

Strategic Petroleum Reserve

Proposed Appropriation Language

For necessary expenses for Strategic Petroleum Reserve facility development and operations and program management activities pursuant to the Energy Policy and Conservation Act of 1975, as amended (42 U.S.C. 6201 et seq.), \$175,081,000, to remain available until expended.

Note.—A regular 2003 appropriation for this account had not been enacted at the time the budget was prepared; therefore, this account is operating under a continuing resolution (P.L. 107–229, as amended). The amounts included for 2003 in this budget reflect the Administration’s 2003 policy proposals.

Explanation of Change

The only change from the language proposed in FY 2003 is to the proposed funding amount.

STRATEGIC PETROLEUM RESERVE

Executive Summary

Mission

The Strategic Petroleum Reserve (SPR) was created by the Energy Policy and Conservation Act (EPCA) of 1975 to provide the United States with adequate strategic and economic protection against disruptions in oil supplies. The SPR Program was established as a 750 million-barrel (MMB) capacity crude oil reserve with storage in large underground salt caverns at six sites in the Gulf Coast area, connected to major private sector distribution systems, and maintained to achieve full drawdown rate capability. Storage capacity development was completed in September 1991 providing the capability to store 750 million barrels of crude oil in underground caverns ready to deploy at the President's direction in the event of an emergency. As a result of the decommissioning of the Weeks Island site in 1999, the Reserve lost 70 million barrels of capacity. However, the Department reassessed the capacities of the remaining storage sites and estimates they are currently capable of storing 700 million barrels. This increase in capacity is a result of fresh water leaching of the caverns during drawdown of oil in previous years, such as the Desert Storm drawdown activities, oil sales in fiscal years 1996 and 1997, oil degassing movements, an exchange of oil in 2000 and various site drawdown tests. At the end of 2003, the inventory of 628 million barrels will provide 54 days of net import protection. At the end of 2004, the inventory is projected to be 675 million barrels, which will also provide 58 days of net import protection, and the Reserve will be filled to its 700 million barrel capacity in FY 2005.

On July 10, 2000, the President directed the Department of Energy to establish a heating oil reserve in the Northeast capable of assuring home heating oil supply for the Northeast states during times of very low inventories and significant threats to immediate further supply. On March 6, 2001, Energy Secretary Abraham formally notified Congress that the Administration would establish the Reserve as a permanent part of America's energy readiness effort, separate from the Strategic Petroleum Reserve.

Strategic Objective

The SPR ensures and maintains the readiness capability to draw down and distribute crude oil from the SPR inventory to commercial distribution systems in order to protect the domestic U.S. economy from the impact of energy supply disruptions.

The following Program Specific Performance Goal supports this strategic objective:

Maintain operational readiness of the Strategic Petroleum Reserve (SPR) to drawdown at a sustained rate of 4.4 million barrels per day for 90 days, within 15 days notice by the President, and fill the SPR to its current capacity of 700 million barrels by 2005 (ER6-1).

Strategy

Oil Fill: In November 2001, the President directed the Secretary of Energy to continue using the royalty oil transfer plan initiated in 1999, as a means to fill the Reserve to its current capacity of 700 million barrels. A solicitation to transfer up to 60,000 barrels per day was issued by the Department of Energy on January 22, 2002, and an award was made in February 2002 that will add 18.6 million barrels to the Reserve by May 2003. Deliveries at a rate of up to 60,000 barrels per day commenced April 2002. The Department of the Interior was able to increase the rate of transfer from 60,000 barrels per day to 100,000 barrels per day beginning October 2002, and intends to increase the transfer rate to 130,000 barrels per day beginning April 2003 with fill of the SPR to 700 million barrels scheduled for 2005.

Vapor Pressure Mitigation: In FY 1993, the SPR discovered that the vapor pressure of crude oil in many storage caverns was increasing as a result of intrusion of gases and natural geothermal heating. During FY 1995-1997 much of the affected inventory was degassed and heat exchangers installed to further reduce vapor pressure during drawdown of the Reserve. Due to continued geothermal heating and renewed gas intrusion into the crude oil, the SPR initiated a second vapor pressure mitigation program and a contract for construction of a degas plant was awarded in November 2001. Continuous removal of excess gas from the SPR crude oil inventory will commence by May 2004. Through degassing, the SPR will be able to maintain its full mission capability while delivering crude oil that meets all safety and environmental standards.

Operational Readiness: SPR's Level 1 Technical and Performance Criteria define SPR's physical facility performance requirements at every level of facility design and operation and are based on the specific performance requirements originally set forth in the SPR Plan and its Amendments as approved by Congress. Completion of the strategies shown above contributes to sustained drawdown capability and overall readiness to meet the mission of the SPR.

Northeast Home Heating Oil Reserve: Two million barrels of heating oil will protect the Northeast against a disruption for 10 days, the time required for ships to carry heating oil from the Gulf of Mexico to New York harbor for distribution. The Reserve was originally established in commercial facilities located in New York Harbor and New Haven, Connecticut. In 2001, the Secretary approved the relocation of 250,000 barrels of heating oil inventory from Connecticut to Rhode Island, giving the reserve additional truck and marine loading options.

Funding Summary

(dollars in thousands)

	FY 2002 Comp. Approp.	FY 2003 Request	FY 2004 Base	FY 2004 Request	FY 2004 Request vs. Base	
					\$ Change	% Change
Facilities Development & Operations	\$154,009	\$154,856	\$154,856	\$158,979	\$+4,123	+3%
Management	\$16,871	\$14,000	\$14,414	\$16,102	\$+1,688	+12%
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Total, Strategic Petroleum Reserve	\$170,880	\$168,856	\$169,270	\$175,081	\$+5,811	+3%
SPR Petroleum Account	\$0	\$11,000	\$11,000	\$0	\$-11,000	-100%
Transfer of Prior Year Balances to Fossil Energy R&D	\$0	\$0	\$0	\$-5,000	\$-5,000	-100%
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Total, SPR Petroleum Account	\$0	\$11,000	\$11,000	\$-5,000	\$-16,000	-145%
NE Home Heating Oil Reserve	\$8,000	\$8,000	\$8,000	\$5,000	\$-3,000	-38%
Additional net budget authority to cover the cost of fully accruing retirement (non-add)	(\$899)	(\$898)	(\$898)	(\$898)	\$0	0%
Total, New BA	\$178,880	\$187,856	\$188,270	\$175,081	\$-13,189	-7%
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Staffing (FTEs)						
Headquarters	24	27	27	27		
Field	97	101	101	101		
Total Staffing	121	128	128	128		

Strategic Petroleum Reserve

Program Mission

The Strategic Petroleum Reserve (SPR) was created by the Energy Policy and Conservation Act (EPCA) of 1975 to provide the United States with adequate strategic and economic protection against disruptions in oil supplies. The program's funding structure includes Facilities Development and Operations which funds all requirements associated with developing and maintaining facilities for the storage of petroleum, operations associated with placing petroleum into storage, and operational readiness activities associated with drawing down and distributing the inventory on a 15-day notice in the event of an emergency. Management funds all costs of personnel and administrative expenses related to maintaining the Project Management Office in New Orleans, Louisiana and the Program Office in Washington, DC; contract services required to support management; and the technical analysis of program issues.

Program Strategic Performance Goals

Maintain operational readiness of the Strategic Petroleum Reserve (SPR) to drawdown at a sustained rate of 4.4 million barrels per day for 90 days, within 15 days notice by the President, and fill the SPR to its current capacity of 700 million barrels by 2005 (ER6-1).

Performance Indicators

- Total number of SPR crude oil barrels in storage
- Rate of degasification

Annual Performance Targets and Results

FY 2002 Results	FY 2003 Targets	FY 2004 Targets
Increased inventory by 42.5 million barrels from all exchange and royalty oil agreements. EOY crude oil inventory = 587 million barrels. (ER6-1)	Add 39.8 million barrels (cumulative from April 2002). EOY crude oil inventory = 628 million barrels. (ER 6-1)	Add 70.4 million barrels (cumulative from April 2002) of royalty oil. EOY crude oil inventory = 675 million barrels.
Completed contract award for design and fabrication of portable degas plant for continuous removal of excess gas from the SPR crude oil inventory.	Complete degas plant design.	Commence full degas plant operations at a rate of 100,000 - 150,000 barrels per day by May 2004 at the Big Hill storage site.

Significant Accomplishments and Program Shifts

SPR continues to lease facilities that are not required for standby operational readiness and have no adverse impact on the SPR mission or program. To date the Strategic Petroleum Reserve has received revenues in the form of oil and cash from the commercial lease of its St. James terminal and pipelines at Big Hill, Bayou Choctaw, and Bryan Mound sites. In FY2002 revenues totaled \$2,192,168, of which \$1,440,529 was paid in crude oil equivalent. These efforts have also reduced the maintenance cost of the Reserve by transferring that responsibility to the lessees.

In September 2000, DOE delivered 30 million barrels of crude oil from the SPR to contractors in exchange for 31.35 million barrels of oil to be returned one year later. DOE subsequently renegotiated the delivery dates for most of the oil into 2002, and the remainder into 2003. In exchange for the delay in deliveries the SPR will increase nearly 35 million barrels of oil. This will help offset the reduction in supplies due to the disruption in Venezuela.

Funding Profile

(dollars in thousands)

	FY 2002 Comp. Approp.	FY 2003 Request	FY 2004 Base	FY 2004 Request	FY 2004 Request vs. Base	
					\$ Change	% Change
Facilities Development & Operations	\$154,009	\$154,856	\$154,856	\$158,979	+\$4,123	+3%
Management	\$16,871	\$14,000	\$14,414	\$16,102	+\$1,688	+12%
Total, Strategic Petroleum Reserve	\$170,880	\$168,856	\$169,270	\$175,081	+\$5,811	+3%
Additional net budget authority to cover the cost of fully accruing retirement (non- add)	(\$899)	(\$898)	(\$898)	(\$898)	\$0	0%

*Public Law Authorization: Energy Policy and Conservation Act (EPCA) (P.L. 94-163)

Funding By Site

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$Change	%Change
Sandia National Laboratories	\$ 2,506	\$ 2,558	\$ 2,612	\$ +54	+2%
National Energy Technology Laboratory	\$ 825	\$ 825	\$ 860	\$ +35	+4%
Oak Ridge National Laboratory	\$ 250	\$ 350	\$ 350	\$ 0	0%
All Other	<u>\$ 167,299</u>	<u>\$ 165,123</u>	<u>\$ 171,259</u>	<u>\$ +6,136</u>	<u>+4%</u>
Total, SPR	\$ 170,880	\$ 168,856	\$ 175,081	\$ +6,225	+4%

Site Description

Sandia National Laboratory

The Sandia National laboratory, located in Albuquerque, NM, provides technical, comprehensive, site-specific engineering research and development support for the planning, design, development, and monitoring of Strategic Petroleum Reserve (SPR) crude oil storage facilities.

National Energy Technology Laboratory

The National Energy Technology Laboratory (NETL) located in Morgantown, WV, Pittsburgh, PA and Tulsa, OK is a multipurpose laboratory, owned and operated by the U.S. Department of Energy. NETL conducts detailed analysis of crude oil streams, caverns and storage cavern composites to ascertain the quality of stored oil on selected oil samples. These measurements include the vapor pressure and gas-oil ratio.

Oak Ridge National Laboratory

The Oak Ridge National Laboratory (ORNL), located in Oak Ridge, TN, provides analytic support to the SPR by documenting SPR analysis models, assisting in the development of SPR oil valuation and bid analysis tools, evaluating potential applications of DIS-Risk model approach related to energy policy issues and evaluating SPR planning alternatives.

All Other

This category includes all non-phase specific site activities (operations, maintenance, security, etc.) at the Big Hill and Bryan Mound sites in Texas as well as West Hackberry and Bayou Choctaw sites in Louisiana. Other activities include technical and program management support to maintain operational readiness. Management funding for SPR Headquarters and Project Management Office (128 FTEs) is also included in this category.

Detailed Program Justification

(dollars in thousands)

	FY 2002	FY 2003	FY 2004
Facilities Development and Operations	\$154,009	\$154,856	\$158,979

Continue activities for renewed vapor pressure mitigation, to include commencing full degas plant operations at the Big Hill site by May 2004. Maintain the Drawdown Readiness Program and perform annual exercises. Continue Recovery Program exercises to maintain readiness and reliability. Address risk reduction by continuing the ES&H program and corrective action plan activity. Monitor geotechnical stability and mine integrity and test emergency responses in the event of indications of unacceptable mine structural conditions at the Weeks Island site. Continue RIK transfer program with the Department of the Interior to add 108 million barrels of oil to the SPR by 2005.

FY2003 and FY 2002 activities included award of contract for degas plant design and completion of site modifications at the Big Hill storage site for vapor pressure mitigation. Continued delivery of exchanged Federal Royalty Oil to the SPR that was transferred to DOE in FY 1999-2001. Maintained the Drawdown Readiness Program and performed annual exercises. Continued Recovery Program exercises to maintain readiness and reliability. Continued ES&H Program and corrective action plan activity developed to address unacceptable risk

(dollars in thousands)

	FY 2002	FY 2003	FY 2004
Management	\$16,871	\$14,000	\$16,102

Continue management of SPR Program to assure capability to achieve Level 1 Performance criteria for drawdown and distribution. Provide analytic support for SPR development, fill and distribution policy decisions. Provide for support and oversight of M&O contractor and subcontractor activities and program operations. Continue the program to pursue commercial leasing of the SPR's underutilized distribution and cavern facilities. Maintain oversight of geotechnical stability & mine integrity. Manage the ES&H corrective action program. Maintain capability for oil acquisition. Continue oil quality assurance management activities.

Explanation of Funding Changes

FY 2004 vs. FY 2003 \$ (000)

Mandatory increase for Cost of Living adjustment and general pay raises	+ 414
Facilities Development and Operations	
Increased requirements related to fill of the Reserve	\$+4,000
Increased cost of sustaining security enhancements	+ 492
Completion of Degas plant construction.....	-3,328
Decrease in motor vehicle requirements	-21
Full degas plant operations in May 2004	+2,980
Management	
Increase reflects funding to adequately support 128 FTE's in HQ's and field sites and fund technical and program management support	+1,688
Total Funding Change, Facilities Operation & Management	\$6,225

**SUMMARY OF SUPPORT FOR
ENERGY INFORMATION ADMINISTRATION (EIA)**

STRATEGIC PETROLEUM RESERVE
(dollars in thousands)

PROGRAM	FY 2002	FY 2003	FY 2004
Energy Modeling Forum	\$ 5	\$ 5	\$ 5
ADP System Utilization	\$ 50	\$ 50	\$ 50
Petroleum Analysis/Subscripts	\$ 65	\$ 65	\$ 65
Total	\$ 120	\$ 120	\$ 120

Per the Memorandum of Understanding between the EIA and SPR dated June 13, 1983, funding is provided for the services as computer usage and hardware support, logistics information, and data collection.

MINORITY EDUCATIONAL INSTITUTION

STRATEGIC PETROLEUM RESERVE

(dollars in thousands)

<u>Appropriation/Decision Unit</u>	<u>Name of Institution</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>
Strategic Petroleum Reserve	Virginia State	\$ 20		
	TSU	\$10		
	UT @ San Antonio	\$ 20		
	Sam Houston State	\$ 10		
	McNeese State University	\$ 10		
	UT @ El Paso	\$ 10		
	University of Puerto Rico	\$ 10		
	Alabama A&M	\$ 10		
	Unknown		\$ 100	\$ 100
	Total		\$ 100	\$ 100