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[May 1975]

SPEECH FOR PRESIDENT FORD
ON PROPOSAL FOR
ENERGY RESOURCE AND FINANCE CORPORATION

Full

Fellow Americans:

First, I wish to thank you for the thousands of expressions of support in the trying days we have just come through. I particularly appreciate and commend your firm resolution:- that this nation will not countenance piracy against its ships on the high seas -- no matter what cloak it may wear.

The strength of a free people lies in its ability to face realities, to come together in crisis, to do so with firm and open resolve and to support their leadership in such commitments. In the days ahead we shall be carrying forward new foreign policy initiatives, mindful of the nation's misjudgments of the past, but confident of our strength and purpose in the future.

Our foreign policy must mirror not only our commitment to the principles of international justice and peace, but it must also reflect our own national needs and aspirations. We must remember that a nation is strong and effective in world affairs only as it is strong and effective at home.

It is about America at home that I wish to speak. And to speak plainly -- to "tell it as it is." This you expect of me -- And I know no other way for a free people to make the right decisions than to face the facts.

This brings me to the economic recession which is causing such difficulty and hardship here within our land.



Economists differ on their opinions as to when the recession will bottom out and how rapid or how sustained the upturn will be. They look at inventories, sales, interest rates, econometric models and other indicators -- as they must. There are uncertainties in any such forecasts because basic conditions have changed in areas like the costs of fuel, the availability of various raw materials and the upset of traditional pricing mechanisms.

But you and I are concerned that, whatever these monitors may indicate, employment has not responded. Unemployment is already high -- too high!

And I have just been given the official projection on the probable unemployment for the next 12 months. It is 8.2%!

Such a level of unemployment over such a period is intolerable. And I intend to take action to overcome it.

Difficult though the task may be, it can be done. It must be done! And, so far as your President is concerned, it will be done!

But I shall need your help to do it.

We can do it by energizing the economy, by encouraging construction and stimulating production. We can do this through our enterprise system and thereby provide real jobs at going pay rates and not "make work" government jobs or a dole.

This is how it can be done -- and in the process build a stronger and more vital America:

The United States faces a serious energy crisis now and will continue to do so in the years ahead unless we take action to increase our energy resources and production. Our national security, our level of employment and the quality of life for all Americans are at stake. We absolutely must progress the program for energy self-sufficiency along the lines I laid down in my message on the State of the Union and in the legislation I submitted to the Congress.

It is now nearly half a year and there has been no legislation. It is nearly a year and one-half since the oil embargo. Action must be taken now and the barriers and roadblocks to progress in the energy field must be eliminated.

A key to moving ahead is the ability of private business to finance new power plants, to open new mines, to bring in more natural gas, to rehabilitate railroads for carrying coal, to build prototype coal gassification plants and the like. It will take a massive effort as we need nuclear power plants, coal fired power plants, uranium mines and mills, oil storage and oil refineries, pumped storage hydro-electric plants, off-shore drilling rigs, railroad hopper cars, surface and underground coal mines. And we need to do these things, and we can, in such a way as to minimize adverse impacts on our environment. It will take sizable capital investment to retool idle plant capacity, to make the equipment and the components for all such items and thereby employ workers laid off due to recession set-backs.

Today it is clear the energy program is not moving. The reasons include: lack of financing, lack of clear direction of federal policy and a pervasive insecurity that large private commitments to such a program will not be supported on a continuing basis by government policy.

To assist in financing, to give this sense of commitment and to give assurance of continuity of program, I propose the establishment of an Energy Resources Finance Corporation by the Congress.

The Energy Resources Finance Corporation would loan funds or guarantee loans to private business to get on with the energy program and our law material programs, and in the process provide thousands of jobs - in our mines, oil fields, utility companies, construction projects, factories, engineering, financial, scientific, accounting and all related activities. The ERFC would get started with a \$20 billion appropriation but be authorized to issue \$200 billion in bonds backed by the Federal Government. It would lend money, buy bonds or preferred stock, take mortgages, build and lease facilities - all with a view to bringing about energy production and employment.

The ERFC should be freed of the red tape which is now holding back essential projects - red tape that must be cut before it strangles the economy and literally dims the lights in our homes and factories.

The ERFC would not be putting the government into business but assisting business in these difficult times to have our enterprise system build what the nation needs and provide real jobs in the process. When its



task is finished the REC would liquidate and disappear.

We have precedents for such actions in Federal Mortgage corporations, Farm credit organizations, the Reconstruction Finance corporation, NASA, the Manhattan project, and others. We have precedents for government providing stimulus to industries like the highway programs for automobiles; airport and airway programs for aviation, and the rights-of-way for many of our railroads.

The ERFC would not signal a threat of new unbridled inflation. It could not be spending federal dollars on a public jobs programs with little or no productive capacity added to the nation. It would be loaning funds at an interest and be repaid.

The ERFC would be expected to make its loans over a period of ten years. Its commitments should be made in five years. Its payout of loan funds over ten years. It would provide productive jobs adding to the productive capacity and the productivity of the nation. As its loans are paid off, the REC would be phased out and liquidated.

The ERFC is critical also for our environmental interests. The enhancement of our environment itself requires additional energy for its achievement. By tackling the energy problem programatically and forth rightly we can advise a better quality of life, employment for our welfare and greater security for the nation.

I am sending legislation to the Congress to create the Energy Resource Finance Corporation next week. I urge your support of it. The need for action is urgent.

We cannot tolerate dependence on foreign sources for so much of our energy.

We cannot expect to achieve environmental goals without more energy.

We cannot tolerate a continuing higher unemployment rate and there is no need too!

We have the capacity to achieve our energy, environmental and employment goals.

Lets get together and do it.

Involved is jobs for Americans and our whole economic future. At stake is the continued strength of the United States, and national security and indeed our political liberty.

It will take hard work. It will take sacrifice. It will have its costs.

But let us remember that there is no free ride to freedom. It has to be paid for by every generation of Americans -- each in its own way.

And let us heed this self-evident truth as we approach the Second Hundred Year anniversary of the Declaration of Independence by acting decisively, by acting now.

By doing so, we can demonstrate once again how a free people can meet challenge and change with imaginative resolution -- and with the enhancement, not the obliterating of human freedom and individual opportunity.

The promise of America is as great -- indeed greater, than ever before. The performance of America will again match that promise. You and I, with God's help, can assure it.

[May 1975]

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MEMORANDUM FOR: THE PRESIDENT

FROM: THE VICE PRESIDENT

SUBJECT: Energy Resources Finance Corporation

In response to my memorandum of May 2, you authorized a Domestic Council review group to explore in more detail the concept of the establishment of an Energy Resources Finance Corporation. Attached for your review are:

Tab 1 - A summary of the current economic situation and statement of the problem.

Tab 2 - A summary outline of the proposed Corporation - its purpose, investment objectives, financing plan, organizational structure and summaries of several typical potential projects and how they would be financed.

Tab 3 - A summary of the principal objections to the Corporation - both from within the Administration and from executives in industry and finance - with suggested responses to these objections.

Tab 4 - A draft speech that might be used by you to announce your decision to move ahead with development of a final plan preparatory to the submission of enabling legislation.

Tab 5 - Draft legislation.



The Nation is at or approaching an economic cross-roads which offers an opportunity for a major new Administration initiative.

Faced with rapid erosion of economic activity, quite correctly your initial efforts to date have been focused on a range of measures designed to arrest and turn the accelerating downward spiral of business activity. Although the first signs of an upturn may be imminent, high unemployment persists, and will continue to persist long into any recovery. We must continue to attack this intolerable employment problem. At the same time, as the economy turns we must turn our immediate attention to the elimination of these energy and resource related bottlenecks which fueled the recent inflation and threaten to reappear in any sustained upturn. Energy shortages would seriously impede and could abort any recovery and would present an unacceptable threat to our national security and foreign policy objectives.

Evidence to date suggests that we are alarmingly stalled on efforts to implement your energy self-sufficiency goals. Investment spending which must precede the development of new and expansion of old sources of energy is seriously lagging. The Federal Government abounds in thoughts, plans and schemes to attack this problem, but unfortunately there is an abundance of equally strongly held views and rationalization as to why such plans will not work. The net result is inaction.

Timing is the key to most successful ventures, and I believe very strongly that now is the time to announce a major new Administration initiative via the formation of the proposed Energy Resources Finance Corporation. To date, you have backed economic measures that, while stimulative to the economy, have had no impact on increasing our productivity or improving our competitive position in the world. Your efforts to hold back the inflationary impact of these programs by keeping a tight rein on the size of the federal deficit have been courageous and increasingly successful, but have the unfortunate side effect of casting the Administration in a negative tone. You have stood firm against a runaway deficit because you recognized the inevitable inflationary implications, but the Administration program lacks the positive counterbalance of an affirmative effort that will channel expenditures in an inflation-fighting, job-producing manner.

The Energy Resources Finance Corporation is cast in a philosophical and structural framework that reflects your deep-seated belief in the free enterprise system.

- it will work through, not around or as a replacement, for private enterprise;
- it is not conceived as a "bail out" mechanism, designed to perpetuate uneconomic operations.

Rather, the entire focus is on the creation of new energy and related natural resource and transportaion capacity and capability, vital to renewed productive efficiency and national self sufficiency;

- it will have a limited life, with no new financial commitments after five years. Consistent with its catalytic, bridge financing role, it will, by law, go out of business when its mission is completed;
- in addition to its financing role, it will have legal powers designed to at the very least, shorten, and in some cases eliminate, the myriad of regulatory impediments which currently impede and stall energy related investment; and
- it is being formed to attack current problems; is designed to have a finite lifespan and therefore should be able to attract the type of entrepreneurial, managerial talent from the private sector that led to the success of World War II synthetic rubber plants and Manhattan-type projects of the past.

Several of the concerns and objections to such a project, voiced within the Administration and elsewhere, (Tab 3) have some merit. I am convinced, however, that the



refutation judgments carry the day. We could go on for months or years refining the pros and cons -- but delay beyond the early part of the summer will put the project that much closer to 1976, and the political attack and/or legislative blockage which predictably will emerge as a matter of Presidential politics.

Your early public announcement (June 1) of the concept of the plan and your decision to submit enabling legislation, will mobilize the considerable talents within the Administration to a concerted program to enlarge, flesh out and improve the precise scope and structure of the Corporation as outlined in the attached documents. With the galvanizing effect of such a decision now, I believe we can have a final program and legislative package ready within a month.

ECONOMIC BACKGROUND AND THE PROBLEM

The consensus view is that the U.S. economy has bottomed and that the first signs of an upturn will become evident in the third and fourth quarter. High unemployment persists, however, and any major improvement in employment rates will seriously lag the general recovery.

Congress, impatient with high unemployment and with the political support of labor, now threatens further spending programs designed to stimulate short term employment goals. Indeed much of the countercyclical monetary and fiscal stimulus to date has been focused on short lead time demand stimulation. Very few, if any, of the stimulative efforts have been focused on the critical problems of increasing productivity and alleviating the energy and related natural resource and transportation shortages and bottlenecks which contributed so significantly to the excessive inflation rates of recent years. While we can be encouraged by the prospect of recovery from recently depressed levels of economic activity, our next set of problems will be associated with increasing our efforts at solving the unemployment situation, while maintaining a sustained rate of recovery -- both without the reoccurrence of inflation.

You recognized the pervasive economic impact of the reoccurrence of energy related shortages and the attendant

national security risks by designating, in your State of the Union Message, the development of energy resources as the Nation's first priority. The Administration's energy independence goals which you established require by 1985 a new or additional

200 nuclear power plants

250 coal mines

150 coal fired power plants

30 oil refineries

20 synthetic fuel plants

and many thousand new oil and gas wells.

It is projected, as a rough approximation, that your program will require capital investment in energy facilities of \$700 to \$850 billion between 1975 and 1985. Unfortunately, as you know, results to date indicate little forward movement. In fact, in 1974, there were 235 coal and nuclear plants delayed or cancelled, representing 114,000 megawatts of nuclear capacity and 74,000 megawatts of coal. Whereas there were a range of regulatory and tax impediments, market price uncertainties and technological difficulties which contributed to this erosion, in a recent survey "financing problems" were cited as the primary or contributing cause of nearly 70% of the nuclear cancellations and deferrals and 45% of the coal plant decisions.



At present, no detailed national energy plan exists which establishes yearly nationwide and regional goals as benchmarks for the investment flows necessary for domestic energy resource development. It is difficult, therefore, to identify, and more importantly, quantify and rank the precise roadblocks to achievement of your energy self-sufficiency goals. Of prime importance are the myriad of federal, state and local rules, requirements, regulatory commissions, etc., all of which conspire to increase the cost of new projects, make the investment returns uncertain, and leave unclear the shifting "rules of the ball game" to the point where play does not commence.

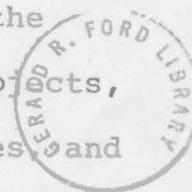
Administration efforts to clarify, simplify and/or preempt this regulatory morass must be redoubled. Realistically, however, with little hope of Congressional cooperation, this promises to be an extremely time-consuming process, with at best an uncertain prospect of success. It is on the theory that a simultaneous effort to open up a financing reservoir that in itself can be used as a weapon to resolve this impasse, that the proposal for a Energy Resources Finance Corporation is predicated.

PURPOSE AND PROPOSED INVESTMENT STRATEGY OF THE CORPORATION

Armed with a charter with features akin to a traditional investment bank, English merchant bank or development bank, the Corporation will act as a financing vehicle designed to catalyze the private sector into undertaking the massive scale of investment needed to achieve the Administration's energy independence goals of the next decade. Through this broad-guage charter, the Corporation will be empowered to provide capital through equity investment, loans and loan guarantees to elements of the private enterprise system -- corporations, partnerships, consortia and/or subsidiaries of the Corporation itself, formed to implement national energy goals.

It is intended that the Corporation would also be empowered to provide financing that would create or refurbish the infrastructure necessary to deliver energy raw materials or energy to converters and end users. Thus critical investments could be made in the energy related portion of our transportation system and to relieve bottlenecks that might occur in other raw materials or finished products (pipe, drilling rigs, etc.) necessary to complete an energy development system.

It is contemplated, in order to encourage the commercialization of a number of synthetic fuel projects, new surface or underground In Situ mining techniques, and



other advanced technologies, that the Corporation or its subsidiaries would be empowered to guarantee not only financial investments but also to enter into price guarantees and/or take or pay contracts for certain quantities of energy product over a fixed period of time. The absolute dollar risk of such guarantees would be limited to a fixed percentage of the Corporation's equity (capital).

Within the context of an overall national energy policy and plan, Corporation financing would be undertaken at "going rates" only where private sector financing was not available on economically acceptable terms or in adequate amounts. Currently such financial bottlenecks have slowed or arrested private investment in at least three broad areas:

1. Large scale projects, with long lead times, where present delay stems partly because of technical uncertainty and partly because capacity will not be needed unless first stage projects are completed. Uranium fuel enrichment plants are typical of this situation. Prudent commercial investors will want to wait for greater proof of technical feasibility and development of actual market demand, with a resulting time delay that is inconsistent with our energy independence timetable.

If we wait to build this enrichment capacity ~~until~~ until enough nuclear power plants are on stream to assure demand, we will have extended periods of imbalance or shortage while long lead time enrichment capacity is rushed to completion.

(See illustrative example at end of this section.)

The scale and complexity of relatively simple coal mine expansion is vastly enlarged when the necessity for development of delivery systems is included in the project. Coal slurry pipelines, electrified railway connections, improved rail-beds, large capacity coal hopper cars and other elements of a total system will require a scale of financing that lends itself to the large resources of the Corporation.

2. Projects which require financing that is structured to defer interest charges and loan repayments until the project is completed and on stream. The Corporation would be able to extend such terms or as an alternative might actually build and then lease or sell the facility. The construction and lease purchase of a conventional nuclear power plant to a utility would be typical of this category of

of investment. The Corporation could, through a subsidiary, cause this plant to be built and would "carry it" until completion, when it could be either sold or leased to the user utility. The limited availability of this capital through the Corporation (relative to total national needs) would allow the Corporation to require certain state and local regulatory concessions as a quid pro quo for financing, providing a potential lever toward regulatory change currently unavailable in the existing environment. The FNP (Floating Nuclear Plant) illustrations at the end of this section add a siting flexibility which together with financing availability offers further lead time savings.

3. Projects which are either demonstrational in nature or are uncertain as to commercial feasibility. Such projects could bear a much higher degree of investment risk and would be limited to an amount equivalent to the equity capital of the Corporation. They would be undertaken as "second stage" efforts, after development financing by ERDA and/or R&D sponsored by private industry. Such projects might

presently be in areas such as coal gasification and liquification, In Situ shale oil recovery, and eventually in more advanced thermal and solar type projects. (Illustrative example at the end of this section covers high BTU gasification plants.)

4. Some Other Potential Investments

Coal slurry pipelines

Nuclear fuel reprocessing plants

High temperature gas reactors

Electrification of railways

Shale oil production plants

Coal liquefaction plants

Oil storage facilities
(This would be straight subsidy)

Coal-fired power plants

100-ton coal hopper cars

Medium-BTU gasification plants

Breeder reactors

Regional high voltage electric transmission
grids

Surface and underground coal mines

Uranium mines and mills

Oil and gas pipelines

Geothermal power plants

Oil refineries

Offshore drilling rigs

New railbeds

Large-capacity coal shovels and draglines

New railroad locomotive units

Oil-to-coal power plant conversion projects

Pumped-storage hydroelectric plants

Western water systems

Authorized Capitalization

Structure:

Billions

Capital Stock - (Equity Subscribed by U.S. Treasury)	\$ 20
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Borrowing Authority (including guarantees)	\$200
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	<u>\$220</u>
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The capital stock or equity of the Corporation (\$20 billion) would be subscribed by the U.S. Treasury. In addition, the Corporation will be authorized to issue and have outstanding, up to \$200 billion of notes, debentures, bonds, guarantees or other evidence of indebtedness. These obligations will be fully guaranteed by the U.S. Government. The terms and timing of all Corporation borrowings will be subject to approval by the Secretary of the Treasury and will be accomplished by the Federal Financing Bank. These obligations will be available for purchase by foreign investors, as well as qualified for purchase by any federally chartered or regulated commercial bank savings and loan association or mutual savings bank. Obligations of the Corporation would be eligible for purchase by the Federal Reserve Open Market Committee and would be lawful investments and may be accepted

as security for all fiduciary, trust and public funds, the investment or deposit of which is under the authority or control of the U.S.

General Powers and Term

The Corporation would have the broadest powers to carry out its operations and to establish subsidiary corporations for special purposes. It would cease to make new loans or investments after a five-year term, and would be empowered and required after five years to monitor and fund prior commitments and to begin a program of liquidation and sale of all its assets within ten years. (Option -- These terms are designed to underline the "temporary" nature of the Corporation. They could be lengthened.)

Special Expediting Powers

Each energy-related project which is certified by the Corporation as being of critical importance to the national goal of energy independence will receive expedited and final treatment by all Federal departments and agencies. Upon receipt of the certification for a project, every Federal department and agency so notified



will have six months to make any administrative or regulatory determination which might affect the certified project. Once the administrative or regulatory determination is made, it will be final. No rules, regulations, laws, orders or other administrative or legal actions made after six months from the date of certification may have any adverse impact on the certified project.

Management

Management of the Corporation would be vested in a Board of Directors consisting of five persons appointed by the President. All five would be independent public members, serving full time as senior executives and directors of the Corporation. Of the five, all of whom would serve staggered terms, not more than three could be members of one political party and not more than one could be from any Federal Reserve District. The President would, with the advice and consent of Congress, appoint one of the five as Chairman and Chief Executive Officer.

Policy Framework

The Corporation, its Board of Directors, and the

Chief Executive Officer, will devise an investment strategy designed to implement the national energy and related resource and transportation policy and program set forth by the President and his delegated agent(s). At present, according to the Energy Reorganization Act of 1974, the Energy Resources Council has central coordinating responsibility in the development of this policy. The Federal Energy Administration and the Energy Research and Development Administration have key statutory roles in the development of overall energy strategy. The Corporation will, subject to Presidential direction, attempt to make investment commitments that expedite the national energy goals put forth by these agencies. The Energy ^{Resources} ~~Advisory~~ Council will serve as policy adviser to the Board of the Corporation, ~~as agent of the President.~~

ILLUSTRATIVE EXAMPLES1. Uranium Fuel Enrichment Plants

To support the goal of 200 new nuclear power plants by 1985 (with additional plants thereafter) and to compete for foreign markets, new uranium fuel enrichment capacity will be required by 1983 and additional increments of capacity will have to come on line every year or two thereafter.

To date, three plants have been built and owned by the U.S. Government (ERDA). However, the Administration is now reviewing whether the next increment of capacity should be Government-owned or private. Whatever the outcome of this decision, it is possible that the subsequent increments of additional nuclear fuel enrichment capacity will be private and use the new centrifuge fuel enrichment technology now under development by ERDA. Investments of \$1 billion or more annually may be required for the necessary centrifuge plant capacity.

Attractive proposals using the centrifuge separation methods have already been presented to ERDA by Garrett Corporation, ENI-Atlantic Richfield, and others. Other interested companies are expected to appear with new

proposals. It is possible that three or four competitive centrifuge projects could be initiated in the next few years. If this occurs, each project could begin on a relatively small scale, but be susceptible to capacity additions once the initial stage is technically settled and markets have developed. Estimated costs for the first stage of a centrifuge project generally range from \$250 to 500 million. Eventually, a plant of an economically viable size might cost \$800 million to \$1 billion.

In order to encourage private industry to enter the fuel enrichment business, substantial Federal help will be required. In addition to ERDA technical assistance and Government arrangements to assure markets for the fuel coming from the private plants and to provide loaned uranium fuel if the new plant construction falls behind schedule, some form of guarantee may be required for the estimated 75% of project costs which would be financed with debt. To encourage private involvement in Uranium enrichment, the Corporation could provide guarantees for the debt associated with the first few centrifuge projects. Guarantees in the range of \$200-300 million per plant for the first stage might be anticipated. If the debt associated with the later



stages of a \$1 billion plant also had to be guaranteed, the total exposure might be \$600-750 million per plant. Once a plant is operating efficiently, markets have been secured and any technical problems are resolved, it might then be provided that the guarantee would be phased out and the project would then be totally financed by private industry and the private capital market.

2. Nuclear Power Plants

As noted above, the construction of 200 new nuclear power plants by 1985 is a national goal encountering significant problems because of cancellations and deferrals of new plant construction. Consequently, the Nation's ability to increase the proportion of electricity produced from domestic ~~and~~ non-fossil fuels is in jeopardy.

While the reasons for delays in these plants are usually varied and complex, a few are common to most. First, many of the utilities are experiencing financial difficulties which limit their capacity to continue investing in capital-intensive nuclear plants. Typically, state public utility commissions are not being helpful in this regard. As an extreme example, construction has been stopped on two plants because of finances after each was more than 45% completed. Secondly, an ever-increasing number of delays are being caused by the licensing process, despite Administration proposals to speed up this process.

These delays and cancellations may require that further increments of electricity will have to be supplied by short lead time oil-consuming combustion turbines in the early 1980's unless significantly lower electricity consumption growth rates occur over the next few years.

Taking numerous actions to increase the number of new nuclear power plants (as well as coal-fired) coming into service in the early 1980's will be an important function of the Corporation. One proposed method of increasing the number of nuclear plants available by the early 1980's involves support for the concept of Floating Nuclear Plants ("FNP"). The FNP is a complete nuclear power generating station comprised of proven systems and equipment and standardized in design to allow repetitive factory manufacture on an assembly-line basis. Following assembly, the plant is towed to its operating location where it is moored--floating within a basin surrounded by a protective structure. This concept has the following advantages:

- standardized, proven design
- factory manufacture
- better quality assurance and control
- greater assurance of high plant reliability
- 3-4 years shorter plant/site lead time
- siting flexibility
- minimized environmental and societal impact
- lower capital and generation costs.

Each Floating Nuclear Power plant could provide electricity from domestic nuclear fuel and eliminate the need for the equivalent of 12 million barrels of oil per year (about \$140 million annually, at today's import price).

In conjunction with Public Service Electric and Gas Company of New Jersey ("PSE&G"), Westinghouse has been developing a method of designing, licensing and producing a FNP. PSE&G has ordered four plants and expended \$30 million in the licensing effort. Westinghouse has already invested \$100 million in the manufacturing facility. However, the general downturn in the utility industry has caused PSE&G to defer the introduction of the first plant from 1980 to 1985. The complications of licensing such a first-of-a-kind concept have discouraged other utilities from ordering the FNP. The result has been a suspension in construction of the Westinghouse factory and delay of implementation of the FNP concept and its oil savings benefits for five years.

To expedite its Floating Nuclear Power plant program, Westinghouse has proposed that the Government order four FNP's with the first to be delivered by the end of 1981. In turn, the Government would sell the four plants to one or more operating utilities upon completion. The result of this action would be recovery of three years on the Westinghouse FNP manufacturing schedule and the reduction of oil consumption through the earlier introduction of the four plants. In addition, the new floating plant concept would

be generally proven and made available to the utility industry three years earlier. Implementation of this program could demonstrate Federal Government leadership and direction in the nuclear area, thereby causing other companies to begin producing and using FNP. (One other company has taken some preliminary steps.) If successful, the scale of this program could be expanded several-fold, as a complement to an accelerated program for additional, conventional nuclear plants.

To effect this program, the Corporation would have to invest about \$2.5 billion for the plants and capitalized interest payments over a ten year period. This capital investment would be returned to the Corporation by the purchasing utility(ies) at the end of this period.

In the course of providing or withholding financing for these nuclear plants and others, the Corporation might obtain a de facto Federal override in the areas of fuel adjustment clauses, regulatory lags, peak pricing and other matters and generally encourage state public utility commissions to begin to act more responsibly in electric price and return on investment considerations. Also, direct Federal involvement could be useful in expediting solution of safety and environmental questions.

3. High BTU Gasification Plants

Proven natural gas reserves have recently been declining as production has exceeded new discoveries. At the same time, reserves dedicated to interstate gas pipeline companies have declined more rapidly than total reserves because gas producers find it much more profitable to sell their gas intrastate, thereby removing this gas from the interstate market. In fact, drilling for sales to intrastate markets is at a near record level. Today the reserves dedicated to interstate markets are equal to about nine years of usage at current rates of consumption.

Faced with dwindling reserves and a declining production rate, the gas pipeline companies have been aggressively seeking new sources of supply to enable them to serve at least their highest priority customers. Because of the decreasing supplies of domestic natural gas and the high cost of imported liquified natural gas, some pipeline companies have plans to initiate synthetic natural gas ("SNG") development projects. This is consistent with the national goal of 20 synthetic fuel plants by 1985.

The Lurgi/methanation process for making high BTU gas from coal uses a combination of proven technologies which have been used in other countries for many years.



As a consequence, the construction of commercial-sized plants could begin in the very near future. Although there are currently plans for more than 10 plants to produce high BTU gas from coal in the U.S., none of these projects has, as yet, proceeded to construction. The six projects at the most advanced stages of planning include:

- * El Paso Natural Gas Company plant in New Mexico
- * American Natural Gas Company plant in North Dakota
- * The Transwestern plant (Pacific Lighting and Texas Eastern Transmission venture) in New Mexico
- * Pan Handle Eastern plant in Wyoming
- * Northern Natural Gas plant in Montana
- * Natural Gas Pipeline Co. plant in North Dakota

Each of these proposed plants would have the capacity to produce about 250 million cubic feet ("MCF") of SNG per day. The estimated cost of a 250 MCF/day plant has doubled in the last 18 months to about \$800 million for the "hardware" (excluding interest on construction financing and anticipated working capital needs of another \$200-300 million). Because the capitalizations of the gas pipeline companies who propose to build these plants are small in relation to the cost of a plant, potential

investors are deeply concerned by the apparent financial risks of a possible SNG plant failure.

The principal factor delaying commercialization of this technology is the inability of the regulated gas utilities to obtain new plant financing. This problem arises as a result of the prevailing FPC pricing regulations for gas transmitted through interstate pipelines and the political uncertainties and technical risks which could lead to further plant cost escalation and major construction delays.

In the recent case of Transwestern, the FPC ruled on its first SNG application. Here the Commission decided that it would not give advance approval to a gas price which would, in effect, guarantee that the investors would earn an adequate return on investment. This unfavorable ruling has made it virtually impossible for the gas utilities to acquire necessary financing for the proposed plants and increases the need for Federal financial help.

In order to expedite the construction of the first high BTU gas plants, the Corporation could agree to participate in the construction of several plants. It could finance this construction until the plants had been through their initial proving periods -- in essence, the

Corporation could thereby assume a major portion of the risk of cost overruns and technical problems. Once the proving periods were over, the Corporation could then lease the completed, proven plants to the various pipeline companies. The capital eventually committed per plant would be at least \$1 billion.

Using this major financing commitment and Government involvement as a lever, the Corporation could help overcome the many major governmental impediments to high BTU gasification projects. Most importantly, the FPC might be convinced to permit gas prices which would allow the gas pipeline companies to pay fair lease payments on plants constructed with Federal Government involvement. Also, surface mining permits, pollution control arrangements, water allocation priorities and other government-related problems might be more expeditiously resolved if a Government Corporation were "out in front."

At the same time the Corporation, or ERDA, should contract for an experimental In Situ gasification project from deep coal mines to determine costs of this method of gas production. Once this is proven, which would take about four years, it could be undertaken by private corporations.

Principal Objections and Concerns Relative to the Establishment of the Corporation and Related Thoughts:

1. There really is no financing problem. Regulatory restrictions, inadequate regulated returns, environmental inhibitions, OSHA dictates, etc., all conspire to create a cost add-on and aura of uncertainty that have retarded investment decision-making. Eliminate the redundant and conflicting regulations, create a Federal preemption of rate-making and investment capital will become available.

There is no denying that excessive restrictions and regulatory overkill are key factors. However, the prospect of legislative movement in this area is remote. We cannot afford to lessen our efforts to eliminate redundant and overly restrictive regulation, nor can we afford to delay investment until this legislative and administrative logjam breaks. The Corporation, with its financial clout, can become a major new forcing lever.

2. The proposed Corporation will be just another government bureaucracy. Government cannot run anything well and this proposed entity will be no exception. It will create a life of its own and constitute another permanent layer of inefficiency.



The Manhattan-District project, Synthetic Rubber Corporation, TVA, Comsat and NASA are prime examples of the exceptions to this generally valid assertion. The proposed structure of the Corporation -- its broad mandate, limited term of existence, and management and Board structure are all designed to attract a type of goal-oriented entrepreneurial management from the private sector. As in any undertaking, management will be the key factor determining success or failure and the entire design and assigned mission are oriented toward attracting such management.

3. Such a Corporation will be interpreted as "throwing in the towel" on free enterprise -- another step in the "socialization" of our system.

Political realities indicate that, with high unemployment the legislative process will throw more, not fewer roadblocks in the path of free enterprise. Without such a bridge mechanism, the private enterprise system, its hands tied, will increasingly fail to deliver adequate energy to satisfy public demands. Private enterprise will be tagged as the culprit, charged with failure, and the ultimate political solution could be to substitute government take over and ownership and control.

4. The Corporation is a mechanism for credit allocation by government. Other credit "users" will be pushed off the bottom rung of the ladder. Unless the "free market" is allowed to allocate credit on the basis of optimum financial return, misallocation will occur.

Energy is a national security as well as economic problem. The highest return to the nation cannot be measured in financial return on individual investments. Free market will allocate only where return is commensurate with financial risk. Given the time frame of our energy independence goals, government must take some of the risks that prevail at these early stages of development, if the President's goals are to be achieved. Product price uncertainty and technological risk are prime causes of financing difficulties. The passage of time may resolve these risks, but our timetable for the nation requires investment now.

5. Financing is a problem only because of the risk-reward rates of energy projects. The proposed Corporation will merely solve a cash flow problem with a balance sheet adjustment, incurring large liabilities that will not be paid out because of inadequate returns.

Perhaps -- but if this proves to be true then the ultimate subsidation of these costs represents the price of national security. Hopefully the Corporation will have a "balanced portfolio" where the high risk - high loss investments are limited and the bulk of the program is concentrated in debt investments or guarantees in projects that will eventually have a satisfactory payout.

6. The raising of this amount of capital, by the government will add to projected "crowding" in financial markets - resulting in a resumption of high interest rates and credit starvation for less well-endowed borrowers.

The borrowing will be coordinated by the Federal Financing Bank. The use of credit guarantees, as well as a staggered need for funds over the life of the Corporation will allow a measure of time to elapse before entire amount of capitalization is funded. Residual dislocations are the price to be paid for designation of energy as priority national objective.

7. From a political viewpoint, once legislation is introduced to form the Corporation, it will be impossible to avoid expansion of its charter -- to the point where it becomes a Christmas tree for

financing in many segments of the economy -- a massive
and obviously impractical national credit allocation
entity.

This is a political judgment and certainly a risk.
If the bill gets perverted, there is always the veto.

THE WHITE HOUSE

WASHINGTON

May 1, 1975

MEMORANDUM TO: JIM CANNON

FROM: R. L. DUNHAM

SUBJECT: Possible New Energy
Initiatives

I have attached two copies of a draft paper which includes a discussion of the need for new energy initiatives and which may lead to the conclusion that a special mechanism such as an Energy Independence Financing Corporation is needed.

The format also lends itself to becoming a decision memo.

Since it is draft, I have made no distribution of it, and particularly consider it premature to send outside of our staff.



May 1, 1975

MEMORANDUM FOR:

FROM:

SUBJECT: The Energy Situation and New Energy
 Initiatives

I. Introduction

A. Purpose

The purpose of this memorandum is to provide you with an updated assessment of the energy problem and to obtain your decision on whether any major new energy policy initiatives should be proposed at this time.

The following decisions are discussed in this memorandum:

1. Should the United States have a detailed, comprehensive energy resources development plan beyond the present one to achieve your energy independence objectives?
2. Should the government take all the necessary steps to allocate capital resources into the energy-related economic sectors?
3. To achieve the proper allocation. . . .
 - a. Should the Administration propose changes in the tax system which discriminate in favor of energy?
 - b. Should a major program for government guarantees of energy-related debt be developed?
 - c. Should the Federal Government take steps to encourage financial institutions to invest a larger percentage of their funds in energy?
 - d. Should the Federal Government take steps necessary to channel significantly increased amounts of capital into new energy technology developments?
 - e. Should the Federal Government create an Energy Independence Financing Corporation to plan, finance and expedite attainment of the Nation's energy goals?



B. The Problem

Recently, you established energy independence goals and gave the development of domestic energy resources, the conservation of energy and the establishment of strategic energy reserves the Nation's first priority.

To achieve the necessary levels of domestic energy supply by 1985, it has been estimated that a total of \$500 billion to \$1 trillion of energy-related capital investment will be needed. Although there is no single estimate about which we are confident, we do think that this is a reasonable range of possibilities. To attain the goals which you established, the Nation requires many major new facilities. Your announced targets include

- 200 nuclear power plants
- 250 coal mines
- 150 coal-fired power plants
- 30 oil refineries
- 20 synthetic fuel plants
- many thousand oil and gas wells

While these are merely targets which may change over time, they do indicate generally that massive amounts of capital will be required for a comparable set of facilities and for other important investments, such as hydro-power installations, nuclear fuel production plants, pipelines and new railroad tracks and coal cars.

At present, no detailed energy plan exists which establishes yearly and regional goals for progress in new investment for domestic energy resources development and, consequently, it is difficult to identify and quantify the precise problems involved in achieving the energy independence goals. However, there is a general sense that many roadblocks continue to stand in the way of success.

For example, the investor-owned electric utility industry is in serious financial difficulty. Although there is no longer the imminent threat of bankruptcy or passing of a stock dividend, a basic recovery in bond ratings or stock valuations has not taken place. One indication



of the continuing nature of the financial problem is the discount of stock price from book value. At the end of February, only 16 of the largest 105 electric companies had stock valued at or greater than book value. Common stocks of the remaining 89 companies were selling at prices equal to approximately 70% of book value.

A semblance of financial stability has been achieved by a significant cut-back in capital expenditures. In 1974 there were 235 coal and nuclear plants delayed or cancelled, representing 114,000 megawatts of nuclear capacity and 74,000 megawatts of coal. Financing problems were indicated as the primary or contributing cause of nearly 70% of the nuclear cancellations and deferrals and 45% of the coal plant decisions. As a result, financing problems have jeopardized the Nation's energy objectives and the adequacy of further electricity availability.

C. Current Administration Initiatives

In approaching the problem of how to achieve the energy independence goals, the Administration has assumed that the Government has a major role to play in eliminating any critical roadblocks and in providing the necessary incentives.

As a step toward your energy goals as outlined in the State of the Union Message, the Omnibus Energy Bill - primarily dealing with import curtailment, conservation, regulatory improvement and strategic reserves - was submitted to Congress. In addition, the proposed fiscal 1976 budget provides for total outlays for energy of over \$2 billion.

Administrative actions have included the \$1 import fee on crude oil and petroleum products and your stated intention to continue an aggressive outer continental shelf leasing policy. Also, you have directed the Secretary of the Interior to expedite coal development.

However, new capital investment in energy and the construction of new energy-related projects continues to lag behind your expectations.

II. Decision #1: Establishment of a Detailed Ten Year Plan for Energy Development

It is apparent that the Federal Government does not have a plan which provides detailed targets for energy activities and investment by region on a year-to-year basis. If one asks, for example, how much new nuclear capacity should be under construction in the Southeast by 1977 in order to achieve the 1985 goals, a reasoned answer does not exist. However, without an answer, it is difficult - if not impossible - to anticipate bottlenecks, monitor the achievement of the 1985 objectives and initiate remedial actions where necessary.

Before deciding on the specific structure for any proposed national energy resources development planning body, however, it is important that you decide:

SHOULD THE UNITED STATES HAVE A DETAILED,
COMPREHENSIVE ENERGY RESOURCES DEVELOPMENT
PLAN BEYOND THE PRESENT ONE TO ACHIEVE YOUR
ENERGY INDEPENDENCE OBJECTIVES?

Favorable Arguments

- ° The discussion above.
- ° The energy problem is a crisis of unprecedented scope and complexity. Thus, in order to mount an effective and efficient program to solve the problem, the acceptance of some economic planning is necessary.

Opposing Arguments

- ° This is unneeded since we know enough to proceed in the development of policy and the solution of problems.
- ° This would be the first step toward national planning and might eventually result in application of the technique to other sectors of the economy.

Presidential Decision

Favor _____

Oppose _____



III. Decision #2: Allocation of Capital and Other Resources
in Order to Effect the Ten Year Energy Plan

If the Administration develops a detailed ten year energy plan, it is probable that we will discover - if we do not already know - that the current system of pricing mechanisms, financial institution arrangements, energy institutions, tax structure and governmental regulation will not achieve the desired objectives. If not, then you must decide:

SHOULD THE GOVERNMENT TAKE ALL THE NECESSARY
STEPS TO ALLOCATE CAPITAL RESOURCES INTO THE
ENERGY-RELATED ECONOMIC SECTORS?

Favorable Arguments

- ° Energy independence is our first national priority and thus we must do everything necessary to achieve the goals and eliminate the crisis.
- ° The American economic system already has many government mechanisms for allocating capital.

Opposing Arguments

- ° Regardless of what the plan indicates, the market system with a few adjustments will result in attainment of the goals.
- ° If historical trends continue, almost \$500 billion will flow into energy-related investment over the next ten years.
- ° Allocation for energy purposes will inevitably result in the demand for allocation from other competing sectors.

Presidential Decision

Favor _____

Oppose _____

IV. Decision #3: Various Mechanisms for Allocation of
Capital Resources

If a decision is made to allocate capital resources into the energy-related sectors, a number of mechanisms have been proposed to perform this task. While they are discussed separately, they are not necessarily mutually exclusive.

A. Discriminatory Tax Arrangements

Tax incentives could be developed - and many have been discussed - which discriminate in favor of energy-related investments (and investors) and thus influence the flow of capital into energy-related sectors.

Before getting bogged down in the specifics of the many rate-change and tax-deferral schemes (such as super-accelerated depreciation), you should decide:

SHOULD THE ADMINISTRATION PROPOSE CHANGES
IN THE TAX SYSTEM WHICH DISCRIMINATE IN
FAVOR OF ENERGY?

Favor Arguments

- ° Once the new tax arrangements are in place, the adjusted market forces will reallocate capital without direct government involvement.
- ° Because the tax system is already filled with discriminatory provisions - some of which may adversely effect energy investment - discrimination which favors energy is needed.

Opposing Arguments

- ° Substantial tax reduction for the energy industry may not be achievable in Congress.
- ° Most new tax incentive proposals are inconsistent with the Treasury's overall tax policy.
- ° The net benefit from tax discrimination will be small relative to the massive resource reallocation which is needed.

Presidential Decision

Favor _____

Oppose _____

B. Guarantees of Securities Issued by Energy-Related Businesses



Another way for the Federal Government to channel capital into energy-related investment would be for the Government to guarantee the debt of energy ventures. This type of mechanism would be similar to arrangements which currently provide guarantees for housing, small business and merchant marine loans.

Here, your decision is:

SHOULD A MAJOR PROGRAM OF GOVERNMENT
GUARANTEES OF ENERGY-RELATED DEBT BE
DEVELOPED?

Favorable Arguments

- ° Guarantee programs already abound in other economic sectors.
- ° Guarantees are the equivalent to Government lending money at a subsidized rate without the disadvantage of direct Government involvement in borrowing and lending.

Opposing Arguments

- ° The cost to the Government will be very large if the loans are risky and result in substantial losses.
- ° Again, this program discriminates in favor of energy and will result in a heavy demand for comparable programs for other sectors.

Presidential Decision

Favor _____ Oppose _____

C. Encourage Investment By Institutional Investors

A major portion of the capital which is formed in the United States flows through financial institutions, such as banks, insurance companies, pension funds and investment companies. It would be possible to influence this flow of capital via a series of legislative and administrative actions. For example,



the Federal Reserve Board could encourage banks to discriminate in favor of energy-related loans.

You must decide:

SHOULD THE FEDERAL GOVERNMENT TAKE STEPS
TO ENCOURAGE FINANCIAL INSTITUTIONS TO
INVEST A LARGER PERCENTAGE OF THEIR FUNDS
IN ENERGY?

Favorable Arguments

- ° Unlike tax incentives or guarantees, this is a way to ensure absolutely that capital actually flows into energy investment.
- ° A policy designed to encourage more institutional investment in energy might leave the institutions free to decide where to make the investment, thereby substituting decentralized investment decisions for governmental decision making.

Opposing Arguments

- ° This will not ensure that capital flows into the "right" energy investments.
- ° This approach will not provide subsidized loans for those energy borrowers who cannot afford the current high interest rates.
- ° This is an unacceptable interference with the fiduciary responsibilities of these institutions.

Presidential Decision

Favor _____

Oppose _____

D. Energy Trust Fund or Energy Development Bank

At present, both the Federal Government and private industry are financing research and development in nuclear conversion and other promising energy technologies. In order to channel more funds into high risk energy research and development ventures,

pilot plants and the first commercial developments of new technologies, the Federal Government could establish a Federal Government institution (an "Energy Venture Capital Institution") to finance promising new technologies. Possible funding of this institution can come from Treasury appropriations out of the general national revenues, a variety of special Federal taxes or the sale of the institution's debt guaranteed by the U.S. Government.

The precise form of the institution is not of critical importance until you decide:

SHOULD THE FEDERAL GOVERNMENT TAKE STEPS
NECESSARY TO CHANNEL SIGNIFICANTLY INCREASED
AMOUNTS OF CAPITAL INTO NEW ENERGY TECHNOLOGY
DEVELOPMENTS?

Favorable Arguments

- ° Our economy cannot survive without reliable and relatively inexpensive energy supplies. For that reason, the development of such new energy sources merits the highest priority in the schedule of Federal concerns and the Government should assume a major burden for this socially worthwhile endeavor.
- ° The energy crisis calls for a large, stable increase in the level of high risk investment, but the free market cannot be relied upon voluntarily to provide substantial and continuing financial support of innovative - but high risk - energy projects.

Opposing Arguments

- ° ERDA already can do everything necessary to stimulate R&D in promising technologies.
- ° The American capital market has generated billions of dollars for high risk, unproven ventures in the past and will continue to do so in the future.

Presidential Decision

Favor _____

Oppose _____

E. The Energy Independence Financing Corporation

Along with some of the new initiatives outlined above, the Administration could propose creation of an "Energy Independence Financing Corporation." This Corporation would be established by the Federal Government to expedite and finance the development of domestic energy sources where the American economy was not freely achieving its energy independence goals. A detailed outline of this proposed institution is contained in Tab A.

This Corporation would be authorized to raise as much as \$250 billion from the American capital market and to allocate this capital into energy-related investment and away from other competing uses. However, before the Corporation could make loans to or buy capital stock in businesses, there would have to be a finding that the investment was important to the attainment of the national energy independence goals and that alternative financing was not available on reasonable terms from other sources.

In those instances where no other entity was capable of performing a critical energy-related function, the Corporation would be authorized to establish a subsidiary to remove the bottleneck, e.g., to construct and lease a shale oil production facility or to commit to buy (and resell) the entire output of a synthetic natural gas plant.

To summarize, the Corporation would be the central institution planning and monitoring the step-by-step achievement of the energy independence goals and providing substantial amounts of capital to businesses and for projects which were found to be important to energy independence. It would be empowered to do anything of financial or business nature which was found to be necessary for the attainment of the energy goals.

You must decide:

SHOULD THE FEDERAL GOVERNMENT CREATE AN
ENERGY INDEPENDENCE FINANCING CORPORATION
TO PLAN, FINANCE AND EXPEDITE ATTAINMENT
OF THE NATION'S ENERGY GOALS?

Favorable Arguments

- ° The amounts of capital needed by the energy-related sectors of the economy are so large that a central capital gathering and allocating mechanism is needed in order to redirect sufficient capital into the high priority sectors.
- ° Every other proposal assumes that the economic and political system will adjust to the demands of energy independence whereas in reality there is no mechanism or series of adjustments which can be expected to result in success except a Government Corporation of unprecedented size and scope engaging in a crash program to plan and allocate capital into energy development.
- ° The American society and economy need a strong demonstration of affirmative action to solve the energy problem and to provide a new sense of forward motion.
- ° The Corporation would attract Arab capital which would otherwise not flow into the American economy or, specifically, into American domestic energy development.

Opposing Arguments

- ° The cost to the Government will be very large if the loans are risky and result in substantial losses.
- ° This is a major interference with the normal functioning of the capital market and departure from our system of free enterprise which will inevitably result in the politically irresistible demand for comprehensive planning and capital allocation for every other competing sector of the economy.
- ° If historical trends continue, almost \$500 billion will flow into energy-related investment over the next ten years.

- ° This proposed crash program will distract the attention of the American people and the Congress away from solution of the real problems of energy development including the irrational system of Federal, state and local regulation, the artificially low domestic oil and gas prices, the disincentives for investment in many energy-related areas and the lack of appropriate energy conservation measures.
- ° The net incremental impact on the flow of Arab dollar surpluses into the American economy will be small since adequate investment vehicles already exist for the amounts of Arab capital reasonably expected to flow into the United States.

Presidential Decision

Favor _____

Oppose _____

OUTLINE OF THE ENERGY INDEPENDENCE
FINANCING CORPORATION

THE CORPORATION

A corporation to be known as the Energy Independence Financing Corporation (the "Corporation") shall be created to allocate capital to those sectors of the economy which are of critical importance to the development of domestic sources of energy and attainment of the goal of energy independence for the United States.

CAPITAL STOCK

The Corporation shall have capital stock of \$50 billion subscribed by the United States, payment for which shall be subject to call in whole or in part by the Corporation.

The Federal Financing Bank shall be authorized to, and upon request of the Corporation shall, purchase stock in amounts up to a total of \$50 billion.

BORROWING AUTHORITY

The Corporation shall be authorized and empowered to issue, and to have outstanding at any one time, notes, debentures, bonds and other evidences of indebtedness in the aggregate principal amount of \$200 billion. Such obligations shall contain terms as to maturity, redemption, priority and interest, and such other terms, as may be determined by the Corporation with the approval of the Secretary of the Treasury.

The Federal Financing Bank shall be authorized to, and upon request of the Corporation shall, purchase notes, debentures, bonds and other evidences of indebtedness in amounts up to a total of \$200 billion. The Federal Financing Bank may, at any time, sell any obligations of the Corporation so acquired.

The obligations of the Corporation shall be fully and unconditionally guaranteed both as to interest and principal by the United States. In the event that the Corporation is unable to pay upon demand, when due, any obligation, the Federal Financing Bank shall pay the amount thereof and thereupon to the extent of the amount so paid by the Federal Financing Bank shall succeed to all the rights of the holder of the obligations.

AUTHORIZED PURCHASERS OF OBLIGATIONS

Obligations of the Corporation shall be eligible for purchase by the Federal Reserve Open Market Committee.

Obligations of the Corporation shall be eligible for purchase by any federally chartered or regulated commercial bank, savings and loan association, or mutual savings bank.

All obligations issued by the Corporation shall be lawful investments for, and may be accepted as security for, all fiduciary, trust, and public funds the investment or deposit of which is under the authority or control of the United States or of any officer or officers thereof.

FINANCIAL ASSISTANCE

To aid in achieving energy independence, the Corporation shall be authorized and empowered, upon such terms and conditions as it may determine, to make loans to, to purchase or guarantee the obligations of, and to subscribe to the capital stock of any business concern in order to

- enable such concern to finance the construction, conversion, or expansion of facilities, or the acquisition of equipment, plant, real property, machinery, supplies, or materials; or
- provide such concern with working capital; or
- aid such concern in the payment of current debts or obligations.

The term "business concern" shall mean any individual, corporation, company, association, firm, partnership, society, public authority, or other entity which is engaged in the development, manufacture, supply, importation, exportation, procurement or production of goods and services in the United States and which is found by the Corporation to be essential, by itself or as part of a larger industrial grouping, to the achievement of energy independence by the United States.

In providing financial assistance, the Corporation shall determine that alternative financing is not available on reasonable terms from other sources.

Financial assistance provided by the Corporation may be made upon such terms, and subject to such restrictions, as shall seem to the Corporation to be commensurate with the needs of the recipient.

Each loan shall bear interest at such rate as the Corporation may determine, giving consideration to the needs and capacities of the recipient as well as to the Corporation's need to sustain continuing operations out of the return from its investments.

All loans or obligations shall be, in the opinion of the Corporation, of such sound value, or so secured, as reasonably to assure retirement or repayment, and may be made or effected either directly or in cooperation with banks or other financing institutions.

The Corporation may, in compliance with applicable laws governing transactions in securities, sell in the open market all or any part of the capital stock, notes, bonds, debentures, or any other evidences of indebtedness of any business concern acquired by the Corporation.

SUBSIDIARY CORPORATIONS

When the Corporation shall determine that such action is necessary to aid in achieving energy independence for the United States, the Corporation may create or organize subsidiary corporations with power to

- produce, acquire, provide, carry, sell, or otherwise deal in commodities, materials and services;
- purchase and lease land;
- purchase, lease, build, convert and expand plants;
- purchase and produce equipment, facilities, machinery, materials, and supplies; and
- lease, sell, or otherwise dispose of such land, plants, facilities, equipment and machinery in order to induce business concerns to engage in the foregoing activities.

PURCHASE OF ASSETS

The Federal Financing Bank shall be authorized to purchase from the Corporation any asset of the Corporation at such price as may be agreed upon between the Federal Financing Bank and the Corporation.

The several Federal Reserve banks shall be authorized to purchase or discount any note, debenture, bond, or other obligation of a business concern, secured or unsecured, held by the Corporations.

AUDIT

The accounts of the Corporation shall be audited annually in accordance with generally accepted accounting standards by independent certified public accountants.

May 1, 1975

MEMORANDUM FOR:

FROM:

SUBJECT: The Energy Situation and New Energy
 Initiatives

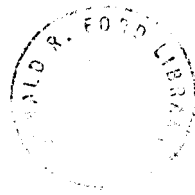
I. Introduction

A. Purpose

The purpose of this memorandum is to provide you with an updated assessment of the energy problem and to obtain your decision on whether any major new energy policy initiatives should be proposed at this time.

The following decisions are discussed in this memorandum:

1. Should the United States have a detailed, comprehensive energy resources development plan beyond the present one to achieve your energy independence objectives?
2. Should the government take all the necessary steps to allocate capital resources into the energy-related economic sectors?
3. To achieve the proper allocation. . . .
 - a. Should the Administration propose changes in the tax system which discriminate in favor of energy?
 - b. Should a major program for government guarantees of energy-related debt be developed?
 - c. Should the Federal Government take steps to encourage financial institutions to invest a larger percentage of their funds in energy?
 - d. Should the Federal Government take steps necessary to channel significantly increased amounts of capital into new energy technology developments?
 - e. Should the Federal Government create an Energy Independence Financing Corporation to plan, finance and expedite attainment of the Nation's energy goals?



B. The Problem

Recently, you established energy independence goals and gave the development of domestic energy resources, the conservation of energy and the establishment of strategic energy reserves the Nation's first priority.

To achieve the necessary levels of domestic energy supply by 1985, it has been estimated that a total of \$500 billion to \$1 trillion of energy-related capital investment will be needed. Although there is no single estimate about which we are confident, we do think that this is a reasonable range of possibilities. To attain the goals which you established, the Nation requires many major new facilities. Your announced targets include

- 200 nuclear power plants
- 250 coal mines
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- 30 oil refineries
- 20 synthetic fuel plants
- many thousand oil and gas wells

While these are merely targets which may change over time, they do indicate generally that massive amounts of capital will be required for a comparable set of facilities and for other important investments, such as hydro-power installations, nuclear fuel production plants, pipelines and new railroad tracks and coal cars.

At present, no detailed energy plan exists which establishes yearly and regional goals for progress in new investment for domestic energy resources development and, consequently, it is difficult to identify and quantify the precise problems involved in achieving the energy independence goals. However, there is a general sense that many roadblocks continue to stand in the way of success.

For example, the investor-owned electric utility industry is in serious financial difficulty. Although there is no longer the imminent threat of bankruptcy or passing of a stock dividend, a basic recovery in bond ratings or stock valuations has not taken place. One indication

of the continuing nature of the financial problem is the discount of stock price from book value. At the end of February, only 16 of the largest 105 electric companies had stock valued at or greater than book value. Common stocks of the remaining 89 companies were selling at prices equal to approximately 70% of book value.

A semblance of financial stability has been achieved by a significant cut-back in capital expenditures. In 1974 there were 235 coal and nuclear plants delayed or cancelled, representing 114,000 megawatts of nuclear capacity and 74,000 megawatts of coal. Financing problems were indicated as the primary or contributing cause of nearly 70% of the nuclear cancellations and deferrals and 45% of the coal plant decisions. As a result, financing problems have jeopardized the Nation's energy objectives and the adequacy of further electricity availability.

C. Current Administration Initiatives

In approaching the problem of how to achieve the energy independence goals, the Administration has assumed that the Government has a major role to play in eliminating any critical roadblocks and in providing the necessary incentives.

As a step toward your energy goals as outlined in the State of the Union Message, the Omnibus Energy Bill - primarily dealing with import curtailment, conservation, regulatory improvement and strategic reserves - was submitted to Congress. In addition, the proposed fiscal 1976 budget provides for total outlays for energy of over \$2 billion.

Administrative actions have included the \$1 import fee on crude oil and petroleum products and your stated intention to continue an aggressive outer continental shelf leasing policy. Also, you have directed the Secretary of the Interior to expedite coal development.

However, new capital investment in energy and the construction of new energy-related projects continues to lag behind your expectations.

II. Decision #1: Establishment of a Detailed Ten Year Plan for Energy Development

It is apparent that the Federal Government does not have a plan which provides detailed targets for energy activities and investment by region on a year-to-year basis. If one asks, for example, how much new nuclear capacity should be under construction in the Southeast by 1977 in order to achieve the 1985 goals, a reasoned answer does not exist. However, without an answer, it is difficult - if not impossible - to anticipate bottlenecks, monitor the achievement of the 1985 objectives and initiate remedial actions where necessary.

Before deciding on the specific structure for any proposed national energy resources development planning body, however, it is important that you decide:

SHOULD THE UNITED STATES HAVE A DETAILED,
COMPREHENSIVE ENERGY RESOURCES DEVELOPMENT
PLAN BEYOND THE PRESENT ONE TO ACHIEVE YOUR
ENERGY INDEPENDENCE OBJECTIVES?

Favorable Arguments

- ° The discussion above.
- ° The energy problem is a crisis of unprecedented scope and complexity. Thus, in order to mount an effective and efficient program to solve the problem, the acceptance of some economic planning is necessary.

Opposing Arguments

- ° This is unneeded since we know enough to proceed in the development of policy and the solution of problems.
- ° This would be the first step toward national planning and might eventually result in application of the technique to other sectors of the economy.

Presidential Decision

Favor _____

Oppose _____

III. Decision #2: Allocation of Capital and Other Resources
in Order to Effect the Ten Year Energy Plan

If the Administration develops a detailed ten year energy plan, it is probable that we will discover - if we do not already know - that the current system of pricing mechanisms, financial institution arrangements, energy institutions, tax structure and governmental regulation will not achieve the desired objectives. If not, then you must decide:

SHOULD THE GOVERNMENT TAKE ALL THE NECESSARY
STEPS TO ALLOCATE CAPITAL RESOURCES INTO THE
ENERGY-RELATED ECONOMIC SECTORS?

Favorable Arguments

- ° Energy independence is our first national priority and thus we must do everything necessary to achieve the goals and eliminate the crisis.
- ° The American economic system already has many government mechanisms for allocating capital.

Opposing Arguments

- ° Regardless of what the plan indicates, the market system with a few adjustments will result in attainment of the goals.
- ° If historical trends continue, almost \$500 billion will flow into energy-related investment over the next ten years.
- ° Allocation for energy purposes will inevitably result in the demand for allocation from other competing sectors.

Presidential Decision

Favor _____

Oppose _____

IV. Decision #3: Various Mechanisms for Allocation of
Capital Resources

If a decision is made to allocate capital resources into the energy-related sectors, a number of mechanisms have been proposed to perform this task. While they are discussed separately, they are not necessarily mutually exclusive.



A. Discriminatory Tax Arrangements

Tax incentives could be developed - and many have been discussed - which discriminate in favor of energy-related investments (and investors) and thus influence the flow of capital into energy-related sectors.

Before getting bogged down in the specifics of the many rate-change and tax-deferral schemes (such as super-accelerated depreciation), you should decide:

SHOULD THE ADMINISTRATION PROPOSE CHANGES
IN THE TAX SYSTEM WHICH DISCRIMINATE IN
FAVOR OF ENERGY?

Favor Arguments

- ° Once the new tax arrangements are in place, the adjusted market forces will reallocate capital without direct government involvement.
- ° Because the tax system is already filled with discriminatory provisions - some of which may adversely effect energy investment - discrimination which favors energy is needed.

Opposing Arguments

- ° Substantial tax reduction for the energy industry may not be achievable in Congress.
- ° Most new tax incentive proposals are inconsistent with the Treasury's overall tax policy.
- ° The net benefit from tax discrimination will be small relative to the massive resource reallocation which is needed.

Presidential Decision

Favor _____

Oppose _____

B. Guarantees of Securities Issued by Energy-Related Businesses

Another way for the Federal Government to channel capital into energy-related investment would be for the Government to guarantee the debt of energy ventures. This type of mechanism would be similar to arrangements which currently provide guarantees for housing, small business and merchant marine loans.

Here, your decision is:

SHOULD A MAJOR PROGRAM OF GOVERNMENT
GUARANTEES OF ENERGY-RELATED DEBT BE
DEVELOPED?

Favorable Arguments

- ° Guarantee programs already abound in other economic sectors.
- ° Guarantees are the equivalent to Government lending money at a subsidized rate without the disadvantage of direct Government involvement in borrowing and lending.

Opposing Arguments

- ° The cost to the Government will be very large if the loans are risky and result in substantial losses.
- ° Again, this program discriminates in favor of energy and will result in a heavy demand for comparable programs for other sectors.

Presidential Decision

Favor _____ Oppose _____

C. Encourage Investment By Institutional Investors

A major portion of the capital which is formed in the United States flows through financial institutions, such as banks, insurance companies, pension funds and investment companies. It would be possible to influence this flow of capital via a series of legislative and administrative actions. For example,

the Federal Reserve Board could encourage banks to discriminate in favor of energy-related loans.

You must decide:

SHOULD THE FEDERAL GOVERNMENT TAKE STEPS
TO ENCOURAGE FINANCIAL INSTITUTIONS TO
INVEST A LARGER PERCENTAGE OF THEIR FUNDS
IN ENERGY?

Favorable Arguments

- ° Unlike tax incentives or guarantees, this is a way to ensure absolutely that capital actually flows into energy investment.
- ° A policy designed to encourage more institutional investment in energy might leave the institutions free to decide where to make the investment, thereby substituting decentralized investment decisions for governmental decision making.

Opposing Arguments

- ° This will not ensure that capital flows into the "right" energy investments.
- ° This approach will not provide subsidized loans for those energy borrowers who cannot afford the current high interest rates.
- ° This is an unacceptable interference with the fiduciary responsibilities of these institutions.

Presidential Decision

Favor _____

Oppose _____

D. Energy Trust Fund or Energy Development Bank

At present, both the Federal Government and private industry are financing research and development in nuclear conversion and other promising energy technologies. In order to channel more funds into high risk energy research and development ventures,

pilot plants and the first commercial developments of new technologies, the Federal Government could establish a Federal Government institution (an "Energy Venture Capital Institution") to finance promising new technologies. Possible funding of this institution can come from Treasury appropriations out of the general national revenues, a variety of special Federal taxes or the sale of the institution's debt guaranteed by the U.S. Government.

The precise form of the institution is not of critical importance until you decide:

SHOULD THE FEDERAL GOVERNMENT TAKE STEPS
NECESSARY TO CHANNEL SIGNIFICANTLY INCREASED
AMOUNTS OF CAPITAL INTO NEW ENERGY TECHNOLOGY
DEVELOPMENTS?

Favorable Arguments

- ° Our economy cannot survive without reliable and relatively inexpensive energy supplies. For that reason, the development of such new energy sources merits the highest priority in the schedule of Federal concerns and the Government should assume a major burden for this socially worthwhile endeavor.
- ° The energy crisis calls for a large, stable increase in the level of high risk investment, but the free market cannot be relied upon voluntarily to provide substantial and continuing financial support of innovative - but high risk - energy projects.

Opposing Arguments

- ° ERDA already can do everything necessary to stimulate R&D in promising technologies.
- ° The American capital market has generated billions of dollars for high risk, unproven ventures in the past and will continue to do so in the future.

Presidential Decision

Favor _____

Oppose _____



E. The Energy Independence Financing Corporation

Along with some of the new initiatives outlined above, the Administration could propose creation of an "Energy Independence Financing Corporation." This Corporation would be established by the Federal Government to expedite and finance the development of domestic energy sources where the American economy was not freely achieving its energy independence goals. A detailed outline of this proposed institution is contained in Tab A.

This Corporation would be authorized to raise as much as \$250 billion from the American capital market and to allocate this capital into energy-related investment and away from other competing uses. However, before the Corporation could make loans to or buy capital stock in businesses, there would have to be a finding that the investment was important to the attainment of the national energy independence goals and that alternative financing was not available on reasonable terms from other sources.

In those instances where no other entity was capable of performing a critical energy-related function, the Corporation would be authorized to establish a subsidiary to remove the bottleneck, e.g., to construct and lease a shale oil production facility or to commit to buy (and resell) the entire output of a synthetic natural gas plant.

To summarize, the Corporation would be the central institution planning and monitoring the step-by-step achievement of the energy independence goals and providing substantial amounts of capital to businesses and for projects which were found to be important to energy independence. It would be empowered to do anything of financial or business nature which was found to be necessary for the attainment of the energy goals.

You must decide:

SHOULD THE FEDERAL GOVERNMENT CREATE AN
ENERGY INDEPENDENCE FINANCING CORPORATION
TO PLAN, FINANCE AND EXPEDITE ATTAINMENT
OF THE NATION'S ENERGY GOALS?

Favorable Arguments

- ° The amounts of capital needed by the energy-related sectors of the economy are so large that a central capital gathering and allocating mechanism is needed in order to redirect sufficient capital into the high priority sectors.
- ° Every other proposal assumes that the economic and political system will adjust to the demands of energy independence whereas in reality there is no mechanism or series of adjustments which can be expected to result in success except a Government Corporation of unprecedented size and scope engaging in a crash program to plan and allocate capital into energy development.
- ° The American society and economy need a strong demonstration of affirmative action to solve the energy problem and to provide a new sense of forward motion.
- ° The Corporation would attract Arab capital which would otherwise not flow into the American economy or, specifically, into American domestic energy development.

Opposing Arguments

- ° The cost to the Government will be very large if the loans are risky and result in substantial losses.
- ° This is a major interference with the normal functioning of the capital market and departure from our system of free enterprise which will inevitably result in the politically irresistible demand for comprehensive planning and capital allocation for every other competing sector of the economy.
- ° If historical trends continue, almost \$500 billion will flow into energy-related investment over the next ten years.

- ° This proposed crash program will distract the attention of the American people and the Congress away from solution of the real problems of energy development including the irrational system of Federal, state and local regulation, the artificially low domestic oil and gas prices, the disincentives for investment in many energy-related areas and the lack of appropriate energy conservation measures.
- ° The net incremental impact on the flow of Arab dollar surpluses into the American economy will be small since adequate investment vehicles already exist for the amounts of Arab capital reasonably expected to flow into the United States.

Presidential Decision

Favor _____

Oppose _____



OUTLINE OF THE ENERGY INDEPENDENCE
FINANCING CORPORATION

THE CORPORATION

A corporation to be known as the Energy Independence Financing Corporation (the "Corporation") shall be created to allocate capital to those sectors of the economy which are of critical importance to the development of domestic sources of energy and attainment of the goal of energy independence for the United States.

CAPITAL STOCK

The Corporation shall have capital stock of \$50 billion subscribed by the United States, payment for which shall be subject to call in whole or in part by the Corporation.

The Federal Financing Bank shall be authorized to, and upon request of the Corporation shall, purchase stock in amounts up to a total of \$50 billion.

BORROWING AUTHORITY

The Corporation shall be authorized and empowered to issue, and to have outstanding at any one time, notes, debentures, bonds and other evidences of indebtedness in the aggregate principal amount of \$200 billion. Such obligations shall contain terms as to maturity, redemption, priority and interest, and such other terms, as may be determined by the Corporation with the approval of the Secretary of the Treasury.

The Federal Financing Bank shall be authorized to, and upon request of the Corporation shall, purchase notes, debentures, bonds and other evidences of indebtedness in amounts up to a total of \$200 billion. The Federal Financing Bank may, at any time, sell any obligations of the Corporation so acquired.

The obligations of the Corporation shall be fully and unconditionally guaranteed both as to interest and principal by the United States. In the event that the Corporation is unable to pay upon demand, when due, any obligation, the Federal Financing Bank shall pay the amount thereof and thereupon to the extent of the amount so paid by the Federal Financing Bank shall succeed to all the rights of the holder of the obligations.



AUTHORIZED PURCHASERS OF OBLIGATIONS

Obligations of the Corporation shall be eligible for purchase by the Federal Reserve Open Market Committee.

Obligations of the Corporation shall be eligible for purchase by any federally chartered or regulated commercial bank, savings and loan association, or mutual savings bank.

All obligations issued by the Corporation shall be lawful investments for, and may be accepted as security for, all fiduciary, trust, and public funds the investment or deposit of which is under the authority or control of the United States or of any officer or officers thereof.

FINANCIAL ASSISTANCE

To aid in achieving energy independence, the Corporation shall be authorized and empowered, upon such terms and conditions as it may determine, to make loans to, to purchase or guarantee the obligations of, and to subscribe to the capital stock of any business concern in order to

- enable such concern to finance the construction, conversion, or expansion of facilities, or the acquisition of equipment, plant, real property, machinery, supplies, or materials;
or
- provide such concern with working capital;
or
- aid such concern in the payment of current debts or obligations.

The term "business concern" shall mean any individual, corporation, company, association, firm, partnership, society, public authority, or other entity which is engaged in the development, manufacture, supply, importation, exportation, procurement or production of goods and services in the United States and which is found by the Corporation to be essential, by itself or as part of a larger industrial grouping, to the achievement of energy independence by the United States.

In providing financial assistance, the Corporation shall determine that alternative financing is not available on reasonable terms from other sources.

Financial assistance provided by the Corporation may be made upon such terms, and subject to such restrictions, as shall seem to the Corporation to be commensurate with the needs of the recipient.

Each loan shall bear interest at such rate as the Corporation may determine, giving consideration to the needs and capacities of the recipient as well as to the Corporation's need to sustain continuing operations out of the return from its investments.

All loans or obligations shall be, in the opinion of the Corporation, of such sound value, or so secured, as reasonably to assure retirement or repayment, and may be made or effected either directly or in cooperation with banks or other financing institutions.

The Corporation may, in compliance with applicable laws governing transactions in securities, sell in the open market all or any part of the capital stock, notes, bonds, debentures, or any other evidences of indebtedness of any business concern acquired by the Corporation.

SUBSIDIARY CORPORATIONS

When the Corporation shall determine that such action is necessary to aid in achieving energy independence for the United States, the Corporation may create or organize subsidiary corporations with power to

- produce, acquire, provide, carry, sell, or otherwise deal in commodities, materials and services;
- purchase and lease land;
- purchase, lease, build, convert and expand plants;
- purchase and produce equipment, facilities, machinery, materials, and supplies; and
- lease, sell, or otherwise dispose of such land, plants, facilities, equipment and machinery in order to induce business concerns to engage in the foregoing activities.

PURCHASE OF ASSETS

The Federal Financing Bank shall be authorized to purchase from the Corporation any asset of the Corporation at such price as may be agreed upon between the Federal Financing Bank and the Corporation.

The several Federal Reserve banks shall be authorized to purchase or discount any note, debenture, bond, or other obligation of a business concern, secured or unsecured, held by the Corporations.

AUDIT

The accounts of the Corporation shall be audited annually in accordance with generally accepted accounting standards by independent certified public accountants.