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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAY 15 1980

Ms. Kristina M. Keith
3016 Renault Street
San Diego, California 92122

Dear Ms. Keith:

This is in reply to your letter of March 17, 1980, to President Carter. Enclosed is an excerpt on nuclear power from the "Second National Energy Plan, " transmitted to the Congress by the President on May 7, 1979. This includes a discussion of breeder reactors under the heading of "New Technologies". Also enclosed is a statement of December 7, 1979, by the President on the Kemeny Commission Report on Three Mile Island.

Sincerely,

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosures:
As stated

96th Congress, 1st Session - - - - - - - - - House Document No. 96-121

SECOND NATIONAL ENERGY PLAN

MESSAGE

FROM

THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

THE SECOND NATIONAL ENERGY PLAN, PURSUANT TO SECTION 801 OF THE DEPARTMENT OF ENERGY ORGANIZATION ACT

EXCERPT

MAY 7, 1979.—Message and accompanying papers referred to the Committee of the Whole House on the State of the Union and ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE
45-004 O WASHINGTON : 1979

B. Nuclear Power

Although nuclear power has its origins in nuclear weapon research conducted during World War II, nuclear-generated electricity was not important in the civilian economy until the early 1960s. At that time, after government and industry had jointly funded and operated several demonstration plants, electric utilities began to place orders for large numbers of commercial nuclear reactors. The first of these began operation in the early 1970s. Orders for new nuclear plants exceeded orders for coal-fired plants through the late 1960s and early 1970s. From 1971 through 1978, utilities placed orders for 105 nuclear plants. By 1978, 38 of these orders had been cancelled. In all of 1978, only two new plants were ordered.

In part, this sharp decline reflects the downward revisions of electricity growth forecasts. Equally important, however, public concerns have increased over a series of unresolved questions about nuclear power--specifically, the management of nuclear wastes, the safety of reactor operations, health and environmental risks, and proliferation of nuclear weapons. Permitting delays arising from the public controversies over these critical issues coincided with a substantial decline in labor productivity. Some nuclear projects experienced large cost overruns and often required what some utility executives viewed as excessive management attention.

The recent accident at the Three Mile Island plant in Pennsylvania has reinforced safety and other public concerns. But as the U.S. regards its energy options after Three Mile Island, the role of nuclear power must receive a considered and objective assessment. The future of nuclear power will change--for the better, if safety and other issues are successfully resolved.

The U.S. now obtains 13 percent of its electricity from nuclear power. Any precipitate action to close a large number of reactors in operation now could seriously aggravate U.S. oil import dependence. In the long term, nuclear energy can help ensure a balanced energy supply system. In the absence of a nuclear power, alternative domestic energy supply sources (especially coal) would be harder pressed, and their costs pushed higher.

In the past, coal, oil, gas, uranium, and hydropower have competed with each other for shares of the electricity market. Regional factors determined the mix, and the price of electricity has been stable. In the future, however, coal is expected to replace large quantities of oil and gas in electricity and many industrial uses. Coal use is expected to double or triple by the end of the century and continue to grow at 3 percent a year thereafter. If nuclear power were not available, coal would have to supply most of the mid and long term electrical demand until new sources such as solar were developed. This would cause serious environmental, occupational safety, and social problems as well as the possiblity of a significant rise in coal prices.

STRATEGY FOR NUCLEAR POWER

First, the Administration seeks to re-establish the light water reactor (LWR) with the once-through fuel cycle as a viable supply option and thereby ensure that nuclear power will be a significant source of energy for the rest of this century. Second, it will continue the development of nuclear power as a potential backup technology for the next century. To implement this strategy, the Administration is pursuing two courses:

- To establish the safety of nuclear power and resolve other technical and institutional issues now impeding nuclear growth; and
- To develop new technologies that permit expanded use of nuclear resources.

Light Water Reactors--The Technical And Institutional Issues

To reestablish the light water reactor as a viable supply option, three issues must be resolved--reactor safety, nuclear waste management, and nuclear siting and licensing. Until reactor safety and waste management issues are resolved, utilities will hesitate to commit to new nuclear plants. Improved siting and licensing procedures are needed to ease the transition through this period of uncertainty by changing the requirements for planning additional plants. Other Federal programs are designed to improve uranium utilization so that existing uranium resources can fuel a larger number of light water reactors, using a once-through fuel cycle. This will extend the time available before breeder reactors need to be commercialized.

Reactor Safety--In response to the Three Mile Island accident, the President has established a fully independent Presidential Commission, including nuclear experts. The Commission will investigate:

- the circumstances that led to the accident and the events that followed;
- the technical questions that the accident raises about the operation of safety and back-up systems for this plant and plant design; and

- the nature and adequacy of the response to the accident by all levels of government.

The President has asked the Nuclear Regulatory Commission (NRC), an independent regulatory body, to accelerate its schedule for putting permanent resident NRC inspectors at every reactor site. Under a program started in 1978, the NRC now has permanent inspectors at 20 reactor sites covering 26 individual reactor units. The President has also instructed the Department of Energy to work closely with the NRC to determine what additional safety precautions may be necessary.

Nuclear Waste Management--Radioactive wastes are generated in a wide variety of activities--research, medicine, defense-related nuclear operations, and in the operation of commercial nuclear power reactors. Over the last decade, the public has become increasingly concerned over whether these wastes can be safely managed. This concern has been tied to the question of whether nuclear power generation should be allowed to expand.

Recognizing the urgent need to find an effective solution to the problem, the April 1977 National Energy Plan pledged to develop a national nuclear waste management policy and program. To acquire the views of pertinent Federal agencies and State and local interests, the President established an Interagency Review Group (IRG) and asked it to design a strategy for dealing with the waste management problem.

The primary objective of waste management planning and implementation is to assure that "existing and future nuclear waste from military and civilian activities (including spent fuel) should be isolated from the biosphere and pose no significant threat to public health and safety." The IRG developed the concept of an "interim strategic planning basis" to use during the interim, since the required environmental and safety studies had not yet been completed and final decisions could not be reached.

The IRG found the most urgent need was for a safe, permanent repository for high-level military and civilian wastes (including spent fuel). Such an effort will require detailed studies of repository sites in a wide variety of geologic environments and diverse media, using a systems approach. Pending completion of the decision process under the National Environmental Policy Act, the IRG has recommended the following actions from the interim planning:

- A number of potential sites in a variety of geologic environments should be identified and early action should be taken to resolve whether to use them at an appropriate time. A single national repository for wastes should be avoided. Near-term strategy should seek to have at least two (and possibly three) repositories in operation within this century; insofar as technical and other considerations permit, these repositories should be in different regions of the country. Under such a regional approach, the geologic, hydrologic, and other technical characteristics of the sites and safety considerations will constitute the primary basis for selection.

- Construction and operation of each repository should proceed in steps. Initial emplacement of waste, at least in the first repository, should be planned on a technically conservative basis. The wastes should be retrievable for some initial period of time. The manner and circumstances in which waste would be retrieved and the technical aspects of waste packaging, containment and handling must be further defined.

A second major waste management concern is the disposition of existing and future uranium mill tailings. In the case of existing sites that pose excessive health risks, the Department of Energy is developing programs to stabilize tailings at the site or remove them to other locations. In addition, new technologies to stabilize tailings are currently being developed to meet the most stringent criteria.

Away-from-reactor (AFR) storage of spent commercial reactor fuel is needed as a temporary bridge between storage of spent fuel at the reactor site and permanent repositories. Possible approaches include modification of an existing storage facility (either in Barnwell, South Carolina; Morris, Illinois; or West Valley, New York);[1/] construction of a new facility within the U.S.; or construction of a new facility a remote off-shore area.

The Administration takes the position that some AFR storage capacity is needed by 1983 for domestic spent fuel. Because of this deadline, use of some existing storage facility is preferred. Furthermore, the U.S. wishes to assure foreign users that the it will be able to receive limited amounts of foreign spent fuel to the extent this serves non-proliferation objectives. Environmental impact statements on AFR

1/ These existing storage facilities were built by industry as a part of commercial reprocessing plants. Since reprocessing is not permitted, these facilities are not being fully utilized by their industrial owners.

domestic fuel storage, foreign fuel storage and fee charges for such storage should be completed this year. In addition, an environmental impact statement on three potential ARF sites is now being prepared. The Administration has submitted legislation to Congress to implement this AFR program.

The Energy Department has funded waste management programs in the amounts shown on Table V-2.

TABLE V-2

FUNDING FOR NUCLEAR WASTE MANAGEMENT
(Million of Dollars)

	FY 1979	FY 1980
Commercial	191	199
Defense	257	372
Spent Fuel Disposal	11	21
Away from Reactor Storage	0	300[1/]
Total	459	892

Nuclear Siting and Licensing Legislation--Last year the Administration proposed legislation to reduce the uncertainties in the nuclear power plant siting and licensing process and to shorten the 10 to 12 year period it now takes to plan, design and build a plant. The Administration will continue to work with Congress to reduce unnecessary and duplicative steps in the siting and licensing process without compromising safety.

The key provisions of the bill included early site selection, environmental and safety review, and "banking" of a site before construction permits are filed for. It also provided for early approval of standardized plant designs independent of the site selection process and combining the application for a construction permit and an operating license. The bill transferred much of the responsibility to the States and called for more public involvement in the decisionmaking process.

1/ Special authorization request accompanying proposed legislation for away from reactor storage facilities.

It is essential that questions about safety and environmental protection and the timeliness with which the process is carried out be reviewed thoroughly and necessary changes made. The Administration expects to work with the Congress to find the appropriate next steps to improve the siting and licensing process to assure both greater safety and efficiency. The Secretary of Energy will submit nuclear siting and licensing legislation to Congress.

Uranium Resources and Their Use

Concern over whether the U.S. uranium resource base is adequate has led to pressures to accelerate the breeder program and to commit to reprocessing. Because of the large uncertainties in present knowledge, a systematic appraisal of domestic uranium resources is being conducted through the National Uranium Resource Evaluation Program (NURE). It is designed to lay an adequate foundation for future fuel cycle decisions and domestic and foreign utility planning.

To recover the maximum energy from the domestic resource base, the Department of Energy has developed programs to:

- Stimulate private industry R&D to improve light water reactor operating efficiency.
- Construct an energy efficient gas centrifuge enrichment plant designed to produce 8.8 million "separative work units" (SWU). The first 2.2 million SWU are now planned to be in operation around 1988. Additional 1.1 million SWU modules can be added up to design capacity as demand grows. The added capacity permits operation of the enrichment enterprise in a way that conserves uranium resources by recovering a greater portion of the fissile uranium isotope.
- Develop advanced isotope separation technology (AIST). This technology, if successfully developed, would permit economic production of nuclear fuel from depleted uranium "tails," thereby increasing by about 20 percent the enriched uranium recoverable from known reserves.
- Examine advanced converter reactor concepts in cooperation with foreign developers as an alternative way to increase uranium conversion efficiency.

The Department's funding for these activities is summarized in Table V-3.

TABLE V-3

FUNDING FOR IMPROVED URANIUM UTILIZATON
(Million Dollars)

	FY 1979	FY 1980
National Uranium Resource Evaluation (NURE)	69	84
Light Water Reactor Efficiency	24	25
Gas Centrifuge Operations & Support (including construction)	241	409
Advanced Isotope Separation	54	55
Advanced Converter Program (Gas Cooled Thermal Reactors)	42	12
Total	430	585
Revenues from Enrichment Operations Excluding Centrifuge Plant but Including Sales of Enrichment Services.	-262	-493

New Technologies

In the long term, the U.S. will rely increasingly on renewable or essentially inexhaustible sources of energy. The breeder reactor is one long-term energy option because it has the capability to produce more fissile ("burnable") fuel than it consumes. The breeder reactor would not only sustain itself, but would also generate fuel for light water reactors.

Interest in the breeder reactor grew out of a desire for an option that would not disappear with the inevitable exhaustion of natural fissile uranium. The interest intensified when early estimates promised even lower cost electricity from the breeder than from the light water reactors, and resulted in programs for early commercialization.

This Administration, however, believes that rapid steps toward breeder commercialization are not needed now. The timing of the breeder program depends on the economic need for the technology and on nonproliferation issues. It is also linked to resolution of the reactor safety and waste management problems affecting the whole nuclear option. The leading breeder candidate (liquid metal fast breeder), if commercialized, would necessarily lead to reprocessing and to widespread use of plutonium. The President, in the context of his nonproliferation policy, directed deferral of such activities and cancellation of the Clinch River Breeder Reactor project while alternative fuel cycles are examined.

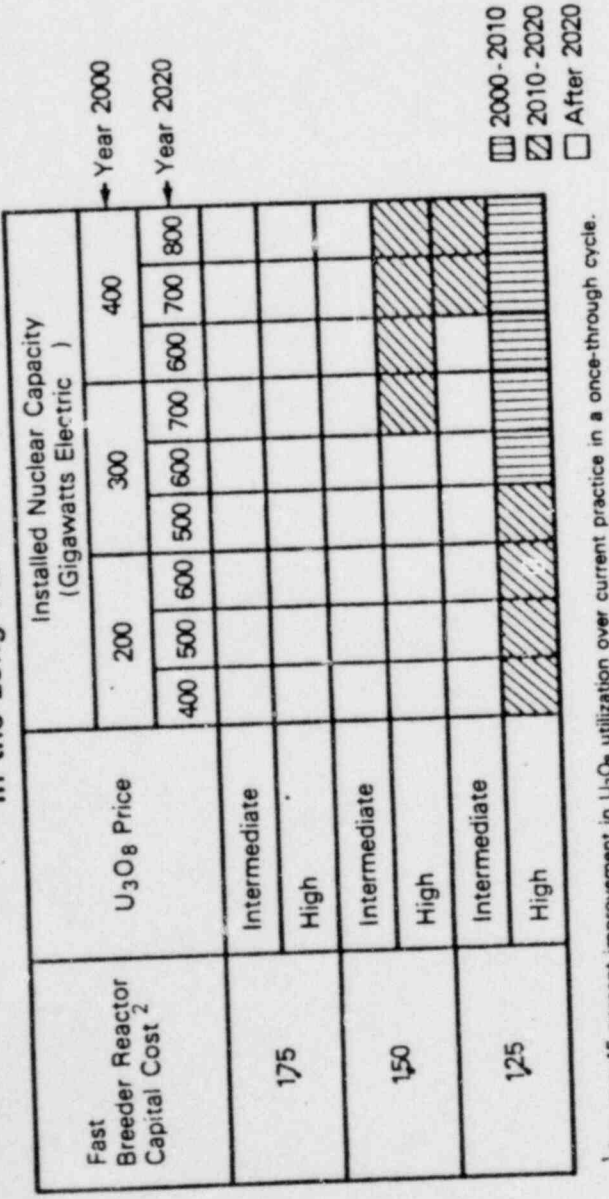
While preliminary results of the International Nuclear Fuel Cycle Evaluation (INFCE) do not suggest the likelihood of risk-proof breeder alternatives, improvements over current and proposed practices are being developed. The INFCE is considering various technical approaches to improving the proliferation resistance of breeder and converter reactor fuel cycles. It is also studying the appropriate timing for their development and commercial use.

Over the past decade, economic arguments have been used to justify the pace of the breeder program. Such justifications hinge on a few key factors--the overall demand for electricity, the uranium resource base, reactor efficiency, and the relative capital costs of light water reactors and breeders. If the demand for electricity grows rapidly, if domestic uranium resources are limited, and if breeders cost little more than light water reactors, then rapid commercialization would be economically attractive. Such perceptions prevailed in the late 1960s and early 1970s when electricity generation, particularly nuclear electricity, was growing rapidly.

Since the 1973-74 oil embargo, several circumstances have changed. Projections of electricity growth rates have dropped from 7 percent a year to around 3 to 4 percent for the long term. Light water reactor growth has slowed because of the problems noted earlier, indicating that uranium resources will last longer. Finally, early optimistic estimates of breeder reactor capital costs ranging from 0.9 to 1.3 times those of light water reactors have been replaced by estimates of 1.25 to 1.75.

These changed factors have been reflected in a recent analysis of the pace of breeder development. Typical of this analysis is the case summarized in Figure V-2. Nuclear electricity demand is described by the amount of installed nuclear capacity in 2000 and in 2020; uranium resources are described in terms of price; and breeder capital costs are described in relation to LWR capital costs. Figure V-2 shows that with reasonably attainable improvements in current LWR fuel efficiency, breeders would not be needed until after 2020 in most cases. The exceptions are when uranium costs are high, nuclear demand is high, and

Figure V-2
Timing of the Need for a Fast Breeder Reactor in the Long Term[1]



[1] Assumes 15 percent improvement in U_3O_8 utilization over current practice in a once-through cycle.
[2] Relative to the capital cost of a light water converter reactor.

breeder capital costs are low. Only under the most extreme cases would the breeder be economically justified in the 2000-2010 period. Successful development of advanced isotope separation technologies would ease the pressure for an early breeder even further. In such a case, the need for an early breeder occurs only for 400 GWe on line in 2000, for breeder capital costs of 1.25 times those light water reactor, and for high uranium prices.

In light of this economic analysis, the four possible RD&D program strategies will be considered below:

- Late Breeder. This strategy assumes that the resource base is adequate for a long period of once-through light water reactor operations, that the nuclear growth rate will be low, or that breeder economics will be unfavorable. Consequently, breeder development would be pursued at a low level and commercialization of the breeder would be deferred as long as possible. A decision on a demonstration plant would be deferred until the 1990s, as would be reprocessing development. Light water reactor improvements, advanced converter reactor development, advanced isotope separation, uranium resource evaluation, and centrifuge facility deployment and development would be emphasized.

- Hedged Breeder. This strategy assumes that the resource base, nuclear growth, and breeder economics do not require rapid commercialization of the breeder. However, because of uncertainty, the strategy would maintain sufficient flexibility and options so that program shifts could be made easily and effectively whenever information or events dictate. The programs for light water reactors, advanced converter reactors, advanced isotope separation, uranium resource evaluation, and centrifuge facilities would be emphasized, but less strongly than in the late breeder.

  Breeder development would continue at a moderate level with emphasis on engineering and component development. A decision on a demonstration plant could be taken in 1981, but also could be deferred until 1986-1990. Plans for both a 20-year and a 30-year commercialization program could be developed. Reprocessing technology would be developed, but commercialization deferred. This program attempts to minimize risk at a moderate cost.

- Early Breeder. This strategy assumes that the uranium ore base is limited, that the nuclear growth rate will be high, and/or that breeder economics will be very favorable. It implies

an early commitment to the breeder, with completion of a conceptual design study by 1981, commitment to a demonstration facility by 1982, and initial commercial deployment 20 years thereafter. Reprocessing development would be given high priority through commercialization. Programs for light water reactor improvement, advanced converter reactor development, advanced isotope separation, and uranium resource evaluation would be de-emphasized. This strategy would require a relatively high cost, high risk program.

- Expanded Nuclear. This strategy assumes that nuclear power will play a predominant role in our energy future, with installed capacities at least equal to the highest values assumed in the analysis. Aggressive programs would be indicated for light water reactors, advanced converters, and breeders--with commitments to commercialize them at the earliest possible dates. For the breeder, this would call for a demonstration plant decision in 1981 and planning for both a 20-year and a 30-year deployment schedule. Reprocessing, through the commercialization stage, would be accelerated. The program would be very costly but would provide the greatest assurance of maintaining and deploying the nuclear option.

The Administration favors the hedged strategy. The breeder program itself includes the liquid metal fast breeder (LMFBR) as the primary option, but would also support two others--the light water breeder reactor (LWBR) and the gas cooled fast reactor (GCFR). Each has particular strengths and weaknesses and provides a hedge against failure of one particular approach.

The Administration's decision not to build the Clinch River Breeder Reactor, a large LMFBR demonstration plant, needs to be viewed in light of the analysis that has taken place over the past decade. Furthermore, for a variety of technical and economic reasons, the Clinch River Plant is no longer considered to be adequate in size or design for a commercial demonstration. Those elements of the Clinch River project which can be used intelligently will be completed. The systems design will be completed together with certain components which have value for test purposes.

In place of the Clinch River plant, the Administration proposes substitution of a conceptual design study as the central focus of the LMFBR program. The results of this study together with recommendations regarding the future course of this program will be presented to the Congress in March 1981.

c. Policy for Coal and Nuclear Power

The Nation's mid-term energy situation depends on successfully maintaining and expanding the use of coal and nuclear power. These two sources are commercially available today and can be enlarged if the markets grow and their critical environmental and social problems are overcome.

The markets for coal and nuclear power are closely tied to the growth in demand for electricity, although coal can also be used in large industrial facilities. The Fuel Use Act gives the Department of Energy the regulatory tools to stimulate the use of coal and nuclear energy resources.

The primary constraints on this movement away from oil and gas arise from the regulatory and technical problems surrounding coal and nuclear power. Development of methods to use coal more efficiently, convert coal into clean fuels, and improve breeder reactors will be important for the long term as coal and conventional uranium fuels are exhausted. It will be different to make this long-term transition, however, without increased use of direct coal burning and light water reactors. Efforts to develop long-term options must be balanced with programs to assure that direct use of coal and nuclear power will be available in the mid term, consistent with public safety and maximum environmental protection.

FOR IMMEDIATE RELEASE DECEMBER 7, 1979

OFFICE OF THE WHITE HOUSE PRESS SECRETARY

THE WHITE HOUSE

STATEMENT BY THE PRESIDENT ON THE KEMENY COMMISSION REPORT ON THREE MILE ISLAND

Room 450, Old Executive Office Building

(AT 2:45 P.M. EST)

THE PRESIDENT: The purpose of this brief statment this afternoon is to outline to you and to the public, both in this country and in other nations of the world, my own assessment of the Kemeny Report recommendations on the Three Mile Island accident and I would like to add, of course, in the presentation some thoughts and actions of my own.

I have reviewed the report of the Commission, which I established to investigate the accident at the Three Mile Island nuclear power plant. The Commission, headed by Dr. John Kemeny, found very serious shortcomings in the way that both the Government and the utility industry regulate and manage nuclear power.

The steps that I am taking today will help to assure that nuclear power plants are operated safely. Safety, as it always has been and will remain, is my top priority. As I have said before, in this country nuclear power is an energy source of last resort. By this I meant that as we reach our goals on conservation, on the direct use of coal, on development of solar power and synthetic fuels, and enhanced production of American oil and natural gas, as we reach those goals, then we can minimize our reliance on nuclear power.

Many of our foreign allies must place much greater reliance than we do on nuclear power, because they do not have the vast natural resources that give us so many alternatives. We must get on with the job of developing alternative energy resources and we must also pass, in order to do this, the legislation that I have proposed to the Congress, making an effort at every level of society to conserve energy. To conserve energy and to develop energy resources in our country are the two basic answers for which we are seeking. But we cannot shut the door on nuclear power for the United States.

The recent events in Iran have shown us the clear, stark dangers that excessive dependence on imported oil holds for our nation. We must make every effort to lead this country to energy security. Every domestic energy source, including nuclear power, is critical if we are to be free as a country from our present over-dependence on unstable and uncertain sources of high priced foreign oil.

We do not have the luxury of abandoning nuclear power or imposing a lengthy moratorium on its further use. A nuclear power plant can displace 35,000 barrels of oil per day, or roughly 13 million barrels of oil per year. We must take every possible step to increase the safety of nuclear power production. I agree fully with the letter and the spirit and the intent of the Kemeny Commission recommendations, some of which are within my own power to implement, others of which rely on the Nuclear Regulatory Commission, or the NRC, or the utility industry itself.

To get the Government's own house in order I will take

(OVER)

several steps. First, I will send to the Congress a reorganization plan to strengthen the role of the Chairman of the NRC, to clarify assignment of authority and responsibility and provide this person with the power to act on a daily basis as a chief executive officer, with authority to put needed safety requirements in place and to implement better procedures. The Chairman must be able to select key personnel and to act on behalf of the Commission during any emergency.

Second, I intend to appoint a new Chairperson of the Nuclear Regulatory Commission, someone from outside that agency, in the spirit of the Kemeny Commission recommendation. In the meantime, I have asked Commissioner Ahearne, now on the NRC, to serve as the Chairman. Mr. Ahearne will stress safety and the prompt implementation of the needed reforms.

In addition, I will establish an independent advisory committee to help keep me and the public of the United States informed of the progress of the NRC and the industry in achieving and in making clear the recommendations that nuclear power will be safer.

Third, I am transferring responsibility to the Federal Emergency Management Agency, the FEMA, to head up all off-site emergency activities, and to complete a thorough review of emergency plans in all the states of our country with operating nuclear reactors by June, 1980.

Fourth, I have directed the Nuclear Regulatory Commission and the other agencies of the Government to accelerate our program to place a resident Federal inspector at every reactor site.

Fifth, I am asking all relevant Government agencies to implement virtually all of the other recommendations of the Kemeny Commission. I believe there were 44 in all. A detailed factsheet is being issued to the public and a more extended briefing will be given to the press this afternoon.

With clear leadership and improved organization, the Executive Branch of Government and the NRC will be better able to act quickly on the crucial issues of improved training and standards, safety procedures, and the other Kemeny Commission recommendations. But responsibility to make nuclear power safer does not stop with the Federal Government. In fact, the primary day by day responsibility for safety rests with utility company management and with suppliers of nuclear equipment. There is no substitute for technically qualified and committed people working on the construction, the operation, and the inspection of nuclear power plants.

Personal responsibility must be stressed. Some one person must always be designated as in charge, both at the corporate level and also at the power plant site. The industry owes it to the American people to strengthen its commitment to safety.

I call on the utilities to implement the following changes; first, building on the steps already taken, the industry must organize itself to develop enhanced standards for safe design, operation, and construction of plants; second, the nuclear industry must work together to develop and to maintain in operation a comprehensive training, examination, and evaluation program for operators and for supervisors. This training program must pass muster with the NRC through accreditation of the training programs to be established.

Third, control rooms in nuclear power plants must be modernized, standardized, and simplified as much as possible, to permit

MORE

better informed decision-making among regular operating hours and, of course, during emergencies.

I challenge our utility companies to bend every effort to improve the safety of nuclear power.

Finally, I would like to discuss how we manage this transition period during which the Kemeny recommendations are being implemented. There are a number of new nuclear plants now awaiting operating licenses or construction permits. Under law, the Nuclear Regulatory Commission is an independent agency. Licensing decisions rest with the Nuclear Regulatory Commission, and as the Kemeny Commission noted, it has the authority to proceed with licensing these plants on a case by case basis, which may be used as circumstances surrounding a plant or its application dictate.

The NRC has indicated, however, that it will pause in issuing any new licenses and construction permits in order to devote its full attention to putting its own house in order and tightening up safety requirements. I endorse this approach which the NRC has adopted, but I urge the NRC to complete its work as quickly as possible and in no event later than six months from today. Once we have instituted the necessary reforms to assure safety, we must resume the licensing process promptly so that the new plants we need to reduce our dependence on foreign oil can be built and operated.

The steps I am announcing today will help to insure the safety of nuclear plants. Nuclear power does have a future in the United States. It is an option that we must keep open. I will join with the utilities and their suppliers, the Nuclear Regulatory Commission, the executive departments and agencies of the Federal Government, and also the state and local governments to assure that the future is a safe one.

Now Dr. Frank Press, Stu Eizenstat, and John Deutsch will be glad to answer your questions about these decisions and about nuclear power and the future of it in our country. Frank?

END (AT 3:00 P.M. EST)

3016 Renault Street
San Diego, California 92122
March 17, 1980

President Jimmy Carter
The White House
1600 Pennsylvania Ave. N. W.
Washington, D. C. 20500

Dear President Carter:

Attached is a reprint of an editorial as it appeared in the San Diego Union Sunday, March 9, 1980.

Do you have an intelligent rebuttal?

Sincerely,

Kristina M. Keith

Kristina M. Keith

Attachment

The San Diego Union
Editorials
PAGE C-2 SUNDAY MORNING, MARCH 9, 1980

Keep The Options Open

The Nuclear Regulatory Commission has ended its moratorium on new nuclear power plants with the licensing of Sequoyah Unit No. 1 near Chattanooga. A pending reorganization of the NRC and a new emphasis on operator training and the monitoring of safety systems by the utility industry have relieved much of the anxiety about nuclear power that arose after the Three Mile Island accident a year ago this month.

Yet an ambivalence remains in the Carter administration's nuclear policy. On the one hand, it recognizes that nuclear power is a must because of the rising price of oil from abroad and the vulnerability of our oil supplies from the Persian Gulf. On the other hand, the administration continues to put a damper on further development of nuclear power technology out of fear that it will lead to greater proliferation of nuclear weapons.

President Carter's effort to have it both ways is putting the United States increasingly out of step with its partners in international energy agencies. His attempt since 1977 to curtail nuclear fuel reprocessing and the development of breeder reactors is getting nowhere. In fact, it was dramatically rebuffed only last month by a 66-nation nuclear fuel conference in Vienna.

The conference recommended that development of breeder technology actually be speeded up, and not only because the breeder vastly increases the energy to be derived from the world's finite supplies of uranium. The breeder is also seen as offering more operating safety, less environmental impact and a reduced waste handling problem compared with today's generation of power reactors.

France has made the breeder the centerpiece of its aggressive nuclear program. With their uranium supplies, reprocessing technology and a family of breeders, the French expect to go into the 1990s with an energy resource equal to all of Saudi Arabia's oil. This prospect is stimulating breeder development in West Germany and England, whose people see new competition arising from French industries enjoying a relatively cheap and abundant supply of electricity.

The advance of Europe into the second-generation of nuclear power does not impress the Carter administration, which continues to downplay fuel reprocessing and breeder development in the 1981 budget for the Department of Energy. That budget carries a disturbing tone of making do with nuclear technology at hand rather than catching the wave of the future.

Six months ago DOE officials were conceding that safety questions involving water-cooled reactors like that at Three Mile Island strengthened the case for the high-temperature gas-cooled reactor (HTGR) developed by General Atomic Co. in San Diego. As the designers of the HTGR point out, it cannot have a loss of coolant accident or threaten a core meltdown. With uranium and thorium as its fuel, it minimizes the problem with plutonium that worries Mr. Carter. And the HTGR is more adaptable to varied industrial uses than water-cooled reactors.

Comes the 1981 DOE budget, however, and the federal contribution to the joint government-industry HTGR program has been dropped, along with funds for the more advanced gas-cooled breeder reactor.

The inexorable rise in oil prices and the uncertainty of overseas supplies calls for an energy policy supporting the full range of non-petroleum options for meeting the nation's basic electrical needs. Where the nuclear option is concerned, the administration is narrowing the alternatives at a time when they clearly should be broadened.