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

FOR RELEASE ON DELIVERY
Expected at 10:00 a.m.
March 4, 1986

STATEMENT OF JAMES DUFFUS III
ASSOCIATE DIRECTOR
RESOURCES, COMMUNITY, AND ECONOMIC
DEVELOPMENT DIVISION
BEFORE THE
SUBCOMMITTEE ON FOSSIL AND SYNTHETIC FUELS
HOUSE COMMITTEE ON ENERGY AND COMMERCE

We appreciate the opportunity to participate in this hearing and provide comments on certain aspects of our work relating to the Strategic Petroleum Reserve (SPR). Specifically, you asked us to comment on (1) the actions taken by the Department of Energy (DOE) on our June 1985 report[1] on DOE's plan for selling SPR oil, (2) the recently-completed test drawdown and sale of SPR oil, and (3) DOE's distribution enhancement program and its effect on drawdown capability. My remarks on the test sale and enhancement program reflect preliminary observations derived from our ongoing work being done for the Chairman, Subcommittee on Environment, Energy and Natural Resources, House Committee on Government Operations.

GAO EVALUATION OF DOE'S SALES PLAN FOR THE SPR

Our June 1985 report, which was done at your request Mr. Chairman, looked at DOE's SPR sales plan. Generally, we found that the plan's market approach would, as intended, probably limit

[1]Evaluation of the Department of Energy's Plan to Sell Oil From the Strategic Petroleum Reserve (GAO/RCED-85-80, June 5, 1985).

oil price increases in a severe supply disruption. However, we made several recommendations to the Secretary of Energy related to the question of who would get the SPR oil.

We reported that the question of who the likely recipients of the oil would be is fundamental to the sales plan's success. If the sale is perceived to result in an unfair distribution of the oil, public confidence in the program and in the government's overall emergency response could be undermined.

DOE's plan states that the universe of buyers will not be restricted except as necessary to assure performance and payment. This universe of buyers could include foreign governments and companies as well as U.S. refiners, oil companies, public agencies, and brokers and traders. DOE argued that (1) allowing equal access to the SPR is the most economical way to sell the oil and (2) excluding foreign buyers from bidding on the oil could be difficult to implement and easily circumvented. We pointed out that under DOE's plan a hostile foreign power could buy oil and that this could seriously undermine public support for the SPR. We recommended that the Secretary reexamine this issue, and amend the plan accordingly, noting that he could place at least some restriction on foreign access to the oil.

In addition to our concerns about unrestricted foreign access to SPR oil, we also pointed out that current provisions of the plan do not limit the amount of oil that any one purchaser could buy at a given sale. We also recommended that the Secretary reexamine DOE's position on this issue.

In recent discussions with DOE officials, we were informed that the SPR sales plan has not changed since the report was issued. Consequently, an oil sale would remain open to any bidder with no upper limit on how much of the quantity offered could be bought by any one purchaser.

SPR TEST DRAWDOWN AND SALE

In February 1980, DOE conducted its first oil withdrawal test. Since that time, DOE has conducted further tests of the SPR's drawdown capability and carried out several simulated tests of the paperwork process that would accompany an actual sale and distribution of oil.

In May 1985, GAO issued a report[2] which examined a series of possible test sale and drawdown scenarios, including a 1.1-million-barrel test. In that report, among other things, we pointed out that while a sale of 1.1 million barrels could provide some indication of the efficiency of DOE's sales procedures, a full test of these procedures would be limited because of the inability to replicate an emergency situation. For example, the relatively small volume of oil offered for sale could limit the number of bidders which would not reflect the bid evaluation and contract preparation procedures expected during an actual oil disruption. In addition, drawing down such a small oil volume

---

[2]Analysis of Oil Withdrawal and Distribution Tests for the Strategic Petroleum Reserve (GAO/RCED-85-115, May 8, 1985).

over a 30-day period does not make sufficient demands on the system to stress drawdown and distribution capabilities. We also examined the feasibility of drawing down and selling and/or storing much larger quantities of oil, such as 2.1 million barrels per day for 7 and 14 days, and concluded that while this was generally feasible and would provide a better test, it would not fully stress the system's capabilities.

In June 1985, the Congress passed the Energy Policy and Conservation Act Amendments of 1985 which required a test sale of 1.1 million barrels of oil. This offered DOE the first opportunity to test its ability to solicit bids, award contracts, withdraw oil, and distribute the oil to buyers in a real-world environment. DOE announced the impending sale of the 1.1 million barrels of oil to prospective bidders in early October 1985. DOE followed this with a pretest sales conference in late October, the final notification of sale on November 18 which formally began the test sale, commencement of contract awards on December 3, and start of oil deliveries on December 11. The final oil delivery was made on January 8, 1986.

Our current assessment of the test sale covers four areas--industry participation, staff training, drawdown capability, and distribution capability.

Regarding industry participation, over 30 industry representatives attended the presales conference. Seventeen companies submitted 35 bids for over 7 million barrels of oil with the top five bidders offering over 96 percent of the then current market prices. In addition, survey questionnaires returned to DOE by oil companies reflected strong support for SPR test sales.

The test sale afforded DOE an opportunity to train staff in carrying out its sales procedures and to assess oil industry reactions to sales agreement documents and purchase procedures. DOE involved a relatively large number of agency and contractor personnel across a wide range of activities. For example, as many as 30 people were involved in the initial planning process and 8 people from each site were added later. About 30 people--mostly contractor employees--were involved in data input operations training so that bids could be evaluated and processed as rapidly as possible. The 35 bids were evaluated and processed in 6 hours rather than the scheduled 3 days. DOE found that too few people were available in the finance area, and that in the event of a larger test, additional people would be needed in the areas of sales, scheduling, billing and collecting. The limited nature of the test and the inability to replicate a real emergency situation, however, continues to leave a measure of uncertainty as to how well a full scale drawdown and sale would be handled.

While DOE made an effort to obtain the maximum benefit from the test sale, the quantity of oil sold was not sufficient to fully test the site drawdown and terminal distribution capabilities. To utilize systems components as much as possible during the test, DOE withdrew oil from four of five sites and required local pipeline facilities and ship and barge loading capabilities at the terminals to be used in distributing the oil. However, spreading the oil withdrawal across four sites limited the extent to which any one site could be tested. At Bryan Mound, for example, the relatively small volume of 300,000 barrels sold

was withdrawn from the caverns and transferred to on-site storage tanks by depressurizing the caverns rather than by using pumps. At sites where pumps were used, the small amounts of oil withdrawn did not test DOE's ability to operate the pumps at maximum capacity for extended periods.

Likewise, the small amount of oil did not fully test terminal distribution capabilities. For example, the Sun terminal that supports the West Hackberry site has barge loading capability of 90,000 barrels per day. About 199,000 barrels of oil were loaded into barges over a period of 6 days at this terminal with a maximum loading of about 49,000 barrels in any one day. Thus, although it appears DOE had an opportunity to fully test the terminal's barge loading capability it was not done.

SPR DRAWDOWN AND DOE'S DISTRIBUTION ENHANCEMENT PROGRAM

The original design of the SPR attempted to integrate the geographical location of the storage sites, site drawdown rates, and marine terminal and commercial pipeline availabilities. The result was three groups of facilities: Seaway, Texoma, and Capline. Each group consisted of one or more storage sites, a marine terminal, and a major interstate crude oil pipeline connecting the terminals to refinery complexes and distribution links in the interior of the United States. According to the design plan, the three groups had a prospective distribution capability of nearly 5 million barrels of oil per day as compared to a design drawdown rate of 4.5 million barrels per day when the storage sites contained their planned 750-million-barrel inventory.

In 1983, however, declining crude oil imports led to the sale of the Seaway and Texoma pipelines and their conversion to natural gas carriers. As a result, and with reductions in the capacity of other distribution facilities, distribution capability was reduced to its current level of about 2.3 million barrels per day as compared to the current SPR drawdown rate of about 3 million barrels.

DOE recognized the problem caused by the oil pipeline sales and in 1983 and 1984, conducted engineering studies on possible distribution enhancements to the three groups. As a result of these studies, DOE developed a plan for constructing enough additional pipelines and making terminal improvements at the Seaway and Texoma groups so that the distribution capability would be increased to 4 million barrels per day. Although the study of the Capline group noted distribution deficiencies, DOE decided not to include any enhancements because of high cost estimates.

DOE's fiscal year 1987 budget submission indicates a revision to its enhancement program. The planned pipeline construction and terminal enhancements for the Seaway group will proceed as scheduled. According to DOE, when the Bryan Mound site is completed, it will have more than enough distribution capability to accommodate its 1-million-barrel-per-day drawdown rate. The planned expansion of the Texoma group's facilities at the Sun terminal and the pipeline construction linking the West Hackberry to the Lake Charles refinery complex, however, have been cancelled. This change will leave the two sites in the Texoma

group with a distribution capability of only 1.2 million barrels per day as compared to their design drawdown rate of 1.4 million barrels when all storage caverns are filled.

In place of the Texoma group enhancements, DOE has decided to increase the distribution capability of the Capline group from its present level of 730,000 barrels per day to 830,000 barrels. This will match the current drawdown rate of about 830,000 barrels per day for the two SPR sites in the group. However, DOE expects this drawdown rate to increase to over 1 million barrels per day when the last two caverns at Bayou Choctaw are completed and filled. It appears, therefore, that the enhancements currently planned for the Capline group will meet the immediate need but will fall short of meeting future distribution needs.

From a total systems perspective, the completion of DOE's current plans for improving the distribution system will increase the terminals' collective distribution capabilities to 3.1 million barrels per day. This is sufficient to accommodate the current SPR system drawdown rate of about 3 million barrels per day. However, completion of storage caverns and oil fill at Bryan Mound, West Hackberry, and Bayou Choctaw to their planned 610 million barrel level will increase the total drawdown rate to about 3.5 million barrels per day. Accordingly, unless additional enhancements are made to the distribution system concurrently with site development and oil fill, distribution constraints will again limit SPR drawdown capability.

To sum up, Mr. Chairman:

--DOE has not taken actions on our June 1985 report recommendations to revise its plans to sell SPR oil.

--The test sale of SPR oil appeared successful in a number of areas and served as a good hands-on learning experience for DOE and contractor staff. The small volume of oil sold however, continues to leave a measure of uncertainty as to how well a full scale drawdown and sale would be handled.

--DOE's distribution enhancement program matches the current drawdown capability of the SPR, but appears to fall short of meeting distribution requirements if the current sites containing oil are completed to their full 610-million-barrel capacity.

Mr. Chairman, this concludes my prepared statement. I will be happy to respond to any questions.

33673