

**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 (42 U.S.C. 6201 et seq.), [189,400,000] *\$205,000,000* to remain available until expended.

Explanation of Changes

No changes.

Public Law Authorizations

Public Law 109-58, "Energy Policy Act of 2005"

Strategic Petroleum Reserve

(\$K)			
FY 2013 Current	FY 2014 Enacted	FY 2014 Current	FY 2015 Request
182,625	189,360	189,360	205,000

Overview

The Strategic Petroleum Reserve (SPR) protects the U.S. from disruptions in critical petroleum supplies and meets the U.S. obligations under the International Energy Program (Energy Policy and Conservation Act, P.L. 94-163, as amended, Section 151). The most recent drawdown of the SPR was 30 million barrels in FY 2011 as the U.S. obligation under the International Energy Agency Libya Collective Action. The remaining 696 million barrels of inventory provided 112 days of net import protection in 2013. The 2015 Budget Request addresses deferred maintenance on the aging infrastructure and provides for the management, maintenance, security, and operational readiness of the Reserve.

In 2012, SPR completed the replacement of an existing storage cavern at its Bayou Choctaw site that posed a major environmental risk. Oil was transferred to the new cavern during FY 2013 and the decommissioning plan, which includes subsidence monitoring, will be in place by September 2014. During FY 2013, the oil degasification plant was dismantled at Bryan Mound and relocated to West Hackberry. The plant is scheduled to resume operations in June 2014 and continue through September 2018 to maintain crude at safe vapor pressure.

Highlights and Major Changes in the FY 2015 Budget Request

This level of funding in FY 2015 will provide the program with full SPR operational readiness and drawdown capability. The program will continue the degasification of crude oil inventory to ensure its availability; testing and cavern remediation; a cavern maintenance program to slow the loss of cavern storage capacity; and repair of the crude oil tank at Bryan Mound that will restore the program's maximum drawdown rate. Major changes from 2014 include:

Vapor Pressure Mitigation

The request provides funding for a full 12 months of oil degasification operations at the West Hackberry site. The continued degasification of SPR stocks is required for the SPR crude oil to be available for emergency use and comply with federal and state regulations. In addition to regular degas plant operations, extensive inspections and electrical preventive maintenance activities will be performed on compressors and pressure safety valves within the plant.

Capacity Maintenance Program

The SPR is currently losing roughly 2 million barrels a year of cavern capacity due to workover-induced and natural cavern creep. To maintain the SPR at its current storage capacity, an aggressive leaching program of 100,000 barrel per day leach rate is required. The program was suspended in FY 2013 and FY 2014 to meet funding constraints. This request provides funding to initiate a 24,000 barrel per day leach rate which will slow (but not offset) the loss of cavern storage capacity and create a total volume of approximately 1.2 million barrels per year.

Restore Maximum Drawdown Capability

Bryan Mound has one storage tank (built in 1980) which is unusable due to tank roof and floor issues and has impacted the SPR's emergency drawdown response capability. The storage tank is essential for Bryan Mound's oil fill and marine oil distribution during drawdown. The replacement of the tank roof is funded in this request to restore the program's maximum rate drawdown capability to 4.4 million barrels per day.

FY 2013 Key Accomplishments

- Degasification plant dismantled and relocated to West Hackberry.
- Oil transferred from Cavern 20 at Bayou Choctaw to newly developed cavern.

**Strategic Petroleum Reserve
Funding by Congressional Control (\$K)**

	FY 2013 Current	FY 2014 Enacted	FY 2014 Adjustment	FY 2014 Current	FY 2015 Request	FY 2015 vs FY 2014 Enacted
Strategic Petroleum Reserve						
Facilities Development and Operations	161,974	164,714	0	164,714	178,999	+14,285
Management	20,651	24,646	0	24,646	26,001	+1,355
Total, Strategic Petroleum Reserve	182,625	189,360	0	189,360	205,000	+15,640
Federal FTEs	126	126	0	126	126	0

Strategic Petroleum Reserve

Overview

The SPR benefits the Nation by providing an insurance policy against potential interruptions in U.S. petroleum supplies whether originating from international supply problems, hurricanes, accidents or terrorist activities. The SPR, with currently available crude oil stocks in underground storage, provides a strong deterrent to hostile efforts. A release of petroleum from the SPR can mitigate the potential economic damage of an actual disruption in international or domestic petroleum supplies and the accompanying price increases. The SPR avails the United States of worldwide emergency assistance through its IEA participation. IEA members are required to maintain 90 days of strategic and commercial stocks and participate with other stockholding nations in a coordinated release of stocks in the event of a major supply disruption. The 696 million barrels of inventory provided 112 days of net import protection in 2013.

To accomplish its mission and address the challenges outlined above, the SPR program is organized into two subprograms: Facilities Development and Operations and Management. The Facilities Development and Operations subprogram funds all requirements associated with developing and maintaining facilities for the storage of petroleum, operations activities associated with placing petroleum into storage, and operational readiness initiatives associated with drawing down and distributing the inventory within 13 days' notice in the event of an emergency. The Management subprogram funds personnel and administrative expenses related to maintaining the Project Management Office (New Orleans, LA) and the Program Office (Washington, DC), as well as contract services required to support management and the technical analysis of program initiatives and issues.

Highlights and Major Changes in the FY 2015 Budget Request

SPR's underground storage caverns require maintenance to assure their storage capability and integrity. SPR maintains a cavern casing inspection and remediation program to comply with the state of Texas' regulations and mitigate the risk of potential casing leaks and environmental damage. The SPR also utilizes a transportable degas plant to ensure availability of crude oil inventories at SPR sites within environmental and safety constraints. This process prevents the off-gassing of volatile organic compounds (VOCs) above safe levels during oil movements through commercial distribution points. In FY 2013, the degasification plant moved from the Bryan Mound to West Hackberry site and operations resume in June 2014 to treat oil to safe vapor pressure levels so it is once again available for emergency use.

FY 2015 funding will provide for the management, operations, maintenance, and security of the Government's four SPR storage sites and maintains SPR readiness and capability to respond to U.S. oil supply emergencies. The program will continue to address infrastructure and cavern maintenance, testing and remediation; mitigation of loss of cavern storage capacity; and degasification of crude oil inventory to ensure its availability. Major changes from 2014 include:

Facilities: FY 2015 funding levels restore the Capacity Maintenance Program at a leach rate of 24,000 barrels per day as well as increased Major Maintenance projects to alleviate the backlog of deferred maintenance impacting SPR 's operational performance. Funding is also included for an additional subcontracted workover rig for continuous maintenance and integrity testing of cavern crude oil and brine piping and casing.

Management: No significant change.

**Strategic Petroleum Reserve
Explanation of Major Changes (\$K)**

FY 2015 vs FY 2014 Enacted

Major Maintenance: The requested FY 2015 funding level supports a larger Major Maintenance program required to reduce the backlog of deferred maintenance projects. The most significant project is the replacement of the roof at Bryan Mound Tank 2 which will bring the tank back into service and restore the program's maximum rate drawdown capability to 4.4 million barrels per day.	+11,747
Operations and Maintenance: The request supports a robust Cavern Integrity Program (+9,471) that includes an additional subcontracted drill rig for 11 routine cavern workovers and 8 cavern remediations. Additionally the Cavern Maintenance Program will restart cavern leaching at a rate of 24, 000 barrels per day (+1,507). The FY 2014 enacted level reflects funding for the real estate settlement for Bayou Choctaw Cavern 102 (-7,100) and fluctuation in hardware upgrades/replacements (-1,367) which is not in the FY 2015 funding level.	+2,538
Management: No change in scope. The increase reflects an escalation adjustment.	+1,355
<hr/> Total, Strategic Petroleum Reserve <hr/>	<hr/> +15,640 <hr/>

Strategic Petroleum Reserve Facilities Development and Operations

Description

The Facilities Development and Operations subprogram provides funding for protection from supply disruptions. The U.S. reliance on petroleum combined with location of significant global reserves in regions of the world subject to political unrest have made the U.S. vulnerable to supply disruptions.

SPR's underground storage caverns require maintenance to assure their storage capability and integrity. SPR maintains a cavern casing inspection and remediation program to comply with state regulations and mitigate the risk of potential casing leaks and environmental damage. The damaged internal floating roof on a tank at Bryan Mound site diminishes the overall maximum SPR drawdown rate to 4.2 million barrels per day versus 4.4 million barrels per day.

FY 2016 – FY 2019 Key Milestones

- (January 2018) Begin foundation and site modifications for degas plant move to Bayou Choctaw.
- (September 2018) Complete degas operations at West Hackberry.

Strategic Petroleum Reserve

Activities and Explanation of Changes

FY 2014 Enacted	FY 2015 Request	Explanation of Changes FY 2015 vs FY 2014 Enacted
Facilities Development and Operations		
<p><i>Degas Plant Operations</i></p> <ul style="list-style-type: none"> • Four months of plant operations. 	<p><i>Degas Plant Operations</i></p> <ul style="list-style-type: none"> • Twelve months of plant operations 	<p><i>Degas Plant Operations</i></p> <p>FY 2015 reflects a full year of degas operations.</p>
<p><i>Cavern Maintenance Program</i></p> <ul style="list-style-type: none"> • No activity 	<p><i>Cavern Maintenance Program</i></p> <ul style="list-style-type: none"> • Cavern leaching at a level of 24, 000 barrels per day at Bryan Mound, West Hackberry, and Big Hill. 	<p><i>Cavern Maintenance Program</i></p> <p>Support a Cavern Maintenance Program with a leach rate of 24 MBD to restore ullage loss caused by workover-induced and natural cavern creep. Without this program, the SPR inventory will be reduced because of lack of storage space.</p>
<p><i>Casing Inspections and Remediations</i></p> <ul style="list-style-type: none"> • Five cavern remediation workovers 	<p><i>Casing Inspections and Remediations</i></p> <ul style="list-style-type: none"> • Eight remediation workovers with addition of a second subcontracted workover rig 	<p><i>Casing Inspections and Remediations</i></p> <p>Supports three additional cavern remediation workovers to minimize the chance of wellbore leaks, regulatory noncompliance, and caverns being removed from service.</p>
<p><i>Major Maintenance</i></p> <ul style="list-style-type: none"> • Minimal major maintenance program resulting in a deferred maintenance backlog 	<p><i>Major Maintenance</i></p> <ul style="list-style-type: none"> • A larger program including Bryan Mound Tank 2 roof repair to bring unit back into service and restore the program's drawdown rate. 	<p><i>Major Maintenance</i></p> <p>Funding supports a more robust Major Maintenance Program that will reduce the backlog and restore the program's maximum rate drawdown capability to 4.4 million barrels per day.</p>

**Strategic Petroleum Reserve
Performance Measures**

In accordance with the GPRA Modernization Act of 2010, the Department sets targets for, and tracks progress toward, achieving performance goals for each program. The following table(s) show(s) the targets and results for FY 2013 and the targets for FY 2014 and 2015. For more information, including historical targets and results from FY 2009 through 2012, as well as the planned targets for FY 2014 and 2014 (FY 2014-2018 for the National Nuclear Security Administration), refer to the Department's Annual Performance Plan and Report [<http://energy.gov/cfo/reports/annual-performance-reports>].

	FY 2013	FY 2014	FY 2015
Performance Goal (Measure)	Drawdown Readiness - Ensure drawdown readiness by achieving greater than 95% of monthly maintenance and accessibility goals.		
Target	95 % of monthly maintenance achieved	95 % of monthly maintenance achieved	95 % of monthly maintenance achieved
Result	95 % of monthly maintenance achieved	TBD	TBD
Endpoint Target	Achieve 95% of monthly maintenance and accessibility goals in all years.		
Performance Goal (Measure)	SPR Operating Cost - Ensure cost efficiency of SPR operations by achieving low operating cost per barrel of capacity		
Target	< 0.25 \$ operating cost per barrel	< 0.25 \$ operating cost per barrel	< 0.25 \$ operating cost per barrel
Result	< 0.25 \$ operating cost per barrel	TBD	TBD
Endpoint Target	Achieve < \$0.25 operating cost per barrel.		
Performance Goal (Measure)	Sustained (90 day) Drawdown Rate - Enable ready distribution of SPR oil by achieving maximum sustained (90 day) drawdown rate of 4.4 million barrels per day.		
Target	4.25 MMB/Day drawdown readiness rate	4.25 MMB/Day drawdown readiness rate	4.25 MMB/Day drawdown readiness rate
Result	4.25 MMB/Day drawdown readiness rate	TBD	TBD
Endpoint Target	Maintain a 90 day drawdown rate of 4.4 million barrels per day.		

**Strategic Petroleum Reserve
Capital Summary (\$K)**

	Total	Prior Years	FY 2013 Current	FY 2014 Enacted	FY 2014 Current	FY 2015 Request	FY 2015 vs FY 2014 Enacted
Capital Operating Expenses Summary (including MIE)							
Capital Equipment > \$500K (including MIE)	n/a	n/a	3,519	7,504	7,504	17,501	+9,997
Total, Capital Operating Expenses	n/a	n/a	3,519	7,504	7,504	17,501	+9,997
Capital Equipment > \$500K (including MIE)							
Total Non-MIE Capital Equipment (>\$500K)	n/a	n/a	3,519	4,220	4,220	7,838	+3,618
Rework Crude Oil Pipeline Mainline Valves (BH-658)	—	—	—	1,500	1,500	—	-1,500
Replace Brine Disposal System Header to Brine Tanks (WH-767)	—	—	—	1,784	1,784	—	-1,784
Replace Crude Oil Header Piping (BC-792)	—	—	—	—	—	1,902	+1,902
Convert Crude Oil BMT-2 to External Floating Roof Tank (BM-740)	—	—	—	—	—	3,678	+3,678
Crude Oil BMT-2 Roof Demolition (BM-740A)	—	—	—	—	—	2,432	+2,432
Close and Cap Anhydrite Pond 9	—	—	—	—	—	1,651	+1,651
Total, Capital Equipment (including MIE)	n/a	n/a	3,519	7,504	7,504	17,501	+9,997

¹Each MIE Total Estimated Cost (TEC) > \$2M; Each Plant Project (GPP/IGPP) Total Estimated Cost (TEC) > \$5M

**Management
Funding (\$K)**

FY 2013 Current	FY 2014 Enacted	FY 2014 Current	FY 2015 Request	FY 2015 vs FY 2014 Enacted
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Program Direction Summary

Washington Headquarters

Salaries and Benefits	3,946	4,370	4,370	5,066	+696
Travel	150	160	160	150	-10
Support Services	1,153	2,007	2,007	1,570	-437
Other Related Expenses	760	792	792	821	+29
Total, Washington Headquarters	6,009	7,329	7,329	7,607	+278

Strategic Petroleum Reserve Project Management Office

Salaries and Benefits	12,155	13,538	13,538	13,651	+113
Travel	547	485	485	507	+22
Support Services	163	166	166	197	+31
Other Related Expenses	1,777	3,128	3,128	4,039	+911
Total, SPR Project Management Office	14,642	17,317	17,317	18,394	+1,077

Total Management

Salaries and Benefits	16,101	17,908	17,908	18,717	+809
Travel	697	645	645	657	+12
Support Services	1,316	2,173	2,173	1,767	-406
Other Related Expenses	2,537	3,920	3,920	4,860	+940
Total, Management	20,651	24,646	24,646	26,001	+1,355
Federal FTEs	126	126	126	126	0

Support Services and Other Related Expenses

Support Services

Technical Support					
Economic & Environmental Analysis	560	547	547	560	+13
Total, Technical Support	560	547	547	560	+13
Management Support					
Training and OPM Recruitment	163	166	166	197	+31
Technical Support	593	1,460	1,460	1,010	-450

	FY 2013 Current	FY 2014 Enacted	FY 2014 Current	FY 2015 Request	FY 2015 vs FY 2014 Enacted
Total Management Support	756	1,626	1,626	1,207	-419
Total, Support Services	1,316	2,173	2,173	1,767	-406
Other Related Expenses					
Rent to Others	519	566	566	726	+160
Communications, Utilities, Misc	100	100	100	173	+73
Other Services	968	2,236	2,236	2,910	674
Supplies and Materials	600	626	626	639	+13
Equipment	350	392	392	412	+20
Total, Other Related Expenses	2,537	3,920	3,920	4,860	+940

Management

Activities and Explanation of Changes

FY 2014 Enacted	FY 2015 Request	Explanation of Changes FY 2015 vs FY 2014 Enacted
Salaries and Benefits		
The funding supports salaries and benefits for 126 FTEs and associated costs required to provide overall direction and execution of the SPR. The SPR mission is carried out by a workforce composed largely of M&O contractors, although there are a variety of functions that are inherently governmental (i.e., program management, contract administration, budget formulation, and interagency/international coordination) that require a dedicated Federal workforce.	Continue management and oversight activities.	No significant change.
Travel		
Instituted travel ceilings in accordance with Secretarial initiative to accomplish a reduction in travel costs.	Continue constrained travel.	No significant change.
Support Services		
Activities support project-planning efforts to maintain technical, mission essential support capabilities.	Continue support services activities	No significant change.
Other Related Expenses		
Provides teleconferencing capabilities between sites; field site building leases; and contingency for DOE field employee evacuation expenses in the event of a hurricane.	Continue support activities.	No significant change.

**Strategic Petroleum Reserve
Facilities Maintenance and Repair**

The Department's Facilities Maintenance and Repair activities are tied to its programmatic missions, goals, and objectives. Facilities Maintenance and Repair activities funded by this budget are displayed below.

Costs for Direct-Funded Maintenance and Repair (including Deferred Maintenance Reduction) (\$K)

	FY 2013 Actual Cost	FY 2013 Planned Cost	FY 2014 Planned Cost	FY 2015 Planned Cost
Strategic Petroleum Reserve	29,708	35,208	35,032	46,386
Total, Direct-Funded Maintenance and Repair	29,708	35,208	35,032	46,386

**Strategic Petroleum Reserve
Total Costs for Maintenance and Repair (\$K)**

	FY 2013 Actual Cost	FY 2013 Planned Cost
Strategic Petroleum Reserve	29,708	35,208
Total, Direct-Funded Maintenance and Repair	29,708	35,208

Each year, the "Planned Cost" for maintenance and repair is a minimum target amount. The Strategic Petroleum Reserve did not meet its planned minimum target in FY 2013. The variance from the target was due to deferral of pipeline valve rework at Bryan Mound from FY 2013 to FY 2014 and the pipeline valve rework at Big Hill from FY 2013 to FY 2015.

**Strategic Petroleum Reserves
Safeguards and Security (\$K)**

	FY 2013 Current	FY 2014 Enacted	FY 2015 Request	FY 2015 vs FY 2014 Enacted
Protective Forces	18,206	18,199	18,612	+413
Physical Security Systems	814	857	895	+38
Information Security	251	281	246	-35
Cyber Security	1,505	1,969	1,851	-118
Personnel Security	818	604	563	-41
Material Control and Accountability	0	0	0	0
Program Management	1,857	1,641	1,619	-22
Program Direction	0	0	0	0
Transportation Security	0	0	0	0
Research and Development	0	0	0	0
Construction	0	243	243	0
Total, Safeguards and Security	23,451	23,794	24,029	235

Department Of Energy
 FY 2015 Congressional Budget
 Funding By Appropriation By Site
 (\$K)

Strategic Petroleum Reserve	FY 2013 Current	FY 2014 Enacted	FY 2015 Request
National Energy Technology Lab			
SPR Geotechnical Analytical Support			
SPR - Facilities Development	116	243	243
Total, National Energy Technology Lab	116	243	243
Oak Ridge National Laboratory			
SPR Econometric Modelling Support			
Management	400	400	490
Total, Oak Ridge National Laboratory	400	400	490
Sandia National Laboratories			
SPR Geotechnical Analytical Support			
SPR - Facilities Development	3,186	3,260	3,335
Total, Sandia National Laboratories	3,186	3,260	3,335
Strategic Petroleum Reserve - Bayou Choctow			
SPR Geotechnical Analytical Support			
SPR - Facilities Development	11,424	10,720	12,287
Total, Strategic Petroleum Reserve - Bayou Choctow	11,424	10,720	12,287
Strategic Petroleum Reserve - Big Hill			
SPR Geotechnical Analytical Support			
SPR - Facilities Development	18,468	20,751	21,208
Total, Strategic Petroleum Reserve - Big Hill	18,468	20,751	21,208
Strategic Petroleum Reserve - Bryan Mound			
SPR Geotechnical Analytical Support			
SPR - Facilities Development	14,424	17,938	25,887
Total, Strategic Petroleum Reserve - Bryan Mound	14,424	17,938	25,887
Strategic Petroleum Reserve - West Hackberry			
SPR Geotechnical Analytical Support			
SPR - Facilities Development	19,269	24,643	23,006
Total, Strategic Petroleum Reserve - West Hackberry	19,269	24,643	23,006
Strategic Petroleum Reserve Project Office			
SPR Geotechnical Analytical Support			
SPR - Facilities Development	95,088	87,146	93,033
SPR Econometric Modelling Support			
Management	14,642	17,317	18,394
Total, Strategic Petroleum Reserve Project Office	109,730	104,463	111,427

Department Of Energy
FY 2015 Congressional Budget
Funding By Appropriation By Site
 (\$K)

Strategic Petroleum Reserve	FY 2013 Current	FY 2014 Enacted	FY 2015 Request
Washington Headquarters			
SPR Econometric Modelling Support			
Management	5,608	6,942	7,117
Total, Washington Headquarters	5,608	6,942	7,117
Total, Strategic Petroleum Reserve	182,625	189,360	205,000