

EN-201

099348

*Handwritten signature*

7

# REPORT TO THE CONGRESS

099348



## BY THE COMPTROLLER GENERAL OF THE UNITED STATES



# Management Of And Plans For The Naval Petroleum Reserves

Department of the Navy

The United States owns many billions of dollars of petroleum in reserve oilfields which are being maintained by the Navy until needed for defense. This report discusses the Navy's management of those properties and recommends improvements in Navy contract administration at the reserves.

This report also discusses recent legislation to authorize production from the reserves. Under this legislation responsibility for custody and exploration of the biggest reserve was shifted from the Navy to the Department of the Interior.

LCD-76-313

MAY 14, 1976

703122 / 099348



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

B-66927

To the President of the Senate and the  
Speaker of the House of Representatives

This is our report on the Navy's activities to develop  
and maintain the naval petroleum reserves.

Our review was made pursuant to a request from Senator  
Mike Gravel, who has agreed that the report should receive  
unrestricted distribution.

We are sending copies of this report to the Director,  
Office of Management and Budget; the Secretary of Defense;  
the Secretary of the Navy; the Secretary of the Interior;  
the Administrator, Federal Energy Administration; and the  
Administrator, Energy Research and Development Administra-  
tion.

A handwritten signature in cursive script, reading "James B. Stacks".

Comptroller General  
of the United States

BEST DOCUMENT AVAILABLE

D I G E S T

By law the Navy has had custody of Federal lands containing huge reserves of petroleum and thousands of acres of oil shale. Traditionally these were held for national defense. The Navy was responsible for managing the following reserves. (See p. 1.)

--Petroleum:

No. 1, Elk Hills, California--proven reserves estimated at 1 billion barrels.

No. 2, Buena Vista, California--nearly depleted.

No. 3, Teapot Dome, Wyoming--proven reserves estimated at 40 million barrels.

No. 4, North Slope, Alaska--not explored, but expected to contain far more than No. 1.

--Oil shale:

Nos. 1 and 3, Colorado.

No. 2, Utah.

After the 1973 Arab oil embargo, public attention was focused on extracting these reserves for peacetime use and on the most appropriate Federal agency to manage them. GAO reviewed these relevant issues in conjunction with a request from Senator Gravel to examine the Navy's management of the reserves.

In April 1976 the Naval Petroleum Reserves Production Act of 1976 was enacted. (See p. 3.) The law basically provides for:

--Transferring the management responsibility for Naval Petroleum Reserve No. 4 to the Department of the Interior on June 1, 1977.

BEST DOCUMENT AVAILABLE

--Retaining with the Navy management responsibility for petroleum reserves Nos. 1, 2, and 3 and increasing production from these reserves for a 6-year period. The production period could be extended with approval of the Congress.

The Navy plans to more fully develop petroleum reserves Nos. 1 and 3 at an estimated cost of \$535 million, raising production to over 400,000 barrels a day. However, without additional pipelines, not provided for in the Navy cost estimates, the production rate at No. 1 cannot be achieved. (See pp. 17 to 19.)

Petroleum reserve No. 2 has been producing for years and is now almost depleted. Petroleum reserve No. 4 and the oil shale reserves are undeveloped. (See pp. 2 and 3.)

At petroleum reserve No. 3 the Navy has no formal procedures for systematically testing oil wells and insuring that problems detected are solved. The Navy said it has requested proposals for a new operator contract and has started to develop a formal maintenance and testing program at this reserve. (See p. 12.)

In the past the Navy has taken the position that it is not required to follow the Armed Services Procurement Regulation for activities pertaining to petroleum reserves. Consequently, Navy procurement for the reserves has not corresponded to that generally used by defense agencies and does not insure that the best interests of the Government are being served. (See pp. 10 and 11.)

In view of GAO comments, the Department of Defense and the Navy--with assistance from the Office of Federal Procurement Policy--are re-considering the applicability of the Armed Services Procurement Regulation to the Navy's petroleum reserve activities. (See pp. 11 and 12.)

The Navy is disposing of petroleum products properly. (See p. 16.)

GAO recommends that the Secretary of the Navy instruct the Director, Office of Naval Petroleum and Oil Shale Reserves, to (see p. 16):

- Establish contracting procedures which conform to the Armed Services Procurement Regulation.
- Review and modify, as necessary, the recently awarded contracts to operate petroleum reserves Nos. 1 and 4 to include the provisions of the procurement regulation.
- Comply with the newly established contracting procedures for the new operator contract for petroleum reserve No. 3.

BEST DOCUMENT AVAILABLE

## C o n t e n t s

	<u>Page</u>
DIGEST	i
CHAPTER	
1 INTRODUCTION	1
Status of the reserves	1
Recent legislation	3
2 NAVY MANAGEMENT OF PETROLEUM RESERVES	4
Contracting for supplies and services	4
Controlling contractor activities	10
Disposing of oil and gas produced	13
Conclusions	15
Recommendations	16
3 NAVY PLANS FOR THE PETROLEUM RESERVES	17
Petroleum Reserve No. 1 (Elk Hills)	17
Petroleum Reserve No. 3 (Teapot Dome)	18
Petroleum Reserve No. 4 (North Slope)	19
4 SCOPE OF REVIEW	21
APPENDIX	
I Letter dated February 9, 1976, from the Acting Secretary of the Navy for Naval Petroleum and Oil Shale Reserves	22
II Letter dated December 10, 1975, from the Assistant Secretary-Management, Depart- ment of the Interior	51
III Letter dated January 14, 1976, from the Administrator, Federal Energy Administra- tion	52
IV Letter dated March 2, 1976, from the Con- troller, Energy Research and Development Administration	54
V Principal officials responsible for adminis- tering activities discussed in this report	56

ABBREVIATIONS

ASPR      Armed Services Procurement Regulation  
DCAA      Defense Contract Audit Agency  
DOD      Department of Defense  
GAO      General Accounting Office  
ONPR      Office of Naval Petroleum and Oil Shale Reserves

AGC00812

BEST DOCUMENT AVAILABLE

CHAPTER 1

INTRODUCTION

The United States has petroleum resources which are required by law (10 U.S.C. chapter 641) to be kept in reserve. The resources are contained in petroleum reserves which were established by Executive orders over 50 years ago. The reserves are:

--Petroleum: No. 1, Elk Hills, California.  
No. 2, Buena Vista, California.  
No. 3, Teapot Dome, Wyoming.  
No. 4, North Slope, Alaska.

--Oil Shale: Nos. 1 and 3, Colorado.  
No. 2, Utah.

The Secretary of the Navy currently has overall responsibility for developing and maintaining the reserves. The Navy's Office of Naval Petroleum and Oil Shale Reserves (ONPR) manages and operates them. In June 1977, however, the Alaskan reserve is to be taken over by the Department of the Interior. 12000812

The purpose of the reserves was to maintain petroleum resources in a standby production status until needed for national defense. Production was restricted to that necessary to protect, conserve, maintain, and test the reserves.

In 1962 the Congress authorized development of a gas field on petroleum reserve No. 4 to make gas available for sale to the native village of Barrow, Alaska, and to other non-Federal communities and installations. A utility company--Barrow Utilities, Inc.,--was formed to distribute gas to the village. 220 00782

In 1974 the Navy notified the utility company that it intended to raise the price of gas to enable the Government to recover the costs of providing it. As a result of the announced price increase, Senator Mike Gravel of Alaska requested us to examine several aspects of the Government's involvement in providing the gas. He also requested a comprehensive review and evaluation of the Navy's management of, and plans for, its energy reserves, especially petroleum reserve No. 4.

STATUS OF THE RESERVES

**BEST DOCUMENT AVAILABLE**

Petroleum reserve No. 1 (Elk Hills)

This reserve is estimated to contain over a billion barrels of recoverable oil. About 20 percent of the



resources is owned by Standard Oil of California, and the Navy has entered into a contract with that company to operate the reserve as a unit. The unit-plan contract provides for conserving the resources and gives the Navy control of the reserve. The Navy also controls some other Federal land on the reserve which is not part of the unit.

Production incidental to maintaining and protecting the reserve has been about 3,000 barrels of oil a day. The Navy estimated that daily oil production of 160,000 barrels could be reached within 60 days. But oil could not be produced at that rate because of limited pipeline capability. Standard has a 50,000 barrel-a-day capacity pipeline at this reserve but connections to transport additional oil off of the reserve would have to be installed. Available pipeline capacity of all private companies in the vicinity of Elk Hills could transport only about 130,000 barrels a day from the reserve within 2 to 12 months after an open-up order. Pipeline capability is discussed in more detail in chapter 3.

Petroleum reserve No. 2 (Buena Vista)

4  
 Acc or 2  
 About 60 percent of the land on this reserve is privately owned. Federally owned land is checkerboarded with private lands and has been leased to private concerns. The Geological Survey administers the leases for the Navy. The reserve has been fully developed and is producing at near capacity. As of December 1974, recoverable oil in the field was estimated at 25.7 million barrels; the Navy's share is estimated at 11.2 million barrels. Buena Vista is not considered an important petroleum reserve because of the small quantity of recoverable oil and the fact that it is already being produced.

Petroleum reserve No. 3 (Teapot Dome)

Teapot Dome contains about 40 million barrels of recoverable oil. The current production capacity is about 2,000 barrels a day. Production incidental to maintaining and protecting the reserve has been about 350 to 400 barrels a day. The Navy has a 5-year plan to further expand the daily production capacity to 12,700 barrels but has not requested funds to carry out the plan. The Navy had placed a higher priority on developing petroleum reserves Nos. 1 and 4 and planned to request funds to further develop reserve No. 3 in fiscal year 1978.

Petroleum reserve No. 4 (North Slope)

This reserve is completely Government owned but is largely unexplored. Some exploration and drilling activities

were started years ago but were suspended in 1953. Those activities resulted in discovery of six gas fields and three oil fields. Gas wells have been drilled to provide heating fuel to Government agencies and to the natives in the Barrow area. Since the reserve has not been explored, it is not known how much oil is there. Estimates range from 10 billion to 33 billion barrels. A program to fully explore the reserve is currently underway and is expected to be completed in fiscal year 1980.

### Oil shale reserves

The oil shale reserves in Colorado and Utah are estimated to contain about 25.8 billion barrels of oil. However, due to technological problems and the costs involved in extracting oil from shale, the Navy has not concentrated on developing these reserves. The current Navy policy is to encourage private industry to develop oil shale technology.

### RECENT LEGISLATION

In April 1976 the Naval Petroleum Reserves Production Act of 1976 (Public Law 94-258) was signed by the President. The law basically provides for:

- Transferring management responsibility for Naval Petroleum Reserve No. 4 to the Department of the Interior on June 1, 1977.
- Retaining with the Navy management responsibility for petroleum reserves Nos. 1, 2, and 3 and increasing production from these reserves for a 6-year period. The production period could be extended with approval of the Congress.

**BEST DOCUMENT AVAILABLE**

## CHAPTER 2

### NAVY MANAGEMENT OF PETROLEUM RESERVES

Lands making up petroleum reserves Nos. 1 and 2 are not completely Government owned and the Navy's approach to managing them recognizes this. Except for petroleum reserve No. 2, the Navy contracts with private concerns to maintain and protect the petroleum reserves. The types of contracts awarded provide for reimbursing the operator for costs incurred and an operator's fee. The Navy also enters into contracts for other supplies and services and for disposing of petroleum products produced as a result of developing and maintaining the reserves.

#### CONTRACTING FOR SUPPLIES AND SERVICES

The Navy awards cost-reimbursement-type contracts for operation and maintenance services at the petroleum reserves. Having little financial interest in the amount of cost incurred, contractors lack incentive to operate efficiently or economically. Effective operations under such contracts require close administration by the Navy. The procedures followed by the Navy, however, do not insure that contractor activities are effectively controlled.

In commenting on this, the Navy noted that major procurement contracts of the Office of Naval Petroleum and Oil Shale Reserves are reviewed by the Judge Advocate General of the Navy and the President, in addition to undergoing review by the House and Senate Committees on Armed Services. Reviews of major contracts at this level may be required but, in our opinion, have little effect on how the contractors operate after the contracts are awarded. Indeed, it appears that such reviews have not effectively controlled ONPR activities. ONPR circumvented contract controls by issuing work orders under existing contracts for work outside the scope of those contracts.

#### Operating agreements

For years private firms have operated petroleum reserves Nos. 1 and 3, and the Navy just recently selected a private firm to operate petroleum reserve No. 4.

#### Petroleum reserve No. 1 (Elk Hills)

Standard Oil of California operated the reserve for the Navy since the inception of the unit-plan contract in 1944. In February 1975 Standard notified the Navy of its intention to terminate the operating agreement as of November 1975.

However, the plan, under which the Navy and Standard agreed to operate the reserve as a unit, continued in effect. The Navy solicited proposals from other firms to replace Standard as the operator. From the five proposals received, the Navy selected Resource Sciences Corporation to be the operator. The contract was subject to approval by the President after Navy consultation with the House and Senate Committees on Armed Services. The contract was approved on November 1, 1975.

The Navy's proposed form of operating agreement did not contain some of the provisions recognized in the Armed Services Procurement Regulation (ASPR) as generally necessary to protect the Government's interest when contracting for goods and services.

The proposed contract for a new operator provided that the contractor would be reimbursed for allowable costs pursuant to ASPR, in addition to a fixed monthly fee. However, it did not sufficiently provide for access to the contractor's records to determine the reasonableness of the costs to be reimbursed. The proposed contract did contain a provision that the contractor's records would be available for inspection and examination by designated representatives of the Navy and Standard. It did not provide for access by representatives of the Comptroller General. After we questioned this, the Navy noted that the Comptroller General would appropriately be a "designated representative of the Navy." But to clarify its original intent, the Navy expanded the wording in the formal contract to provide for access to the contractor's records by representatives of the Defense Contract Audit Agency (DCAA) and the Comptroller General.

The contract provided for the Navy to make a provisional payment at the end of each month for the estimated reimbursable costs for that month. Previous provisional payments are to be adjusted to actual reimbursable costs, including overhead. Regarding negotiated final overhead rates, reimbursing actual overhead costs on a monthly basis is not in accordance with ASPR, which provides that overhead be reimbursed at a tentative billing rate pending negotiation of a final overhead rate at the end of a regularly stated period. The period preferably is the contractor's fiscal year and, as such, would allow time to accumulate costs from all cost centers and to insure the propriety of cost allocations.

The Navy has concluded that using a provisional overhead with readjustment on an annual basis is not necessary. The Navy noted that its procedures are to make provisional monthly payments, which are

\* \* \* adjusted the following month in accordance with actual reimbursable costs, including

overhead. 'Actual reimbursable costs' are intended to reflect actual audited costs since the records are subject to continual audit by both the Navy and the Defense Contract Audit Agency." (Underscoring supplied.)

Based on discussions with DCAA, we question the Navy's position. At the time the provisional monthly payment is made, actual costs for the previous month will not have been accumulated and cannot be audited until sometime later. While the Navy procedures provide for monthly audits of actual costs, DCAA plans only to make monthly tests and to make annual audits of overhead charges. DCAA noted that, as of January 1976, the operator had not yet installed an acceptable accounting system.

### Petroleum reserve No. 3 (Teapot Dome)

The agreement to operate this reserve was entered into with the Intex Oil Company in August 1958, for an indefinite period. Intex merged with two other companies in 1967 to form the Tesoro Petroleum Corporation. The operating agreement continued, and Tesoro has operated the reserve since that time.

The agreement is inconsistent with the Navy's objective of conserving the oil for use in the event of an emergency. Also, the adequacy of the agreement to compensate the operator is questionable in that the operator's computed fee fluctuates with the price of crude oil.

The agreement provides for computing the operator's monthly fee at 6 percent of the net profit. Net profit is determined monthly by deducting operation costs and a portion of the development costs from the sales proceeds the Navy receives. Thus, the operator receives a portion of the revenues for all the oil the Navy sells and, therefore, has the incentive of producing as much as possible.

In commenting on this, the Navy stated that it did not agree that more oil than necessary was produced to enhance the operator's profit. The Navy stated that it controls the amount of production, not the operator, and noted that the average daily production from the reserve has steadily declined. However, the Naval Petroleum Reserves Production Act of 1976 provides for increased production from this reserve.

The Navy did agree, however, that the operator's fee could fluctuate significantly because of either the price of oil or costs to operate. The Navy recognized that the

contract no longer provided a fair and equitable arrangement and has requested proposals for a new operator contract for this reserve. The need for a different method of arriving at a reasonable fee arrangement was emphasized by the recent legislation requiring increased production.

Production was to be limited to that amount necessary to protect and maintain the reserve. The quantity of oil available for sale by the Navy should have been that quantity produced because of testing the reserve or protecting it against drainage from production on adjacent lands.

The operating plan provided to us by the officer-in-charge at the reserve indicated that the Navy followed the mirror-image-operating objective to protect against drainage. Under the mirror-image concept, or offset production, for each well on neighboring property, there should be a well within the reserve producing at the same rate as the neighboring well.

Production data for the period 1970-74 showed that in each year the operator produced more oil from the reserve than was produced from adjacent property. In commenting on this, the Navy noted that it does not follow a mirror-image-operating objective and stated that there were valid engineering reasons for producing more oil than adjacent producers. The Navy stated that it is producing oil to prevent drainage by gravity off the reserve and that it is not feasible to shut down a Navy well or wells merely because an offset well is shut-in for 30 days or so.

The officer-in-charge at the reserve acknowledged that oil production from the reserve exceeded that of the adjacent property and stated that it sometimes may be necessary to produce more oil than the adjacent property. However, he was unable to provide specific data outlining the reasons and justifications for the quantity of offset production from petroleum reserve No. 3.

Concerning the operator's fee, the recent increase in oil prices has provided an added incentive to produce from the reserve. During fiscal year 1974, prices for crude oil from this reserve increased from about \$3.50 to \$10 a barrel. As of December 31, 1974, the price had increased to almost \$12 a barrel. The following table shows how the increased prices affected revenues and the contractor's fee during calendar year 1974.

**BEST DOCUMENT AVAILABLE**

	Computed at \$3.50 a <u>barrel</u>	<u>Actual</u>
Oil sold in 1974: 124,483 barrels		
Gross proceeds	\$453,693	\$1,351,106
Less: deductible costs	<u>275,769</u>	<u>275,769</u>
Net proceeds	<u>\$177,924</u>	<u>\$1,075,337</u>
Contractor's fee at 6 percent	a/ <u>\$ 12,325</u>	<u>\$ 64,520</u>

a/Monthly fee is 6 percent of computed net proceeds fit or a minimum of \$500 a month. At the \$3.50 price, the minimum fee would have been required for 3 months of the year.

The Navy did not disagree that the operator's fee had increased but noted that in 1974 it was only twice as large as the year before. The Navy noted that the contractor's average fee over the past 17 years has been 9 percent of expenses. Data on expenses and fees for that period shows the average computed fee to have been about 9 percent. But it also shows that for the last 2 years of that period--fiscal years 1974 and 1975, a period of increased oil prices--the operator's fee was 25 percent a year.

#### Petroleum reserve No. 4

The Navy's approach to operating this reserve has differed from that of the other reserves. Although an officer-in-charge has been assigned to the reserve, for the most part the day-to-day activities have been conducted from the ONPR headquarters. The procedure was expected to change when the Navy finalized a contract with an operator.

The Navy solicited proposals for an operator in September 1974. The proposed contract was subject to approval by the President after Navy consultations with the House and Senate Committees on Armed Services. From the nine proposals received, the Navy selected the Husky Oil Company to be the operator. In June 1975 the Navy awarded Husky a \$400,000 letter contract to have the necessary facilities available for operation when the proposed contract was approved. The President approved the contract in November 1975 to be effective December 1, 1975.

The contract provided that the operator would be reimbursed all allowable costs, a monthly performance fee, and a fixed amount as compensation for overhead expenses. This method of providing for overhead costs is not in accordance with the method suggested by ASPR.

The Naval Petroleum Reserves Production Act of 1976 (Public Law 94-258) transferred responsibility for this reserve to the Department of the Interior, effective June 1, 1977. The transfer will also include responsibility for any contracts in effect with respect to reserve activities.

#### Contracts for other services and supplies

In operating the petroleum reserve in Alaska, Navy personnel have not followed sound contracting procedures and have purchased supplies and services without assurance that the Government's best interests are being served.

The Secretary of the Navy has contract authority for activities concerning the petroleum reserves. Acting for the Secretary, the Assistant Secretary of the Navy approves and signs all contracts. However, ONPR has circumvented this procedure by issuing job orders to existing contracts for work outside the scope of those contracts.

For example, the Navy contracted for advisory engineering services of one individual because of his knowledge in arctic operations and familiarity with the operations at petroleum reserve No. 4. On instructions from ONPR, however, he has acted as a Navy purchasing agent. During fiscal year 1975 materials and equipment purchased under the contract for advisory services amounted to over \$490,000. The consultant was also instructed to direct a cleanup program and was authorized to employ a staff, the costs for which during fiscal year 1975 amounted to about \$167,000.

Navy officials told us that shortly after the current ONPR Director was assigned, he discontinued any procurement activities under this contract. The Navy noted that it had resorted to extraordinary procurement methods because of the need to suddenly implement an exploration program at petroleum reserve No. 4 and that these unusual methods were taken during a transition period. While recognizing its contracting procedures were out of the ordinary, the Navy disagreed that the best interests of the Government were not being served. Our conclusion that the Navy's procedures did not adequately protect the Government's interest was subsequently supported by the Navy Audit Service which, after examining the contractual arrangements with the consultant, concluded that the contracts were "extremely weak." That report, also discussed on page 13, recommended termination of the contract.

**BEST DOCUMENT AVAILABLE**



In another instance of circumventing the contract control, the Navy entered into a contract for the advice of an independent petroleum consultant. The contractor was to provide:

"\* \* \* the services of its organization as an engineering and geophysical consultant, advisor and/or representative with respect to Navy's operations and responsibilities for the Naval Petroleum Oil Shale Reserves, and render \* \* \* technical advice on the subject of petroleum engineering and geology as may be required \* \* \*."

In December 1974 a job order was issued under the contract which provided for developing an information filing and retrieval system at an estimated cost of over \$206,000. The work does not appear to be related to technical advice on petroleum engineering and geology. The current ONPR Director agreed and stated that this work could be performed by any number of firms in the Washington, D.C., area. He canceled the job order on February 7, 1975.

ASPR provides that all procurements shall be made on a competitive basis to the maximum extent possible. Contract prices tend to be higher when bids or proposals are not genuinely competitive. In our opinion the Navy's procedures for obtaining additional services through the use of existing consultant contracts did not insure full and free competition.

#### CONTROLLING CONTRACTOR ACTIVITIES

Tight controls are needed to insure efficient and economical operations under the cost reimbursement contracts used by ONPR. One measure of control is the contract document and the provisions included therein. Another measure is the direction provided to the contractors in the day-to-day operations. ONPR has not taken full advantage of either of these measures.

#### Contract provisions

ASPR implements the Armed Services Procurement Act of 1947 and sets forth uniform contracting policies and procedures. The procedures apply to all purchases of property (except land) and services for which payment is to be made from appropriated funds. These procedures are applicable to the Department of the Navy. Navy personnel believe, however, that ASPR does not apply when contracting for supplies or services for the petroleum reserves.

In a September 1969 memorandum to the Director, ONPR, the Judge Advocate General of the Navy stated that:

"\* \* \* the authority and procedures for administration of the Naval Petroleum and Oil Shale Reserves, including contracts, stems from the acts of Congress now codified as 10 USC sections 7421 through 7438 to the exclusion of acts of regulations generally applicable to military procurement."

That conclusion apparently was based on an earlier Navy memorandum entitled "Memorandum of Law on Contracting Authority of the Secretary of the Navy, Naval Petroleum Reserves--Inapplicability of ASPR." That memorandum contained a broad conclusion that ASPR does not apply to contracts relating to the naval petroleum reserves. It should be noted, however, that the situation with which the memorandum dealt involved only the sale of crude oil from a petroleum reserve, not the procurement of property or services for a petroleum reserve.

There is little doubt that the law, which provides a special procedure for the sale of petroleum from the naval petroleum and oil shale reserves, governs such sales exclusive of ASPR. Such sales do not seem to be within the category of Government purchases or contracts to purchase which ASPR expressly applies. We believe, also, that ASPR does not apply to contracts entered into for the joint exploration, conservation, and development of land, such as the unit agreement for petroleum reserve No. 1. Such contracts are for the use of land or raw minerals therein, rather than the purchase of personal property or services.

In our opinion, however, contracts for personal services and operating agreements for the various petroleum reserves do fall in the category of contracts for property (other than land) or services and, therefore, should be governed by ASPR. A major consideration in statutory construction is to give effect to legislative intent.

The legislative history of the Armed Services Procurement Act shows that the Congress intended it to be as comprehensive as possible and to apply to all procurements of supplies and services by every branch of the Armed Forces.

In commenting on this the Navy stated that, in view of our findings, the question of whether ASPR applies is under careful review by the Department of Defense and the Navy, with the assistance of the Office of Federal Procurement Policy. The Navy noted that the problem would be completely

resolved and that it would provide comments on this issue at a later date. As of the date of this report, we have not received those comments.

### Controlling day-to-day operations

The reserves have not been operated economically under Navy contract administration, and at one of the reserves the oil wells were not well maintained.

#### Inadequate maintenance

The Navy has developed a cyclical testing schedule of the wells, pipelines, gas processing, and storage facilities. At petroleum reserve No. 3, however, ONPR did not have a formal program to systematically test the wells in accordance with this maintenance policy. The officer-in-charge stated that when he believed it was needed, he orally directed the contractor to test the wells. But when the wells were tested, ONPR had no followup procedures to insure that problems were solved. Tests of 89 wells and related equipment in 1973 disclosed that 18 wells could not be produced because of mechanical failures, line leaks, and undefined problems. The operator's representative told us that the problems had been corrected, but the Navy had no records to support it.

The officer-in-charge said that the wells would have to be operated and produced to be sure the problems had been solved, but he was uncertain whether the wells had been produced since the test.

The Navy did not have a formal written maintenance plan in effect at No. 3 at the time of our review. The Navy stated that in the past wells and other equipment have been tested on an unscheduled basis and that problems discovered were readily corrected. However, as noted in the example above, the office-in-charge could not be sure that problems had been corrected. The Navy noted that subsequent to our review, the officer-in-charge began to (1) formally schedule all tests; (2) record the test results, problems discovered, and corrective actions taken; and (3) develop a formal maintenance and testing program.

#### Inadequate control of expenditures

During fiscal years 1974 and 1975, the Navy approved payment to a contractor at petroleum reserve No. 4 for certain questionable expenses consisting of interest on a bank loan, accounting services, and premiums on a life insurance policy. After we discussed the matter with ONPR personnel,

they told the contractor that charges for life insurance premiums would no longer be approved. They also requested the Navy Audit Service to make a detailed analysis of expenditures on the contract. In its report to the Director, ONPR, the Navy Audit Service noted that the contractual arrangements and controls governing most of the transactions were extremely weak and did not protect the Navy's interest. The report contained recommendations for administrative and procedural improvements to better protect these interests, including termination of the contract and certain cost adjustments. In a memorandum to the Assistant Secretary of the Navy (Installations and Logistics), the Director, ONPR, noted that the contract had been terminated effective November 21, 1975, and that the required cost adjustments would be made on final settlement. He noted that action had been taken on all the recommendations, mostly before receipt of the Navy Audit Service report.

A contract at the Alaska reserve was awarded in May 1974 at a value of \$385,806 for environmental compliance work to be completed by September 30, 1974. As of January 1975, an overrun of over \$140,000 had been experienced, and the work was still not completed. The latest modification to the contract, dated January 7, 1975, increased the total cost to \$526,294, and work was completed at only two of the three sites specified in the contract.

Much of the overrun and delays occurred because the contractor had to repair or modify equipment which did not meet performance specifications. The equipment had been purchased by the Navy's contractor/purchasing agent. Cleanup work at the remaining site is not expected to be completed until sometime in fiscal year 1977 and will be performed under another contract.

The Navy stated that by the time two of the three areas had been cleaned up it was impractical to reach the third area, because of thawing, and that part of the contract work was terminated. According to Navy officials, DCAA is auditing all the costs of the cleanup contract. The results will be used in arriving at a fair and reasonable settlement of the contract.

#### DISPOSING OF OIL AND GAS PRODUCED

The Navy produces some oil and gas from the petroleum reserves in the course of its development and maintenance activities. At the Elk Hills reserve, additional production

**BEST DOCUMENT AVAILABLE**

may be necessary to comply with the unit-plan agreement under which the reserve is operated.

Under the unit-plan agreement for Elk Hills, Standard Oil is permitted to receive a quantity of production sufficient to pay its share of operating expense plus taxes levied against the company's land and equipment. Those taxes, levied by local taxing authorities, have increased from about \$0.5 million in 1969 to \$5.5 million in 1975. Standard was allocated about 78 percent of the oil produced in calendar year 1974 and 38 percent of the 1975 production.

Much of the gas produced is reinjected into the reserves to help maintain pressure and insure ultimate recovery of a greater quantity of oil. The remaining production of gas and oil is either sold or used by Government agencies. Except for the quantity allocated to Standard, as discussed above, oil and gas produced from petroleum reserves Nos. 1 and 3 are sold competitively to the highest bidder. Oil has not yet been produced from the reserve in Alaska. Gas produced from that reserve is either sold to Barrow Utilities, Inc., for resale to the city of Barrow or is used by U.S. agencies.

Crude oil is sold by competitive bids. Sales are based on the price of crude oil in the area plus the purchaser's bid.

#### Sale to Barrow Utilities, Inc.

In the late 1940s the Navy began operating a natural gas field near Barrow to provide fuel to Government facilities in the area, including the Navy, Air Force, Public Health Service, National Weather Service, and National Bureau of Standards.

In 1962 the local civilian residents received permission from the Congress to purchase excess gas from the Navy, at rates based on recovery of cost. Barrow Utilities, Inc., was formed to distribute gas to the village.

The Navy sells gas to Barrow Utilities under 5-year contracts, the first of which began in 1964. The rate during the first two contracts was 50 cents per thousand cubic feet. The Navy reassessed the rate for the 1974 contract and notified Barrow Utilities that the rate would be increased to 77 cents per thousand cubic feet to cover allowable costs.

Our analysis of the Navy's cost computation disclosed two significant discrepancies in the amortization of capital items. These were offsetting, however, and had little

effect on the rate. We also found several minor errors, the total of which did not significantly affect the final rate. We computed the rate on allowable costs to be \$0.76 per thousand cubic feet, which the Navy accepted.

Barrow Utilities, Inc., has entered a suit to prevent the Navy from increasing the price. As of September 1975, the courts had not reached a decision on the request. Until a decision is reached, the rate remains at \$0.50 per thousand cubic feet.

The April 1976 legislation provides that gas should continue to be provided to villages near Point Barrow at reasonable and equitable rates. With respect to these rates, House Report No. 94-942, dated March 23, 1976, states that the costs to provide the services are not expected to be amortized; the rate set should be at a level which is reasonable from the Federal Government's viewpoint; and that it be equitable from the users' viewpoint. The average disposable income to the village residents should be considered in determining what an equitable rate might be.

### CONCLUSIONS

The Navy's procedures for obtaining services and supplies and for controlling operator activities do not adequately protect the Government's interest.

In their dealings concerning the petroleum reserves, Navy personnel believe that they are not required to follow the provisions of ASPR. They have awarded contracts under the general contracting authority contained in the law which directs the Secretary of the Navy to take possession of, and administer, the reserves to benefit the United States.

We agree that ASPR does not apply to contracts which the Navy enters into to sell petroleum products produced from the reserves and does not apply to agreements to jointly explore and develop the reserves, such as the unit agreement for petroleum reserve No. 1. In our opinion, however, ASPR does apply to other contracts. We believe that the history of the Armed Services Procurement Act, implemented by ASPR, clearly shows it was the legislative intent that all purchases of supplies and services were to be made under the act. Such services and supplies would, in our opinion, include the services of private firms to operate the reserves for the Navy and the purchase of supplies and equipment needed to carry out those operations. We also believe that the manner in which ONPR has purchased such services and supplies--as discussed in this chapter--indicates the need for clearly defined contracting procedures, such as those prescribed by ASPR.

The operating contract for petroleum reserve No. 3 has been in effect since 1958. It does not provide an equitable arrangement for arriving at a fee for the operator. The need for a different method was emphasized by the recent legislation requiring increased production. The Navy has no formal procedures for systematically testing the wells at this reserve nor does it have an effective followup procedure to insure that wells which have failed have been repaired and can be produced.

Concerning the disposition of petroleum products produced, the Navy's procedures are adequate. Competitive routine sales to the highest bidder are consistent with legislative requirements.

#### RECOMMENDATIONS

We recommend that the Secretary of the Navy instruct the Director, ONPR, to establish contracting procedures which conform to the policies and procedures set forth in ASPR. Further, we recommend that the recently awarded contracts to operate petroleum reserves Nos. 1 and 4 be reviewed, and modified as necessary, to include the provisions of the procurement regulations.

In view of the actions which the Navy stated it has taken to develop a formal maintenance and testing program at petroleum reserve No. 3, we have no recommendations on the activities at that reserve. In view of the Navy action to obtain proposals for a new operator contract at reserve No. 3, we have no recommendations concerning the current contract. We recommend, however, that the award of the new contract comply with the newly established contracting procedures.

### CHAPTER 3

#### NAVY PLANS FOR THE PETROLEUM RESERVES

##### PETROLEUM RESERVE NO. 1 (ELK HILLS)

The estimated proven recoverable reserves at Elk Hills are about 1 billion barrels. At today's prices for "new" oil, that volume would yield a gross revenue of about \$10 billion.

The Navy has a two-stage plan for developing this reserve. The first stage is to achieve a peak production of 160,000 barrels of oil a day at a development cost of about \$47.5 million. The second stage would increase projected production to a peak of 400,000 barrels of oil a day at an additional cost of \$417.6 million.

Neither of these production rates can be achieved, however, without additional pipeline capacity to move the oil to refineries. The Naval Petroleum Reserves Production Act of 1976 (Public Law 94-258) authorizes and directs the Secretary of the Navy to produce at the maximum efficient rate and to provide adequate pipeline capacity to carry 350,000 barrels a day from reserve No. 1.

About \$47.5 million for the 160,000 barrels-a-day plan was provided in the Supplemental Appropriations Act of January 1974 (Public Law 93-245). The plan provided for drilling and equipping 240 wells in the shallow oil zone at specific locations. In late 1973 Standard Oil of California started production from land that is bordered on three sides by the reserve. To prevent drainage from the reserve, the Navy had to divert available drilling rigs to that area of the reserve.

Navy personnel stated that 133 wells had been completed by mid-November 1975. Some of these were drilled in locations not specified in the 5-year engineering plan, and Navy personnel noted that this will probably result in a like number of planned locations not being drilled. But they also said that the change did not preclude the wells which were drilled from being properly included in the 5-year development plan.

In fiscal years 1975 and 1976, the Congress appropriated a total of about \$131 million for the second stage of the Navy's plan. The Navy's 1977 budget request to continue its development is \$117.9 million.

**BEST DOCUMENT AVAILABLE**



According to a Navy survey, there are only four existing pipelines in the San Joaquin Valley with appreciable surplus capacity, as shown in the following schedule.

<u>Company</u>	<u>Volume (barrels a day)</u>	<u>Destination</u>	<u>Cost to connect</u>	<u>Time for connec- tion</u>  (months)
Standard	50,000	San Francisco	\$ 50,000	1 - 2
Tascopeira	30,000	Bakersfield	240,000	2 - 6
ARCO	50,000	Los Angeles	800,000	2 - 12
Union	25,000	San Francisco	2,000,000	10 - 30

Navy personnel also investigated the feasibility of leasing, or purchasing and converting, a 20-inch gas line to transport 200,000 barrels of oil a day from Elk Hills to a marine terminal at Port Hueneme. They believe that this line could be connected to the reserve by installing approximately 30 miles of 10-inch pipeline over existing right-of-way and connected to Port Hueneme on the other end by installing 6 miles of 10-inch line. The Naval Petroleum Reserves Production Act of 1976 authorizes the Secretary of the Navy to make any necessary arrangements for pipeline capacity needed to transport crude oil from the reserve.

For use in preparing testimony for a congressional committee, the Navy originally estimated the costs of acquiring, converting, and connecting the gas pipeline to be about \$100 million. The Navy later revised its estimate to \$50 million and has awarded an engineering services contract for a comprehensive cost estimate for the project. According to the Navy, the contractor's preliminary report indicated that the costs will be "on the order of magnitude" of \$50 million.

#### PETROLEUM RESERVE NO. 3 (TEAPOT DOME)

The remaining recoverable oil in No. 3 is estimated at only about 40 million barrels, worth about \$400 million in gross revenues at today's prices. The Navy plans full development of this reserve over a 5-year period to produce about 12,700 barrels of oil a day at an estimated development cost of about \$70 million. According to the Office of Naval Petroleum and Oil Shale Reserves, the Navy had placed a higher priority on developing petroleum reserves Nos. 1 and 4 through fiscal year 1977 and would not have requested funds for development of this reserve until fiscal year 1978.

The Naval Petroleum Reserves Production Act of 1976 authorizes and directs the Secretary of the Navy to begin production at this reserve within 90 days. Present production capacity is only about 2,000 barrels a day.

Sufficient unused pipeline and refinery capacity is available to process any expected increased production from petroleum reserve No. 3.

PETROLEUM RESERVE NO. 4 (NORTH SLOPE)

At this time there are no reliable estimates of proven oil reserves in the North Slope field, which is adjacent to the proven commercial field at Prudhoe Bay, Alaska. It is expected to be by far the largest of the petroleum reserves.

A plan for exploring this reserve was developed by a private firm under a cost-plus-a-fixed-fee contract. The work is part of a 7-year effort and calls for 26 exploratory wells and over 10,000 miles of seismic work to identify subsurface structures that would likely contain oil and gas deposits.

The Navy plan, which started in fiscal year 1974, would cost an estimated \$283.8 million over the following period.

<u>Year</u>	<u>Amount</u>
	(millions)
1974	\$ 7.5
1975	32.9
1976	54.7
1977	69.4
1978	47.8
1979	48.7
1980	22.8

The plan considers such expected problems as equipment movement, material shortage, and transportation. Since moving equipment by conventional oil field transports over the unfrozen Alaskan surface has been shown to be damaging to the tundra (creates erosion scars), movement is limited to the time when the surface is frozen. The scheduled field operations in the plan have generally been limited to the frozen period except for continuing work at prepared test-well sites, which can be supplied by aircraft operating from all-season gravel airstrips.

Concerning pipeline requirements at this reserve, Navy personnel believe that it is a bit early and that too many

uncertainties exist for any detailed planning to be instituted now. However, they recognize that the pipeline facilities will be needed and are considering the question of moving oil and gas when it is produced.

In August 1973 the Navy requested that the Department of the Interior set aside three corridors for the Navy from the reserve to the existing Alaska corridor. The request was incorporated in a November 1974 study by the Bureau of Land Management on "Multimodal Transportation and Utility Corridor Systems in Alaska." Two of the three corridors requested were included in the study with the Navy mentioned as having identified the need. The other corridor was not included because the Department of the Interior subsequently determined that the area requested was to be included in a national park. The Navy stated that the determination was made after its request. The Navy noted that, to compensate for the loss of that corridor, the Department of the Interior has agreed to set aside another corridor.

The recent legislation places the responsibility for this reserve in the hands of the Department of the Interior, effective June 1, 1977.

## CHAPTER 4

### SCOPE OF REVIEW

Our examination of the Navy's management of the petroleum reserves included a review of the laws directing the Secretary of the Navy to maintain and protect them; various pieces of proposed legislation which, if enacted, would directly affect future use of the reserves; and Office of Naval Petroleum and Oil Shale Reserves files and records relating to the Navy's functions of maintaining and developing the reserves. Our review was conducted at the ONPR Offices in Washington, D.C.; petroleum reserve No. 1, Elk Hills, California, which also included transactions pertaining to petroleum reserve No. 2; petroleum reserve No. 3, Casper, Wyoming; and petroleum reserve No. 4, in Alaska.

**BEST DOCUMENT AVAILABLE**



DEPARTMENT OF THE NAVY  
OFFICE OF THE SECRETARY  
WASHINGTON, D. C. 20350

FEB 9 1976

Mr. F. J. Shafer  
Director, Logistics and Communications Division  
U. S. General Accounting Office  
Washington, D. C. 20548

Dear Mr. Shafer:

The Secretary of Defense has asked me to reply to your letter of April 7, 1975, which forwarded the GAO Draft Report on the Naval Petroleum Reserves, GAO Code 945240 (OSD Case #4213).

We appreciate this opportunity to review your findings. The Department of the Navy comments are enclosed herewith.

Sincerely,

A handwritten signature in cursive script that reads "Jack L. Bowers".

JACK L. BOWERS  
Acting Secretary of the Navy  
For Naval Petroleum and Oil Shale Reserves

Encl:  
(1) Comments

RECEIVED FEB 11 1976

Department of the Navy Reply  
to  
GAO Draft Report 4 November 1975  
on  
Management of and Plans for  
The Naval Petroleum Reserves

OSD Case No. 4213

Summary of GAO findings, conclusions and recommendations. In its review of the management of, and plans for, the Naval Petroleum and Oil Shale Reserves, the GAO Draft Report concluded that, (a) the Navy has plans for the full development of Naval Petroleum Reserves No. 1 and 3 (NPR 1 and NPR 3) and for the further exploration of Naval Petroleum Reserve No. 4 (NPR 4); (b) the estimated cost of developing NPR 3 is not provided for in Navy's current budget; (c) the operator contract for NPR 3 is inconsistent with the objective of keeping oil in the Reserve, therefore a new contract should be negotiated; (d) the Navy has taken the position that the Armed Services Procurement Regulations are not legally applicable to control activities pertaining to the Petroleum Reserves; (e) the existing procurement procedures used by Navy do not ensure that the best interests of the Government are being served; and (f) the Navy has no formal procedures for systematically testing oil wells and ensuring that problems detected are solved. The GAO recommended that the Secretary of the Navy instruct the Director, Naval Petroleum and Oil Shale Reserves to: (a) establish contracting procedures which conform to the policies and procedures set forth in the Armed Services Procurement Regulations (ASPR) and include the appropriate ASPR provisions in the operator contracts for NPR's 1 and 4; (b) negotiate a new contract for NPR 3 more

BEST DOCUMENT AVAILABLE

aligned with performance rather than the price of oil; and (c) establish formal procedures for testing and conserving the Reserves and to more closely monitor contractor activities to ensure adherence to those procedures.

Summary of Department of the Navy Response. The Navy in the past has considered that the Armed Services Procurement Regulations do not apply to Naval Petroleum Reserve procurements. In view of the findings by GAO, this matter is under careful review by Navy and DoD. This issue will therefore be the subject of separate early comments. The Navy will insure that this problem will be completely resolved. As a matter of interest, the assistance of the Office of Federal Procurement Policy has been requested to bring the expertise of that office to bear upon the scope and adequacy of the Navy's procurement policies. In response to the other subjects addressed in the draft GAO Report, Navy desires to focus on the following issues wherein the report is believed to be inaccurate or where additional facts will assist in a better understanding.

1. The implication that the progress in exploratory and development drilling at Naval Petroleum Reserve No. 1 has been slow.
2. GAO asserts that the procurement procedures of the Office of Naval Petroleum and Oil Shale Reserves do not protect the Government's best interests.
3. The Navy's management of offset production at NPR 3 is said to result in excessive oil being produced.
4. The use of a Navy consultant as a purchasing agent at NPR 4 is noted.
5. GAO's discussion of the applicability of Federal Energy Administration Regulations to the sale of oil produced from the Reserves.

6. The GAO criticism of a lack of formal procedures for testing of wells and surface facilities at NPR 3.

7. The implication that of the three multimodal corridors that Navy requested be set aside by the Department of the Interior, one was rejected because it would run through a proposed national park.

8. The contention that the cost estimate for acquisition and conversion of an existing 20-inch gas line to transport oil from NPR 1 to the Port Hueneme, California area is questionable, because the Navy arbitrarily reduced the estimated cost from \$100 million to \$50 million.

#### Major Issues

1. Alleged Lethargic Exploratory and Development Drilling at NPR-1. GAO Statements, page 26, paragraph 2 - "Funds for the 160,000 barrels a day (B/D) plan were made available in January 1974 by the Supplemental Appropriations Act, 1974 (Public Law 93-245). That plan provided for drilling and equipping 240 oil wells, but little progress had been made toward completing the program. Two wells were completed and drilling had begun on a third well as of March 1975. About \$32.4 million had been committed for drilling and associated surface facilities as of April 1, 1975. Navy personnel stated that progress on the program was slow because of a worldwide shortage of drilling equipment and materials."

Navy position. In 1973, Navy prepared a five-year comprehensive plan for developing NPR-1 (Elk Hills) to a state of readiness to produce at a rate of 755,000 B/D (reduced to 400,000 B/D in 1974 as being the maximum efficient production rate). In November 1973, the Administration requested legislation to authorize production at NPR-1 for a period of one year at the rate of

BEST DOCUMENT AVAILABLE



160,000 B/D. In anticipation of this legislation being enacted, the Senate Appropriations Committee included funds in the amount of \$72 million in the Supplemental Appropriations Act, 1974 (Public Law 93-245). These funds included \$11.5 million for exploration, \$47.5 million for development, and \$13.0 million for open-up and operation for one year. The "open-up" legislation was not approved by Congress. However, the funds, which had been appropriated for exploration and development, under the appropriate authorization in the existing statute, were made available and applied toward an initiation of a five-year exploratory and development plan which included the drilling of approximately 1,100 wells.

The GAO statement that, "Two wells were completed and drilling had begun on a third well as of March 1975." is incorrect. As the Assistant Secretary of the Navy (I&L) testified before the House Armed Services Investigating Subcommittee on 25 March 1975, a total of 42 wells in the five-year development program had been drilled as of that date. In addition, at that time five other wells were in the process of being drilled, site preparations had been completed for 22 new wells, and eight other well locations had been surveyed and staked. As of 19 November 1975, a total of 133 wells have been drilled at NPR 1 and the drilling rate is increasing. There are presently eight drilling rigs on site compared with five rigs in March 1975.

The fact that Standard Oil of California initiated production in 1973, from its lands in the 7R area adjacent to the Reserve (now shut in under court order) motivated the assignment of priority to the development of the Stevens Zone in the 17R, 18R, and 8R areas of the Reserve (rather than the Shallow Oil Zone as originally planned for the unapproved one-

year production) does not exclude these wells from proper inclusion in the five-year development plan.

## 2. Procurement Policy

GAO Statements, page 9, paragraph 2 - "The (procurement) procedures followed by the Navy, however, do not ensure that contractor activities are effectively controlled. These procedures apply to the agreements with private firms to operate the reserves and to contracts for other services and supplies."

Navy position. Navy does not agree that its contracting procedures do not ensure that the best interests of the Government are served. Major procurement contracts of the Office of Naval Petroleum and Oil Shale Reserves are reviewed and approved by the Judge Advocate General and the President, in addition to undergoing review by the Armed Services Committees of the House and Senate. The Attorney General's opinions have consistently approved these contracts as complying with applicable law and as including the legally required provisions by reference to the Naval Petroleum and Oil Shale Reserves Statutes, (10 USC sections 7421 through 7438) and such other statutes as have mandatory general application to the federal government.

GAO Statement, page 10, paragraph 2 - "The Navy's proposed form of operating agreement did not contain some of the provisions recognized in the Armed Services Procurement Regulations as necessary to protect the Government's interest."

Navy position. The only provisions of the NPR-1 operator contract GAO has specifically mentioned are those regarding the Comptroller General's access to the contractors' records which is discussed below. (Otherwise, it should be noted that Section XV, Part 2 of the ASPR is specifically incorporated in full in that operator contract as the basis for the

determination of reimbursable costs to contractors.)

GAO Statements, page 10, paragraph 3 - "However, it (proposed NPR-1 operator contract) did not provide for access to the contractor's records to determine the reasonableness of the costs to be reimbursed. We discussed this with Navy personnel and they agreed that a clause providing access to the contractor's records was necessary. They stated that the contract, when awarded, would contain that provision."

Navy position. These statements imply that there was no provision in the proposed contract for access to the contractor's records by the Government and that such a provision was included only as a result of GAO insistence. This was not the case. The proposed contract originally contained the provision that, "Any of Operator's books and records, wherever relevant to the determination of reimbursable costs hereunder, shall be available, at any and all reasonable times, for inspection and examination by designated representatives of Navy and Standard."

At the time of the GAO review, one of the GAO team members questioned whether the provision, as stated, would allow a review of records by the Comptroller General. The Navy indicated that the Comptroller General would appropriately be a "designated representative of Navy". Nevertheless, for clarity and pursuant to GAO's request, the wording in the formal contract was expanded by adding at the end of the provision ". . .including representatives of Defense Contract Audit Agency and the Comptroller General". This additional language merely clarified the intent as originally drafted.

GAO statement, page 10a, paragraph 1 - "Reimbursement of actual overhead costs on a monthly basis is not in accordance with the procurement

regulations, which provide that overhead be reimbursed at a tentative billing rate pending negotiation of a final overhead rate at the end of a regularly stated period."

Navy position. The procedure for reimbursing the NPR-1 contractor for overhead costs is appropriate. The procedure involves Navy making a provisional payment at the end of each month for the estimated reimbursable costs for that month. The previous provisional payment is adjusted the following month in accordance with actual reimbursable costs, including overhead. "Actual reimbursable costs" are intended to reflect actual audited costs since the records are subject to continual audit by both Navy and the Defense Contract Audit Agency. Accordingly, the use of a provisional overhead with readjustment on an annual basis is not considered necessary. The kind of overhead that is applicable to operations under this contract is not a complicated determination that requires distribution of large and diverse items from a common overhead pool to different contracts of the operator.

GAO statements, page 11, paragraph 2 - "The agreement (NPR-3 operator contract) is inconsistent with the Navy's objective of conserving the oil for use in event of an emergency. Also, the adequacy of the agreement to compensate the operator is questionable in that the operator's computed fee fluctuates with the price of crude oil."

Navy position. Navy agrees that this contract is no longer a fair and equitable arrangement between Navy and its current operator. The operator's fee can fluctuate to a significant degree, both up and down, making it unfair to either party under differing circumstances. Such fluctuations are caused by the influence of both oil prices and costs.

The Navy, through close monitoring of the contract, realized early in 1975, that although the provisions had been beneficial to the government in the past, the changes in the world oil prices now demanded revision. In February, 1975, action was initiated to draft a new contract. A Notice of Request for Proposals (RFP No. 75) was recently issued soliciting offers for a new operator contract at NPR-3. These proposals are scheduled to be received by 28 January 1976.

Navy does not agree with the implication that more oil than necessary has been produced from NPR-3 in order to enhance the operator's profit. In fact, the amount of production has steadily declined. In January, 1973, the average daily production was 429 barrels oil per day. In January, 1974, it declined to 299 B/D and by July, 1975, it was down to 207 B/D. Navy, pursuant to the contract provisions, controls the amount of production, not the operator.

GAO Statement, page 15, paragraph 1 - "Tight controls are needed to ensure efficient and economical operations under the cost reimbursement contracts used by the ONPR. One measure of control is the contract document and the provisions included therein. Another measure is the direction provided to the contractors in day-to-day operations. The ONPR has not taken full advantage of either of these measures."

Navy position. The Navy has recognized the importance of the contract document in its operations. Except for the transition period at NPR-4 (discussed below) contracts have followed a pattern which has evolved into the provisions incorporated into operator contracts at NPR-1 and NPR-4 which ensure close supervision of day-to-day operations. A sampling of these provisions are appended as Appendix A. Further, the

Navy does not agree that it was deficient in providing direction to any of its contractors in day-to-day operations.

The Navy has the capability to provide, and is currently providing, day-to-day supervision of contractor operations in the Reserves to ensure that efficient and economical operations are conducted. The contractor and Navy staffs at NPR-1 are collocated on the Reserve at Elk Hills. The Navy considers that for effective control of contract operations, the contractor's functional areas of management must be integrated into a single system of management. The same is true also for the staff of the Officer in Charge. Both management systems must be compatible. Close working relationships and effective communications between elements in the contractor's organization and those in the Officer in Charge's organization are essential for the required, proper, and overall integrated management of the contract and the oil field development and management enterprises. Field operations are properly supervised by the Navy staff. This type of contract administration is currently in effect at Elk Hills and is functioning well to ensure that the Government's interests are protected.

The office of the Officer in Charge, NPR-4 has been changed from Barrow, Alaska, to Anchorage, Alaska, where an integrated management team is being established in anticipation of approval of the Husky Oil Company operator contract. In addition, Navy has provided adequate personnel support for the Officer in Charge and additional officers will soon augment his staff.

At NPR-3, the operator staff is located on the Reserve and the Officer in Charge has offices in Casper, Wyoming. Inasmuch as the Officer in

Charge and his staff make frequent visits (daily when drilling is in progress) to the Reserve each week, it is considered that the levels of management and coordination are adequate for present operations.

Regarding the control of operations at NPR-4, as discussed on page 18 of the draft report, the GAO draft report expresses concern regarding the cost overrun on a contract for environmental clean-up. It indicates that the overrun had occurred even though all the work had not been completed. The cost overrun was attributed to repair and modification of equipment, "which did not meet performance specifications."

The referenced contract was with Environmental Services Incorporated, for environmental clean-up of three areas on the Reserve. Due to a delay in the delivery of Government-furnished equipment to the contractor, the clean-up effort was late in getting started. By spring, the contractor had cleaned up two of the three areas. Due to the thawing of the tundra, it was impractical to reach the third site without causing substantial damage to the environment. Accordingly, the actual clean-up operation was terminated.

During the entire operation the contractor was required to operate and maintain the Government-furnished equipment. Due to the Arctic weather conditions and the fact that low pressure-tired vehicles of a new type were being utilized, the amount of maintenance required was exceptional. The new equipment was under warranty, however, and as major problems with it developed, the manufacturer provided technical representative assistance and warranty parts.

All costs associated with the clean-up contract are currently undergoing a thorough audit by the Defense Contract Audit Agency. That audit will be utilized in arriving at a fair and reasonable settlement to the contract.

### 3. Mirror image offset production

GAO statements, pages 11 and 12, paragraphs 5 and 1 respectively - "To protect against drainage, the Navy follows the mirror image operating objective. This provides that for each well on the neighboring property, there should be a well within the reserve produced at an identical rate, referred to as offset production. Analysis of production data for the period 1970-1974 showed that in each year the operator produced more oil from the reserve than was produced from adjacent property. In 1973 and 1974, for example, total offset production from the reserve exceeded production from adjacent property by 34 percent and 65 percent, respectively."

Navy position. Navy does not follow a "mirror image" operating objective in its offset production program at NPR-3, as defined above, and maintains that there are valid engineering reasons for producing more oil than adjacent producers.

There basically are two areas where Navy is involved with offset production at NPR-3; the Second Wall Creek formation on the northern portion of the Reserve and the Shannon Sand on the east flank of the Reserve.

The South Salt Creek field outside the northern boundary of the Reserve is currently being water-flooded as a secondary recovery measure. Navy wells along this boundary are being produced to preclude a pressure



build-up in the Second Wall Creek formation on the Reserve. Such a pressure build-up would result in a loss of oil through movement off the Reserve or through oil displacement into the aquifer. Peculiar problems of reservoir engineering that have to be addressed in this area include the fact that water injection wells have been drilled on the adjacent Government-leased lands within 50 feet of the Navy boundary even though Interior Department regulations stipulate that such wells are not to be drilled within 200 feet of an adjacent boundary. Also, the Reserve boundary is stepped in shape in the area being water-flooded thereby making the oil in the exposed corners vulnerable to loss. The pools of Navy's oil are also subject to damage by water encroachment from the adjacent water-flood operation causing "fingering" and trapping of otherwise producible oil.

On the east flank of NPR-3, Navy is producing oil to prevent its drainage by gravity off the Reserve. As the adjacent operators produce oil, the formation pressure is reduced thereby setting up a pressure differential which results in the oil flowing down-structure (off the Reserve) to outside producers. Navy, in the early 1960's, engineered an offset production well program that, in layman's terms, acted as a "fence" to preclude the oil flowing off the Reserve. It is not feasible to shut down a Navy well or wells merely because an offset well is shut-in for 30 days or so. To do so would mean that a gap in the "fence" would be created, enabling the offset producer to resume production and recover the oil which migrated from the Reserve.

Another consideration that must be taken into account when evaluating the Navy production rate is the fact that the North Unit operator out-

side the east flank of the Reserve initiated a waterflood program in 1966, and kept it in operation until April, 1973. In that case the Navy maintained an operation similiar to the present one on the north end of the Reserve involving the Second Wall Creek formation. Oil together with substantial quantities of water was produced in order to preclude water incursion into the Reserve and resultant loss of oil off the Reserve. Although that adjoining waterflood was stopped in 1973, it was almost 18 months before the effects dissipated.

In addition to offset production, it should be noted that the testing of wells for maintenance purposes also contributes to the total amount of oil produced at NPR-3. The total program should also be viewed from the perspective that, as we have previously mentioned the total production has been only 200-400 barrels per day.

GAO statement, page 12, paragraph 3 - "However, due to the price increase, the operator's fee (in the NPR-3 operator contract) increased over five times to \$63,200. This increase in profit resulted from the type of agreement in effect, not from the increased activity or better performance by the contractor."

Navy position. The fact that the operator's fee increased is not disputed. The fee, however, only increased two times as compared to the prior year. To put the matter in a proper perspective, the average fee accruing to the operator over the past 17 years has been 9%. It is expected that the fee for FY 1976 will be about 3½%.

#### 4. Use of Navy Consultant as a Purchasing Agent

GAO statement, page 13, paragraph 4 - "In the operation of the petroleum

reserve in Alaska, Navy personnel have not followed sound contracting procedures and have purchased supplies and services without assurance that the best interests of the Government are being served."

Navy position. Due to the exigency of suddenly being called upon to implement an exploration program within Naval Petroleum Reserve No. 4 during FY 1974, for which funding was unexpectedly provided in the Supplemental Appropriations Act (P.L. 93-245), the Navy resorted to extraordinary procurement methods to ensure that the program was accomplished. Navy disagrees that the best interests of the Government were not served. These unusual actions were initiated during a transition period and further resort to such measures is not anticipated. At the time the supplemental appropriation was provided, NPR-4 was essentially in a "caretaker" status under the cognizance of an Officer in Charge who had neither a supporting staff nor a logistics organization. The Secretary of the Navy has subsequently executed an operator contract with the Husky Oil Company for accomplishment of the Navy's exploration program at NPR-4 and this contract is currently awaiting Presidential approval.

The Supplemental Appropriations Act provided Navy with funds in January 1974 in the amount of \$7.5 million for the accomplishment of seismic exploration and the drilling of two exploratory wells during the winter of 1974-75. These exploratory activities necessitated the immediate acquisition of well casing, cement, drilling muds, and other oilfield supplies in order to facilitate their shipment approximately four months later on board the COOL BARGE (Military Sealift Command commercial charter barges) from Seattle in June, 1974.

Although a serious attempt was made by Navy to procure the necessary materials through federal agencies, the limited time available prior to delivery in Seattle precluded any real success. For example, an order for \$700,000 of steel casing was placed with the Defense Construction Supply Center in February, 1974. Due to the dire shortage of such oil field materials on the market at that time as well as other administrative constraints, only \$38,000 worth of the casing was acquired by that agency.

During the period in question, Navy had, under contract, a consultant for arctic engineering and related matters who provided assistance regarding NPR-4 exploration. This consultant was being paid a daily fee for his professional services. When the urgent requirement arose to expeditiously obtain supplies and materials for the FY 1975 exploratory drilling program, the consultant agreed to undertake procurement of the necessary items at no increase in his fee and without any overhead charge. It is recognized that the support contractor utilized by the Naval Arctic Research Laboratory could possibly have acquired selected portions of the required materials; however, his labor overhead fee alone would have been 78%.

Accordingly, the Navy contractor initiated procurement of the required oil field materials under Navy supervision. Pricing information was solicited from various suppliers and purchase orders were placed with those firms submitting the lowest cost. In some instances, for example, the purchase of muds and chemicals which are normally priced the same by competing companies, the orders were distributed among all interested

suppliers in Anchorage, Alaska, in accordance with standard oil field practice.

Through the use of these extraordinary means and without financial prejudice to the Government, all of the necessary materials were acquired in time to be loaded on the June, 1974, COOL BARGE shipment to NPR 4 and the two exploratory wells were drilled during FY 1975.

This type of unusual procurement activity has now been terminated. It is expected that the Husky Oil Company operator contract will be approved by the President in the near future thereby enabling procurements to be accomplished pursuant to that contract in accordance with accepted and well established federal government procurement procedures.

6. Lack of Testing Procedures at NPR 3.

GAO Statement, page 17, paragraph 2 - "ONPR dealings with contractors have not ensured economical operations and, at one of the Reserves (NPR-3), have not ensured that oil wells were properly maintained.

[See GAO note p. 50.]

For example, at Petroleum Reserve No. 3, the ONPR did not have a formal maintenance program to test the wells in accordance with Navy maintenance policy."

Navy position. Although the matter of economical operations has already been addressed, the assertion that the NPR-3 facilities were not being adequately maintained deserves comment. It is true that at the time of the GAO review, a formal, written maintenance plan was not in effect as has been the case at the larger NPR-4. However, even in the absence of such a plan, maintenance was nevertheless being accomplished at a level above that normally experienced in an oil field. It should be noted that of 150 producible wells at NPR-3, approximately 62 are currently on production. This leaves 88 wells that are normally in a standby status. Written policy for the standby (shut-in) wells is to test them biennially. In the past, the producing wells, the associated tank batteries, and other surface equipment were tested on an unscheduled basis as determined by the Officer in Charge (who is a petroleum engineer). Normally, relatively minor items such as repair of wiring, replacement of pump motors, and repair of line leaks were the type of problems discovered and readily corrected.

Subsequent to the GAO review and at the GAO's suggestion, the Officer in Charge has commenced the formal scheduling of all tests. The results of the tests, maintenance problems discovered and corrective action initiated are now logged for record purposes. The Officer in Charge is currently in the process of developing a formal program for the testing of wells and performance of maintenance.

### 7. Multimodal corridor

GAO statements, pages 28 and 29, paragraphs 5 and 1 respectively. "In August 1973, the Navy requested that the Department of the Interior set aside three corridors for the Navy from the reserve to the existing Alyeska corridor. The request was incorporated in a November 1974 study by the Bureau of Land Management on "Multimodal Transportation and Utility Corridor Systems in Alaska". Two of the corridors requested were included in the study with the Navy mentioned as having identified the need. The other corridor was not included because it would run through a proposed national park, according to an ONPR official."

Navy position. The GAO statements would lead one to the conclusion that Navy desired to establish a corridor through a national park. That is not the case. The Assistant Secretary of the Navy (I&L) letter of 30 August 1973, which requested three pipeline corridors leading from NPR-4 to the existing Alyeska Pipeline Service Company corridor was written prior to the Department of the Interior's determination that Anaktuvuk Pass was to be included in a national park area. To compensate for loss of this corridor, the Department of the Interior has later agreed to a corridor leading west to the major Kelly River corridor running north-south on the west coast of Alaska.

### 8. GAO assertion that Navy arbitrarily reduced its estimated cost for the acquisition of a Navy pipeline.

GAO statements, page 30, paragraph 2 "These connections and cost estimates have not been fully studied or verified to establish their validity, and they are questionable. For example, the estimated cost for the Navy line to Port Hueneme was arbitrarily reduced from an estimated

\$100 million to \$50 million, and the Navy had no support for either figure."

Navy position. On 14 February 1975, in preparation for testimony before the House Armed Services Committee on H.R. 49, the Office of Naval Petroleum and Oil Shale Reserves, by internal and informal communications, requested its Elk Hills field staff to provide a "best guess" estimate of the cost of acquiring the Atlantic Richfield Company 20-inch pipeline which runs from the vicinity of Elk Hills to the vicinity of Port Hueneme, California, and the cost of converting it to an oil line with the necessary connections at each end, pumping stations, and a terminal facility. The rough estimate provided was \$100 million. The engineering staff at Elk Hills immediately commenced to refine the rough estimate and shortly thereafter revised it to \$50 million, which was used in the testimony of the Assistant Secretary of the Navy (I&L) before the House Armed Services Committee on 25 March 1975. The \$50 million figure was qualified as a broad estimate. Subsequently, the Navy has entered into an Engineering Services Contract with MARMAC Engineering to develop a comprehensive cost estimate for the project. A preliminary report from that firm indicates that the cost of the completed system will be on the order of magnitude of \$50 million, thereby substantiating the more general estimate prepared earlier by Elk Hills engineering personnel and presented to the Congress.

#### Other Miscellaneous Items

1. Supply of gas to Barrow Utilities, Inc.

GAO comments on pages 20, 21 and 22 apply - In view of the fact that one of the major reasons for the GAO review was an investigation into the



pricing of gas being sold to Barrow Utilities and Electric Cooperative Incorporated (BUECI), the following information is presented to complete the record. Particular note should be made of a legislative technical problem related to the sale of gas to BUECI.

Barrow Utilities and Electric Cooperative, Inc., (hereinafter BUECI), is a nonprofit utility cooperative incorporated under the laws of the State of Alaska engaged in the business of purchasing natural gas from the United States Navy and reselling the same to the residents of Barrow, Alaska. On August 13, 1964, the Navy, pursuant to Congressional authority (10 USC, sections 7422(c), 7430(a), 7431(d)), executed a five-year contract with BUECI's predecessor for the sale of natural gas. Under the terms of said contract, the sale price of natural gas was 50 cents per thousand cubic feet (mcf). On July 23, 1969, this contract was renewed for an additional five-year term whereby natural gas continued to be sold at the price of 50 cents per thousand cubic feet (mcf) to BUECI.

In May 1974, Navy formally requested proposals for a new five-year contract to govern the sale of gas from the South Barrow gas field. The base price per thousand cubic feet (mcf) was set at 77 cents in order to reflect the Federal Government's current cost of development and operation of the South Barrow gas field during Fiscal Years 1970-1974. Navy received only one response and that was from BUECI. In July 1974, Navy informed BUECI that its bid was accepted and forwarded the requisite contract to be executed. The contract has not been returned.

In August 1974, the General Accounting Office (GAO), at the request of Senator Gravel, commenced an investigation of Navy's natural gas contract and price determination. In October 1974, GAO reported that the contract price should be reduced to 76 cents per thousand cubic feet (mcf) rather

than 77 cents per thousand cubic feet (mcf). In response to this, Navy informed BUECI of its adoption of 76 cents per thousand cubic feet (mcf) as base price for natural gas under the proposed contract.

The 1969 contract with BUECI was scheduled to expire on October 1, 1974. On September 27, 1974, after consultation with the Senate and House Armed Services Committees, the Navy extended the contract for 60 days.

The contract as extended expired December 1, 1974, however, Navy has continued to deliver gas to BUECI for humanitarian reasons. On January 6, 1975, BUECI initiated litigation to require Navy to continue delivering gas at 50 cents per thousand cubic feet (mcf). Oral arguments were held on July 7, 1975, in the U.S. District Court at Fairbanks, Alaska, and the matter is now pending before that court.

After commencement of the lawsuit, Navy has continued to deliver gas to BUECI, billing the Cooperative at 50 cents per thousand cubic feet (mcf), subject to readjustment pending outcome of the lawsuit. BUECI paid only its January and February billings. It has not paid its March through October billings. Upon the advice of counsel, BUECI placed all monies owed the United States in "escrow" pending the outcome of the above lawsuit. This action was accomplished unilaterally by BUECI and without the consent of Navy. It has been determined that the escrow account is maintained at the Barrow Branch of the Alaska National Bank of the North and that there is sufficient money in the account to cover all outstanding billings at 50¢/Mcf. On October 17, 1975, a demand letter was mailed by Navy to Mr. Nelson Ahvakana, President of BUECI, for the immediate payment of \$54,534.50, lawful monies owed the U. S. Government by BUECI.

On August 28, 1975, the Department of Justice corresponded with the court advising it of a newly discovered development in the case. This development is summarized below.

a. Between the months of August and October, 1962, Congress enacted two separate public laws, each of which had the effect of amending Title 10, Chapter 641 of the United States Code. The first bill to be passed became P.L. 87-599, 76 Stat. 401, August 24, 1962, and this Act has been the focal point of litigation in the Barrow Utilities case. This Act amended 10 USC section 7422 by adding subsection (c) which authorized sale of gas to the Barrow natives. The second bill passed became P.L. 87-796, 76 Stat. 904, (October 11, 1962). The purpose of this Act, which amended all applicable sections of 10 USC Chapter 641, including Section 7422, was to give the Secretary of the Navy operating responsibility for the Naval Oil Shale Reserves rather than mere custody which he had prior to that date. An examination of the two Acts in the Statutes at Large discloses the problem.

The second Act (76 Stat. 904) amended 10 USC Section 7422, and after stating that Section 7422 "is hereby amended to read as follows", subsection (c), (added only six weeks prior) was completely omitted. The technical result of this action is a technical repeal of subsection (c) within six weeks after it became law.

Since 1962, the codifiers of Title 10, United States Code, have either overlooked or ignored the discrepancy between the two Acts and have always printed subsection (c) as part of the supplement for 10 USC Section 7422. Moreover, since 1964 (i.e., when the first five-year gas

contract was entered into between the Navy and plaintiffs) the Navy has acted in reliance on subsection (c) of 10 USC Section 7422 for authority to sell gas to the Eskimos at Barrow.

The problem may have resulted because the two objectives of the Navy were presented to Congress in two separate bills, each of which amended Section 7422 by restating a new language for the section. Since the "Barrow Gas Bill" was enacted first, it had the effect of adding subsection (c) as a part of 10 USC Section 7422. Since subsection (c) was not on the books at the time the language of the second bill was proposed, it is understandable why the language in that bill made no reference to subsection (c) of Section 7422. The apparent explanation is that at the time the second bill was introduced, there was no subsection (c) in Section 7422.

This development was called to the attention of the Senate and House Armed Services Committees by letters from the Assistant Secretary of the Navy (I&L) to them dated September 30, 1975. The U.S. District Court has reserved final action pending the possible Congressional action to cure the legal technicality involved.

## 2. Cost of developing NPR-3 not in Navy's current budget

GAO comment on page 2, paragraph 2 - "Estimated cost of this plan is about \$70 million; the Navy has not provided for it in its budget."

Navy position. The Navy has placed higher priority on activity at NPR-1 and NPR-4 in the fiscal years through 1977. The Office of Naval Petroleum and Oil Shale Reserves has requested funds for development of NPR-3 beginning in FY 1978.

APPENDIX A  
CONTRACT PROVISIONS

"(a) In regard to the UNIT, the SOUTH FLANK WATER INJECTION AGREEMENT, or the WEST END WATER INJECTION AGREEMENT prior to the actual performance of any item of work which has been authorized under Section IV(a) hereof, or the placing of any purchase order for, or the furnishing of, supplies, materials and equipment contemplated by this contract, which items or order does, or is likely to, involve a total cost in excess of twenty five hundred dollars (\$2,500.00), or such other amount as the Officer in Charge may from time to time establish, OPERATOR shall, except in an emergency, submit to the Officer in Charge and the Operating Committee a written estimate of the cost of such work or order and, before proceeding, secure the consent of the Operating Committee. If, in the opinion of the Operating Committee the estimated cost is excessive and consent is withheld for that reason, the Operating Committee will so notify OPERATOR within ten (10) days after receipt of such written estimate. The OPERATOR shall thereafter secure bids from three or more responsible and qualified independent contractors regularly engaged in such work. If any one of such bids is lower than the estimated cost originally submitted, the OPERATOR shall either (1) perform the work with its own personnel at the cost stated in the lowest bid, or (2) contract with the lowest bidder for the performance by the latter of such work. The Officer in Charge and the Operating Committee shall each be notified immediately of any emergency work undertaken without approval of the Operating Committee.

(b) In regard to any NON-UNIT LANDS prior to the actual performance of any item of work which has been authorized under Section IV(a) hereof, or the placing of any purchase order for, or the furnishing of, supplies, materials, and equipment contemplated by this contract, which item or order does, or is likely to, involve a total cost in excess of five hundred dollars (\$500.00), or such other amount as the Officer in Charge may from time to time establish, OPERATOR shall, except in an emergency, submit to the Officer in Charge a written estimate of the cost of such work or order and, before proceeding, secure the consent of the Officer in Charge. If, in the opinion of the Officer in Charge the estimated cost is excessive and consent is withheld for that reason, the Officer in Charge will so notify OPERATOR within ten (10) days after receipt of such written estimate. The OPERATOR shall thereafter secure bids from three or more responsible and qualified independent contractors regularly engaged in such work. If any one of such bids is lower than the estimated cost originally submitted, the OPERATOR, with consent of the Officer in Charge, shall either (1) perform the work with its own personnel at the cost stated in the lowest bid, or (2) contract with the lowest bidder for the performance by the latter of such work. The Officer in Charge shall be notified immediately of any emergency work undertaken without his approval."

The NPR 4 operator contract provides the following control:

"ARTICLE VIII

JOB ORDERS

A. All orders for services hereunder shall be placed on behalf of NAVY by the DIRECTOR or his authorized representative, the OFFICER IN CHARGE. Such orders shall be signed by the DIRECTOR or the OFFICER IN CHARGE and shall contain the following information:

1. A reference to this contract, and a Job Order number;
2. A description of such services in reasonable detail;
3. A statement of the place and the time completed work is expected to be delivered or services performed;
4. A statement of the total estimated price of the services to be performed;
5. The appropriation to which the Job Order is chargeable;
6. Reference to and ratification of any oral request for services of an urgent nature; and
7. Any other pertinent information.

B. OPERATOR may reject any Order which it determines it cannot feasibly perform, but each Order shall be deemed to have been accepted by the OPERATOR upon receipt thereof unless within thirty (30) days thereafter, the OFFICER IN CHARGE shall have received from OPERATOR written notice of rejection or a request for an extension of time.

C. If no estimated cost is specified in an Order, OPERATOR shall, promptly after receipt thereof, forward to the OFFICER IN CHARGE a statement of OPERATOR's proposed estimated total cost for the services to be included in the Order, detailing, as near as possible, the total

estimate for each item of cost. The cost figure will be stated as a maximum figure beyond which costs will not be reimbursed without prior written authorization of the OFFICER IN CHARGE.

D. Amendments to Orders may be made by the DIRECTOR or the OFFICER IN CHARGE under the procedure prescribed in subsection (a) of this article.

E. It is hereby understood that any Order is subject to the availability of funds appropriated by the Congress of the United States.

ARTICLE XIX  
COSTS OF EXPLORING,  
PROSPECTING, DEVELOPING  
AND OPERATING

A. The costs of exploring, prospecting, developing, and operating the RESERVE contemplated by this contract shall be reimbursed by NAVY in the amount of actual cost, exclusive of overhead expenses, in accordance with Article XXI, Billing for Costs of Exploring, Prospecting, Developing and Operating of this contract, and in accordance with such standards of completeness and accuracy as may be directed by NAVY.

B. Prior to the actual performance of any item of work which has been authorized under Article VIII, Job Orders hereof, or the placing of any purchase order for, or the furnishing of, equipment, supplies or materials contemplated by this contract, which certain item or order does, or is likely to, involve a total cost in excess of two thousand five hundred dollars (\$2,500.00), or such other amount as the DIRECTOR may from time to time establish, OPERATOR shall, except in an emergency, submit to the OFFICER IN CHARGE a written estimate of the cost of such work or order and, before proceeding, secure the approval of the OFFICER



IN CHARGE. If, in the opinion of the OFFICER IN CHARGE, the estimated cost is excessive and approval is withheld for that reason, the OFFICER IN CHARGE shall so notify OPERATOR within ten (10) days after receipt of such written estimate. The OPERATOR shall thereafter secure bids from two or more responsible and qualified independent contractors regularly engaged in such work or furnishing such equipment, supplies, or materials.

If any one of such bids is lower than the estimated cost originally submitted, the OPERATOR, with approval of the OFFICER IN CHARGE, shall either (1) perform the work with its own personnel at the cost stated in the lowest bid, or (2) contract with the lowest bidder for the performance by the latter of such work. The OFFICER IN CHARGE shall be notified immediately of any emergency work undertaken without his approval."

GAO notes:..

1. The deleted comments relate to matters which were discussed in the draft report but omitted from this final report.
2. Page references in this appendix refer to the draft report and do not necessarily agree with the page numbers in final report.



## United States Department of the Interior

OFFICE OF THE SECRETARY  
WASHINGTON, D.C. 20240

DEC 10 1975

Mr. Henry Eschwege  
Director, Resources and  
Economic Development Division  
U.S. General Accounting Office  
Washington, D.C. 20548

Dear Mr. Eschwege:

This responds to your November 4, 1975, letter inviting comments on the GAO draft report "Management of and Plans for the Naval Petroleum Reserves" prepared at the request of Senator Mike Gravel.

The proposed report is primarily concerned with Navy management and plans. However, it also considers the use of the Reserves to help meet U.S. energy needs and the question of management by Navy versus Interior. GAO has recommended the establishment of a Department of Natural Resources made up of Interior, FEA, and ERDA. The report recommends that NPR No. 4 be transferred to this newly created Department. In the interim, GAO believes that Congress should consider transferring management responsibility for the oil shale reserves and Petroleum Reserves Nos. 2 and 4 to the Department of the Interior, whose mission is more closely aligned toward management of our natural resources.

We agree that such a change would be appropriate and in line with Interior's mission. The establishment of a Department of Natural Resources has been administration policy for several years, and we continue to support that policy.

Thank you for the opportunity to review this draft report.

Sincerely yours,

*James T. Clark*  
Assistant Secretary - Management

GAO note: Subsequent to the date of this letter, legislation was enacted transferring responsibility for petroleum reserve No. 4 to the Department of the Interior. Therefore, these comments were not incorporated into the final report.



*Save Energy and You Serve America!*



FEDERAL ENERGY ADMINISTRATION  
WASHINGTON, D.C. 20461

JAN 14 1976

OFFICE OF THE ADMINISTRATOR

Mr. Monte Canfield, Jr.  
Director, Office of Special Programs  
United States General Accounting Office  
Washington, D.C. 20548

Dear Mr. Canfield:

We were pleased to have had the opportunity to review the enclosed draft report entitled, "Management of and Plans for the Naval Petroleum Reserves."

It is our recommendation that the Naval Petroleum Reserves be brought into full production as soon as possible by means of exploration drilling, development drilling, installation of production related facilities such as tanks and gas plants, and the construction of pipelines to market the oil.

The Energy Policy and Conservation Act of 1975 (PL 94-163) calls for the creation of a Strategic Petroleum Reserve which will provide for the storage of up to 1 billion barrels of petroleum products but not less than 150 million barrels within 3 years. This new legislation also requires that the Federal Energy Administration in cooperation with the Department of the Navy and the Department of Interior prepare and submit a report to the Congress on the exploration and development of NPR-4 in Alaska.

We understand that the House-Senate Conference Committee, which is currently considering NPR legislation, has tentatively decided to authorize production of NPR's 1, 2, and 3 under the continued jurisdiction of the Navy; NPR-4 would be transferred to the Department of the Interior, but no development or production would be authorized at this time, although a study would be required on the best procedures for developing the reserve. In view of this potential change in policy regarding the Naval Petroleum Reserves, it is recommended that GAO reexamine the assumptions underlying its evaluation of the NPR operation and operating contracts.

[See GAO note below.]

Sincerely,

  
Frank G. Zarb  
Administrator

Enclosures

GAO notes:

1. Subsequent to the date of this letter, legislation was enacted transferring responsibility for petroleum reserve No. 4 to the Department of the Interior, and requiring production from the other petroleum reserves. Therefore, these comments were not incorporated into the final report.
2. The deleted comments relate to matters which were discussed in the draft report but omitted from this final report.



UNITED STATES  
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION  
WASHINGTON, D.C. 20545

MAR 2 1976

Mr. Henry Eschwege, Director  
Resources and Economic Development Division  
U.S. General Accounting Office

Dear Mr. Eschwege:

Thank you for the opportunity to review and comment on the draft report entitled "Management of and Plans for the Naval Petroleum Reserves," prepared at the request of Senator Mike Gravel.

For the most part, the draft report deals with matters which are primarily of concern to the Secretary of the Navy and to the Secretary of the Interior. We have no comments on such matters.

However, the draft report also reiterates an earlier GAO proposal to the Congress to establish a new Department of Energy and Natural Resources which would consist of the Department of the Interior, the Federal Energy Administration, and the Energy Research and Development Administration (ERDA). We feel that the reorganization issue does not flow naturally out of the proper subject matter of the draft report, i.e., it is not a necessary support to the study and its other recommendations. We, therefore, strongly urge that the reorganization issue be eliminated from the report.

In the past several years, there have been a number of critical and pressing issues related to energy policies and programs which were immediately related to organization questions. Among these issues have been:

- The need for improved coordination among the various energy activities of the Federal Government (addressed first by establishing the Energy Policy Office by Executive Order, then by establishing the Federal Energy Administration, and finally by the Energy Resources Council provided in the Energy Reorganization Act).
- Multiple agency energy research and development programs (addressed through establishment of ERDA).



Mr. Henry Eschwege

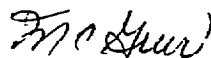
--The conflict-of-interest perceived by many between AEC's development and regulatory roles and the emphasis on nuclear development in the allocation of Federal energy research and development dollars (addressed by the establishment of ERDA and NRC).

We believe that problems of energy policy development and program execution which flowed from organizational causes have been adequately and effectively addressed. The task now is to use the new organizational structure to get on with the job of developing and refining energy policies and developing energy alternatives through a national coordinated energy R&D effort. Further reorganization of the energy activities would only extend a period of policy and program uncertainties which previously existed and would detract from substantive efforts currently underway to solve our energy problems. From the standpoint of the energy programs we believe that, unlike the recent past, there are presently no pressing problems flowing from unresolved organizational issues.

The uncertainty of another major reorganization could also create significant recruitment problems with a consequent loss of momentum.

For these reasons, we do not consider it to be in the overall best interests of resolving energy problems to proceed with a Department of Energy and Natural Resources proposal at this time. Furthermore, should it be decided to proceed, ERDA would most strongly urge that the proposal be confined to the natural resources part of that reorganization and that the energy-related organizational mechanisms so recently established be given an opportunity to function for a sufficient period of time to accurately assess their worth.

Sincerely,



M. C. Greer  
Controller

GAO note: Subsequent to the date of this letter, legislation was enacted transferring responsibility for petroleum reserve No. 4 to the Department of the Interior, and requiring production from the other petroleum reserves. Therefore, these comments were not incorporated into the final report.

PRINCIPAL OFFICIALS RESPONSIBLE FOR  
ADMINISTERING ACTIVITIES  
DISCUSSED IN THIS REPORT

	Tenure of office	
	From	To
<u>DEPARTMENT OF DEFENSE</u>		
SECRETARY OF DEFENSE:		
Donald Rumsfeld	Dec. 1975	Present
James R. Schlesinger	July 1973	Dec. 1975
William P. Clements, Jr. (acting)	May 1973	July 1973
Elliot L. Richardson	Jan. 1973	May 1973
<u>DEPARTMENT OF THE NAVY</u>		
SECRETARY OF THE NAVY:		
J. William Middendorf	June 1974	Present
John W. Warner	May 1972	June 1974
ASSISTANT SECRETARY OF THE NAVY (INSTALLATIONS AND LOGIS- TICS):		
Jack L. Bowers	June 1973	Present
Charles L. Ill	July 1971	June 1973
DIRECTOR, OFFICE OF NAVAL PETRO- LEUM AND OIL SHALE RESERVES:		
Capt. George G. Dowd	Feb. 1975	Present
Capt. Joseph P. Trunz, Jr.	July 1972	Feb. 1975
<u>DEPARTMENT OF THE INTERIOR</u>		
SECRETARY OF THE INTERIOR:		
Thomas S. Kleppe	Oct. 1975	Present
Kent Frizzell (acting)	July 1975	Oct. 1975
Stanley K. Hathaway	June 1975	July 1975
Kent Frizzell (acting)	May 1975	June 1975
Rogers C. B. Morton	Jan. 1971	May 1975

Copies of GAO reports are available to the general public at a cost of \$1.00 a copy. There is no charge for reports furnished to Members of Congress and congressional committee staff members. Officials of Federal, State, and local governments may receive up to 10 copies free of charge. Members of the press; college libraries, faculty members, and students; non-profit organizations; and representatives of foreign governments may receive up to 2 copies free of charge. Requests for larger quantities should be accompanied by payment.

Requesters entitled to reports without charge should address their requests to:

U.S. General Accounting Office  
Distribution Section, Room 4522  
441 G Street, NW.  
Washington, D.C. 20548

Requesters who are required to pay for reports should send their requests with checks or money orders to:

U.S. General Accounting Office  
Distribution Section  
P.O. Box 1020  
Washington, D.C. 20013

Checks or money orders should be made payable to the U.S. General Accounting Office. Stamps or Superintendent of Documents coupons will not be accepted. Please do not send cash.

To expedite filling your order, use the report number in the lower left corner and the date in the lower right corner of the front cover.



**AN EQUAL OPPORTUNITY EMPLOYER**

**UNITED STATES  
GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548**

**OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300**

**POSTAGE AND FEES PAID  
U. S. GENERAL ACCOUNTING OFFICE**



**THIRD CLASS**