

~~CONFIDENTIAL~~  
13 May 1959

**MEMORANDUM FOR: Director of Central Intelligence**

**THROUGH: Deputy Director/Intelligence**

**SUBJECT: Proposal for the Exploitation of Liquefied Natural Gas  
for the Underdeveloped Areas**

1. The purpose of this memorandum is to recommend a concerted effort by the Free World to supply the underdeveloped areas with fossil fuel sources of energy as the basis for expanding their industrial production. Specifically, it recommends exploring the possibility of making liquefied natural gas available on a global scale.

2. In a memorandum to the DCI dated 7 August 1958, subject "Expression of Concern on the Problem of Disposing of Nuclear Waste (Attachment: Article from Christian Science Monitor, 5 August 1958)," I ventured the opinion that the disposal of nuclear waste may prove a decisive obstacle to the development of nuclear power. In a seminar on Free Europe given by the Office of Training in March 1959 I further suggested that, even apart from waste disposal and accident risk, purely economic factors would probably prevent nuclear power from becoming competitive with fossil fuels during the present century. If this should prove to be the case, it would be important for the United States to proceed with caution in presenting to the underdeveloped countries an image of "Atoms for Peace" in terms of unlimited nuclear power, which, if not realized, could produce severe disillusionment and anti-Western reaction in these areas.

3. It would appear indeed that conventional fuel, especially of fossil origin, is the key in the predictable future to industrial development both in the present highly developed areas and throughout the underdeveloped countries as well. The supply of such fuel, if properly exploited, is adequate for centuries.

4. A new and important development is the liquefaction of natural gas which apparently is approaching the stage of high profitability. The attached clipping from the Christian Science Monitor of 11 May 1959

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indicates that the equivalent of eighty million tons of coal is "flared off" in Venezuela every day. This staggering statistic immediately suggests that we have here and in other oil producing areas a ready solution of the energy problem for the underdeveloped countries. If it is possible to develop compact supplies of natural gas deliverable cheaply anywhere in the world there would appear to be no restriction, so far as energy is concerned, to the industrialization of backward areas.

5. SRS has contended that the long range response to the Communist challenge is to be found primarily in positive actions by the Free World, headed by the US, toward the economic and social advancement of all backward areas. If the potential of liquid gas is as reported, it would appear that we should begin immediately to organize a world-wide program for its distribution. Countries such as Pakistan, India, Egypt, and many others which are aspiring to build up their industry should be equipped with basic port and pipeline facilities for natural gas as primary capital investments of their development programs. Of one thing we may be sure - if we do not do this, the Communists will. The potential here is of the scale and scope of a world Marshall Plan.

6. The dissipation of fantastic quantities of natural gas is an act of major irresponsibility. One may speculate that it might even have climatological effects of a serious nature. In any case, it is a profligate squandering of the precious resources of nature which must be husbanded for future generations. We will earn the reproach of billions of people, alive and unborn, if we do not immediately convert this waste to profitable use.

Chief, SRS/DDI

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### Frozen Gas: British Challenge

- By John Allan May, Staff Correspondent of The Christian Science Monitor.

London.

Another competitor for coal, even on an island such as this that is literally built on coal, has appeared from overseas. It is liquid gas.

And it may even prove such a competitor that it will beat coal right back into the ground for keeps.

In the House of Commons Alfred Robens, Labor's chief spokesman on power problems, has reported that there now are plans in view for building four tankers of 32,000 tons each to ship liquid methane into this country from the United States and Venezuela.

Just these four tankers alone could bring in enough methane to produce as much town and industrial gas as can be made here from 13 million tons of coal a year. They would not remain alone for long.

The Robens report may be a little premature but it does show that some very hard thinking is already being done following the first Atlantic voyages of the Anglo-American natural gas carrier Methane Pioneer.

The ship is shared by the British Gas Council and Constock International Methane.

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Actual results of these ferry trips with deep frozen gas from Louisiana for the North Thames Gas Board will take some time to evaluate officially. But unofficially it seems to be accepted that the Pioneer is the harbinger of an entirely new worldwide trade.

Besides the United States, Britain, and Venezuela, many other countries are interested in the possibilities. Mexico hopes to export gas by sea. French plans for the export of Saharan gas to Europe may be changed decisively as a result of voyages of the Methane Pioneer. And, of course, every oil producing country of the Middle East must sit up and take notice.

Natural gas, in many oil fields, is strictly a waste material. Nearly two billion cubic feet of it are "flared off" daily in Venezuela alone. This is about as much gas as needs 30 million tons of coal to make in the time-honored way.

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It now has been proved that if you turn this gas into a liquid and freeze it at minus 258°F. it contracts to such a degree that it takes up only 1/600th of its normal space.

The tiny Methane Pioneer has only five tanks but they hold the equivalent of 100,000,000 cubic feet of natural gas (whose manufacture would require a stock of coal weighing five times as much as the ship).

The estimate on which the North Thames Gas Board went to work with the gas council and Constock on the Methane Pioneer's trial runs was that the delivered cost of 40 billion cubic feet of methane to Thames side storage would likely prove to be just half the cost of the town gas they are manufacturing from British coal.

That's the size of the challenge.

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The sea transport of liquid gas is not only a challenge to Britain, it is likely to have repercussions right around the world. The United States for instance is aware already of the fact that liquid methane from foreign sources could be bought much cheaper than America's own piped gas. While the United States is unlikely to allow free competition with its own gas it may well import liquid gas to take care of the problem of peak load conditions.

Sahara gas, carried by tanker to the ports of northwestern Europe, could bring big changes to the whole European power industry.

For the coal industry, however, its challenge is both unavoidable and basic. If coal is now on the way out as a fuel - and with oil, gas, and nuclear power it looks as though it could be - does a country fight the trend or accept it; protect its industry, the jobs of its miners, and its own natural resources, or buy where fuel is cheapest and then find other work for the tens of thousands of men whose jobs have disappeared?

(The Christian Science Monitor, May 11, 1959, p. 13).

