

Energy: 1945–1980

Most Americans now date the nation's current, unsolved energy problems back to 1973—the time of the Arab oil embargo, OPEC price increases, and gas lines. Yet both the long-term question of U.S. energy supplies and the much-debated remedies of the 1970s surfaced repeatedly in Washington after World War II. The failure of successive Presidents and Congresses—from the Truman days through the Carter era—to devise a coherent national energy policy is a complex political story. Duke economist Craufurd D. Goodwin and four colleagues have produced the first comprehensive account of this failure: *Energy Policy in Perspective*. We present here a three-part summary of their 728-page work, ending with Professor Goodwin's analysis of why things went so wrong for so long.

SETTING THE STAGE

With the death of Franklin D. Roosevelt, Harry S Truman became President of the United States on April 12, 1945. He faced a host of challenges. First, he had to see World War II through to victory. Later, he had to oversee the economy's conversion to peacetime, promote a stable new world order, and contain Joseph Stalin's ambitions in Europe and the Mideast.

As it happened, these preoccupations coincided with a little-publicized development: The United States was suddenly no longer self-sufficient in energy. In 1947, the United States, an exporter of oil since 1870, became a net importer. It was clear, moreover, to noted specialists such as geologist Everette De Golyer that the "center of gravity" of world oil production was shifting rapidly from the Western Hemisphere to the Middle East.

Harry Truman thus became the nation's first chief executive to face energy matters in a "modern" context. He did not consciously set out to forge an "energy policy" as recent Ameri-

Adapted from Craufurd Goodwin, *Energy Policy in Perspective: Today's Problems, Yesterday's Solutions* (Washington, D.C.: The Brookings Institution, 1981). Copyright © 1981 by the Brookings Institution.

can Presidents have done, and he had not the luck to do so accidentally. Rather, he confronted (or avoided) energy issues as they arose, one at a time, fuel by fuel. In Washington, as in the press and in the country at large, there was no overriding sense that “energy,” as such, was destined to become a Big Problem.

Yet, as Truman and the Congress dealt with the “fuel” issues before them, they did not operate in a vacuum. Three distinct ways of thinking about energy supplies, prices, and producers shaped the recurring postwar debates—and flavor American energy debates today.

The first approach was a legacy of the Depression and the New Deal. Its advocates in the Interior Department and the White House believed that if the free market threatened to produce economic distress for workers or consumers, then the free market system should be modified. Often this meant that key industries, such as oil, gas, and public power, needed the leash of regulation to keep prices down. Sometimes it meant that Washington was prepared to set itself up in the energy business, as it did in creating the Tennessee Valley Authority and the Bonneville Power Administration during the 1930s. Harold Ickes, FDR’s (and briefly Truman’s) Interior Secretary, and the first U.S. official to acquire the sobriquet “energy czar,” once proposed that oil companies be regulated like electric utilities.

A second perspective, that of officials in the Pentagon and at the State Department, may be summed up by the word *expediency*. After December 1941, America had a war to win. Legitimate concerns about the price of electricity, resource conservation, or antitrust laws had to give way to the needs of mobilization. With some modifications, this view applied to the Cold War and to the task of ensuring adequate supplies of foreign oil for reasons of “national security.” Thus, despite the lingering memory of Teapot Dome, cooperative relationships developed between the federal government, especially the Interior Department, and the producers of oil, gas, and coal.* “God help Government,” wrote C. Pratt Rather, a gas industry execu-

*In 1922, Interior Secretary Albert Fall persuaded President Warren G. Harding to transfer control over the U.S. Naval Petroleum Reserves to his department. Fall then leased, in return for a bribe, the 9,481-acre Teapot Dome reserve in Wyoming to oilman Harry Sinclair; he subsequently leased the 38,969-acre Elk Hills reserve in California to another oilman, Edward Doheny. A congressional investigation later uncovered the scheme. Fall, Sinclair, and Doheny were indicted, convicted, and briefly imprisoned.

This essay has been adapted by the editors from chapters 1–3 of Energy in Perspective, which were written by Craufurd D. Goodwin (the Truman years) and William J. Barber, an economist at Wesleyan University (the Eisenhower years).

tive assigned to Interior in 1951, "and industry too, if this sensible alliance is not maintained."

A third viewpoint was that of the free-market economists and their allies, represented primarily by the Federal Trade Commission and the antitrust division of the Justice Department. Only vigorous competition among many small producers of oil, coal, and gas—not planning, not federal price-fixing, not a peacetime War Production Board—would guarantee minimum energy costs and maximum efficiency. This notion was embodied in the Sherman Antitrust Act of 1890 and the Clayton Antitrust Act of 1914. "Big Oil" was a favorite target.

Competition vs. Regulation

Each of these views had its sincere adherents in such places as the Bureau of Mines and the Petroleum Administration for War, and its advocates on Capitol Hill. When he assumed the Presidency, Harry Truman acquired not one energy policy but several:

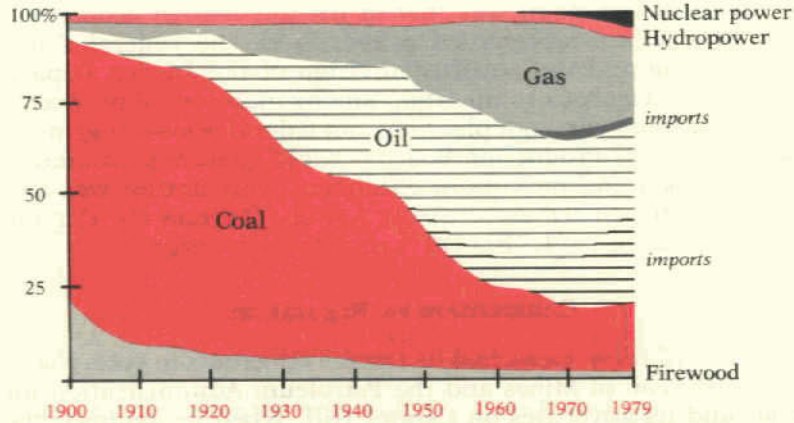
Oil. Here the free-marketers had won the first round with the breakup in 1911 of John D. Rockefeller's Standard Oil, "mother of trusts," into 34 separate companies. But *laissez faire* in the oil industry led, in the 1920s, to overproduction, price wars, and waste. (Drilling too many wells in close proximity often resulted in loss of pressure and hence of recoverable reserves.) After Columbus M. ("Dad") Joiner's 1930 strike in the Sabine Basin in East Texas, opening up what was then the largest oil field in the world, the price of U.S. petroleum plummeted to 65¢ a barrel.*

As a result, Congress stepped in with the Connally Hot Oil Act in 1935 to enforce a complicated system of quotas (or "allowables") governing the amount of petroleum each producing state could sell. ("Hot oil" was oil sold in excess of the allowable.) The federal government collected nationwide data on oil consumption so that just enough petroleum would be produced to satisfy demand at an arbitrary price. Local allowables were set by intrastate bodies, such as the Texas Railroad Commission. The whole scheme was overseen by an Interstate Oil Compact Commission. The controlled price of U.S. oil was higher than that of crude available from Venezuela or Mexico, but an oil tariff was already in place (1932) to discourage imports.

In effect, Congress sanctioned a petroleum oligopoly blessed

*A barrel of oil is equivalent to 42 gallons. Normally a barrel contains 55 gallons, but petroleum was first transported to market in wooden casks by horse-drawn wagons; there was so much slopping around that refiners were willing to pay only for 42 gallons per barrel.

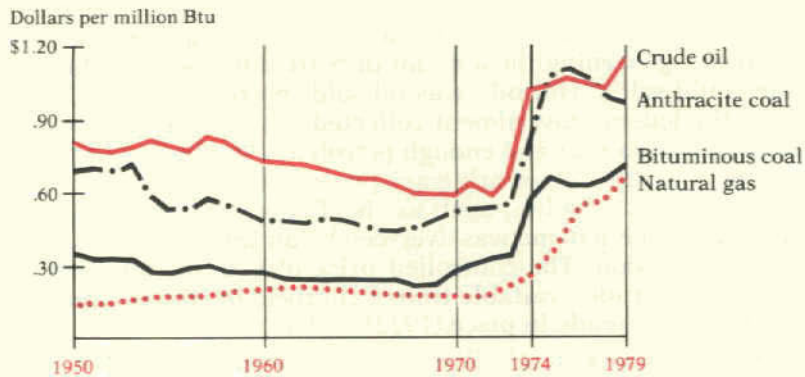
U.S. ENERGY CONSUMPTION BY SOURCE, 1900-79
(as % of total consumption)



Source: U.S. Department of the Interior; U.S. Department of Energy; *Historical Statistics of the United States*, 1975.

Relative consumption of various fuels has changed dramatically over time (above). Increases in oil prices and depletion of gas reserves have led to a modest revival of coal. Firewood has overtaken nuclear power as a source of energy. In constant dollars (below), the price of all fuels steadily declined until the early 1970s, contributing to record demand.

PRICES OF U.S.-PRODUCED FOSSIL FUELS, 1950-79
(in constant 1972 dollars)



Source: Energy Information Administration, *Annual Report to Congress*, 1979.

with a legal price-fixing regime. Through this and other interventions, such as the oil-depletion allowance, the federal government ensured that the free market did not determine the price of oil, or the rate of production, or the pace of exploration.*

Foreign oil soon added a new twist. America's demand for petroleum had grown rapidly during World War II, and demand continued to expand following V-J Day, after a brief postwar downturn. To most specialists, it had long been obvious that the nation's petroleum future did not lie in Texas or Oklahoma. This prospect posed several dilemmas. German U-boats had decimated Allied shipping during World War II: Would heavy reliance on imports leave the United States exposed in the event of future hostilities? Or was it actually better to buy cheap foreign oil during peacetime, saving domestic reserves for an emergency? There was no easy answer. To exploit such reserves, a strong domestic oil industry had to be preserved; yet foreign imports could undercut U.S. producers.

Many of the large, vertically integrated American oil companies (the "majors") had invested heavily overseas.† Their economic interests did not always coincide with those of their smaller, stay-at-home cousins—or with Washington's foreign policy goals for that matter. (From the beginning, Arab oil and support for Israel did not mix well.) The bottom line, however, was that the United States was going to need foreign oil. With such needs in mind, President Roosevelt, returning from Yalta in February 1945, arranged a friendly cruise through the Red Sea with Ibn Saud, King of oil-rich Saudi Arabia.

Natural gas. Gas emerged as a potential major fuel only during World War II. Like oil, natural gas was cheap, could move by pipeline, and was a "clean" fuel increasingly preferred to coal by industry and utilities. By war's end, greater and greater proportions of gas to oil were being found.

Should gas be further regulated? Under the 1938 Natural

*The oil depletion allowance was established in 1926 to encourage producers to search for new oil. An oil company could deduct from its tax base 27.5 percent (changed to 22 percent in 1969) of gross income from a given oil property; the deduction could not exceed one-half the net income from that property. (Similar but lesser tax incentives nourished many industries. For example, there was a 3 percent depletion allowance for clam shells.) There was, of course, a certain contradiction between Washington's twin goals of encouraging oil exploration and limiting production.

†Great Britain dominated Mideast oil production before World War II, but American companies pulled abreast after the war and then moved far ahead. The situation during the early Truman years was as follows: Exxon and Mobil owned interests in the Trucial States, Qatar, and Iraq, but shared the fields with Great Britain; Gulf was established, alongside the British, in Kuwait; Exxon was the main foreign presence in Venezuela. The 440,000-square-mile Aramco concession in Saudi Arabia—once regarded as a "white elephant"—was owned jointly by Socal, Texaco, Mobil, and Exxon. Iran remained largely a British preserve, although Exxon and Mobil had a quarter interest in the Anglo-Iranian Oil Company.

Gas Act, the Federal Power Commission (FPC) plainly had the authority to regulate the prices that the few existing interstate pipeline companies could charge local utilities and industry. But what about the "wellhead" price that gas producers charged the pipeline? Here, there was room for interpretation.

Southwestern Congressmen like Senator Robert S. Kerr (D.-Okla.) believed that federal intervention was unnecessary: With 2,300 producers, the gas industry, Kerr claimed, was quite competitive. Regulators like Leland Olds, veteran New Dealer and FPC commissioner, countered that 75 of those producers (mostly oil companies) controlled 70 percent of the market.

The neglected long-range issue was whether the United States should encourage conservation of finite gas reserves through relatively high prices or stimulate widespread use of gas via politically popular low prices.

A Free-Marketer's Nightmare

Coal. Dirty, bulky coal was America's most abundant natural resource, but the coal industry was the most financially troubled of all the energy producers. Its share of U.S. energy consumption had been declining for years. N. H. Collisson, chief of the U.S. Coal Mines Administration, warned soon after World War II that the coal problem "far exceeds the ability of the industry to effect a solution."

Demand for oil and gas—coal's attractive rivals—had grown steadily after World War I. The coal industry ran in the red every year from 1924 until 1939, when a temporary system of minimum coal prices, established under the Bituminous Coal Act, began to have an effect. But price supports ended in 1943 and the industry as a whole, plagued by high fixed costs and too many small, marginal producers (there were then about 5,000 coal-mining companies) slipped back into unprofitability.

Unlike oil, coal benefited from neither market regulation nor subsidy. Its depletion allowance was a mere 5 percent. The industry was a free-marketer's nightmare: It was the one truly laissez-faire industry left in the energy sector, and it was thus placed at a severe competitive disadvantage. Ironically, geologists and bureaucrats alike knew that the nation's return to coal was inevitable when oil and gas ran out. Coal's long-term future was secure. Looking ahead, Evelyn Cooper, a member of the Interior Department's secretariat, predicted in 1946 that coal would eventually regain "all markets lost to these competing fuels and, in addition, . . . will itself be an important raw material for the manufacture of [synthetic] gasoline." The question

was whether the coal industry could survive till then.

This, then, was the energy picture that greeted Harry Truman at war's end. The United States was consuming about 30 quadrillion Btu's of energy a year (two-fifths of the 1980 level).^{*} Almost half the U.S. energy came from coal, followed by oil, then gas. In 1946, America was a net exporter of all of these fuels. In that year, a barrel of U.S. oil cost \$1.41. Natural gas was priced at 5¢ per thousand cubic feet.

When Truman sought to act on energy matters, it was generally as an interventionist. Truman was suspicious of big corporations, fearful of monopoly, and loyal to the New Deal that he supported as a Senator from Missouri in 1935-45. He himself promised Americans a "Fair Deal," favoring the "little guy," and pushed ahead with plans for "more TVAs" in Colorado, California, and elsewhere. He didn't want the West, he said, to be "an economic colony of Wall Street."

The ailing coal industry got no succor from Truman. Any good will he may have had ebbed quickly during a wave of coal strikes beginning in 1946. Amid brownouts, Truman symbolically doused the floodlights on Capitol Hill and ordered a federal takeover of the coal mines for a year. The President possibly had better relations with Stalin than he did with John L. Lewis, imperious president of the United Mine Workers.

The reality was that coal operators could not afford to pay appreciably higher wages to 400,000 coal miners unless they also raised the price of coal; yet higher coal prices would merely encourage coal's remaining customers to switch to oil.

Keeping Gas Cheap

Harry Truman's one concession to the coal industry was a nod in the direction of developing synthetic oil and gas derived from coal. There was no mystery about synthetics. Very early in World War II, the Germans were producing 30 million barrels of synthetic oil a year in Silesian and West Prussian coal-oil plants. U.S. technicians, examining Nazi scientific records after the Allied victory, learned the details. Congress authorized \$85 million for "synfuel" research during the Truman years.

Yet, without slave labor (which the Germans employed), and with plenty of cheap oil and gas still available, producing synthetic oil and gas was too costly a proposition. For 30 years, synfuels were to remain perpetually "a decade away."

In 1946, looking at another fuel, President Truman decided

^{*}A British thermal unit (Btu) is the quantity of heat required to raise one pound of water 1° Fahrenheit.

to turn over the government's two large-diameter steel pipelines—the Big Inch and Little Big Inch, built during the war to bring oil from Texas to the Atlantic seaboard—to the “gas people.” This decision, to the dismay of the coal industry, promoted gas from the status of a petroleum by-product (which was, for the most part, used locally) to that of an important fuel with a new national market. Truman's instincts urged him toward stricter regulation of the gas industry. To him, this meant that the Federal Power Commission should regulate the price of gas at the wellhead, not simply the pipeline price.

The pricing issue quickly found its way into the federal courts. The city of Detroit filed a motion in 1946 requesting the FPC to assert its jurisdiction over Phillips Petroleum, the local supplier of gas; the suit wound a tortuous path to the Supreme Court, and no ruling was forthcoming until the Eisenhower administration. Meanwhile, gas-state Congressmen—Senator Kerr of Oklahoma, and Senator Lyndon Johnson and House Speaker Sam Rayburn of Texas—pushed through a bill in 1950 to exempt natural gas from wellhead regulation. Advised by aide Charles Murphy that the legislation had “no merit” and would “take some of the shine off of the Fair Deal,” Truman vetoed the bill. There the matter rested, for a while.

Truman's veto climaxed a bitter fight in Congress, pitting consumer states (which favored low prices) against producer states (which favored high prices). Even racial prejudice was brought in: “The colored people,” wrote Charles LaFollette, director of Americans for Democratic Action, “are particularly incensed because they regard this measure [the Kerr bill] as a reward to the chief foes of civil rights legislation.” For all the passion aroused by the debate, few voices warned that excessive demand and excessive dependence might result from selling gas at prices far lower than what the market would bear. The realities became clearer three decades later.

Trouble in Iran

The major *oil* policy question Truman faced was what to do about petroleum imports. As a percentage of total U.S. oil consumption, imports swelled during the Truman era from zero to 13 percent—or to almost 1 million barrels a day.

Imports meant different things to different people. Domestic producers feared a tidal wave of inexpensive foreign oil. Consumers looked forward to a “softening” in the price of gasoline. The State Department, believing that more imports were inevitable, hoped by “active, energetic, and consistent support” to



Public suspicion of the oil industry ran deep during the Truman years. Yet, despite their presumed power, oil companies gained only one of the three initiatives Herblock criticized in this 1950 cartoon—tax benefits.

From The Herblock Book, Beacon Press, 1952.

ensure that American companies got the lion's share of the Middle East's oil concessions. The Pentagon was worried about defending distant oil supplies and a vulnerable tanker lifeline in the event of war but also conceded that "draining America first" would only make matters worse. The Defense Department pressed hard—and in vain—for a massive stockpile of crude.

For his part, Harry Truman saw growing imports as part of "a concerted effort by the big companies to put the little [domestic] companies out of business." He was apparently on the verge of curbing imports drastically when the Korean War broke out on June 25, 1950. The import question was left in limbo.

A year later, with the United States deeply involved in war, events in Iran underscored the risk in heavy reliance on oil from the Mideast. In April 1951, Iran's frail but frenetic premier, Dr. Mohammed Mossadegh, nationalized the Anglo-Iranian Oil Company. Anglo-Iranian was largely a British firm (it became British Petroleum in 1954), and the production cutbacks did not affect the United States. But Western Europe and Japan were threatened with shortages.

Washington responded by looking the other way as the "Seven Sisters" joined to create a "disaster plan" cartel, boycotting all Iranian oil and arranging for the supply of oil, from other sources, to Europe and the Far East.* Despite Truman's

*The "Seven Sisters," the oil companies controlling almost all Mideast petroleum production at the time, were Exxon, Shell, British Petroleum, Gulf, Texaco, Mobil, and Socal.

suspicious, the majors could be useful; then as later, they brought order out of chaos when governments failed to do so.

But, unlike its European allies, the United States never established ground rules for its own day-to-day relations with the big oil companies operating abroad; instead, the executive branch acted erratically. In 1952, for example, the Federal Trade Commission filed a criminal suit against Gulf, Exxon, Texaco, Mobil, and Socal for “cartel practices” overseas, even as Secretary of State Dean Acheson warned that weakening of the oil companies would lead to a “decrease of political stability” in the Mideast.

The Paley Commission

Thus, Harry Truman bequeathed to his successor a set of energy policies with many unresolved contradictions and no guiding rationale. Why did no comprehensive policy emerge?

Ignorance was not the culprit. In the yeasty period of discussion following World War II, energy policy had been given considerable attention by Harold Ickes and others in Washington. Conferences were held, studies commissioned, proposals advanced. The general dimensions of America’s long-term energy supply problem were clear. There was no want of expert advice, even if firm quantitative data on fuels, which the government did not then collect, were scarce.

The main barrier to concerted action on energy—as on other matters—was Washington’s chronic peacetime preoccupation with short-term political costs and benefits. Stephen Raushenbush, an influential Interior Department official, asked himself in 1944: “Can a sensible fuels policy be devised?” He decided that the answer was no. Neither Congress nor the White House, he concluded, was equipped to address the matter on a broad national level. “Every measure comes up as a special commodity interest measure, is handled by a special agency, and goes before special interest committees of Congress.”

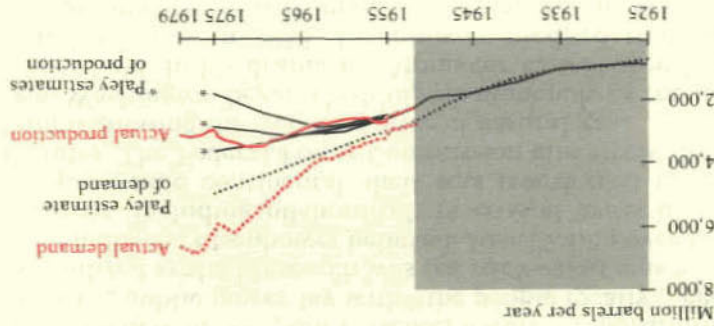
The energy sector was fragmented, and individual energy industries themselves were riven by conflicts. No one federal agency had responsibility for energy matters, but many of them—from the Bureau of Mines to the Bureau of Reclamation—had something at stake. The policymaking structure had so evolved that even minor projects, like synfuel development, touched many nerves, soothing some (in the coal industry), irritating others (in the oil and gas industries). Sudden crises such as the Korean War heightened awareness of long-range energy needs but at the same time deadened sensation to all but the cri-

Some issues were extraordinarily divisive. "Big Oil" had been a target of savage criticism since the 1880s; by the early 1950s, suspicion of the multinational oil companies was virtually embedded in American political rhetoric. "Oil continues to ally embedded in American political rhetoric," culminated in Harold Ickes as the 1947-52 "tidelands" controversy raged in Washington. At issue was whether mineral rights to submerged coastal lands should rest with the states or with the federal government. The oil companies favored state control (they believed royalties would be lower and access easier), but President Truman felt otherwise; and he prevailed against those whom he regarded as "special privileged promoters."

It is unfortunate that the one broad White House energy initiative—creation of the Paley Commission—came at the end of the Truman era instead of at the beginning. Formally known as the President's Materials Policy Commission, and headed by CBS chairman William S. Paley, this blue-ribbon study group was set up by President Truman in 1951 to take stock of America's future needs for all types of nonrenewable natural resources. With a staff of 50, Paley brought the study to completion in 1952.

The final report, *Resources for Freedom*, was widely publicized. The authors insisted that "the hydra heads of energy policy must be reined together." They recommended a wide

U.S. CRUDE OIL DEMAND VS. DOMESTIC PRODUCTION, 1925-79



Source: *Resources for Freedom* (Paley Report), 1952; Energy Information Administration, Annual Report to Congress, 1979.

Projections of U.S. oil supply and demand made by the Paley Commission in 1952 proved remarkably accurate. The commissioners warned that Americans had "skinned the cream" off domestic energy resources.

range of federal programs, including research into solar and atomic energy and creation of an underground petroleum reserve. They challenged Detroit to come up with a fuel-efficient car and challenged Americans generally to start preparing for the energy demands of the 1970s. "As a nation," the authors observed, "we have always been more interested in sawmills than seedlings."

The timing of the Paley report was inauspicious. Four months after its publication, Dwight D. Eisenhower was elected President of the United States; the warnings of *Resources for Freedom* were largely forgotten in the transition to the first Republican administration since 1933.

Whether or not Eisenhower read the Paley report, he would certainly have been comfortable with its assertion that a consistent energy policy "implies no increase in government activity; it might well mean less." The new administration's basic stance on economic matters might be summed up by the words "hands off." Eisenhower believed in free markets, in private enterprise, and in regulation by states and localities, not by the federal government. Energy policy per se did not rank high on the Eisenhower agenda. But in its various applications, the broader official free-market doctrine affected the energy sector in many ways.

Conception without Sex?

As early as the summer of 1953, the Interior Department announced a "no new starts" policy: Henceforward, responsibility for developing public power lay with "the people locally." Federally subsidized synfuel research was cut back—that was a job for private industry, Eisenhower believed. Jurisdiction over seabed resources, including offshore oil, in coastal areas of the 875,000-square-mile continental shelf was transferred to the several states. The Federal Power Commission effectively drew back from regulating the wellhead price of natural gas.

Soon, Washington began shedding its monopoly of the nuclear power field. In his dramatic "Atoms for Peace" speech to the United Nations in 1953, Eisenhower pledged that the "miraculous inventiveness of man" would be put to work in harnessing atomic energy. With White House backing, the Republican-controlled Congress rejected Democratic Senator Albert Gore's proposal to make generating electricity from nuclear power a federal monopoly. Instead, Congress authorized the Atomic Energy Commission to make uranium fuel and reactor blueprints available to the private sector. The first com-

mercial nuclear power plant went into operation in 1957 in Shippingport, Pennsylvania, using a reactor modeled on that of the Navy submarine, *Nautilus*. When questioned by reporters about the high cost (\$110 million) of the new plant, Admiral Hyman Rickover, who helped supervise its construction, replied: "You people are asking for conception without sex."

When the Iran crisis came to an end in 1954 following the overthrow of Mossadegh and the return of the Shah—"a diplomatic victory for the West," as the *New York Times* put it—Eisenhower again paid homage to free competition by inviting U.S. independent oil producers, most of them with little or no foreign experience, to join with six "majors" in dividing up the 60 percent of Iranian oil production reserved to U.S. firms under the terms of the new settlement.

Erecting a "Quota Dike"

For a full year, the Eisenhower administration adhered to its free-market principles. Then, in 1954, came a recession. Despite his professed distaste for the "new economics," the first Republican President since Herbert Hoover was not about to preside over a depression. The notion of government intervention in the economy regained some of its appeal.

Eisenhower was opposed to "slam-bang" stimulants to increase demand, but some kind of stimulus was clearly in order. New public power projects, favored by the Democrats, were a possibility. But the public works project that the President backed and Congress approved was the construction of a new 41,000-mile interstate highway system. The highway program helped to open up the hinterland to industry and tourism and encouraged suburbanization. In effect, it also subsidized growing U.S. dependence on cars and buses, further weakening the ailing passenger railways. In the end, the highway program helped to create a sizable new demand for imported oil.

The year 1954 also brought a Supreme Court decision in the long-simmering Phillips Petroleum case. The Court ruled that the Federal Power Commission, as Truman had believed, *must* regulate the wellhead price of natural gas. Eisenhower promptly sought to annul the ruling by legislation, and a bill to exempt natural gas from FPC jurisdiction cleared Congress after a reprise of the bitter debate of 1950. But evidence came to light of an attempt by an oil company lawyer to bribe Senator Francis Case (R.-S.D.), and Eisenhower reluctantly vetoed the legislation, saying that "any good bill ought to be passed without having a terrible stench connected with it." Later attempts to

In 1957, President Eisenhower waved a "neutron wand" in the White House, activating the nation's first atomic power plant at Shippingport, Pa.



Courtesy Dwight D. Eisenhower Library.

revive the legislation were stalled in Congress.

So, for almost three decades, the FPC was to set prices for natural gas. Responsive to consumer pressure, it kept them low, overlooking the long-term effects of its actions on future U.S. energy supply and demand.

Like its predecessor, the Eisenhower administration worried most about oil, notably, the rising volume of imports. As a proportion of total U.S. oil consumption, imports rose from 13 to almost 19 percent during the Eisenhower years. Growing Mideast production by American companies spurred this trend. After 1950, U.S. tax laws made foreign crude, already cheap to produce, especially attractive: At the urging of the State Department, the Treasury Department had ruled that royalty payments to foreign governments by American companies could be subtracted from their U.S. taxes. Domestic U.S. oil producers demanded protection.

In 1955, Eisenhower established a system of voluntary import controls, whereby U.S. oil companies would limit future imports to the share of the domestic market that foreign oil held in 1954. (Canadian and Venezuelan oil was, in effect, exempted.)

The voluntary system did not work, in part because some of the "newcomers"—American independents who had ventured late into the Arab world—defied such discipline.

On March 10, 1959, Eisenhower issued Presidential Proclamation 3279 replacing the voluntary quota system with mandatory oil import controls—a "quota dike." Henceforth, foreign oil could not legally be brought into the United States without a license issued by the Secretary of the Interior; the Interior Secretary would allocate these imports among domestic refiners. The "hemispheric preference" for Canadian and Venezuelan oil was ended. The President did not like what he had done. He privately complained about the "tendencies of special interests in the United States to press almost irresistibly for [protective] programs like this."

Mandatory quotas did not change the underlying reality—a condition of surplus at home and abroad. A lid had long been kept on domestic production to keep oil prices stable; now a lid was clamped on imports largely for the same reason. But foreign oil was still cheaper to produce than domestic oil, and the major oil companies still stood to make greater profits by bringing it in. Controls moderated the glut but did not eliminate it. By 1960, *Time* magazine was urging motorists to drive four minutes more each day to help reduce surplus gasoline stocks.

Designed to protect domestic interests, the Eisenhower controls program was to have long-term international repercussions. The State Department had viewed quotas with foreboding, warning of hostility from oil-producing countries anxious to find markets for what, in some cases, was their only source of export revenue. The Venezuelans, dependent on U.S. imports and about to embark on a massive economic development effort, were especially upset.

In 1960, Venezuela, Iran, Iraq, Kuwait, and Saudi Arabia formed the Organization of Petroleum Exporting Countries, the brainchild of Venezuelan oil minister Perez Alfonso. Many things would have to fall into place before OPEC could challenge its customers. But a new actor, as yet hardly noticed in the West, was now on the world stage.