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 Legislation is to be resubmitted to Congress this year, with a number of new provisions to simplify licensing of nuclear plants and requiring that the Government act on all completed license applications within 18 months after they are received.
 By proclamation, all existing tariffs on imported crude oil and products are to be removed, and holders of import licenses will be able to import petroleum duty free.
 Direct control over the quantity of crude oil and refined products that can be imported has been suspended and will be replaced by a license-fee quota system.
 An Office of Energy Conservation is to be established in the Department of the Interior to coordinate the energy-conservation programs that have been scattered throughout the Federal establishment, to conduct research, and to cooperate with consumer and environmental groups in efforts to educate consumers in energy efficiency.
 The Department of Commerce, working with the Council on Environmental Quality and the EPA, was directed to develop a voluntary system of energy efficiency labels for major home appliances to assist the consumer further.
 The Department of State, in coordination with the AEC, other Government agencies, and the Congress, was instructed to move rapidly in developing a program of international cooperation—such as the joint research presently being pursued in MHD by the U.S. and the Soviet Union—in R&D of new forms of energy and in developing international mechanisms for dealing with energy crises.
 A new post has been created, that of Counselor to the President on Natural Resources, to assist in the policy coordination in this area.
 The Secretary of the Interior was directed to strengthen his departmental organization of energy activities in the following ways: the responsibilities of the new Assistant Secretary for Energy and Minerals will be expanded to incorporate all departmental energy activities; the Department is to develop a capacity for gathering and analyzing energy data; an Office of Energy Conservation is being created to seek means for reducing energy demands; and the Department has also strengthened its capabilities for overseeing and coordinating a broader range of energy R&D.
 By Executive order, the Department of the Treasury was authorized to direct the Oil Policy Committee that coordinates the oil import program.
 By a second Executive order, a special energy committee, composed of three of the President's principal advisors, was established to deal with top-level energy policy matters; and a new division of

energy, environmental, and economic objectives.
 The Department of the Interior was directed to institute a new reporting system on national coal production and the FPC is to report regularly on the use of coal by utilities.
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Energy and Science was established within the Office of Management and Budget.
 Proposals. Gas from new wells, or gas newly dedicated to interstate markets, and the continuing production of natural gas from expired contracts should no longer be subject to price regulation at the well-head.
 The Secretary of the Interior should be authorized to impose a ceiling on the price of new natural gas when circumstances warrant.
 Congress should pass legislation providing appropriate settlements for those forced to relinquish Santa Barbara Channel leases in 1971.
 Congress should act swiftly so that we can expedite the construction of the Alaska pipeline.
 The highest national priority should be given to expand development and utilization of our coal resources.
 Strong legislation should be enacted as soon as possible to protect the environment from abuse caused by strip mining.
 All state utility commissions should ensure that utilities receive a rapid and fair return on pollution-control equipment, including stack-gas-cleaning devices and coal-gasification processes.
 Siting legislation should be enacted by Congress for electric generating facilities and for deep-water ports to accommodate "supertankers."
 Congress should extend the investment credit provisions of our present tax law to encourage exploratory drilling for new oil and gas fields.
 Legislation should be enacted to permit the Department of the Interior to issue licenses for deep-water ports.
 Local officials should be permitted to use money from Highway Trust Funds for mass-transit purposes.
 The following provisions in the Presidential budget for fiscal 1974 should be approved: a 20 percent increase in energy R&D funding; the creation of a new central energy fund in the Interior Department to provide additional money for nonnuclear R&D (most particularly coal research); a 27 percent increase in coal R&D; increased funding of R&D for the liquid metal fast-breeder reactor, reactor safety and radioactive waste disposal, and the production of nuclear fuel; a 35 percent increase in funding for our total fusion R&D effort and the initiation of reactor design studies; additional funds to assure reactor safety; the tripling of our solar energy R&D; and a 24 percent increase of R&D funds relating to environmental control technologies.
 All state utility commissions should review their regulations regarding R&D expenditures to assist the electric utility industry in its R&D efforts.
 Legislation should be enacted to consolidate Federal energy-related activities within a new Department of Energy and Natural Resources (DENR), which would build on the already proposed legislation, with heightened emphasis on energy programs, and "would provide leadership across the entire range of national energy. It would, in short, be responsible for administering the national energy policy detailed in this message."

... A new Department of [Energy and] Natural Resources should be created that would bring together the many natural resource responsibilities now scattered throughout the Federal government. This department would work to conserve, manage and utilize our resources in a way that would protect the quality of the environment and achieve a true harm-

Reactions to the Nixon message

As might be expected, depending on the source, reactions on the President's message on energy varied. Many Congressional experts on our energy outlook believe that Mr. Nixon's measures come at least six years too late. Laying at the doorstep of the Johnson Administration the responsibility for the original failure to establish a national energy policy before what they believe to be crisis conditions that obligated President Nixon to act, this critical group further maintains that it will take several years to effect the Nixon proposals, even presuming he can obtain Congressional approval—a doubtful prospect considering the stiff opposition he faces from a Democrat-controlled Congress.

On the other hand, the Nixon message met with a generally favorable, though guarded, reaction from the energy industry, and Spectrum found oil industry spokesmen felt similarly. The latter view the present situation as a "crunch" of short-term duration rather than as a full-blown crisis, and they go along with such proposals as:

- Removing natural gas prices from regulation.
- Removing oil-import quotas.
- Expanding the leasing of offshore oil and gas sites.
- Postponing national air-quality standards.

Said John G. McLean, chairman of the Continental Oil Company and head of the National Petroleum Council, to Spectrum: "We must take all necessary steps to stimulate the development of our indigenous energy resources."

Among such steps, Mr. McLean told Spectrum he favors strengthened tax incentives for the develop-

ment of energy resources and "reasonable modifications in the ecological constraints that are, at present, inhibiting the development and consumption of our indigenous fuels."

But Arnold R. Miller, president of the United Mine Workers UMW, reacted with considerably less enthusiasm to Mr. Nixon's message, expressing to Spectrum the UMW's feeling that "we face an emergency situation today because Government has failed to develop a national approach to our energy needs, but, instead, has permitted corporate interests to develop and supply the nation's energy in accordance with their profit instincts alone."

Furthermore, no one in the Administration consulted with the leaders of the 200 000-man UMW on energy policy decisions, Mr. Miller pointed out, and he went on to say that "there has been no indication from the Administration of any concern that thousands of miners may lose their jobs." By this, Mr. Miller is expressing the UMW concern that the shift from deep-mining of high-sulfur-content coal in the Appalachian states to strip-mining of low-sulfur coal in the West may lead to the abandonment of important coal mining east of the Mississippi River.

Finally, Mr. Miller blamed industry and Government "myopia" for the slow development of sulfur-removal processes that would preserve the Appalachian coal economy.

And as for the environmentalists and those concerned with conservation, they, too, found the President's message in conflict with their interests, charging that the proposals favored economic over ecological concerns.

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The new Department of [Energy and] Natural Resources would absorb the present Department of the Interior . . .

The bill to accomplish the creation of the DENR was introduced into the House of Representatives by Congressman Chet Holifield (D-Calif.). Proposed within the DENR is an Energy and Mineral Resources Administration, headed by an administrator who would report to the Secretary. Figure 1 represents an organizational block diagram and shows the five administrations within the DENR.

Coordination and augmentation of Federal regulatory functions. Two major proposals that address this topic are the Ash Council recommendations and a study by the Bar of the City of New York:

Ash Council report on independent regulatory agencies. The President's Advisory Council on Executive Organization (Ash Council) submitted its report on the independent regulatory agencies to Mr. Nixon on January 30, 1971. The recommendations, however, were not submitted to Congress. The report made several far-reaching suggestions for restructuring the various commissions—including the FPC—that included the abolition of these agencies per se. The functions of these agencies would be headed by a single administrator of a supra-agency appointed by and serving at the pleasure of the President (following confirmation by the Chief Executive). Included in this supra-agency would be a newly established Federal Power Agency.

The report also recommended the streamlining of

the adjudicative processes of the regulatory functions by restricting review of hearing examiner decisions so that "hearing examiners would enjoy the status of administrative judicial officers." Appeals from the Federal Power Agency's final judgment, for example, would be taken to a new Administrative Court, with appeal only to the U.S. Supreme Court.

Report of Special Committee on Electric Power and the Environment, New York City Bar. This special committee was the outgrowth of four regular committees dealing with power plant siting in New York State. The committee transmitted its final report in August 1972 and, although its focus was not on Federal reorganization, it made recommendations for reform of the Federal regulatory framework.

For example, the report recommends the creation of an "Energy Commission" that would be a regulatory body "consolidating the regulatory duties of the FPC, AEC and, preferably, those parts of the Federal government dealing with energy forms other than electricity," and an "Energy Agency" that would be "a developmental body consolidating the research activities of the AEC, Office of Coal Research, and all other administrative and executive offices concerned with energy R&D."

Further, the Energy Commission would have the responsibility for studying the extent to which the demand for energy should be encouraged or discouraged, and then presenting its recommendations to Congress. The commission would also be charged with reviewing the intermediate-range plans of utilities and determining how much new generating capacity is

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Further, the Energy Commission would have the responsibility for studying the extent to which the demand for energy should be encouraged or discouraged, and then presenting its recommendations to Congress. The commission would also be charged with reviewing the intermediate-range plans of utilities and determining how much new generating capacity is

actually needed, as well as the general locations in which such new capacity should be sited.

Finally, the proposed Energy Agency is designed to be a "one-stop" regulatory framework for power plants and their licensing.

Inputs from the "House" side

Congressman McCormack, chairman of the Subcommittee on Energy of the House Committee on Science and Astronautics, made some cogent remarks before the National Conference of the Joint Engineering Legislative Forum last February 27. Commenting on the future of nuclear, solar, and geothermal energy, Mr. McCormack had this to say:

"The U.S. must depend heavily upon nuclear fission to . . . meet its energy needs for the rest of this century. I hope the time will come, after 2000, when we can—as a matter of world policy—totally abandon the combustion of fossil fuels and the use of nuclear fission as sources of energy, and turn instead to the nearly inexhaustible . . . and nonpolluting sources available to us in the future. Until that time, however, our only rational course is to proceed vigorously with our present programs—including the development of the LMFBR, and alternative breeder concepts . . ."

"One of the . . . inexhaustible and potentially nonpolluting sources is solar energy. . . . With adequate R&D support over the next 30 years, solar energy could provide at least 35 percent of the heating and cooling of future buildings, more than 30 percent of the methane and hydrogen needed in the U.S. for gaseous fuels, and more than 20 percent of the country's needs for electric power . . ."

"Several encouraging studies are underway, but a well-managed, progressive, imaginative program for solar energy should be established at once. It should set, as its immediate goal, a series of inexpensive and simple experiments to determine whether . . . solar energy would provide the potential for . . . central power stations that its advocates claim . . . Solar energy, if it is economically feasible, would have a minimum impact upon the environment . . . It is my hope that the Subcommittee on Energy . . . can work closely with the NSF, other Federal agencies, and private agencies to establish a program for solar energy research. . . . Such a program should anticipate the extensive use of solar energy by the mid-1980s . . ."

"Geothermal may be another essentially inexhaustible energy source. Research . . . indicates that the conversion of such energy would also be nonpolluting, with closed systems pumping exhausted steam or hot water back into the ground. The concept also considers the possibility of pumping seawater into the ground to produce dry steam to drive turbogenerators . . . But, as with solar energy, an organized program is required."

"Two 'far-out' sources of inexhaustible energy may be available to us: fusion, and satellite solar energy. I am encouraged with the programs on fusion research (although I suspect they are 'underfunded' by \$5 to \$7 million in the President's proposed budget for fiscal 1974). Fusion energy will not be pollution free. We can be sure that in the early generations of [such] power stations, we will have large amounts of waste heat released to the atmosphere [plus] radioactive

materials—including small amounts of tritium . . .

"Satellite solar energy can be considered to be pollution free, except for heat loss in converting microwaves to electric energy, and in use of the energy itself. It does involve many flights of the space shuttle and the use of a nuclear-powered transportation system from low to synchronous stationary orbit . . ."

"With regard to these 'exotic' sources, I hope that we may have a pilot nuclear fusion plant by the year 2000, and that it will prove to be economically competitive . . ."

Other spokesmen, other views

Interior Secretary Rogers Morton has, for some time, been advocating the construction of the trans-Alaska pipeline. His position is now substantially reinforced by President Nixon's latest energy message. Nevertheless, the construction of this line will probably be delayed for a considerable time by the complexities of current court litigation initiated by conservationist groups to block the project. Morton's advocacy of the trans-Alaskan stems primarily from his reluctance to "find ourselves really in a position of total dependence on other parts of the world for our energy base." He feels this would place the U.S. in a "very insecure position."

Stewart Udall, Secretary of the Interior in the Kennedy and Johnson Administrations, feels that the best alternative to the crises is a conservation of both fuels and energy. He advocates smaller cars, commuter car pools, more dependence upon mass rapid transit, and barring private motor vehicles from the downtown areas of major cities. Udall tends to view the insatiable energy demand as a force that must be curbed and controlled if we are to conserve our natural resources and preserve the environment.

A concluding observation

Unfortunately, one "energy message" from the President will not "clear the air"—either environmentally or politically. The abrupt lifting of the oil import quotas may raise more questions and problems than it will solve, especially in the sensitive area of balance of payment deficits. Further, the political-ly unstable Middle East will be an important factor in the future unstable fuel equation.

As we go to press, Senator Jackson announced that his committee will hold hearings on coal policy issues, beginning June 6. Said Jackson: "Coal is a critical and vital element in the [U.S.] energy supply picture. Progress toward the goal of national energy self-sufficiency will depend . . . on our ability to use our vast coal resources more effectively and in environmentally acceptable ways . . . We cannot ignore the fact that the production and use of coal has been seriously affected by government action . . . Only a concerted effort by both Congress and the Executive branch will enable coal to achieve a greater role in meeting our future energy needs."

Jackson also released a background paper on "Factors Affecting the Use of Coal in Present and Future Energy Markets." The report identifies public policy issues affecting coal's future, describes the impact of present and proposed public policies on that fuel's economic position as an energy source, and suggests the potential of coal in meeting energy needs.