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COMPTROLLER GENERAL OF THE UNITED STATES

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B-200355

SEPTEMBER 23, 1980

The Honorable Henry M. Jackson  
Chairman, Energy and Natural  
Resources Committee  
United States Senate



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The Honorable Harley O. Staggers  
Chairman, Interstate and  
Foreign Commerce Committee  
House of Representatives

Subject: Status of Strategic Petroleum Reserve  
Activities (EMD-80-127)

*Background*  
Your letter of July 23, 1980, signed jointly by members of the Senate Energy and Natural Resources Committee and the House Committee on Interstate and Foreign Commerce (see enc. II), requested us to report monthly to both committees on the administration's activities to implement title VIII of the Energy Security Act. Title VIII requires the President to resume filling the Strategic Petroleum Reserve (SPR) at an average rate of at least 100,000 barrels per day for fiscal year 1981 and succeeding years. Title VIII also requires the President, within 60 days of enactment, to amend the Department of Energy's (DOE's) crude oil entitlements program so that the Government in effect pays lower tier prices for SPR crude oil. This amendment would remain in effect until September 30, 1981, the scheduled date for decontrol of domestic crude oil prices and the anticipated end of the entitlements program.

This letter is the first in a series of monthly status reports on DOE's activities in response to title VIII of the act. Enclosure I discusses these activities. In view of the time constraints involved, this report is informational in nature and covers actions taken between June 30, 1980, and September 5, 1980. It is based on interviews with officials in DOE, the Defense Fuel Supply Center, and the Office of Management and Budget, and on publications, studies and DOE program documents related to the SPR.

This report does not evaluate the reasonableness of the positions and actions taken by DOE or the underlying evidence for them. We plan to evaluate their reasonableness in future reports.

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Since the June 30, 1980, effective date of the act, the administration has taken several steps to resume filling the SPR and to amend the entitlements program.

--On August 8, 1980, DOE's Economic Regulatory Administration issued notice of a proposed amendment to current mandatory petroleum allocation regulations which would authorize DOE to require certain refiners to provide oil for the SPR.

--On August 11, 1980, the Defense Fuel Supply Center, crude oil purchasing agent for DOE, issued a solicitation for a competitive exchange of up to 100,000 barrels per day of Naval Petroleum Reserve oil for an equal amount of oil delivered to the SPR.

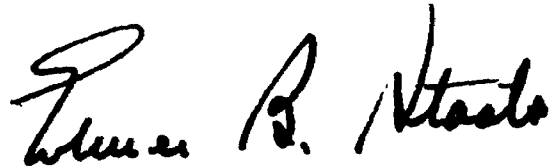
--On August 21, 1980, the Economic Regulatory Administration issued the required amendment to the entitlements program effective August 29, 1980.

--On September 4, 1980, DOE reached agreement with the Pacific Refining Company to deliver up to 750,000 barrels of oil to the SPR in exchange for releasing Pacific Refining from its current contract to buy Naval Petroleum Reserve oil. This oil will arrive at the SPR during October.

It appears that the administration is making a concerted effort to comply with the requirements of title VIII of the Energy Security Act, although to date DOE has directed most of its attention to the minimum supply requirements. It remains to be seen how effective its efforts will be. The Director, Office of Management and Budget stated in an August 19, 1980, letter to the Chairman, Senate Committee on the Budget, that the administration plans to substantially exceed the minimum required fill rate, if current market conditions continue. According to the Director, the additional steps necessary to increase SPR fill rates will be taken after initial actions to resume fill at the minimum 100,000-barrels-per-day rate are successfully underway.

In order to meet the time frames requested, we did not obtain formal agency comments but have discussed the report with DOE and Defense Fuel Supply Center officials.

We are sending copies of this letter to the ranking minority member of the Senate Committee on Energy and Natural Resources and the House Committee on Interstate and Foreign Commerce. We plan no further distribution of this report until 30 days from its date of issuance as requested by your office. Unless other arrangements are made, we will then make copies available to interested parties upon request.



Comptroller General  
of the United States

Enclosures - 2



STATUS OF STRATEGIC  
PETROLEUM RESERVE ACTIVITIES

BACKGROUND

The Energy Policy and Conservation Act of 1975 (P.L. 94-163) authorized creation of a Strategic Petroleum Reserve (SPR) to provide for storage of up to 1 billion barrels of crude oil. The Department of Energy (DOE) is implementing a three-phased plan to achieve a 750-million-barrel oil storage capacity. The first phase, essentially completed in December 1979, involved developing five oil storage sites on the Gulf Coast in Texas and Louisiana with a combined capacity of 248 million barrels. By 1986, three of these sites will be expanded, bringing total storage capacity to 538 million barrels. An additional site would be added and current sites further expanded to bring the Reserve's storage capacity to 750 million barrels. DOE has not developed plans for the final 250-million-barrel increment of the Reserve.

DOE has experienced serious difficulties in acquiring oil to fill SPR facilities. Since October 1978 four contractors have failed to deliver 10 million barrels of crude oil, about 11 percent of SPR purchases. Because of a worldwide shortage of oil during early 1979, DOE decided in April 1979 to suspend new purchases of SPR oil. The last oil delivered to the SPR arrived in August 1979, bringing the total oil in storage to about 92 million barrels. This is about 37 percent of the current 248-million-barrel SPR storage capacity and about 2 weeks of supply if a cutoff occurred equivalent to average 1980 crude oil import rates.

Title VIII of the Energy Security Act (P.L. 96-294) requires the President to resume filling the SPR. The act restates the President's discretionary authority to use or exchange crude oil received as royalties from production on Federal lands and production from the Naval Petroleum Reserve to fill the SPR. According to the Conference Committee's report on S. 932, the precursor of the Energy Security Act, the specified 100,000-barrels-per-day average fill rate is intended to be a minimum and is not to be considered the appropriate rate of injection. The Conference Committee's report also stated that the President give a high priority to the use of Federal royalty oil for the SPR. However, title VIII requires that unless this minimum fill rate is achieved, crude oil from the Naval Petroleum Reserve (NPR) at Elk Hills, California, cannot be sold or otherwise disposed of except to fill the SPR.

Title VIII also requires an amendment to DOE's entitlements program so that DOE in effect pays lower tier prices for SPR crude oil. The current price of lower tier oil, which DOE defines as domestic oil discovered before 1973, is about \$7 a barrel. DOE is responsible for promulgating and enforcing crude oil entitlements and petroleum allocation regulations, as well as for operating both the SPR and Naval Petroleum Reserve. Thus, DOE is the main agency responsible for meeting title VIII requirements.

Other agencies involved in SPR oil acquisition include (1) the Defense Fuel Supply Center, (2) the Department of Defense's Military Sealift Command, which works with the Center to provide necessary Government or private contractor transportation of SPR oil, and (3) the Department of Commerce's Maritime Administration, which monitors Federal and industry compliance with the Cargo Preference Act of 1954 requiring a balanced use of U.S. and foreign flag vessels for ocean transportation.

DOE officials claim that actions to resume oil fill are independent of actions taken to amend the entitlements program and that delay or failure in operation of the entitlements program amendment would not affect DOE's ability to exceed the minimum average oil fill requirement of title VIII.

In an August 19, 1980, letter to the Chairman, Senate Committee on the Budget, the Office of Management and Budget stated that the administration plans to substantially exceed the minimum required fill rate for fiscal year 1981, if current market conditions continue. According to the Director, the additional steps necessary to increase SPR fill rates will be taken after initial actions to resume fill at the minimum 100,000-barrels-per-day rate are successfully underway.

#### SPR OIL FILL ACTIVITIES

DOE is considering two alternative approaches to fill the SPR--a competitive exchange of Naval Petroleum Reserve oil and a mandatory program to require certain refiners to provide oil for the SPR. In addition, DOE has obtained up to 750,000 barrels of oil for the SPR from the Pacific Refining Company and in return will release the company from its current contract to buy Naval Petroleum Reserve oil. DOE's competitive and mandatory approaches for acquiring SPR oil are discussed as follows.

Competitive exchange

On August 11, 1980, the Defense Fuel Supply Center, crude oil purchasing agent for DOE, issued a solicitation for a competitive exchange of up to 100,000 barrels per day of Naval Petroleum Reserve oil, about 36.5 million barrels during fiscal year 1981, for an equal amount of oil delivered to the SPR. Exchange of Naval Petroleum Reserve oil was one of several options available to DOE to acquire crude oil for the SPR. We asked DOE officials the reason for selecting this option as opposed to other options such as an open solicitation or use of Federal royalty oil as intended by the Conference Committee. We were told that DOE believes use of domestically produced oil is preferred over foreign oil, and that the federally owned Naval Petroleum Reserve would guarantee availability of about 100,000 barrels per day for the SPR and present less administrative problems and require less time to implement than using Federal royalty oil.

Industry response

During testimony at DOE's August 27, 1980, and September 4, 1980, hearings on the proposed rule for exchanging Naval Petroleum Reserve oil, oil companies and refiners voiced unanimous support for resuming SPR oil fill. However, some West Coast refiners voiced concern that DOE's exchange could deprive them of an important source of crude oil to meet their local market requirements. The President of the Independent Refiners Association of California objected to DOE's decision to exchange NPR oil because small 1/ and independent 2/ California refiners rely on this oil as a major source of low sulfur, high quality crude oil. These companies received about 104,000 of the 127,000 barrels per day of 1979 Naval Petroleum Reserve production. According to the Association, of this amount, only about 30,000 barrels per day will be set aside by DOE for small refiners and not subject to the exchange. According to the Association's testimony, small and independent refiners do not have the

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1/For purposes of NPR sales contracts, a "small" refiner is one who has a refining capacity of 45,000 barrels a day or less.

2/Independent refiners generally are engaged in refining only, while integrated companies are also engaged in other areas such as production or marketing.

petroleum supplies to participate in an exchange and will find it difficult to replace Naval Petroleum Reserve crude oil lost.

Remaining actions  
and uncertainties

DOE officials currently estimate that oil fill will resume as a result of the competitive exchange by November 1980. However, this assumes, among other things, an acceptable response to the solicitation and effective and efficient transportation, receipt, and injection of the oil.

On September 3, 1980, the Defense Fuel Supply Center received offers which in total exceed 100,000 barrels per day. These offers must be evaluated to determine if they are responsive to the solicitation. Such factors as conformance to crude oil specifications and timing and mode of delivery must be considered. The Center plans to negotiate the offers, considering such factors as (1) price differentials to compensate for differences in quality of oil exchanged and (2) proposed delivery schedules. It plans to award contracts to the successful offerers by the first week in October. It then plans to prepare a detailed schedule of oil deliveries to the SPR.

Arranging transportation and ensuring facility readiness are important factors in efficiently filling the SPR. DOE's scheduling of deliveries must consider the type of oil offered, the terminals' unloading capacities, and the type of oil each storage facility can accept. To ensure system readiness, SPR facilities must be ready to receive oil deliveries. Major SPR facilities include

- terminals to unload tankers,
- meters to measure volumes delivered,
- temporary storage tanks to hold oil pending delivery to the long-term storage caverns,
- pipelines connecting terminals to caverns, and
- oil injection and salt-water disposal equipment.

If deliveries do in fact begin in November 1980, DOE will need average deliveries of about 110,000 barrels per day for the rest of the fiscal year to achieve the minimum average fill rate required by title VIII for that year. Any delay



in oil fill beyond that date, will of course, increase the fill rate needed to achieve the minimum requirement for the year. Between October 1978 and March 1979 when SPR facilities were being constructed, DOE received an average of about 205,000 barrels per day.

For this solicitation, assuming the oil is delivered in 50,000-dead-weight-ton tankers carrying about 300,000 barrels of oil, an SPR terminal would have to dock and unload a tanker an average of every 2.8 days. Based on the contractual and physical capacity of the three SPR terminals, whose capacities range from 100,000 to 350,000 barrels per day, it appears that the 110,000-barrels-per-day average can be readily handled by the terminals.

Although DOE is taking actions under its proposed competitive exchange to meet the minimum required fill rate, and it appears physically possible for DOE to achieve these rates, it remains to be seen how effective these actions will be. In view of the uncertainties concerning the acceptability of the offers received and the logistics of transportation and delivery of the exchange oil, it is too early to tell if the current competitive exchange will result in compliance with the minimum oil fill requirement.

#### Mandatory program

On August 8, 1980, DOE's Economic Regulatory Administration issued notice of a proposed amendment to current mandatory petroleum allocation regulations which would authorize DOE to require certain refiners to provide oil for the SPR. DOE considers the mandatory program a necessary back-up to assure the minimum 100,000-barrels-per-day SPR oil fill, should the solicitation for competitive exchange result in an insufficient number of acceptable offers.

The proposed rulemaking sets forth two alternative mechanisms for obtaining crude oil for the SPR. Both mechanisms generally would authorize DOE to require certain refiners to supply crude oil to the SPR. DOE would be authorized in either case to compensate refiners delivering oil to the SPR either by exchanging Naval Petroleum Reserve oil or by cash payment. Differences in the two somewhat similar approaches include identification of refiners required to supply oil for the SPR and the amount of flexibility available to refiners to meet SPR and other crude oil allocation requirements.

Industry response

DOE held hearings on the proposed mandatory approach of filling the SPR on August 27, 1980, and on September 4, 1980. Various industry representatives testified at the hearings. While they supported filling the SPR, industry officials generally believed that the administration should procure the oil using voluntary and competitive measures, rather than through a mandatory sale or exchange. They voiced concerns that the mandatory program would cause inequities among companies, increase administrative burdens, and could compound transportation problems. DOE is currently evaluating these comments.

USE OF ENTITLEMENTS

In addition to requiring SPR oil fill at a minimum 100,000-barrel-per-day average for fiscal year 1981, the Energy Security Act also required DOE to use its entitlements program 1/ to lower its acquisition cost of SPR oil. Section 805(a), title VIII of the act directs that the President, not later than August 29, 1980, amend the entitlements regulations to effectively allocate to the SPR lower tier, price-controlled domestic oil. DOE amended the rule as required on August 29, 1980, but did so without holding hearings. DOE officials said they will later amend the regulations should significant industry objections occur.

In past SPR purchases DOE transferred entitlements to companies who supplied the SPR oil. If the company did not own refineries and could not directly use the entitlements, the suppliers could then receive cash for the entitlements

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1/The entitlements program is designed to distribute the benefits of price controls on domestic crude oil among refiners. An entitlement is the right to refine a barrel of price-controlled domestic oil. Refiners buy and sell entitlements, calculated monthly by DOE as the difference between the average price of controlled and uncontrolled oil adjusted by volume of each category of oil sold, to permit them to process their monthly volume of controlled oil. Refiners must buy entitlements to process more than the national average of controlled oil. Cash received in exchange for entitlements sold in effect reimburses refiners who are selling entitlements for part of the higher purchase cost of uncontrolled oil.

by selling them to refiners. However, under the August 29, 1980, amendment, DOE will sell a sufficient number of entitlements to refiners required to buy them to reduce the SPR purchase price to the price of lower tier domestic oil. DOE estimates the current value of an entitlement at about \$25. The Office of Management and Budget, in its recent letter to the Chairman, Senate Committee on the Budget, expressed some concern over how effective the entitlements program will be in reimbursing the Government for SPR purchases. OMB is concerned that as more domestic oil is removed from price controls, the number of entitlements will decrease. Consequently, there may not be sufficient funds changing hands to lower DOE's crude oil costs to the lower tier price. Accordingly, the administration has requested fiscal year 1981 budget outlays and requested appropriations to assure adequate funds to pay for 100,000 barrels per day of exchange oil without entitlements.

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## United States Senate

COMMITTEE ON  
 ENERGY AND NATURAL RESOURCES  
 WASHINGTON, D.C. 20510

July 23, 1980

Honorable Elmer B. Staats  
 Comptroller General of the United States  
 GENERAL ACCOUNTING OFFICE  
 441 G Street, N.W.  
 Washington, D. C. 20548

Dear Mr. Staats:

On June 30, 1980 the President signed the Energy Security Act (Public Law 96-294). Title VIII of this Act is intended to provide for a resumption of purchases by the United States government of crude oil for the Strategic Petroleum Reserve authorized in 1975 by the Energy Policy and Conservation Act. Purchases of oil for this purpose have been suspended for well over a year, despite the fact that the present level of the SPR is clearly inadequate insurance against any contemplated interruption in petroleum imports.

The Congress attaches a high priority to the timely implementation of the provisions of title VIII. Both the language of the Act and the accompanying joint statement of managers are very emphatic on this matter. Accordingly, we are asking that you assist Congress in monitoring implementation of this title by the Executive Branch.

In particular we request that the General Accounting Office report by letter on a monthly basis to the Senate Committee on Energy and Natural Resources and the House Committee on Interstate and Foreign Commerce describing the activities taken by the Executive Branch under the provisions of title VIII of the Energy Security Act. This report should include GAO's evaluation of these activities in relation to the clear intent of Congress, expressed in the Act, to resume as soon as possible the filling of the SPR. These monthly reports should continue through October, 1981. We are further requesting that GAO provide Congress by January 1, 1982 with a comprehensive report on activities of the Executive Branch under title VIII for the period July, 1980 through October, 1981.

Honorable Elmer B. Staats  
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Please let us know if the Senate Committee on Energy and Natural Resources or the House Committee on Interstate and Foreign Commerce can be of assistance in carrying out this request.

Sincerely yours,

*Harley O. Staggers*  
Harley O. Staggers  
MEMBER OF CONGRESS

*Bennett Johnston*  
B. Bennett Johnston  
U. S. SENATOR

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