# B. Specific Comments on Hypothetical Terms and Conditions and Suggestions for Changes in the Incentives

## 2. Oil Companies

### b. Oil from Shale

### Incentive 1. Direct Grant (2/3--1/3) for Pilot Plant

See first comment under Incentive 1 for high and low BTU coal gasification.

This represents no incentive to us. The license and patent policy indicated, the royalty-free provision, are major obstacles. We cannot give our investment away. Government help is not needed as regards our particular land and resources, if production is to be maintained as it should be. Our pattern, module-by-module construction and development, makes for a prudent and reduced capital investment. This would not be compatible with government proposals. Our lands are free lands, no government leases are involved.

To give our technology away is totally unacceptable.

We would prefer 90 percent coverage at a minimum for the pilot plant.

#### Incentive 2. Direct Grant (1/2--1/2) for Demonstration Plant

See second comment under Incentive 2 for high and low BTU coal gasification.

See second and third comments under Incentive 1 above.

We would prefer 75 percent minimum coverage for the demonstration plant.

The direct grant is not attractive. We are beyond that, and the patent right problem acts as a disincentive.

#### Incentive 3. Convertible Grant

See third comment under Incentive 3 for high and low BTU coal gasification.

What does "true value of rights" mean? Estimate of this incentive is meaningless unless this is clearly defined. Who would ultimately determine the "true value of rights"? Would the government claim some value of the technology? There are too many uncertainties in this for the making of an intelligent decision.

Whatever the formula developed--and it is far from clear in the wording and meaning of this incentive--we must see a way to get our money back.

This is not attractive and has unfair competition espects. The government in essence is funding a competitor that hasn't proceeded as far as we have. Patent rights are also a problem. The government should require a careful determination of nonavailability of capital from private sources.

#### Incentive 4. Loan Guarantee

This would be attractive, provided it were without recourse.

We prefer this to any of the grant incentives because, among other reasons, patent rights are preserved which might be lost under direct grants. "V" loans were good ones as sponsored by the Defense Production Act and embodied certain desirable features: they were supported by the full faith and credit of the United States government; they covered both principal and interest; and, in the event of default, the lender could go directly to the treasury "until payment was gained." This latter payment provision, called the "pipeline" feature, is particularly desirable and should be included in any government loan guarantee incentive.

We think that 60 percent is the minimum U.S. government guarantee for a loan, and 75 percent more reasonable. After the first plant is operating and producing, there should be no problem getting conventional loans from private sources at reasonable interest rates, even unguaranteed by the government.

Reserves should be included as a capital cost in a loan guarantee program.

This is not clear enough as to the degree of government participation and control. What security is offered? The plant? If the project were on government land, the government would have control of both the shale, in such case, and the land. What return is implied for the government? Any?

## Incentive 5. Guaranteed Procurement/Fixed Price

See all comments under Incentive 5 for high and low BTU coal gasification.

This creates varied problems when all funds are included. It is one of the more attractive incentives, but requires spelling out as to terms. The setting of price prior to plant construction is a problem. How can it realistically be determined in the face of cost (inflationary) at present? There is ambiguity, too, as to the quality of the product. This is obviously important with respect to both cost and ultimate value of the product.

The provision by which the government may shut down at its own option is not wise, especially after the plant is operational.

Under this proposal, the contractor would assume an obligation to provide oil. If the project fails, the contractor would be required to purchase oil on the open market and supply same to the government. This is an inequitable burden to place on the contractor, in our view, since the right to acquire a long-term, secure domestic supply of oil will be a principal incentive for private participation in the project.

## Incentive 6. Guaranteed Procurement/Cost Plus Fixed Fee

See comment under Incentive 6 for high and low BTU coal gasification.

This, we feel, is applicable to a contractor, not to an energy developer. We do not feel it could apply to us. The risk-reward factor and relationship are vital.

To be attractive, this incentive would have to permit inclusion of interest costs (a la the crucial roadblock problem). CPFF also does not overcome the capital availability problem associated with the high initial cost of construction. In our view, the CPFF approach could overreach its goal in that Congress would delay its approval. There is no need for overreaching.

## Incentives 7a and 7c. Guaranteed Price and Alternative

We propose various options for absorbing price differentials if the contract price exceeds the market value at time of production:

- (a) Spread the cost (or credit) for price differential over refining industry as part of crude cost. (A \$3.00/barrel differential on 500,000 B/D of synthetic fuels spread over 14.5 million B/D national refinery runs would represent 11 cents per barrel.) Or,
- (b) The government could pay the price differential when the contract price is above market and be reimbursed from a fund established for this purpose when the contract price is below market; or
- (c) Any import licensing fee resulting, say, from the Ford proposal, could be used.
- On a broader national basis, we recommend quotas or tariffs, with quotas the preferred approach, to stabilize foreign price intervention in the oil market. The sugar precedent was handled in this fashion. We would support the Ways and Means Committee approach of a declining quota, reducing at, say, 500,000 barrels per year every year.

Precedent for the spreading of costs over all refineries is to be found in the Emergency Petroleum Allocation Act under which FEA currently equalizes crude prices across the entire United States.

## Incentive 9. Sale of Options/Guaranteed Price

See comments under Incentives 7a and 7c, beginning on preceding page.

# B. Specific Comments on Hypothetical Terms and Conditions and Suggestions for Changes in the Incentives

### 2. Oil Companies

#### c. General

## Incentive 1. Direct Grant (2/3--1/3) for Pilot Plant

This OCR type incentive is not appealing to us because of the allied restriction on worldwide patent rights. We are a very agressive company in technical innovations. In our view, this incentive leaves very little reason for development using private capital.

## Incentive 2. Direct Grant (1/2--1/2) for Demonstration Plant

This incentive is subject to the same criticism as for the pilot plant direct grant (noted above). The percentage cost to be supplied by the government is not the critical element--rather the restrictions on patent rights and the limited return to the company act as disincentives.

### Incentive 3. Convertible Grant

We foresee the possibility of a dispute arising as to the value of the equity at that future time when the industrial developer would desire to exercise his option to repurchase the government equity. The effectiveness of the grant has considerable elasticity as a function of the degree or percentage government participation. A 90 percent grant would be far more than twice as desirable as a 50 percent grant, which might not have any incentive effect at all. Would infrastructure costs be covered by the grant, things such as pipelines or electric transmission lines or support industries or the cost of building towns in the case of shale oil development. We need a far clearer definition of what is meant by "cost of plant" in this regard. With a high government participation percentage and a comprehensive, extensive and inclusive definition of cost of plant, this would be the most desirable of all the incentives.

# Incentives 5 and 6. Guaranteed Procurement/Fixed Price and Cost Plus Fixed Fee

The limitation of profit which derives from any guaranteed purchase agreement is unattractive to us.

# B. Specific Comments on Hypothetical Terms and Conditions and Suggestions for Changes in the Incentives

#### 3. Utilities

## a. Low BTU Coal Gasification

## Incentive 1. Direct Grant (2/3--1/3) for Pilot Plant

The follow-on use of technology clause is unacceptable. One hundred eighty days is too short a test period. A year minimum would be more appropriate for break-in, and a longer period would be preferred.

Direct grants for pilot plants are fine if the patent right problem is resolved.

## Incentive 2. Direct Grant (1/2--1/2) for Demonstration Flant

In order for the project to be planned firmly, an open-end escalation for labor charges and cost of materials is needed. The escalators proposed in the Phase II booklet are inadequate in that regard.

Patent right dissemination by the U.S. government, particularly background rights, is not negotiable because of an agreement we have with another organization. We agree that patents are a crucial roadblock, in the sense of the definition of the Phase II booklet.

Requirements for government licensing of patents, as stipulated in this incentive in the Phase II booklet, are also a problem.

The sale of product on a pro-rata basis would be acceptable only if the government portion would be proportional to their contribution.

Direct grants for demonstration plants are fine if the patent right problem is resolved.

## Incentive 3. Convertible Grant

Convertible grants, provided the U.S. government's grant provides 90 percent of the funding, would be attractive if the government did not require background patent rights. The pricing stipulation set forth in the Phase II booklet also would be unacceptable.

The termination clause is totally unacceptable.

This incentive is acceptable if the background patent right clauses could be removed. In our view, this procedure is essential for a first-generation commercial plant, again without the background patent right proviso.

### Incentive 5. Guaranteed Procurement/Fixed Pri e

The change of scope clauses spelled out in the Phase II booklet are inadequate and some changes would be hard to negotiate. Such changes of scope include provisions for the plant (1) not working, (2) being expanded in size, or (3) requiring alterations because of environmental regulations. The changes of scope due to expansion might not be too difficult to negotiate. In case of failure, costs might be shared. The environmental problems, however, are very difficult to anticipate and would cause the most difficulty in the needed change of scope clauses of anticipated contracts.

This incentive is not attractive because of the uncertainty of costs involved.

## Incentive 6. Guaranteed Procurement/Cost Plus Fixed Fee

See first comment under Incentive 5 above.

This incentive is unsatisfactory because of the uncertainties of the process technology, cost, financing, etc. This incentive, as well as Incentive 5, really applies to a first commercial plant, for which it would be satisfactory and in fact desirable.

# B. Specific Comments on Hypothetical Terms and Conditions and Suggestions for Changes in the Incentives

#### 4. Others

### a. High and Low BTU Coal Gasification

## Incentive 6. Guaranteed Procurement/Cost Plus Fixed Fee

We would recommend a cost-plus-fixed-fee contract basis, not one with a cost-sharing provision. There must be a fair and visible profit contained in it for private industry, or it won't go.

## b. Oil from Shale

## Incentive 1. Direct Grant (2/3--1/3) for Pilot Plant

Patents are major constraints to oil shale extraction. We would demand that we retain sole right to our background patents.

We feel the granting of exclusive or non-exclusive patent rights on all future patents should be done proportionately on the basis of the percent contribution by government and industry.

The government must learn to be patient with new process development, as there necessarily is a long period of trial and error during which the process is debugged. The 180 days quoted in the Phase II booklet is simply inadequate in that regard.

The cost of capital must be included as a reimbursable cost. (Note: This is one of the so-called "crucial roadblocks" of the Phase II study.)

It is necessary to define "costs" better; particularly, what is meant by "an allowable cost."

We agree with the industry team criticism of the indemnification clauses of the Phase II booklet.

## Incentive 2. Direct Grant (1/2--1/2) for Demonstration Plant

Business indices are highly imprecise in our eyes and are unsatisfactory for developing for use as the base of a contract escalator clause. See comments one, two, four and five under Incentive I, preceding page.

In our view, the government must support almost entirely the high construction costs needed to develop the necessary demonstration plants in order to proceed with commercial development of synfuels.

## Incentive 3. Convertible Grant

See comments one, two, four and five under Incentive 1, preceding page.

## Incentive 4. Loan Guarantee

See comments four and five under Incentive 1, preceding page.

## Incentive 5. Guaranteed Procurement/Fixed Price

This is not an attractive incentive as there is no way to predict future costs and hence future profit.

# Incentive 6. Guaranteed Procurement/Cost Plus Fixed Fee

The instability of the economy and the difficulty in cost projection, in our eyes, makes it almost impossible to negotiate this kind of contract as an incentive to synfuel production.

A fee of only 10 percent or less is inadequate.

We would prefer a ten-year period, and a faster write-off. Capital costs are the biggest item. Depreciation must also be considered a part of cost.

A 10 percent fee of total cost that included both depreciation and interest cost would be acceptable to us.

## C. General Comments on Incentives

## 1. Gas Companies

Until the necessary technology is successfully demonstrated in a pilot plant, no program of financial incentives under discussion will necessarily encourage moving forward with commercial gasification. Demonstration of feasibility in a pilot plant is a controlling factor in moving forward with high BTU coal gasification. The high BTU technology has not yet been perfected at the pilot plant stage, much less at the demonstration level.

## C. General Comments on Incentives

### 2. Oil Companies

The materials furnished with respect to Phase II were helpful in pointing out the weaknesses in the various incentives discussed. We agree with most of the Industry Team comments concerning the hypothetical terms and conditions for the various incentives. Some of the factual basis and estimates for the program will require restudy and modification. For instance, to view a low BTU plant as costing more than a high BTU plant is obviously incorrect.

We feel strongly that we should not participate in government funded research where the grant of a compulsory license under its background technology is required for a "reasonable royalty." We have a licensing policy which has resulted in the license of about 30 percent of our total patent portfolio and would consider participation in federally sponsored research, with respect to patent rights, under the provisions of the President's Executive Order Policy Memorandum of August 23, 1971.

The protection of confidential technology may be difficult under the Freedom of Information Act, even though this type of data is exempted from public disclosure. It is conceivable that we might require a waiver of sovereign immunity from suit with regard to confidential know how to enable us to go to the courts to protect our rights.

We believe that the policy established by the President's Executive Order Policy Memorandum of August 23, 1971, and the regulations used by the Department of Defense are the most equitable to industry and beneficial to the nation generally because of the incentives provided the contractor having an initial background intellectual property portfolio.

With respect to all of the incentives, we generally concur with the observations and comments presented by the Industry Team, which in most instances requested that additional provisions of the hypothetical terms and conditions be negotiable.

Though the proposed incentives speak in terms of liquid and gaseous synthetic fuels, most appear to be applicable only to liquid synthetic fuel production. This is particularly true under the incentives involving guaranteed procurement by the government. Specifically, the logistics involved which could well include the requirement to store the substance purchased by the government as well as interconnecting transport of same, may be impractical for synthetic gaseous fuels. In order to store such gaseous fuels, underground reservoirs which could effectively contain the gas would be required and may not be available in the area of production. In addition, under current practices, the justification of pipeline connection to a particular property requires volumes of a magnitude which will justify the construction of the pipeline, and this may not always be the case in the event of synthetic gaseous production.

It is our view that the financial incentives offered will not provide the incentive for any private company to embark on a major synfuel project (with the exception of a form of the guaranteed procurement, cost plus fixed fee). The reasons are that: (1) inflation, material shortages and other factors will cause synfuel plant costs to escalate to a degree not possible to project; (2) some of the required technologies for ultimate commercial production are not known; and (3) inflation and oil price unknowns are two major sources of uncertainty that influence the plans of the petroleum industry and must be explicitly considered. In this connection:

- (a) Much remains to be done in research and development of synfuel processes, including economic aspects, before initiating large scale projects (and probably pilot stage as well). More efficient, less costly new processes, or improvements on old, will evolve in time.
- (b) The effect of inflation on oil and other prices and the effect on plant costs (together with material shortages) combine to raise the financial risk factor to an unacceptable level for industry to commit substantial sums, even with the financial incentives proposed.

Many of these incentives place more restraints, not less, on us. A tax moratorium, accelerated depreciation, accelerated write-off-these would be more attractive as incentives.

All the incentives appear to assume a proven technology, an assumption which is unjustified.

## C. General Comments on Incentives

## 3. Utilities

It must be realized that no company, however strong or rich, will undertake projects requiring tens and hundreds of millions of dollars if risk of loss or the possibility of disaster exist. Even a 50-50 sharing of such risk offers little incentive, or, after the fact, of solace, in such a case. Even a loan guarantee does not relieve the borrower's liability as an obligor, either financial or moral-hence the risk factor is the vital element.

## C. General Comments on Incentives

### 4. Others

There is today no clear-cut government energy policy, which is highly desirable in our eyes. Because of the questionable state of the economy and the high uncertainty of price forecasts, we feel that industry tends to back off from any syncrude development which is not supported by government purchase guarantees, and then only under a CPFF version.

None of the incentives presented in the Phase II booklet really meet the constraints which had been identified in Phase I and which really inhibit the development of syncrude; for example, facilitation of environmental approvals, assistance in community planning and development, etc.

From our standpoint, low BTU and in situ coal gasification programs would be the only ones of interest. However, even as regards these, none of the proposed incentives will work; none of them "turn us on."

## D. Miscellaneous Comments

## 1. Gas Companies

We believe that the essential elements needed to make coal gasification projects financially viable can be reduced to the following five items:

- (1) Sanctity of contract legislation which protects the contracts underlying the gasification projects.
- (2) A permitted acceptable rate of return that attracts equity investors. While the required return on equity would be evidenced by the contracts underlying the specific project or in the certificate application, other incentives to attract capital and enhance such investments should be provided. The ability to protect the purchasing power of the dollar by trending the investment basis with an appropriate index would be extremely beneficial. Any number of tax incentives like investment tax credits and accelerated depreciation would improve economics and cash flow.
- (3) Assistance in providing construction funds and the ability to earn on construction work in progress. The enormity of the capital required together with the lead time necessary to bring a plant on stream are simply too great to be handled from normal corporate sources. Funding by private sources requires ability to earn on the construction investment and some kind of protection from political risks which could prematurely stop or delay construction. Such protection might best be provided by government guarantees. Equity funds and earnings on the construction work in progress could be provided by advance payments or a rate surcharge, either of which would do the job. Direct government loans for construction may be necessary for the first projects which could be classified as demonstration plants.
- (4) Support of permanent financing obligations by additional security against major calamities. Since the magnitude of a coal gasification venture may dwarf the credit of the ultimate consumers in many instances, additional security above that provided by the mortgagable property will be essential to at least the first commercial plants. Governmental loan guarantees or insurance would not only enhance the availability of senior capital but also reduce its cost and the ultimate price of the SNG. The insurance of debt service during periods of prolonged shutdowns or catastrophic occurrence is essential.

(5) Assurance of a competitively viable market price for the SNG. A major prerequisite to the development of a new synthetic industry is competitive price certainty. Without it, projects cannot be financed. World crude prices are controlled by the Middle East oil producers that can obviously undercut any SNG product. FPC proposals to implement a new system of end-use rate design would make higher cost SNG unmarketable. There must be some kind of protection from those uncertainties.

It should be borne in mind that not just the production of a plant but the capacity and opportunity to expand upon it are important. By evolution we would hope for an ultimate production of 500,000 barrels per day. Then, the availability of an appropriate marketplace for tar sands and shale production would be the essential.

The real incentive in shale would be an acceptable leasing policy; neighbors of ours in a joint venture share this conviction. If additional reserves, under an acceptable leasing policy and with front-end money available, were opened, we would be most interested in this field.

In any of these endeavors, the putting together of people and the site of the energy sources is the problem. A big incentive would be one that made the putting together of such an infrastructure mechanically and economically possible. Community costs on site are high; local and state restraints are a serious consideration. (In Canada, where a project is under way, the government will finance these costs.) Governments must get together to make this possible from here on.

Progress of the art in coal gasification is possible but sanctity of contract must prevail or momentum will be lost. In the absence of these conditions we could not invite the risk of the costs involved; we cannot afford to have a product that isn't salable with a reasonable return on our investment and risk.

Whatever protection we in the energy-producing business are to have must be meaningful to the purpose. We cannot, for example, afford to be flooded with foreign oil.

Where financing is concerned, if the government establishes the proper climate, equity capital could be made available, but only so. The risk picture must assure a fair return.

There is worry in the gas industry that Project Independence seems to write off gas, yet syngas beats electricity from coal.

Among related factors to be considered in the total picture, for example, is the fact that coal in the west cannot come out by rail alone; it must come out in all forms, gas, electricity, et al. The Wyoming Geological Survey reports that the production of an adequate supply of rail cars is unlikely in the near future.

We cannot finance a high BTU plant alone; with full regulatory protection, we might be able to finance with a partner, but it is doubtful.

Low BTU will not fly today without incentives; prices would be prohibitive in face of volatile world oil markets. With fifteen-year commitments required, perhaps few would attempt it.

We are sufficiently optimistic that we are proceeding prudently on both sides, high and low BTU. We are gambling that government policy will support our efforts in due course.

Without incentives in the near future our efforts will cease. Low BTU efforts will go forward at a slow pace, but protection for the buyer as to final costs is vital.

Price guarantee could be structured to be a self-liquidating process of attraction to the government.

Here is a suggested alternative to the guaranteed price alternative: one way out of this synthetic energy pricing dilemma in addition to consideration of these incentives is to deal directly with energy prices. I.e., interchangeable energy prices equalized by use of a "tax" or "rebate" on consumers. Why not try to equate fuel prices for industry and let costs pass back through the economic system? This is a similar concept to Incentive 7c, but it would apply to more than just the liquid fuels industry; prices would adapt to international oil prices. (Many more words are required to really explain this concept.)

The principal roadblocks are: existing regulatory restraints upon the gas industry, environmental considerations and requirements. Indian tribe liaison and availability of capital, whether from the private market or government sources.

We hope that, if the government does proceed with the synthetic gas program, only one government agency will be designated as the responsible contact point. If another agency has to be involved, say to issue a loan guarantee, it should be able to do so on the recommendation of the first agency, without having to have the company make two r more briefings of the same information. Possibly the FPC could operate as that single point of contact to be responsible for approvals of technical, financial and environmental aspects.

Equity holders of a future synthetic gas process would not be covered by government guarantees, unlike the bondholders. We believe that some protections for equity holders in the form of cost of service rate treatment and insurance against certain types of risks must be provided by the government to the extent that risks cannot be covered by commercial insurance.

There is only one way out: We must be assured of rates on a cost of service basis, including a fair return on company investment. Only on that basis can projects go forward. The actual cost must be reflected in the consumer's rate as part of a package of financial and regulatory guarantees offered by the government.

We suggest that a "sanctity of contract" type legislation should be developed under which, once an agreement had been entered into by both government and industry, government could not unilaterally abrogate it. One possible solution would be a ruling by the FPC that once a project has been approved the customer will pick up all additional costs in the form of rate increases.

A preferred incentive would be some form of government insurance which would become operative in the event of a shutdown, stopwork or partial shutdown of an SNG plant. We think industry needs such insurance to protect against ballooning costs and the risks of cost estimates in an inflationary period.

Our preferred package of incentives would be cost of service rate treatment, risk insurance, and possible government support in the event of cost overruns.

We strongly urge FEA to interview financial institutions to learn their position prior to writing any legislation.

Electric utilities will probably protest against what they would consider to be favored treatment of their gas competitors under any broad, across-the-board program of loan guarantees.

If the gasification of coal reaches the demonstration phase, and thereafter a commercial phase, we anticipate the major problem in developing coal gasification will be raising the huge amounts of capital required. If such coal gasification plants are to be privately owned, which we strongly endorse, it will be essential that several things happen:

- (a) Government regulatory agencies must permit companies to promptly recover their costs, especially the large capital costs during the construction phase which will extend over a number of years. The companies are confronted with problems not heretofore experienced in terms of the magnitude of the projects, as well as the time from commencement until the date of operation. The utilities cannot afford to keep large amounts of capital, which are not producing return or interest, tied up over a, say, five-year construction period. "If we have any significant amounts of money committed to gasification without having some kind of interest or return to take into our income statement, we would have a dilution of return on equity which is unacceptable." It was re-emphasized that significant amounts of capital tied up for long times offer two problems. One is loss of return; the other, difficulty in raising other capital because of the associated worsening of the debt ratio requirement.
- (b) Regulatory agencies must permit companies adequate earnings in order to attract the large amounts of capital required.

In the demonstration phase, we are confronted with a serious problem of raising the large amounts of capital needed. It was pointed out that the controlling financial test which must be met by utilities is that their outstanding debt cannot exceed, under the usual indenture or mortgage provisions, 60-70% of total capitalization. Thus, there is a very definite limit on the amount of debt that a company can issue to pay for a demonstration plant. The problem of raising equity capital is most difficult. Currently the sale of common stock is counterproductive as many utilities' stock, such as ours, are selling below their book value.

We would prefer for the government to reimburse industry so that industry could act as an agent for the government, with the government taking ownership and industry accepting a fee for operating the gasification programs. The World War II synthetic rubber Defense Production Act offers a precedent in this regard.

If the government offered loans as a percentage of debt with very low interest, say 2 percent, as they did with REA, a more attractive investment would be available. However, unless this loan could be subordinated to other debt, it might be considered as part of outstanding debt for the indenture test. Because of restrictions under our outstanding preferred stock with respect to the issuance of debt that is subordinated, a problem may be posed even by this type of loan.

Environmental approvals will be a major obstacle to the development of any gasification project.

A low BTU gasification plant would require about \$150 million for construction. If tax-free bonds could finance 90 percent of that cost, a very attractive option would be offered. The key, however, would be in obtaining an IRS ruling that the bonds under these terms would be tax free.

Tax-free state industrial revenue bonds might be a more attractive incentive than any of the incentives proposed by FEA. if the federal ceiling could be raised. Such tax-free offerings are today under consideration in Ohio and indeed exist for loans of less than \$5 million.

Low BTU gasification plants would be of considerable value to the fertilizer industry. This fact might be of particular interest to Congress and should be exploited in any possible legislative proposal by FEA in supporting the possibility of issuing tax-free bonds or approving the use of tax-free state bonds to assist in plant construction or in gaining other low interest rate loans from whatever source.

We are willing to go forward, but \$1.2 billion will be required to induce us to do so. There are three absolute needs: We must be assured that the customers will pay, whatever the cost—a formidable requirement under present circumstances. (The FPC as a decision-maker is acceptable to us, but assurance of customer payment is vital.) Lacking this, we are looking at a \$3.40-\$3.80 price and in this we are not competitive, if competition is a proper consideration (but it is not). We have a market captive to its circumstances and not enough gas for it. We cannot subsidize the customer, obviously. The FPC and the government generally must recognize the obvious necessities. Someone must pay for a \$1.2 billion plant; this assurance is essential.

We are dealing with a new technology in high BTU plant construction. Start-up costs and operational problems are, in many areas, unknown. The FPC schedules and requirements, with \$1.2 billion involved,

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represent obstacles no one in the industry is willing to gamble on.
Unless this is changed, unless there is assurance we can and will
be paid, nothing can or will be done. The FPC does not yet see this.

How much can the private market absorb? Consideration might be given to the financing permitted under Title 11 of the Maritime Act.

There is a risk that the technology won't work. But the government is urging experimentation in the national interest, hence it should take some risk itself, such as guarantee of bonds.

But other obstacles exist. For example, the water-feedstock dilemma. The power in this lies with Interior. For three years it has had under consideration our request for a contract decision. The water is available, yet the draft of the contract offered gives "most use" provision for four Indian tribes, i.e., if they requested water for agricultural use, we would have to subordinate our right to theirs. We could not live with this as a practical production matter.

In short, clear and practical government policies are required to move private industry in energy production. Lacking these, and faced with multiple other problems (capital costs, inflation, environmental requirements), industry can't do the job.

The World War II synthetic rubber program would not interest us. Inability to take advantage of depreciation if the project failed represents a major obstacle.