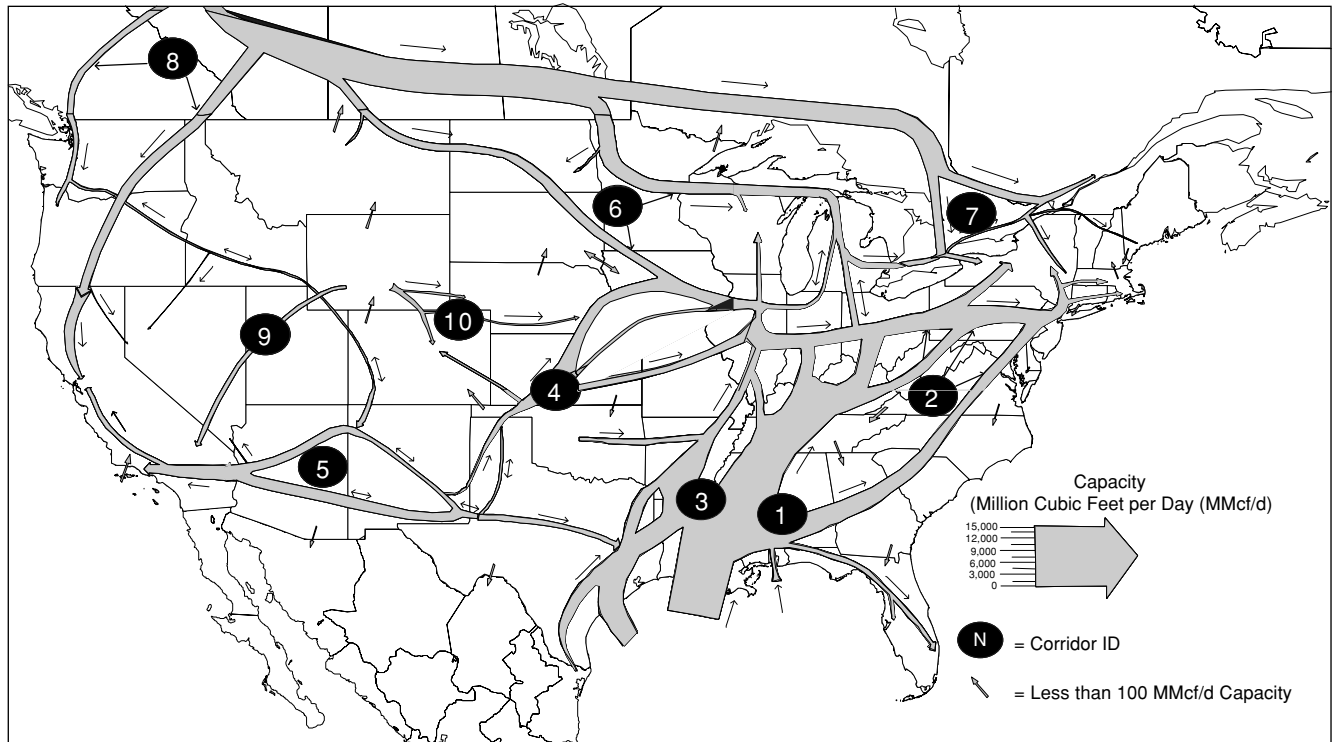
from Bush,” *EIR*, Aug. 18, 2000). In the midst of the policy fight, Neal was re-elected to office in September, and is widely viewed as a champion for the public good.

Since then, on Oct. 17-19, Senator Neal visited Mexico, to encourage the dumping of the deregulated, “free” (rigged) market approach to energy. There, in the northeastern states, regional natural gas prices have soared by 150% in one year, causing mass cutbacks and shutdown of industry. After the North American Free Trade Agreement (NAFTA) came in, the Spain-based conglomerate, Gas Natural, bought out natural gas distribution in Mexico, and now demands high “market” prices. Neal, along with *EIR* Editor Paul Gallagher, presented LaRouche’s Sept. 19 emergency measures perspective, under which the pricing of natural gas should be regulated in the national interest.

During the first week of November, Senator Neal went to Ohio, where energy deregulation started on Nov. 1, and natural gas price deregulation is scheduled to start on Jan. 1, 2001. Neal met with state leaders on the need to roll it all back. He stressed that past mistakes don’t matter. In Nevada, only two

FIGURE 2

Major Natural Gas Transportation Corridors in the United States and Canada, 1997



Note: The 10 transportation corridors are: (1) Southwest-Southeast, (2) Southwest-Northeast, (3) Southwest-Midwest, (4) Southwest Panhandle-Midwest (5) Southwest-Western, (6) Canada-Midwest, (7) Canada-Northeast, (8) Canada-Western, (9) Rocky Mountains-Western, and (10) Rocky Mountains-Midwest. Source: Energy Information Administration, EIA GIS-NG Geographic information System, Natural Gas Pipeline State Border Capacity Database, as of December 1997.

out of 29 legislators voted against deregulation. In Ohio, only seven out of 100 state representatives voted against deregulation. Nevertheless, in Nevada, it was stopped; and it can and must be stopped everywhere.

Neal singled out for condemnation, the Federal legislation proposed this session by Sens. Phil Gramm (R-Tex.) and Charles Schumer (D-N.Y.), that would dictate nationwide energy deregulation, by abolishing the 1935 Public Utility Holding Company Act.

Natural Gas Price Hyperinflates

In fact, over the past 30 years, state and Federal acts have implemented deregulation piecemeal, to the point that we have the energy crisis we face today. In this issue, besides an update on the domestic policy fight, we provide essential background on the natural gas system of the United States. For certain, the hyperinflation of natural gas prices can't be blamed on the Organization of Petroleum Exporting Countries.

Among the milestones of the U.S. deregulation process were the following: In 1978, there was the Natural Gas Policy

Act, which phased out stable prices at the well-head. In 1990 and 1992, there were amendments to the Clean Air Act, that furthered the control over natural gas by a select few. In the survey below, John Hoefle provides corporate profiles of the gas pipeline cartel, including Enron, the largest contributor to George W. Bush's campaigns, and others, behind Al Gore.

What **Figures 1** and **2**, and the accompanying description of the physical economy of the natural gas industry make clear, is that there is no basis for a North American natural gas crisis in terms of natural resources or infrastructure. It is entirely a policy crisis.

Figure 1, from the Energy Information Administration of the U.S. Department of Energy, shows the location of significant natural gas basins in the United States. Mexico has important deposits. Canada, especially the provinces of Alberta, Saskatchewan, and British Columbia, is rich in gas fields. Natural gas resources, either associated with oil or "non-associated," are significant both on the continent of North America, and offshore, not only because of their output potential, but also because they lie within economical piping distance for consumption.

Figure 2 shows the volume of gas moved through the transportation corridors, as of 1997. Important to note is the “political geography” of the flows. In recent years, Canadian natural gas exports to the United States have become sizable—and soon will be significantly increased, with the opening this month of the new “Alliance Pipeline,” a 1,200-mile line from British Columbia to Chicago. Though a welcome addition to infrastructure, the pipeline itself is controlled by the same cartel financial interests usurping natural resources and undercutting the economy. It is significant that no U.S.-Mexico mutual interest infrastructure has been built. In 1982, then-President José López Portillo proposed an oil-for-technology development program between the two nations, but the free-trade circles around then-Vice President George Bush rejected this outright, favoring instead their schemes to deregulate, dominate, and loot—i.e., schemes that went on to become NAFTA.

The Physical Economy of the Natural Gas Industry

by John Hoefle

While the oil and gas industry is dominated by an oligarchic oil cartel and is rife with price-fixing and speculation, beyond these unsavory elements lies a marvel of technology and engineering, able to move large volumes of natural gas from distant fields to the doorsteps of millions of American homes and businesses. Here we take a look at the physical-economic side of this essential infrastructure.

Exploration and Production

The search for natural gas begins with the identification of subterranean rock formations where gas is likely to be found. The gas migrates upward through pores in sedimentary rock; if it reaches the surface, it is dispersed into the atmosphere, but most often the gas is trapped when it hits a layer of impermeable rock. These impermeable layers, usually shaped into domes by folding and faults, are what the geologists look for in their search for oil. The search begins with determining broad areas where traps are likely to be found, then examining potential prospects via seismology. Seismology involves sending energy waves through the Earth, then recording the results when the waves are reflected back to the surface. Because different layers of rock reflect the waves in different manners, geologists can process these reflections through computers to get a fairly good map of the subsurface strata. Another method of mapping underground rock formations

involves using magnetometers to measure small changes in the Earth’s magnetic field at the surface, which can indicate what types of rock lie below. Magnetometers can be placed in helicopters, planes, and even satellites, allowing wide areas to be surveyed.

Still, the only way to determine if a trap-like formation actually contains gas and/or oil, is to drill a well. Most wells today are drilled by rotary rigs, which use hard-drill bits at the end of long chains of rotating pipe. While the basic principle is old, advances in technology have significantly improved the drilling process, including the monitoring of conditions inside the well and advances in horizontal drilling techniques. There have also been the technologies in offshore drilling, allowing for deeper wells and a greater number of wells per drilling platform.

Once a gas-bearing formation is located, it must be tested to see if it is viable for commercial production. How big is the field, and what is the most efficient production rate? Is there oil mixed with the gas, and if so, of what viscosity? Does the gas flow freely out of the well, or must it be pumped out? The answers to these questions help determine whether the field should be put into production.

Processing and Transmission

For gas to have commercial value, it must be transported from the production wellhead to the homes, businesses, and industrial plants where it will be burned. Nearly all of the natural gas produced in North America is transported by pipeline, and the gas must be processed to remove oil and other more valuable hydrocarbons, as well as diluents such as water and helium and contaminants such as hydrogen sulfide. From the wellhead, the gas is piped into a gathering system, which collects gas from many wells in a field and transports it to a central station. A typical large gathering system may involve thousands of miles of gathering lines connecting a hundred or more wells. Total U.S. gathering systems exceed 300,000 miles of pipeline, and there are more than 600 gas-processing plants in operation in the United States.

Once the gas has been gathered and processed, it is ready to be fed into the interstate gas transmission systems operated by the gas transmission companies. These pipelines are generally made of steel, with diameters ranging from 20 inches to 42 inches. The gas is moved through the pipeline at higher pressures, both to reduce the volume of the gas and to provide a pushing force to propel the gas through the pipe. In order to maintain the pressure in the line, compressor stations are inserted into the pipeline every 100 miles or so. As of 1998, there were 85 interstate pipeline companies in the United States, with more than 200,000 miles of pipeline; there were also more than 200 smaller intrastate pipeline systems. Many of the pipelines pass through hubs, the best-known of which is the Henry Hub in Louisiana. During the 1990s, the number of hubs expanded, as the hubs were transformed into “market centers” where gas could be sold, traded, and temporarily