

**Strategic Petroleum Reserve  
Proposed Appropriation Language**

For Department of Energy expenses necessary 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.), \$214,175,000, to remain available until expended.

*Note. —A full-year 2022 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of P.L. 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.*

**Explanation of Changes**

The FY 2023 Request reflects increases for the Strategic Petroleum Reserve Cavern Integrity program, Maintenance program, Piping Integrity, Data Systems, and Cybersecurity and Physical Security Program activities, with a decrease to the Major Maintenance Program. The Request also funds the Northeast Gasoline Supply Reserve.

**Public Law Authorizations**

Public Law 109-58, “Energy Policy Act of 2005”

Bipartisan Budget Act of 2015 (P.L. 114-74, Section 403)

Bipartisan Budget Act of 2018 (P.L. 115-123)

Energy Policy and Conservation Act, P.L. 94-163, as amended, Section 151

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

<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted</b>
188,000	188,000	214,175	+26,175

**Overview**

The Strategic Petroleum Reserve (SPR) protects the U.S. economy from disruptions in critical petroleum supplies and meets United States (U.S.) obligations under the International Energy Program (Energy Policy and Conservation Act, P.L. 94-163, as amended, Section 151). The SPR benefits the U.S. by providing an insurance policy against potential interruptions in U.S. petroleum supplies, whether originating from domestic or international supply disruptions, natural disasters, sabotage, or acts of terrorism. The SPR also provides limited capability to lease excess storage space to outside entities.

The FY 2023 Budget supports the program’s operational readiness and drawdown capabilities. The SPR will continue conducting multiple, non-emergency crude oil sales in FY 2023 as directed by (1) the Bipartisan Budget Act of 2015 (P.L. 114-74, Section 403), which directs the sale of 10 million barrels in FY 2023, and (2) the Fixing America’s Surface Transportation (FAST) Act (Public Law 114-94), pursuant to which the SPR is directed to sell 66 million barrels from FY 2023 through FY 2025, of which the SPR will sell approximately 16 million barrels in FY 2023. Combined, the SPR anticipates total FY 2023 sales of about 26 million barrels.

The Northeast Gasoline Supply Reserve (NGSR) was administratively established in 2014 as part of the SPR to ease regional shortages resulting from sudden/unexpected supply interruptions (e.g., Superstorm Sandy). The NGSR consists of 1 million barrels of gasoline blendstock stored in leased commercial storage terminals located in Maine, Massachusetts, and New Jersey.

**Highlights and Major Changes in the FY 2023 Budget Request**

The SPR Program will pursue the following major activities in FY 2023:

- Equipment and facility maintenance to sustain drawdown capability.
- Legislatively directed non-emergency multi-year crude oil sales.
- Security Program and maintenance of security related infrastructure items.
- Storage cavern wellbore diagnostic and remediation activities using 1 workover rig and crew that includes 11 cavern wellbore workovers. This includes Mechanical Integrity Testing required for cavern wells, and repair actions when wells fail to meet standards during the 5-year state-required testing cycle.

FY 2023 funding includes the utilization of one rig and workover rig crew to perform 11 cavern wellbore workovers within the Cavern Integrity Program, compared to 2 cavern wellbore remediations and 4 cavern well workovers that were performed in FY 2021. Unanticipated cavern issues may require reprioritization of projects to fund emergency repairs with consideration to activities associated with normal operations, multi-year crude oil sales and the Life Extension II (LE2) Project. There are no planned Major Maintenance construction projects compared to 9 in FY 2021. An increase to the Maintenance Program supports preventive and corrective maintenance to equipment and infrastructure for Drawdown Readiness in a safe, timely, and environmentally compliant manner and in performing Congressionally mandated crude oil sales. With an increase to the Security Program it retains capable and adequate effectiveness in providing a deterrence and response posture to adversarial threats.

**Cybersecurity:** DOE is engaged in three categories of cyber-related activities: protecting the DOE enterprise from a range of cyber threats that can adversely impact mission capabilities; bolstering the U.S. Government’s capabilities to address cyber threats; and improving cybersecurity in the electric power subsector and the oil and natural gas subsector. The cybersecurity crosscut supports central coordination of the strategic and operational aspects of cybersecurity and facilitates cooperative efforts such as the Joint Cybersecurity Coordination Center for incident response and the implementation of Department-wide Identity Credential and Access Management.

	<b>Cyber- security</b>	<b>Total</b>
Facilities Development and Operations	3,144	3,144

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

	<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted (\$)</b>	<b>FY 2023 Request vs FY 2021 Enacted (%)</b>
<b>Strategic Petroleum Reserve</b>					
Facilities Development and Operations	160,949	160,949	164,818	+3,869	+2.4%
Management	27,051	27,051	27,642	+591	+2.2%
Northeast Gasoline Supply Reserve	0	0	21,715	+21,715	+100%
<b>Total, Strategic Petroleum Reserve</b>	<b>188,000</b>	<b>188,000</b>	<b>214,175</b>	<b>+26,175</b>	<b>+13.9%</b>
<b>Federal FTEs</b>	<b>126</b>	<b>126</b>	<b>126</b>	<b>0</b>	

**Future Years Energy Program (FYEP)  
(\$K)**

	<b>FY 2023 Request</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>
<b>Strategic Petroleum Reserve</b>	214,175	230,815	235,915	241,015	246,115

**Major Outyear Priorities and Assumptions**

In the FY 2012 Consolidated Appropriations Act (P.L. 112-74), Congress directed the Department to include a future-years energy program (FYEP) in subsequent requests that reflects the proposed appropriations for five years. For FY 2023, DOE proposes to submit a FYEP, to be included in the FY 2023 Budget, that shows outyear funding for each account for FY 2024 - FY 2027. By meeting this statutory requirement, DOE can plan better and focus on initiatives that go beyond a single year. This approach provides more insight into the long-term implications of annual budget decisions. Although the outyear funding levels will match the mechanically generated outyear totals published in the FY 2023 President's Budget within the MAX A-11 data set for both the 050 and non-050 accounts, the numbers are not indicative of any future budget request levels. Funding requests for FY 2024 through FY 2027 will be determined as part of the annual budget process. This approach provides more insight into the long-term implications of annual budget decisions. This FYEP section will include a brief narrative broadly discussing administration priorities that are not expected to change in the coming years and are expected to guide decisions in future budgets.

## Strategic Petroleum Reserve

### Overview

The Strategic Petroleum Reserve (SPR) protects the U.S. economy from disruptions in critical petroleum supplies or demand and meets U.S. obligations under the International Energy Program (Energy Policy and Conservation Act, P.L. 94-163, as amended, Section 151). The SPR benefits the U.S. by providing an insurance policy against potential interruptions in U.S. petroleum supplies or demand whether originating from domestic and international supply disruptions, natural disasters, sabotage, and acts of terrorism.

The SPR has 594 million barrels of crude oil inventory (as of December 31, 2021) stored in underground cavern storage, providing the U.S. with multiple geostrategic benefits, and bolstering the world's collective energy security system. 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 U.S. with international emergency assistance through its participation in the International Energy Agency (IEA) energy supply security initiatives. IEA members are required to maintain 90 days' worth of net petroleum import protection in government-owned and/or commercial stocks and have a commitment to participate with other stockholding nations in a coordinated release of stocks in the event of a major supply disruption. While the U.S. is a net exporter of crude oil and all petroleum products as defined by the IEA, the inventory of 594 million barrels of crude oil as of December 31, 2021 would provide about 189 days of 2021 net crude oil import protection (based on net crude oil imports of 3.143 million barrels per day as reported in the U.S. Energy Information Administration's Petroleum Supply Monthly with Data Through November 2021). The SPR has a maximum drawdown capability of over 4 million barrels per day, which could be made available in the event of an IEA collective action. The United States percentage share of an IEA collective action release is 42.4%, as of December 2021.

To accomplish its mission and address the challenges outlined above, the SPR program is organized into two subprograms: 1) Facilities Development and Operations and 2) 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 technical analysis of program initiatives and issues.

### Highlights of the FY 2023 Budget Request

SPR's underground storage caverns require maintenance to assure their storage capability and integrity. Ongoing oil sale activities increase equipment usage and run times and require consistent preventive, predictive and corrective maintenance to prevent or address equipment failures.

#### Cavern Integrity

The Casing Inspection and Cavern Remediation Program was developed in 2010 to remediate the anomalies in cavern wellbore casings. This is necessary to maintain the required level of operational and drawdown/fill capability. Cavern remediation and diagnostic workovers anticipate and remediate cavern wellbore failures that cause caverns to be removed from service, and in preventing potential environmental releases.

#### Maintenance and Major Maintenance

Maintenance of SPR equipment and facilities supports drawdown/fill readiness in a safe and environmentally compliant manner. Increased infrastructure use due to legislatively directed, multi-year crude oil sales require additional Maintenance and Major Maintenance activities to sustain operational readiness. It includes the maintenance of infrastructure items that support Physical Security.

Major changes in FY 2023 include no new planned Major Maintenance construction projects that will be a decrease from 9 in FY 2021. Increased maintenance activities in preventive and corrective maintenance, to equipment and facility infrastructure. The Cavern Integrity Program will perform 1 cavern wellbore remediation and 11 cavern wellbore workovers. With an increase to the Security Program it retains capable and adequate effectiveness in providing a deterrence and response posture to adversarial threats.

**Strategic Petroleum Reserve  
Funding (\$K)**

	<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted (\$)</b>	<b>FY 2023 Request vs FY 2021 Enacted (%)</b>
<b>Strategic Petroleum Reserve</b>					
Facilities Development and Operations	160,949	160,949	164,818	+3,869	+2.4%
Management	27,051	27,051	27,642	+591	+2.2%
Northeast Gasoline Supply Reserve	0	0	21,715	21,715	+100%
<b>Total, Strategic Petroleum Reserve</b>	<b>188,000</b>	<b>188,000</b>	<b>214,175</b>	<b>+26,175</b>	<b>+13.9%</b>
<b>Federal FTEs</b>	<b>126</b>	<b>126</b>	<b>126</b>	<b>0</b>	

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

<b>FY 2023 Request vs FY 2021 Enacted</b>
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<p><b>Facilities Development and Operations:</b> The Request reflects increases to the Cavern Integrity Program (+\$1,909); the Maintenance Program (+\$3,087); IT life-cycle upgrades; Physical Security Program for SPR sites (+\$569). and replacements for support systems projects and contractor service support (+\$4,329); it reflects decreases to the Major Maintenance Program (-\$6,025).</p>	<p><b>+3,869</b></p>
<p><b>Management:</b> The Request reflects an increase for salaries and benefits escalation, rent to others, and decreases to technical support services and funding to support for DOE field employee evacuation expenses in the event of a hurricane.</p>	<p><b>+591</b></p>
<p><b>Northeast Gasoline Supply Reserve:</b> The FY 2023 Budget Request reflects continuing support for the commercial gasoline storage leases.</p>	<p><b>+21,715</b></p>
<hr/> <p><b>Total, Strategic Petroleum Reserve</b></p>	<hr/> <p><b>+\$26,175</b></p>

**Strategic Petroleum Reserve  
Facilities Development and Operations**

**Description**

The Facilities Development and Operations subprogram funds activities to maintain the SPR's operational readiness capability for successful drawdowns/fills and operate the sites in a safe, secure, and environmentally acceptable manner. Despite a significant reduction in U.S. reliance on imported petroleum, with significant global reserves in regions of the world subject to political unrest, the U.S. economy remains vulnerable to price increases/decreases related to petroleum supply/demand disruptions. The SPR's stockpile of petroleum products and spare capacity diminishes these vulnerabilities to the effects of supply/demand disruptions.

The SPR's underground storage caverns require maintenance to assure their storage capability and integrity. Surface and sub-surface infrastructure and systems that must be maintained to meet operational readiness requirements have been identified and are funded in this subprogram.



**Facilities Development and Operations  
Funding**

**Activities and Explanation of Changes**

FY 2021 Enacted	FY 2023 Request	Explanation of Changes FY 2023 Request vs FY 2021 Enacted
<b>Facilities Development and Operations \$160,949,000</b>	<b>\$164,818,000</b>	<b>+\$3,869,000</b>
<b>Casing Inspections and Remediations \$31,456,000</b>	<b>Casing Inspections and Remediations \$33,365,000</b>	<b>Casing Inspections and Remediations +\$1,909,000</b>
<ul style="list-style-type: none"> <li>Funding level supports 1 cavern workover rig and leased crew to execute 2 remediation and 4 cavern wellbore diagnostic workovers.</li> </ul>	<ul style="list-style-type: none"> <li>Funding level supports 1 cavern workover rig and leased crew to execute 11 cavern wellbore diagnostic workovers.</li> </ul>	<ul style="list-style-type: none"> <li>The increase is for the Cavern Integrity Program that allows for an increase compared to FY 2021 of 7 cavern wellbore diagnostic workovers utilizing one leased rig and crew for cavern integrity operations to insure drawdown capability.</li> </ul>
<b>Major Maintenance \$9,814,000</b>	<b>Major Maintenance \$3,789,000</b>	<b>Major Maintenance -\$6,025,000</b>
<ul style="list-style-type: none"> <li>Continue approach to repair, replace, or upgrade equipment including Security, Environmental, Safety &amp; Health (ESH), Drawdown and Non-Drawdown critical systems.</li> </ul>	<ul style="list-style-type: none"> <li>Continue approach to repair, replace, or upgrade equipment including Security, ESH, Drawdown and Non-Drawdown critical systems.</li> </ul>	<ul style="list-style-type: none"> <li>Decreased funding level represents no planned construction projects in FY 2023 as compared to 9 in FY 2021. approach to repair, replace, or upgrade equipment including Security, ESH, Drawdown and Non-Drawdown critical systems.</li> </ul>
<b>Maintenance \$23,937,000</b>	<b>Maintenance \$27,024,000</b>	<b>Maintenance +\$3,087,000</b>
<ul style="list-style-type: none"> <li>Provides preventive/corrective/predictive maintenance of the SPR equipment and facilities to support drawdown readiness in a safe and environmentally compliant manner.</li> </ul>	<ul style="list-style-type: none"> <li>Provides preventive/corrective/predictive maintenance of the SPR equipment and facilities to support drawdown readiness in a safe and environmentally compliant manner.</li> </ul>	<ul style="list-style-type: none"> <li>The increase supports additional materials and services for maintenance of pumps, motors, valves, and actuators of drawdown/fill critical equipment while maintaining an acceptable level of risk of equipment failures which could affect drawdown/fill operations.</li> </ul>
<b>Security \$21,169,000</b>	<b>Security \$21,738,000</b>	<b>Security +\$569,000</b>
<ul style="list-style-type: none"> <li>Protect and defend personnel, property and resources against assault, sabotage, vandalism, theft, trespass, and compromise of sensitive as well as classified information.</li> </ul>	<ul style="list-style-type: none"> <li>Protect and defend personnel, property and resources against assault, sabotage, vandalism, theft, trespass, and compromise of sensitive as well as classified information.</li> </ul>	<ul style="list-style-type: none"> <li>The increase is for the Security Program to provide for a safe and secure workplace to meet DOE and Federal requirements for the protection of resources and information and ensuring drawdown readiness.</li> </ul>

FY 2021 Enacted	FY 2023 Request	Explanation of Changes FY 2023 Request vs FY 2021 Enacted
<p><b>Data Systems &amp; Support \$74,573,000</b></p> <ul style="list-style-type: none"> <li>Data Systems to support the mission of drawdown readiness, processing, sale, and receipt of goods (oil), communications, reporting, providing protection from malware and computer viruses, and all other activity associated with the use of data and information systems. Compliance requirements for Fire Protection, Department of Transportation (DOT) 5-year Navigable Waterway Inspection, Risk Management Approach Implementation Plan (RMAIP), Multi-Factor Authentication and Piping Assurance Program.</li> </ul>	<p><b>Data Systems &amp; Support \$78,902,000</b></p> <ul style="list-style-type: none"> <li>Data Systems to support the mission of drawdown readiness, processing, sale, and receipt of goods (oil), communications, reporting, providing protection from malware and computer viruses, and all other activity associated with the use of data and information systems. Compliance requirements for Fire Protection, DOT 5-year Navigable Waterway Inspection, RMIAP (Cyber Security), Multi-Factor Authentication and Piping Assurance Program.</li> </ul>	<p><b>Data Systems &amp; Support +\$4,329,000</b></p> <ul style="list-style-type: none"> <li>Funding level reflects an increase for replacement of life-cycle site operations equipment, data system server hardware and software upgrades, RMAIP, Piping Integrity Program, technical services support activities to include Engineering, Quality Assurance, Property Management, Procurement, Safety &amp; Health and Financial Management.</li> </ul>

**Strategic Petroleum Reserve  
Capital Summary<sup>1</sup> (\$K)**

	<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted (\$)</b>	<b>FY 2023 Request vs FY 2021 Enacted (%)</b>
<b>Capital Operating Expenses Summary (including MIE)</b>					
Capital Equipment > \$500K (including MIE)	6,795	6,795	0	-6,795	-100.0%
Plant Projects (GPP >\$10M)	0	0	0	0	0.0%
<b>Total, Capital Operating Expenses</b>	<b>6,795</b>	<b>6,795</b>	<b>0</b>	<b>-6,795</b>	<b>-100.0%</b>
<b>Capital Equipment &gt; \$500K (including MIE)</b>					
Total Non-MIE Capital Equipment (>\$500K)	6,795	6,795	0	-6,795	-100.0%
<b>Total, Capital Equipment (including MIE)</b>	<b>6,795</b>	<b>6,795</b>	<b>0</b>	<b>-6,795</b>	<b>-100.0%</b>
<b>Plant Projects (GPP - Total Estimated Cost &gt;\$10M)</b>					
<b>Total, Plant Projects (GPP – Total Estimated Cost)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>
<b>Total, Capital Summary</b>	<b>6,795</b>	<b>6,795</b>	<b>0</b>	<b>-6,795</b>	<b>-100.0%</b>

<sup>1</sup> This list of projects is illustrative and can be adjusted based on operational requirements, priorities, and/or funding.

## **Strategic Petroleum Reserve Management**

### **Overview**

Management provides funding for the salaries and related requirements of the Headquarters federal workforce responsible for providing programmatic policy, planning and oversight, to include strategic project planning, budget formulation and financial management, operations, engineering, safety, security, and technical analysis of programmatic activity of the SPR. The additional Federal workforce of the SPR Project Management Office directs program execution and establishes technical performance standards as well as scope, cost, and schedule milestones for the Management and Operations contractor.

### **Highlights of the FY 2023 Budget Request**

The Federal staff remains at 126 FTEs with additional technical support contractors. Travel is for operational field support and oversight, including site and vendor visits. Other related expenses include field building leases and telecommunications activities.

**Management  
Funding (\$K)**

	<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted (\$)</b>	<b>FY 2023 Request vs FY 2021 Enacted (%)</b>
<b>Program Direction Summary</b>					
<b>Washington Headquarters</b>					
Salaries and Benefits	5,674	5,674	5,844	+170	+3.0%
Travel	130	130	120	-10	-7.7%
Support Services	2,109	2,109	1,619	-490	-23.2%
Other Related Expenses	1,087	1,087	917	-170	-15.6%
<b>Total, Washington Headquarters</b>	<b>9,000</b>	<b>9,000</b>	<b>8,500</b>	<b>-500</b>	<b>-5.6%</b>
<b>Strategic Petroleum Reserve Project Management Office</b>					
Salaries and Benefits	15,172	15,172	15,941	+769	+5.1%
Travel	604	604	575	-29	-4.8%
Support Services	450	450	715	+265	+58.9%
Other Related Expenses	1,825	1,825	1,911	+86	+4.7%
<b>Total, SPR Project Management Office</b>	<b>18,051</b>	<b>18,051</b>	<b>19,142</b>	<b>+1,091</b>	<b>+6.0%</b>
<b>Total Management</b>					
Salaries and Benefits	20,846	20,846	21,785	+939	+4.5%
Travel	734	734	695	-39	-5.3%
Support Services	2,559	2,559	2,334	-225	-8.8%
Other Related Expenses	2,912	2,912	2,828	-84	-2.9%
<b>Total, Management</b>	<b>27,051</b>	<b>27,051</b>	<b>27,642</b>	<b>+591</b>	<b>+2.2%</b>
<b>Federal FTEs</b>	<b>126</b>	<b>126</b>	<b>126</b>	<b>0</b>	

	FY 2021 Enacted	FY 2022 Annualized CR	FY 2023 Request	FY 2023 Request vs FY 2021 Enacted (\$)	FY 2023 Request vs FY 2021 Enacted (%)
<b>Support Services</b>					
Technical Support					
Economic & Environmental Analysis	570	570	570	0	0.0%
Total, Technical Support	<b>570</b>	<b>570</b>	<b>570</b>	<b>0</b>	<b>0.0%</b>
Management Support					
Training and OPM Recruitment	150	150	150	0	0.0%
Technical Support	1,839	1,839	1,614	-225	-12.2%
Total Management Support	<b>1,989</b>	<b>1,989</b>	<b>1,764</b>	<b>-225</b>	<b>-11.3%</b>
<b>Total, Support Services</b>	<b>2,559</b>	<b>2,559</b>	<b>2,334</b>	<b>-225</b>	<b>-8.8%</b>
<b>Other Related Expenses</b>					
Rent to Others	636	636	719	+83	+13.1%
Communications, Utilities, Misc.	77	77	109	+32	+41.6%
Other Services	1,699	1,699	1,350	-349	-20.5%
Supplies and Materials	50	50	50	0	0.0%
Equipment	450	450	600	+150	+33.30%
<b>Total, Other Related Expenses</b>	<b>2,912</b>	<b>2,912</b>	<b>2,828</b>	<b>-84</b>	<b>-2.9%</b>

**Management  
Funding**

**Activities and Explanation of Changes**

FY 2021 Enacted	FY 2023 Request	Explanation of Changes FY 2023 Request vs FY 2021 Enacted
<b>Management \$27,051,000</b>	<b>\$27,642,000</b>	<b>+\$591,000</b>
<b>Salaries and Benefits \$20,846,000</b>	<b>\$21,785,000</b>	<b>+\$939,000</b>
<ul style="list-style-type: none"> <li>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&amp;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.</li> </ul>	<ul style="list-style-type: none"> <li>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&amp;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.</li> </ul>	<ul style="list-style-type: none"> <li>Increase reflects escalation in costs.</li> </ul>
<b>Travel \$734,000</b>	<b>\$695,000</b>	<b>-\$39,000</b>
<ul style="list-style-type: none"> <li>Provides travel to assure capability to achieve Level 1 Performance criteria for drawdown and distribution of the Reserve.</li> </ul>	<ul style="list-style-type: none"> <li>Provides travel to assure capability to achieve Level 1 Performance criteria for drawdown and distribution of the Reserve.</li> </ul>	<ul style="list-style-type: none"> <li>Minor reduction in travel is due to more virtual capability being used .Supports travel required to ensure the reserve is drawdown ready.</li> </ul>
<b>Support Services \$2,559,000</b>	<b>\$2,334,000</b>	<b>-\$225,000</b>
<ul style="list-style-type: none"> <li>Activities support project-planning efforts to maintain technical, mission essential support capabilities.</li> </ul>	<ul style="list-style-type: none"> <li>Activities support project-planning efforts to maintain technical, mission essential support capabilities.</li> </ul>	<ul style="list-style-type: none"> <li>Decrease reflects reduced project-planning efforts for technical analysis which support programmatic planning and capability requirements.</li> </ul>
<b>Other Related Expenses \$2,912,000</b>	<b>\$2,828,000</b>	<b>-\$84,000</b>
<ul style="list-style-type: none"> <li>Provides teleconferencing capabilities between sites; field site building leases; analytical support services and materials; Information Technology (IT) hardware and software materials and services support; and contingency for DOE field employee evacuation expenses in the event of a hurricane.</li> </ul>	<ul style="list-style-type: none"> <li>Provides teleconferencing capabilities between sites; field site building leases; analytical support services and materials; Information Technology (IT) hardware and software materials and services support.</li> </ul>	<ul style="list-style-type: none"> <li>Decrease reflects increases for the cost of field site building leases, IT hardware and software materials and services and a decrease in the cost of supporting DOE field employee evacuation expenses in the event of a hurricane.</li> </ul>

**Strategic Petroleum Reserve  
Facilities Maintenance and Repair**

The SPR Program’s Facilities Maintenance and Repair activities are tied to its programmatic missions, goals, and objectives. The Facilities Maintenance and Repair activities funded by this budget and displayed below are intended to halt asset condition degradation.

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

	FY 2021 Actual Cost	FY 2021 Planned Cost	FY 2022 Planned Cost	FY 2023 Planned Cost
Strategic Petroleum Reserve	34,472	32,792	32,113	29,822
<b>Total, Direct-Funded Maintenance and Repair</b>	<b>34,472</b>	<b>32,792</b>	<b>32,113</b>	<b>29,822</b>

**Report on FY 2021 Expenditures for Maintenance and Repair**

This report responds to legislative language set forth in Conference Report (H.R. 108-10) accompanying the Consolidated Appropriations Resolution, 2003 (Public Law 108-7) (pages 886-887), which requests the Department of Energy provide an annual year-end report on maintenance expenditures to the Committees on Appropriations. This report compares the actual maintenance expenditures in FY 2021 to the amount planned for FY 2021, including congressionally directed changes.

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

	FY 2021 Actual Cost	FY 2021 Planned Cost
Strategic Petroleum Reserve	34,472	32,792
<b>Total, Direct-Funded Maintenance and Repair</b>	<b>34,472</b>	<b>32,792</b>



**18-E-001, Strategic Petroleum Reserve (SPR) Modernization  
Various locations**

**Project Data Sheet for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary**

Initially, the SPR Modernization Program was comprised of two projects: the Life Extension Phase II (LE2) project (18-E-001-01), and the Marine Terminal Distribution Capability Enhancements (MTE) project (18-E-001-02); however, the MTE project has since been cancelled due to lack of current mission need. The LE2 project will modernize aging SPR infrastructure through systems upgrades and associated equipment replacement to ensure continued ability to meet mission requirements for the next 15-25 years. LE2 activities will occur at all four SPR storage sites: Bryan Mound, Big Hill, West Hackberry, and Bayou Choctaw. This Project Data sheet does not include the impacts to LE2 from the Presidentially ordered drawdown of March 2022 as the impacts are currently being definitized for all four sites. All cost and schedule data in this data sheet is subject to change once those impacts are definitized.

The Energy Security and Infrastructure Modernization (ESIM) Fund was established as the funding source for the SPR Modernization Program. The ESIM fund contains offsetting collections from the sale of SPR crude up to the authorized annual revenue ceiling. These sales are limited to the period of fiscal years 2017 through 2020. However, the final sale in FY 2020 did not occur because of a lack of demand related to the COVID-19 virus. Section 14002 of the CARES Act (P.L. 116-136) provided the Department flexibility to conduct the final sale in FY 2020, FY 2021, or FY 2022. The final sale was ultimately conducted in FY 2021. Oil sales proceeds were as follows: 2017: \$323,195,827; 2018: \$347,828,624; 2019: \$299,999,961; and 2021: \$449,999,980, for a total of \$1,421,024,392.

**Significant Changes**

**LE2 Project:**

This Construction Project Data Sheet (CPDS) is an update from Fiscal Year 2022 and does not include a new start for the budget year. This year's CPDS is the first time individual sub project information has been broken out. Design is substantially complete, and three subprojects (Bryan Mound, Bayou Choctaw, and Big Hill) received CD-2 Approve Project Baseline and CD-3 Approve Start of Construction on June 23, 2021. West Hackberry is expected to receive CD-2 Approve Project Baseline and CD-3 Approve Start of Construction during FY 2022.

The most recent approved Critical Decision for LE2 is CD-2/3 for the Bryan Mound, Bayou Choctaw, and Big Hill sites on June 23, 2021. The Total Project Cost (TPC) baselined for each site with an 85% confidence level was as follows:

- 1) Bryan Mound (18-E-001-01-02): \$315M with an approved CD-4 date of May 2025.
- 2) Big Hill (18-E-001-01-01): \$457M, with an approved CD-4 date of February 2025.
- 3) Bayou Choctaw (18-E-001-01-03): \$355M, with an approved CD-4 date of February 2025.
- 4) Multiple CD-3X's, acquisition of long lead equipment and site preparatory work, have been approved between FY 2017 and FY 2021.

The most recent Critical Decision for West Hackberry is CD-1 on December 22, 2016 with CD-2 Approve Baseline and CD-3 Approve Start of Construction schedule for 3<sup>rd</sup> quarter FY 2022.

A Level 2 Federal Project Director (FPD) has been assigned to this project and has approved this Construction Project Data Sheet (CPDS). Federal Project Directors have also been assigned for each site (sub-project) and are working toward required Level 3 certification.

**MTE Project:**

The Marine Terminal Distribution Capability Enhancements project scope did not receive Congressional funding authority in FY 2018. On May 21, 2018, the Under Secretary of Energy signed a memorandum approving the cancelation of the Strategic Petroleum Reserve Marine Terminal Distribution Capability Enhancement project.

**Life Extension Phase II:**

**Critical Milestone History: Overall Life Extension II**

	CD-0	Conceptual Design Complete	CD-1	CD-2	Final Design Complete	CD-3	CD-4
FY 2018	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	4 <sup>th</sup> Qtr. 2024
FY 2019	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	4 <sup>th</sup> Qtr. 2024
FY 2020	10/30/15	09/01/16	12/22/16	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2024
FY 2021	10/30/15	09/01/16	12/22/16	2 <sup>nd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	4 <sup>th</sup> Qtr. 2024
FY 2022	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	3 <sup>rd</sup> Qtr. 2021	4 <sup>th</sup> Qtr. 2024
FY 2023*	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2022	3 <sup>rd</sup> Qtr. 2022**	3 <sup>rd</sup> Qtr. 2022	1 <sup>st</sup> Qtr. 2026***

Mission Need for a construction project with a conceptual scope and cost range

**Conceptual Design Complete** – Actual date the conceptual design was completed (if applicable)

**CD-1** – Approve Alternative Selection and Cost Range

**CD-2** – Approve Performance Baseline

**Final Design Complete** – Estimated/Actual date the project design will be/was complete(d)

**CD-3** – Approve Start of Construction

**Deactivation & Decommissioning Complete** –Completion of D&D work

**CD-4** – Approve Start of Operations or Project Completion

**PB** – Indicates the Performance Baseline

\* Project has CD-2 and CD-3 approval for Bryan Mound, Bayou Choctaw, and Big Hill. West Hackberry anticipated CD-2 and CD-3 approvals within FY2022.

\*\*Some re-design to occur at West Hackberry resulting from April 2022 DOE directed descopes

\*\*\* West Hackberry estimated CD-4 completion 1<sup>st</sup> Qtr. FY 2026

**Milestone History: Bryan Mound**

	CD-0	Conceptual Design Complete	CD-1	CD-2	Final Design Complete	CD-3	CD-4
FY 2018	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	4 <sup>th</sup> Qtr. 2024
FY 2019	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	4 <sup>th</sup> Qtr. 2024
FY 2020	10/30/15	09/01/16	12/22/16	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2024
FY 2021	10/30/15	09/01/16	12/22/16	2 <sup>nd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	4 <sup>th</sup> Qtr. 2024
FY 2022	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	3 <sup>rd</sup> Qtr. 2021	4 <sup>th</sup> Qtr. 2024
FY 2023	10/30/15	09/01/16	12/22/16	06/23/21	4/12/21	6/23/21	3 <sup>rd</sup> Qtr. 2025

**Critical Milestone History: West Hackberry**

	CD-0	Conceptual Design Complete	CD-1	CD-2	Final Design Complete	CD-3	CD-4
FY 2018	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	4 <sup>th</sup> Qtr. 2024
FY 2019	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	4 <sup>th</sup> Qtr. 2024
FY 2020	10/30/15	09/01/16	12/22/16	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2024
FY 2021	10/30/15	09/01/16	12/22/16	2 <sup>nd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	4 <sup>th</sup> Qtr. 2024
FY 2022	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	3 <sup>rd</sup> Qtr. 2021	4 <sup>th</sup> Qtr. 2024
FY 2023	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2022	3 <sup>rd</sup> Qtr. 2022	3 <sup>rd</sup> Qtr. 2022	1 <sup>st</sup> Qtr. 2026

**Critical Milestone History: Bayou Choctaw**

	CD-0	Conceptual Design Complete	CD-1	CD-2	Final Design Complete	CD-3	CD-4
FY 2018	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	4 <sup>th</sup> Qtr. 2024
FY 2019	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	4 <sup>th</sup> Qtr. 2024
FY 2020	10/30/15	09/01/16	12/22/16	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2024
FY 2021	10/30/15	09/01/16	12/22/16	2 <sup>nd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	4 <sup>th</sup> Qtr. 2024
FY 2022	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	3 <sup>rd</sup> Qtr. 2021	4 <sup>th</sup> Qtr. 2024
FY 2023	10/30/15	09/01/16	12/22/16	6/23/21	5/21/21	6/23/21	2 <sup>nd</sup> Qtr. 2025

**Critical Milestone History: Big Hill**

	CD-0	Conceptual Design Complete	CD-1	CD-2	Final Design Complete	CD-3	CD-4
FY 2018	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	4 <sup>th</sup> Qtr. 2024
FY 2019	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	3 <sup>rd</sup> Qtr. 2019	4 <sup>th</sup> Qtr. 2024
FY 2020	10/30/15	09/01/16	12/22/16	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2020	4 <sup>th</sup> Qtr. 2024
FY 2021	10/30/15	09/01/16	12/22/16	2 <sup>nd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	4 <sup>th</sup> Qtr. 2024
FY 2022	10/30/15	09/01/16	12/22/16	3 <sup>rd</sup> Qtr. 2021	2 <sup>nd</sup> Qtr. 2021	3 <sup>rd</sup> Qtr. 2021	4 <sup>th</sup> Qtr. 2024
FY 2023	10/30/15	09/01/16	12/22/16	6/23/21	5/12/21	6/23/21	2 <sup>nd</sup> Qtr. 2025

**Sub-projects: Bryan Mound and Big Hill**

Subproject	Fiscal Year	Performance Baseline Validation	CD-3A	CD-3B	CD-3C	CD-3D
BM,BH	FY 2017		07/14/17			
BM,BH	FY 2018					
BM, BH	FY 2019			11/20/18		
BM, BH	FY 2020				10/25/2019	
BM, BH	FY 2021	6/23/2021				01/2021
BM, BH	FY 2022					
BM, BH	FY 2023					

- CD-3A – Approve Long-Lead Procurements, Original Scope
- CD-3B – Approve Long-Lead Procurements, Revised Scope
- CD-3C – Approve Long-Lead Procurements, Revised Scope
- CD-3D – Approve Long-Lead Procurements, Revised Scope

**Sub-project: Bayou Choctaw**

Subproject	Fiscal Year	Performance Baseline Validation	CD-3A	CD-3B	CD-3C	CD-3D
BC	FY 2019		11/20/18			
BC	FY 2020			10/25/2019		
BC	FY 2021	6/23/2021			01/2021	
BC	FY 2022					
BC	FY 2023					

**Sub-project: West Hackberry**

Subproject	Fiscal Year	Performance Baseline Validation	CD-3A	CD-3B	CD-3C	CD-3D
WH	FY 2017		07/14/17			
WH	FY 2018					
WH	FY 2019			11/20/18		
WH	FY 2020				10/25/2019	
WH	FY 2021					01/2021
WH	FY 2022	3rd Qtr. 2022				
WH	FY 2023					

**Project Cost History**

	TEC, Design (\$000)	TEC, Construction (\$000)	TEC, Total (\$000)	OPC Except D&D (\$000)	OPC, D&D (\$000)	OPC, Total (\$000)	TPC (\$000)
FY 2018	\$100,628	\$1,299,372	\$1,400,000	\$6,711	\$0	\$6,711	\$1,406,711
FY 2019	\$199,749*	\$800,251	\$1,000,000**	\$5,250	\$0	\$5,250	\$1,005,250
FY 2020	\$276,383	\$1,163,617***	\$1,440,000***	\$5,250	\$0	\$5,250	\$1,445,250***
FY 2021	\$392,886	\$1,047,114	\$1,440,000	\$5,250	\$0	\$5,250	\$1,445,250
FY 2022	\$392,886	\$1,022,888	\$1,415,774	\$5,250	\$0	\$5,250	\$1,421,024
FY 2023	\$354,657	\$1,061,117	\$1,415,774	\$5,250	\$0	\$5,250	\$1,421,024

The costs are only estimates as of July 2021 and consistent with the high end of the cost ranges. No construction funds, except for approved long lead procurement, will be used until the project performance baseline for each sub-project has been validated and CD-3 has been approved. CD-2/3 was approved in June 2021 for the Bayou Choctaw, Big Hill, and Bryan Mound sites. CD-2/3 for the West Hackberry site is expected to be approved in the third quarter of FY 2022.

\*The increase in design cost is due to: 1) competing the design contract instead of using a reach-back contract to the M&O contractor partner; 2) adding fee to competed contract; 3) adding escalation to schedule delay caused by competing design contract; and 4) adding engineering cost associated with additional scope (deleted scope was represented completely in construction cost).

\*\* The maximum range project cost of \$1.42B was approved at CD-1.

\*\*\*The Project Scope was expanded to include drilling 17 new wells at two sites. The costs for FY 2020 entry have been revised to reflect the increase in scope. This scope has been subsequently removed to stay within the \$1.42 B funding limit.

Note: The table above is a summation of the sub-projects. The tables below are broken out by sub-project starting for the 2023 submittal as previous data sheets were submitted for total project only.

**Sub-Project Cost History: Bryan Mound**

	TEC, Design (\$000)	TEC, Construction (\$000)	TEC, Total (\$000)	OPC Except D&D (\$000)	OPC, D&D (\$000)	OPC, Total (\$000)	TPC (\$000)
FY 2023*	\$69,661	\$243,670	\$313,331	\$1,313	\$0	\$1,313	\$314,644

\*Current submission is first year reporting data by sub-project

**Sub-Project Cost History: West Hackberry**

	TEC, Design (\$000)	TEC, Construction (\$000)	TEC, Total (\$000)	OPC Except D&D (\$000)	OPC, D&D (\$000)	OPC, Total (\$000)	TPC (\$000)
FY 2023*	\$97,041	\$196,099	\$293,140	\$1,313	\$0	\$1,313	\$294,453

\*Current submission is first year reporting data by sub-project

**Sub-Project Cost History: Bayou Choctaw**

	TEC, Design (\$000)	TEC, Construction (\$000)	TEC, Total (\$000)	OPC Except D&D (\$000)	OPC, D&D (\$000)	OPC, Total (\$000)	TPC (\$000)
FY 2023*	\$94,338	\$259,134	\$353,472	\$1,313	\$0	\$1,313	\$354,785

\*Current submission is first year reporting data by sub-project

**Sub-Project Cost History: Big Hill**

	TEC, Design (\$000)	TEC, Construction (\$000)	TEC, Total (\$000)	OPC Except D&D (\$000)	OPC, D&D (\$000)	OPC, Total (\$000)	TPC (\$000)
FY 2023*	\$95,350	\$360,480	\$455,830	\$1,313	\$0	\$1,313	\$457,143

\*Current submission is first year reporting data by sub-project

**2. Project Scope and Justification****Scope**

The Strategic Petroleum Reserve-Life Extension 2 (SPR-LE2) project involves work at all four SPR storage sites: Bryan Mound, Big Hill, West Hackberry, and Bayou Choctaw. The SPR-LE2 project will be managed as four sub-projects based on site location for baseline development, field execution, and project completion. Completion of the SPR-LE2 project will extend SPR key equipment and infrastructure capabilities for an additional 15-25 years and assure the required drawdown of 4.4 million barrels per day of hydraulic capability is maintained. Actual drawdown rate is highly dependent on cavern/site inventory level. The scope at each of the four SPR storage facilities includes modernization of aging SPR infrastructure through systems upgrades and associated equipment replacement including repair or replacement of crude oil transfer systems, raw water systems, brine disposal systems, power distribution and lighting systems, and physical security systems. It also includes building and installation of a new portable degasification plant at the Bayou Choctaw site.

**Justification**

In August 2016, the Department of Energy published a Long-Term Strategic Review (LTSR) of SPR capabilities and infrastructure. The LTSR compared current operational capability to Level 1 Technical and Performance Criteria and identified gaps within the storage site infrastructure and distribution system necessary to provide the design delivery rate

of 4.4 million barrels per day if capacity is completely filled, now and for the next 25 years. The results indicated that a significant investment in infrastructure and process equipment is critical to ensure the SPR can maintain readiness, meet mission requirements, and operate in an environmentally responsible manner. The SPR-LE2 Project addresses these requirements within the four (4) subprojects. Current surface assets and systems are past or near their original design life of 25 years. Revitalization of many, but not all, of those assets and systems last occurred from 1995 to 2000 under the first LEP. As these assets continue to age, modernization will be required – either through additional maintenance and/or repair, or outright replacement.

The project is being conducted in accordance with the project management requirements in DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*.

**Preliminary Key Performance Parameters (KPPs)**

The Threshold KPPs represent the minimum acceptable performance that the project must achieve. Achievement of the Threshold KPPs will be a prerequisite for approval of CD-4, Project Completion. The Objective KPPs represent the desired project performance for all four (4) subprojects. The preliminary KPPs will be finalized when the project is baselined at CD-2.

<b>Preliminary Performance Measure - SPR</b>	<b>Threshold</b>	<b>Objective</b>
Raw Water Withdrawal Rate	4.5 MMBD*	4.5 MMBD*
Peak Sustained Drawdown Rate	4.4 MMBD*	4.4 MMBD*
Site Fill Rate	605 MBD**	605 MBD**

\*At full capacity. MMBD is Million Barrels per day.

\*\*At full capacity. MBD is Thousand Barrels per day.

<b>Preliminary Performance Measure – Bryan Mound</b>	<b>Threshold</b>	<b>Objective</b>
Raw Water Withdrawal Rate	1545MBD	1545MBD
Peak Sustained Drawdown Rate	1500MBD	1500MBD
Site Fill Rate	225MBD	225MBD

<b>Preliminary Performance Measure – West Hackberry</b>	<b>Threshold</b>	<b>Objective</b>
Raw Water Withdrawal Rate	1339MBD	1339MBD
Peak Sustained Drawdown Rate	1300MBD	1300MBD
Site Fill Rate	225MBD	225MBD

<b>Preliminary Performance Measure – Bayou Choctaw</b>	<b>Threshold</b>	<b>Objective</b>
Raw Water Withdrawal Rate	530MBD	530MBD
Peak Sustained Drawdown Rate	515MBD	515MBD
Site Fill Rate	110MBD	110MBD

<b>Preliminary Performance Measure – Big</b>	<b>Threshold</b>	<b>Objective</b>
Raw Water Withdrawal Rate	1133MBD	1133MBD
Peak Sustained Drawdown Rate	1100MBD	1100MBD
Site Fill Rate	225MBD	225MBD

### 3. Project Cost and Schedule

#### Financial Schedule (LE2 Project Summary)

	(\$K)		
	Appropriations (Budget Authority)	Obligations	Costs
Total Estimated Cost (TEC)			
Design			
FY 2015	\$0	\$0	\$0
FY 2016	\$0	\$0	\$0
FY 2017	\$137,215	\$137,215	\$4,159
FY 2018	\$116,377	\$116,377	\$59,036
FY 2019	\$68,480	\$68,480	\$74,893
FY 2020	\$7,760	\$7,760	\$68,487
FY 2021	\$24,825	\$24,825	\$44,039
FY 2022	\$0	\$0	\$47,028
FY 2023	\$0	\$0	\$34,916
FY 2024	\$0	\$0	\$20,395
FY 2025	\$0	\$0	\$1,704
<b>Total, Design a</b>	<b>\$354,657</b>	<b>\$354,657</b>	<b>\$354,657</b>
Construction			
FY 2015	\$0	\$0	\$0
FY 2016	\$0	\$0	\$0
FY 2017	\$27,400	\$27,400	\$0
FY 2018 <b>b</b>	\$338,284	\$338,284	\$483
FY 2019	\$262,459	\$262,459	\$729
FY 2020	\$0	\$0	\$26,076
FY 2021	\$432,974	\$432,974	\$61,857
FY 2022	\$0	\$0	\$249,357
FY 2023	\$0	\$0	\$500,907
FY 2024	\$0	\$0	\$212,269
FY 2025	\$0	\$0	\$9,439
<b>Total, Construction</b>	<b>\$1,061,117</b>	<b>\$1,061,117</b>	<b>\$1,061,117</b>

(\$K)

	Appropriations (Budget Authority)	Obligations	Costs
TEC			
FY 2015	\$0	\$0	\$0
FY 2016	\$0	\$0	\$0
FY 2017	\$164,615	\$164,615	\$4,159
FY 2018	\$454,661	\$454,661	\$59,519
FY 2019	\$330,939	\$330,939	\$75,622
FY 2020	\$7,760	\$7,760	\$94,563
FY 2021	\$457,799	\$457,799	\$105,896
FY 2022	\$0	\$0	\$296,385
FY 2023	\$0	\$0	\$535,823
FY 2024	\$0	\$0	\$232,663
FY 2025	\$0	\$0	\$11,143
Total, TEC	\$1,415,774	\$1,415,774	\$1,415,774
Other Project Cost (OPC)			
FY 2015 <b>c, d</b>	\$88	\$88	\$88
FY 2016 <b>c, d</b>	\$4,190	\$4,190	\$4,190
FY 2017 <b>d</b>	\$972	\$972	\$699
FY 2018 <b>d</b>	\$0	\$0	\$273
FY 2019	\$0	\$0	\$0
FY 2020	\$0	\$0	\$0
FY 2021	\$0	\$0	\$0
FY 2022	\$0	\$0	\$0
FY 2023	\$0	\$0	\$0
FY 2024	\$0	\$0	\$0
FY 2025	\$0	\$0	\$0
Total, OPC	\$5,250	\$5,250	\$5,250



(\$K)

Appropriations (Budget Authority)	Obligations	Costs
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Total Project Cost  
(TPC)

FY 2015	\$88	\$88	\$88
FY 2016	\$4,190	\$4,190	\$4,190
FY 2017 <b>e</b>	\$340,972	\$165,587	\$4,858
FY 2018 <b>f</b>	\$350,000	\$454,661	\$59,792
FY 2019 <b>g, j</b>	\$300,000	\$330,939	\$75,622
FY 2020 <b>h</b>	\$0	\$7,760	\$94,563
FY 2021 <b>i</b>	\$425,774	\$457,799	\$105,896
FY 2022	\$0	\$0	\$296,385
FY 2023	\$0	\$0	\$535,823
FY 2024	\$0	\$0	\$232,663
FY 2025	\$0	\$0	\$11,143
<b>Total, TPC d,k</b>	<b>\$1,421,024</b>	<b>\$1,421,024</b>	<b>\$1,421,024</b>

**a:** DOE and DOE support labor; M&O project support.

**b:** Bayou Choctaw CD-3A Degas Plant.

**c:** Includes costs for Office of Project Management.

**d:** Funding requirements are included in the Facilities Appropriation 089X0218.

**e:** FY 2017 Omnibus authorized oil sales target of \$340,000,000 (Appropriation). Actual proceeds were \$323,195,827.

**f:** FY 2018 Omnibus authorized oil sales target of \$350,000,000 (Appropriation). Actual proceeds were \$347,828,624.

**g:** FY 2019 Omnibus authorized oil sales target of \$300,000,000 (Appropriation). Actual proceeds were \$299,999,961.

**h:** FY 2020 Omnibus authorized oil sales target of \$450,000,000 (Appropriation). Sales postponed and authorized completion no later than FY 2022 as part of the CARES Act (P.L. 116-136).

**i:** FY 2021 Omnibus authorized oil sales target of \$450,000,000 (Appropriation). Actual proceeds were \$499,999,980.

**j:** Includes costs for Office of Project Management EIR which will be funded from the DOE Contingency within LE 2 funds.

**k:** The Total Project Cost (TPC) of \$1.4B was approved at CD-1, and final scope will be established at CD-2. The TPC for obligations and costs is the total of funds from Facilities Appropriation and funding received through the sale of SPR crude oil.

**Note:** Project is being funded through the sale of SPR crude oil and not through the normal congressional appropriations process.

**Financial Schedule – Bryan Mound**

(dollars in thousands)

Obligations	Costs
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Total Estimated Cost (TEC)

Design

FY 2015	\$0	\$0
FY 2016	\$0	\$0
FY 2017	\$14,956	\$874
FY 2018	\$22,289	\$11,676
FY 2019	\$10,480	\$11,699
FY 2020	\$1,940	\$12,747
FY 2021	\$19,996	\$9,125
FY 2022	\$0	\$9,977
FY 2023	\$0	\$7,852
FY 2024	\$0	\$5,711
FY 2025	\$0	\$0

Total, Design	\$69,661	\$69,661
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Construction

FY 2015	\$0	\$0
FY 2016	\$0	\$0
FY 2017	\$3,400	\$0
FY 2018	\$48,884	\$353
FY 2019	\$50,000	\$0
FY 2020	\$0	\$2,289
FY 2021	\$141,386	\$13,563
FY 2022	\$0	\$74,844
FY 2023	\$0	\$112,557
FY 2024	\$0	\$40,064
FY 2025	\$0	\$0

Total, Construction	\$243,670	\$243,670
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**Financial Schedule – Bryan Mound, continued**

	(dollars in thousands)	
	Obligations	Costs
TEC		
FY 2015	\$0	\$0
FY 2016	\$0	\$0
FY 2017	\$18,356	\$874
FY 2018	\$71,173	\$12,029
FY 2019	\$60,480	\$11,699
FY 2020	\$1,940	\$15,036
FY 2021	\$161,382	\$22,688
FY 2022	\$0	\$84,821
FY 2023	\$0	\$120,409
FY 2024	\$0	\$45,775
FY 2025	\$0	\$0
Total, TEC	\$313,331	\$313,331
Other Project Cost (OPC)		
FY 2015	\$22	\$22
FY 2016	\$1,048	\$1,048
FY 2017	\$243	\$175
FY 2018	\$0	\$68
FY 2019	\$0	\$0
FY 2020	\$0	\$0
FY 2021	\$0	\$0
FY 2022	\$0	\$0
FY 2023	\$0	\$0
FY 2024	\$0	\$0
FY 2025	\$0	\$0
Total, OPC	\$1,313	\$1,313
Total Project Cost (TPC)		
FY 2015	\$22	\$22
FY 2016	\$1,048	\$1,048
FY 2017	\$18,599	\$1,049
FY 2018	\$71,173	\$12,097
FY 2019	\$60,480	\$11,699
FY 2020	\$1,940	\$15,036
FY 2021	\$161,382	\$22,688
FY 2022	\$0	\$84,821
FY 2023	\$0	\$120,409
FY 2024	\$0	\$45,775
FY 2025	\$0	\$0
Total, TPC	\$314,644	\$314,644

**Financial Schedule – West Hackberry**

(dollars in thousands)

	Obligations	Costs
Total Estimated Cost (TEC)		
Design		
FY 2015	\$0	\$0
FY 2016	\$0	\$0
FY 2017	\$24,801	\$1,072
FY 2018	\$27,043	\$14,861
FY 2019	\$23,000	\$21,382
FY 2020	\$1,940	\$16,889
FY 2021	\$18,524	\$12,622
FY 2022	\$0	\$10,367
FY 2023	\$0	\$9,379
FY 2024	\$0	\$7,032
FY 2025	\$0	\$1,704
Total, Design	\$95,308	\$95,308
Construction		
FY 2015	\$0	\$0
FY 2016	\$0	\$0
FY 2017	\$3,000	\$0
FY 2018	\$111,269	\$130
FY 2019	\$99,819	\$710
FY 2020	\$0	\$1,426
FY 2021	(\$16,256)	\$12,394
FY 2022	\$0	\$38,101
FY 2023	\$0	\$96,663
FY 2024	\$0	\$38,969
FY 2025	\$0	\$9,439
Total, Construction	\$197,832	\$197,832

**Financial Schedule – West Hackberry, continued**

	(dollars in thousands)	
	Obligations	Costs
TEC		
FY 2015	\$0	\$0
FY 2016	\$0	\$0
FY 2017	\$27,801	\$1,072
FY 2018	\$138,312	\$14,991
FY 2019	\$122,819	\$22,092
FY 2020	\$1,940	\$18,315
FY 2021	\$2,268	\$25,016
FY 2022	\$0	\$48,468
FY 2023	\$0	\$106,042
FY 2024	\$0	\$46,001
FY 2025	\$0	\$11,143
Total, TEC	\$293,140	\$293,140
Other Project Cost (OPC)		
FY 2015	\$22	\$22
FY 2016	\$1,048	\$1,048
FY 2017	\$243	\$175
FY 2018	\$0	\$68
FY 2019	\$0	\$0
FY 2020	\$0	\$0
FY 2021	\$0	\$0
FY 2022	\$0	\$0
FY 2023	\$0	\$0
FY 2024	\$0	\$0
FY 2025	\$0	\$0
Total, OPC	\$1,313	\$1,313
Total Project Cost (TPC)		
FY 2015	\$22	\$22
FY 2016	\$1,048	\$1,048
FY 2017	\$28,044	\$1,247
FY 2018	\$138,312	\$15,059
FY 2019	\$122,819	\$22,092
FY 2020	\$1,940	\$18,315
FY 2021	\$2,268	\$25,016
FY 2022	\$0	\$48,468
FY 2023	\$0	\$106,042
FY 2024	\$0	\$46,001
FY 2025	\$0	\$11,143
Total, TPC	\$294,453	\$294,453

**Financial Schedule – Bayou Choctaw**

(dollars in thousands)

Obligations	Costs
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Total Estimated Cost (TEC)

Design

FY 2015	\$0	\$0
FY 2016	\$0	\$0
FY 2017	\$33,074	\$1,003
FY 2018	\$43,111	\$18,600
FY 2019	\$19,000	\$21,981
FY 2020	\$1,940	\$20,941
FY 2021	(\$2,787)	\$9,535
FY 2022	\$0	\$10,595
FY 2023	\$0	\$8,772
FY 2024	\$0	\$2,911
FY 2025	\$0	\$0

Total, Design	\$94,338	\$94,338
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Construction

FY 2015	\$0	\$0
FY 2016	\$0	\$0
FY 2017	\$0	\$0
FY 2018	\$127,713	\$0
FY 2019	\$24,820	\$19
FY 2020	\$0	\$5,146
FY 2021	\$106,601	\$20,778
FY 2022	\$0	\$67,800
FY 2023	\$0	\$130,303
FY 2024	\$0	\$35,088
FY 2025	\$0	\$0

Total, Construction	\$259,134	\$259,134
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**Financial Schedule – Bayou Choctaw, continued**

	(dollars in thousands)	
	Obligations	Costs
TEC		
FY 2015	\$0	\$0
FY 2016	\$0	\$0
FY 2017	\$33,074	\$1,003
FY 2018	\$170,824	\$18,600
FY 2019	\$43,820	\$22,000
FY 2020	\$1,940	\$26,087
FY 2021	\$103,814	\$30,313
FY 2022	\$0	\$78,395
FY 2023	\$0	\$139,075
FY 2024	\$0	\$37,999
FY 2025	\$0	\$0
Total, TEC	\$353,472	\$353,472
Other Project Cost (OPC)		
FY 2015	\$22	\$22
FY 2016	\$1,048	\$1,048
FY 2017	\$243	\$175
FY 2018	\$0	\$68
FY 2019	\$0	\$0
FY 2020	\$0	\$0
FY 2021	\$0	\$0
FY 2022	\$0	\$0
FY 2023	\$0	\$0
FY 2024	\$0	\$0
FY 2025	\$0	\$0
Total, OPC	\$1,313	\$1,313
Total Project Cost (TPC)		
FY 2015	\$22	\$22
FY 2016	\$1,048	\$1,048
FY 2017	\$33,317	\$1,178
FY 2018	\$170,824	\$18,668
FY 2019	\$43,820	\$22,000
FY 2020	\$1,940	\$26,087
FY 2021	\$103,814	\$30,313
FY 2022	\$0	\$78,395
FY 2023	\$0	\$139,075
FY 2024	\$0	\$37,999
FY 2025	\$0	\$0
Total, TPC	\$354,785	\$354,785

**Financial Schedule – Big Hill**

(dollars in thousands)

Obligations	Costs
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Total Estimated Cost (TEC)

Design

FY 2015	\$0	\$0
FY 2016	\$0	\$0
FY 2017	\$64,384	\$1,210
FY 2018	\$23,934	\$13,899
FY 2019	\$16,000	\$19,831
FY 2020	\$1,940	\$17,910
FY 2021	(\$10,908)	\$12,757
FY 2022	\$0	\$16,089
FY 2023	\$0	\$8,913
FY 2024	\$0	\$4,741
FY 2025	\$0	\$0
Total, Design	\$95,350	\$95,350

Construction

FY 2015	\$0	\$0
FY 2016	\$0	\$0
FY 2017	\$21,000	\$0
FY 2018	\$50,418	\$0
FY 2019	\$87,820	\$0
FY 2020	\$0	\$17,215
FY 2021	\$201,242	\$15,122
FY 2022	\$0	\$68,612
FY 2023	\$0	\$161,383
FY 2024	\$0	\$98,148
FY 2025	\$0	\$0
Total, Construction	\$360,480	\$360,480



**Financial Schedule – Big Hill, continued**

	(dollars in thousands)	
	Obligations	Costs
TEC		
FY 2015	\$0	\$0
FY 2016	\$0	\$0
FY 2017	\$85,384	\$1,210
FY 2018	\$74,352	\$13,899
FY 2019	\$103,820	\$19,831
FY 2020	\$1,940	\$35,125
FY 2021	\$190,334	\$27,879
FY 2022	\$0	\$84,701
FY 2023	\$0	\$170,296
FY 2024	\$0	\$102,889
FY 2025	\$0	\$0
Total, TEC	\$455,830	\$455,830
Other Project Cost (OPC)		
FY 2015	\$22	\$22
FY 2016	\$1,048	\$1,048
FY 2017	\$243	\$175
FY 2018	\$0	\$68
FY 2019	\$0	\$0
FY 2020	\$0	\$0
FY 2021	\$0	\$0
FY 2022	\$0	\$0
FY 2023	\$0	\$0
FY 2024	\$0	\$0
FY 2025	\$0	\$0
Total, OPC	\$1,313	\$1,313
Total Project Cost (TPC)		
FY 2015	\$22	\$22
FY 2016	\$1,048	\$1,048
FY 2017	\$85,627	\$1,385
FY 2018	\$74,352	\$13,967
FY 2019	\$103,820	\$19,831
FY 2020	\$1,940	\$35,125
FY 2021	\$190,334	\$27,879
FY 2022	\$0	\$84,701
FY 2023	\$0	\$170,296
FY 2024	\$0	\$102,889
FY 2025	\$0	\$0
Total, TPC	\$457,143	\$457,143

**Details of Project Cost Estimate (LE2 Project Summary)**

(dollars in thousands)

	Current Total Estimate	Previous Total Estimate	Original Validated Baseline
Total Estimated Cost (TEC)			
Design (PED)			
Design	\$354,657	\$392,886	N/A
Contingency	\$0	\$13,137	N/A
Total, PED	\$354,657	\$406,023	N/A
Land Acquisition	\$1,733	\$0	N/A
Construction			
Site Facilities Construction	\$825,905	\$392,730	N/A
Off-Site Facilities	\$9,195	\$29,735	N/A
Drilling/Wellhead/Casings	\$23,877	\$261,341	N/A
Pipeline Construction	\$77,176	\$70,776	N/A
Construction Management	\$41,369	\$84,923	N/A
Project Support	\$35,161	\$109,366	N/A
Contingency	\$46,701	\$85,106	N/A
Total, Construction	\$1,059,384	\$1,033,977	N/A
Total, TEC	\$1,415,774	\$1,440,000	N/A
Contingency, TEC	\$46,701	\$98,243	N/A
Other Project Cost (OPC)			
OPC except D&D			
Conceptual Design	\$1,366	\$1,366	N/A
Other OPC Costs	\$3,884	\$3,884	N/A
Start-up	\$0	\$0	N/A
Contingency	\$0	\$0	N/A
Total, OPC except D&D	\$5,250	\$5,250	N/A
D&D			
D&D	\$0	\$0	N/A
Contingency	\$0	\$0	N/A
Total, D&D	\$0	\$0	N/A
Total, OPC	\$5,250	\$5,250	N/A
Contingency, OPC	\$0	\$0	N/A
Total, TPC	\$1,421,024	\$1,445,250	N/A
Total, Contingency	\$46,701	\$98,243	N/A

**Note:** Project is being funded through the sale of SPR crude oil and not through the normal congressional appropriations process.

**The total project is not yet baselined.**

**Details of Project Cost Estimate – Bryan Mound**

(dollars in thousands)

	Current Total Estimate - Bryan Mound	Previous Total Estimate	Original Validated Baseline
<b>Total Estimated Cost (TEC)</b>			
<b>Design (PED)</b>			
Design	\$69,661	N/A	\$69,661
Contingency	\$0	N/A	\$0
<b>Total, PED</b>	<b>\$69,661</b>	<b>N/A</b>	<b>\$69,661</b>
<b>Land Acquisition</b>	<b>\$0</b>	<b>N/A</b>	<b>0</b>
<b>Construction</b>			
Site Facilities Construction	\$200,735	N/A	\$200,735
Off-Site Facilities	\$0	N/A	\$0
Drilling/Wellhead/Casings	\$7,640	N/A	\$7,640
Pipeline Construction	\$0	N/A	\$0
Construction Management	\$10,277	N/A	\$10,277
Project Support	\$9,618	N/A	\$9,618
Contingency	\$15,400	N/A	\$15,400
<b>Total, Construction</b>	<b>\$243,670</b>	<b>N/A</b>	<b>\$243,670</b>
<b>Total, TEC</b>	<b>\$313,331</b>	<b>N/A</b>	<b>\$313,331</b>
<b>Contingency, TEC</b>	<b>\$15,400</b>	<b>N/A</b>	<b>\$15,400</b>
<b>Other Project Cost (OPC)</b>			
<b>OPC except D&amp;D</b>			
Conceptual Design	\$342	N/A	\$342
Other OPC Costs	\$971	N/A	\$971
Start-up	\$0	N/A	\$0
Contingency	\$0	N/A	\$0
<b>Total, OPC except D&amp;D</b>	<b>\$1,313</b>	<b>N/A</b>	<b>\$1,313</b>
<b>D&amp;D</b>			
D&D		N/A	N/A
Contingency		N/A	N/A
<b>Total, D&amp;D</b>	<b>\$0</b>	<b>N/A</b>	<b>\$0</b>
<b>Total, OPC</b>	<b>\$1,313</b>	<b>N/A</b>	<b>\$1,313</b>
<b>Contingency, OPC</b>	<b>\$0</b>	<b>N/A</b>	<b>\$0</b>
<b>Total, TPC</b>	<b>\$314,644</b>	<b>N/A</b>	<b>\$314,644</b>
<b>Total, Contingency</b>	<b>\$15,400</b>	<b>N/A</b>	<b>\$15,400</b>

Note: This is the first submission with data broken out by sub-project; therefore, previous estimate will not be reflected until subsequent submittal.

**Details of Project Cost Estimate – West Hackberry**

(dollars in thousands)

	Current Total Estimate - West Hackberry	Previous Total Estimate	Original Validated Baseline
Total Estimated Cost (TEC)			
Design (PED)			
Design	\$95,308	\$95,308	N/A
Contingency	\$0	\$0	N/A
Total, PED	\$95,308	\$95,308	N/A
Land Acquisition	\$1,733	\$1,733	N/A
Construction			
Site Facilities Construction	\$160,220	\$160,220	N/A
Off-Site Facilities	\$5,195	\$5,195	N/A
Drilling/Wellhead/Casings	\$11,484	\$11,484	N/A
Pipeline Construction	\$0	\$0	N/A
Construction Management	\$8,058	\$8,058	N/A
Project Support	\$7,842	\$7,842	N/A
Contingency	\$3,300	\$3,300	N/A
Total, Construction	\$196,099	\$196,099	N/A
Total, TEC	\$293,140	\$293,140	N/A
Contingency, TEC	\$3,300	\$3,300	N/A
Other Project Cost (OPC)			
OPC except D&D			
Conceptual Design	\$342	\$342	N/A
Other OPC Costs	\$971	\$971	N/A
Start-up	\$0	\$0	N/A
Contingency	\$0	\$0	N/A
Total, OPC except D&D	\$1,313	\$1,313	N/A
D&D			
D&D		N/A	N/A
Contingency		N/A	N/A
Total, D&D	\$0	\$0	N/A
Total, OPC	\$1,313	\$1,313	N/A
Contingency, OPC	\$0	\$0	N/A
Total, TPC	\$294,453	\$294,453	N/A
Total, Contingency	\$3,300	\$3,300	N/A

Note: This is the first submission with data broken out by sub-project. West Hackberry is not yet baselined; therefore, the original validated baseline is N/A.

**Details of Project Cost Estimate – Bayou Choctaw**

(dollars in thousands)

	Current Total Estimate - Bayou Choctaw	Previous Total Estimate	Original Validated Baseline
Total Estimated Cost (TEC)			
Design (PED)			
Design	\$94,338	N/A	\$94,338
Contingency	\$0	N/A	\$0
Total, PED	\$94,338	N/A	\$94,338
Land Acquisition	\$0	N/A	\$0
Construction			
Site Facilities Construction	\$220,800	N/A	\$220,800
Off-Site Facilities	\$0	N/A	\$0
Drilling/Wellhead/Casings	\$4,753	N/A	\$4,753
Pipeline Construction	\$0	N/A	\$0
Construction Management	\$10,281	N/A	\$10,281
Project Support	\$8,300	N/A	\$8,300
Contingency	\$15,000	N/A	\$15,000
Total, Construction	\$259,134	N/A	\$259,134
Total, TEC	\$353,472	N/A	\$353,472
Contingency, TEC	\$15,000	N/A	\$15,000
Other Project Cost (OPC)			
OPC except D&D			
Conceptual Design	\$342	N/A	\$342
Other OPC Costs	\$971	N/A	\$971
Start-up	\$0	N/A	\$0
Contingency	\$0	N/A	\$0
Total, OPC except D&D	\$1,313	N/A	\$1,313
D&D			
D&D		N/A	N/A
Contingency		N/A	N/A
Total, D&D	\$0	N/A	\$0
Total, OPC	\$1,313	N/A	\$1,313
Contingency, OPC	\$0	N/A	\$0
Total, TPC	\$354,785	N/A	\$354,785
Total, Contingency	\$15,000	N/A	\$15,000

Note: This is the first submission with data broken out by sub-project; therefore, previous estimate will not be reflected until subsequent submittal.

**Details of Project Cost Estimate – Big Hill**

(dollars in thousands)

	Current Total Estimate - Big Hill	Previous Total Estimate	Original Validated Baseline
Total Estimated Cost (TEC)			
Design (PED)			
Design	\$95,350	N/A	\$95,350
Contingency	\$0	N/A	\$0
Total, PED	\$95,350	N/A	\$95,350
Land Acquisition	\$0	N/A	\$0
Construction			
Site Facilities Construction	\$244,150	N/A	\$244,150
Off-Site Facilities	\$4,000	N/A	\$4,000
Drilling/Wellhead/Casings	\$0	N/A	\$0
Pipeline Construction	\$77,176	N/A	\$77,176
Construction Management	\$12,753	N/A	\$12,753
Project Support	\$9,401	N/A	\$9,401
Contingency	\$13,000	N/A	\$13,000
Total, Construction	\$360,480	N/A	\$360,480
Total, TEC	\$455,830	N/A	\$455,830
Contingency, TEC	\$13,000	N/A	\$13,000
Other Project Cost (OPC)			
OPC except D&D			
Conceptual Design	\$342	N/A	\$342
Other OPC Costs	\$971	N/A	\$971
Start-up	\$0	N/A	\$0
Contingency	\$0	N/A	\$0
Total, OPC except D&D	\$1,313	N/A	\$1,313
D&D			
D&D		N/A	N/A
Contingency		N/A	N/A
Total, D&D	\$0	N/A	\$0
Total, OPC	\$1,313	N/A	\$1,313
Contingency, OPC	\$0	N/A	\$0
Total, TPC	\$457,143	N/A	\$457,143
Total, Contingency	\$13,000	N/A	\$13,000

Note: This is the first submission with data broken out by sub-project; therefore, previous estimate will not be reflected until subsequent submittal.

**Schedule of Appropriations Requests**

Section 404 of the Bipartisan Budget Act authorizes drawdown and sale of SPR crude oil over four fiscal years (FY 2017 – FY 2020) to finance SPR modernization. This CPDS reflects the high end of the cost ranges. The Total Project Cost (TPC) of \$1.4B was approved at CD-1, and final scope will be established at CD-2. Bryan Mound, Bayou Choctaw, and Big Hill achieved CD-2/3 in FY 2021 and West Hackberry is expected to achieve CD-2/3 within FY 2022.

Request	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
FY 2018	TEC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	OPC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	TPC	\$ -	\$ -	\$375,400	\$350,000	\$174,600	\$100,000	\$ -	\$ -	\$ -	\$ -	\$1,000,000
FY 2019	TEC	\$ -	\$ -	\$ 340,000 *	\$ 350,000	\$ 300,000	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$1,000,000
	OPC	\$ 88	\$ 4,190	\$ 972	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$5,250
	TPC	\$ 88	\$ 4,190	\$ 340,972	\$ 350,000	\$ 300,000	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$1,005,250
FY 2020	TEC	\$ -	\$ -	\$ 340,000 *	\$ 350,000 **	\$ 300,000	\$ 450,000	\$ -	\$ -	\$ -	\$ -	\$1,440,000
	OPC	\$ 88	\$ 4,190	\$ 972	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$5,250
	TPC	\$ 88	\$ 4,190	\$ 340,972	\$ 350,000	\$ 300,000	\$ 450,000	\$ -	\$ -	\$ -	\$ -	\$1,445,250
FY 2021	TEC	\$ -	\$ -	\$ 340,000 *	\$ 350,000 **	\$300,000 ***	\$450,000 ***	\$ -	\$ -	\$ -	\$ -	\$1,440,000
	OPC	\$ 88	\$ 4,190	\$ 972	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$5,250
	TPC	\$ 88	\$ 4,190	\$ 340,972	\$ 350,000	\$ 300,000	\$ 450,000	\$ -	\$ -	\$ -	\$ -	\$1,445,250
FY 2022	TEC	\$ -	\$ -	\$ 340,000 *	\$ 350,000 **	\$300,000 ***	\$ -	\$425,774****	\$ -	\$ -	\$ -	\$1,415,774
	OPC	\$ 88	\$ 4,190	\$ 972	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$5,250
	TPC	\$ 88	\$ 4,190	\$ 340,972	\$ 350,000	\$ 300,000	\$ -	\$ 425,774	\$ -	\$ -	\$ -	\$1,421,024
FY 2023	TEC	\$ -	\$ -	\$ 340,000 *	\$ 350,000 **	\$300,000 ***	\$ -	\$425,774*****	\$ -	\$ -	\$ -	\$1,415,774
	OPC	\$ 88	\$ 4,190	\$ 972	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$5,250
	TPC	\$ 88	\$ 4,190	\$ 340,972	\$ 350,000	\$ 300,000	\$ -	\$ 425,774	\$ -	\$ -	\$ -	\$1,421,024

\* FY 2017 Omnibus authorized oil sales target of \$340,000,000 (Appropriation). Actual proceeds were \$323,195,827.

\*\* FY 2018 Omnibus authorized oil sales target of \$350,000,000 (Appropriation). Actual proceeds were \$347,828,624.

\*\*\* FY 2019 Omnibus authorized oil sales target of \$300,000,000 (Appropriation). Actual proceeds were \$299,999,961.

\*\*\*\* FY 2020 Omnibus authorized oil sales target of \$450,000,000 (Appropriation). Sale postponed, and authorized completion changed to no later than FY 2022 as part of the CARES Act (P.L. 116-136).

\*\*\*\*\* FY 2021 Omnibus authorized oil sales target of \$450,000,000 (Appropriation). Actual proceeds were \$499,999,980.

**4. Related Operations and Maintenance Funding Requirements**

**Not applicable for Project Engineering and Design.**

Start of Operation or Beneficial Occupancy (fiscal quarter or date)	Establish at CD-2
Expected Useful Life (number of years)	25
Expected Future Start of D&D of this capital asset (fiscal quarter)	N/A*

**(Related Funding requirements)**

(dollars in thousands)

	Annual Costs		Life Cycle Costs	
	Current Total Estimate	Previous Total Estimate	Current Total Estimate	Previous Total Estimate
Operations		N/A		N/A
Maintenance & Repair		N/A		N/A
<b>Total **</b>		N/A		N/A

\* The SPR is not planning on decommissioning the sites, and there is no date associated with the line item.

\*\* Funding requirements are included in the Facilities Appropriation 089X0218.

**5. D&D Information**

This project does not require D&D funding.

**6. Acquisition Approach**

The existing Strategic Petroleum Reserve Management and Operating Contractor did originally procure the Architect-Engineer contractor. With Office of the Under Secretary for Science (S3) concurrence in FY 2019, the M&O Contractor is self-performing the remaining Architect-Engineering (A-E) design scope and will procure all Government Furnished Property and firm fixed priced construction contracts.



**SPR Petroleum Account**  
**Proposed Appropriation Language**

For Department of Energy expenses necessary for the acquisition, transportation, and injection of petroleum products, and for other necessary expenses pursuant to the Energy Policy and Conservation Act of 1975, as amended (42 U.S.C. 6241, 6239 note); \$8,000,000 to remain available until expended.

*Note.* —A full-year 2022 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of P.L. 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.

**Explanation of Changes**

The FY 2023 Request funds activities related to the acquisition, transportation, and injection of petroleum products into the Strategic Petroleum Reserve. The increase reflects a smaller carryover due to drawdown costs associated with a larger volume in multi-year crude oil sales and sufficient funding to execute a 30-million-barrel emergency sale and for receipt of 4.3 million barrels from an exchange carried out in 2022.

**Public Law Authorizations**

Energy Policy and Conservation Act, Public Law 94-163, as amended.

**SPR Petroleum Account  
(\$K)**

<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>
1,000	1,000	8,000

**Overview**

The SPR Petroleum Account funds activities related to the acquisition, transportation, and injection of petroleum products into the Strategic Petroleum Reserve; test sales of petroleum products from the Reserve; and the drawdown, sale, and delivery of petroleum products from the Reserve.

**Highlights and Major Changes in the FY 2023 Budget Request**

Sections 403 of the Bipartisan Budget Act of 2015 (P.L. 114-74), Section 30204 of the Bipartisan Budget Act, 2018, (P.L. 115-141) and Section 32204 of the Surface Transportation Reauthorization Act of 2015 (P.L. 114-94) direct non-emergency, multi-year oil sales.

**SPR Petroleum Account  
Funding by Congressional Control  
(\$K)**

	<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted (\$)</b>	<b>FY 2023 Request vs FY 2021 Enacted (%)</b>
<b>SPR Petroleum Account</b>					
Petroleum Acquisition, Transportation and Drawdown	1,000	1,000	8,000	+7,000	+700%
<b>Total, SPR Petroleum Account</b>	<b>1,000</b>	<b>1,000</b>	<b>8,000</b>	<b>+7,000</b>	<b>+700%</b>
<b>Federal FTEs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Outyear Funding  
(\$K)**

<b>FY 2023 Request</b>	<b>FY 2024 Request</b>	<b>FY 2025 Request</b>	<b>FY 2026 Request</b>	<b>FY 2027 Request</b>
8,000	26,816	27,195	25,299	25,885

**Major Outyear Priorities and Assumptions**

Future budget requests will be determined as part of the annual budget process. Outyear funding for SPR Petroleum Account Appropriation is estimated to be roughly \$105,195,000 for FY 2024 through FY 2027. SPR Petroleum Account priorities include the following:

- Starting in FY 2023 through FY 2027, SPR is Congressionally mandated to sell about 175 million barrels, or about an average of 35 million barrels of crude oil each fiscal year. The Department’s FY 2024 – 2027 outyear funding requests will require additional increase in funding to cover costs of selling increased volumes of crude oil.

## SPR Petroleum Account

### Overview

The SPR Petroleum Account funds activities related to the acquisition, transportation, and injection of petroleum products into the Strategic Petroleum Reserve; test sales of petroleum products from the Reserve; and the drawdown, sale, and delivery of petroleum products from the Reserve. SPR Petroleum Account activities can include: 1) the incremental costs of withdrawing oil from the storage caverns and transporting it to the sales point where purchasers take title; 2) petroleum inventory acquisitions and associated transportation costs; 3) U.S. Customs duties; and 4) terminal throughput charges and other related miscellaneous costs.

### *SPR Oil Acquisition/Transportation/Drawdown*

As of December 31, 2021, the SPR crude oil inventory is 594 million barrels. Currently, the Department is undergoing a series of non-emergency, multi-year oil sales pursuant to the Bipartisan Budget Act (BBA) of 2015 (Public Law 114-74), and the Fixing America's Surface Transportation (FAST) Act (Public Law 114-94), the Act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018. Drawdown and sales are scheduled as follows:

- From FY 2018 through FY 2025 (eight consecutive years) – sell 58 million barrels of crude oil, with 10 million barrels to be sold in FY 2023. Proceeds will be deposited into the General Fund of the Treasury (Bipartisan Budget Act, Section 403).
- From FY 2017 through FY 2020 (four consecutive years) – sell the required volumes of SPR inventory to raise up to the authorized revenue ceiling to be deposited into the Energy Security and Infrastructure Modernization Fund (Bipartisan Budget Act, Section 404). In FY 2017, 6.3 million barrels were sold; in FY 2018, 4.7 million barrels were sold, and in FY2019 4.2 million barrels were sold. Oil sales of 6.6 million barrels scheduled for FY 2020 were postponed until FY 2021 with revenues totaling \$1.4 billion. Section 14002 of the CARES Act (P.L. 116-136) provides the Department flexibility to postpone through Fiscal Year 2022 a sale of crude oil from the Strategic Petroleum Reserve that was originally authorized for FY 2020.
- From FY 2017 through FY 2019 (three consecutive years) – sell 10 million barrels of crude oil in FY 2017, 9 million barrels in FY 2018, and 6 million barrels in FY 2019, for a total of 25 million barrels. Proceeds will be deposited in the General Fund of the Treasury (21st Century Cures Act, Section 5010).
- From FY 2023 through FY 2025 (three consecutive years) – sell 16 million barrels of crude oil in FY 2023, 25 million barrels in FY 2024, and 25 million barrels in FY 2025, for a total of 66 million barrels. Proceeds will be deposited in the General Fund of the Treasury (Fixing America's Surface Transportation Act, Section 32204).
- From FY 2026 through FY 2027, sell 7 million barrels of crude oil. Proceeds shall be deposited in the General Fund of the Treasury during the fiscal year in which the sale occurs (An Act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018, Section 20003).
- From FY 2020 through FY 2021, sell 10 million barrels of crude oil. Proceeds will be deposited in the General Fund of the Treasury (Consolidated Appropriations Act, 2018, Section 501).
- From FY 2022 through FY 2027, sell 100 million barrels of crude oil, with 30 million barrels to be sold in FY 2022, 35 million in FY 2026, and 35 million in FY 2027. Proceeds will be deposited in the General Fund of the Treasury (Bipartisan Budget Act of 2018, Section 30204).
- In FY 2028, sell 5 million barrels of crude oil. Proceeds will be deposited in the General Fund of the Treasury (America's Water Infrastructure Act of 2018, Section 3009).
- From FY 2028 through FY 2031 (four consecutive years) – sell up to 88 million barrels of crude oil. Proceeds will be deposited in the General Fund of the Treasury and the Secretary of the Treasury shall deposit in the SPR Petroleum Account established under section 167(a) of the Energy Policy and Conservation Act (42 U.S.C. 6247(a) \$43,500,000, to be used to carry out the sale in accordance with section 167 of the Energy Policy and Conservation Act (42 U.S.C. 6247). (Infrastructure Investment and Jobs Act, Section 90002).

This FY 2023 Budget Request includes a request for direct appropriation for continuing scheduled sales of SPR oil and to maintain readiness for potential emergency drawdown operations.

**SPR Petroleum Account  
Funding (\$K)**

**SPR Petroleum Account**  
 Petroleum Acquisition, Transportation and Drawdown  
**Total, SPR Petroleum Account**

<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted (\$)</b>	<b>FY 2023 Request vs FY 2021 Enacted (%)</b>
1,000	1,000	8,000	+7,000	+700%
<b>1,000</b>	<b>1,000</b>	<b>8,000</b>	<b>+7,000</b>	<b>+700%</b>

**SPR Petroleum Account**

**Activities and Explanation of Changes**

FY 2021 Enacted	FY 2023 Request	Explanation of Changes FY 2023 Request vs FY 2021 Enacted
<b>SPR Petroleum Account</b>		
<b>Petroleum Acquisition, Transportation and Drawdown \$1,000,000</b>	<b>\$8,000,000</b>	<b>+\$7,000,000</b>
<i>Non-Emergency Drawdown</i> <ul style="list-style-type: none"> <li>FY 2021 provides for the SPR Petroleum Account to pay for the costs of certain statutorily mandated crude oil sales.</li> </ul>	<ul style="list-style-type: none"> <li>The FY 2023 request, along with prior year balances, will be able to support the 26 million barrels that the SPR is authorized to sell through legislation described above and receipt of 4.3 million barrels of from the Winter Exchange in 2022.</li> </ul>	<ul style="list-style-type: none"> <li>The increase in funding supports legislative-directed sales in FY 2023.</li> </ul>

**Naval Petroleum and Oil Shale Reserves  
Proposed Appropriation Language**

For Department of Energy expenses necessary to carry out naval petroleum and oil shale reserve activities, 13,004,000 to remain available until expended: *Provided*, That notwithstanding any other provision of law, unobligated funds remaining from prior years shall be available for all naval petroleum and oil shale reserve activities.

*Note. -A full year 2022 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of P.L. 117-43, as amended). The amounts included for 2023 reflect the annualized level provided by the continuing resolution*

**Explanation of Changes**

FY 2023 budget authority will fund continued NPR-1 environmental assessment and remediation activities.

**Public Law Authorizations**

- P.L. 94-258, U.S. Naval Petroleum Reserves Production Act of 1977
- P.L. 95-91, U.S. Department of Energy Organization Act of 1977
- P.L. 104-106, The National Defense Authorization Act For Fiscal Year 1996
- P.L. 105-261, The Strom Thurmond National Defense Act for Fiscal Year 1999
- P.L. 109-58, Energy Policy Act of 2005

**Naval Petroleum and Oil Shale Reserves  
(\$K)**

FY 2021 Enacted	FY 2022 Annualized CR	FY 2023 Request	FY2023 Request vs FY 2021 Enacted
13,006	13,006	13,004	-2

**Overview**

The Naval Petroleum and Oil Shale Reserves (NPOSR) program manages five legal agreements that were executed as part of the 1998 sale of Naval Petroleum Reserve 1 (NPR-1) in Elk Hills, California. The legal agreements direct post-sale work, including environmental restoration and remediation, contract closeout, and records disposition. Legal agreements also include payment for post-employment medical and dental benefits to former NPR-1 Management & Operating (M&O) contractor employees. The NPR-1 program continues to work towards closing out the remaining environmental findings at the site, as required by the 2008 agreement between the Department of Energy (DOE) and the California Department of Toxic Substances Control (DTSC).

DOE also operated Naval Petroleum Reserve 3 (NPR-3) and the Rocky Mountain Oilfield Testing Center (RMOTC), co-located near Casper, Wyoming, until its sale in January 2015. DOE retains responsibility for Industrial Landfill number 2 (IND-2) located at NPR-3 until a closure permit is issued by the Wyoming Department of Environmental Quality (WDEQ). Landfill remediation activities were completed in FY 2017 and ground water sampling began in compliance with WDEQ requirements. The period of sampling will be specified by WDEQ but is expected to continue for one to four years. No new FY 2023 budget authority is requested for NPR-3.

The program will continue the ongoing activities to attain release from the remaining environmental findings related to the sale of NPR-1. All 131 areas of concern (AOC) have undergone an initial investigation and the program has made recommendations to California’s DTSC for either no further action (NFA) required status, additional field work investigation, or remedial action.

**Highlights and Major Changes in the FY 2023 Budget Request**

New FY 2023 budget authority of \$13.004 million will support continued work with the California DTSC and other stakeholders on the environmental remediation and cultural resource activities in accordance with the 2008 DTSC Corrective Action Consent Agreement to obtain NFA status for all 131 AOCs.

Also included is the payment to former NPR-1 M&O contractor employees for post-employment medical and dental benefits. NPR-3 will continue groundwater sampling activities for the landfill closure with oversight by the Washington, D.C., Headquarters office.



**Naval Petroleum and Oil Shale Reserves  
Funding by Congressional Control (\$K)**

	<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted (\$)</b>	<b>FY 2023 Request vs FY 2021 Enacted (%)</b>
<b>Naval Petroleum and Oil Shale Reserves</b>					
Production Operations	11,000	11,000	11,004	+4	+0.0%
Management	2,006	2,006	2,000	-6	-0.3%
<b>Total, Naval Petroleum and Oil Shale Reserves</b>	<b>13,006</b>	<b>13,006</b>	<b>13,004</b>	<b>-2</b>	<b>-0.0%</b>
<b>Federal FTEs</b>	<b>4</b>	<b>4</b>	<b>4</b>		

**Outyear Priorities and Assumptions**

In the FY 2012 Consolidated Appropriations Act (P.L. 112-74), Congress directed the Department to include a future-years energy program (FYEP) in subsequent requests that reflects the proposed appropriations for five years. This FYEP shows outyear funding for each account for FY 2024 - FY 2027. The outyear funding levels use the growth rates from and match the outyear account totals published in the FY 2023 President’s Budget for both the 050 and non-050 accounts. Actual future budget request levels will be determined as part of the annual budget process.

**Future Years Energy Program (FYEP)  
(\$K)**

	<b>FY 2023 Request</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>
<b>Naval Petroleum and Oil Shale Reserves</b>	\$13,004	\$13,000	\$14,000	\$14,000	\$14,000

## **Naval Petroleum and Oil Shale Reserves Production Operations**

### **Overview**

The NPR-1 program continues to work towards closing out the remaining environmental restoration and remediation activities for 131 AOCs, as required by the 2008 agreement between DOE and California's DTSC. DOE will continue the monitoring and oversight of environmental remediation of the Elk Hills site and the work on records disposition.

The NPR-3 program will continue post-sale activities for the closure of the landfill using prior-year balances. No new FY 2023 budget authority is requested for NPR-3.

### **Highlights of the FY 2023 Budget Request**

The Department is requesting new FY 2023 budget authority of \$13.004 million to fund the remediation work at the NPR-1 site.

Of the 131 AOCs for which DOE is responsible for environmental cleanup, as of March 2021, 111 AOCs have received NFA certification from California's DTSC. The remaining 20 AOCs that require remediation are larger-scale projects with substantial funding requirements. New FY 2023 budget authority of \$13.004 million supports remediation of 3 AOCs.

**Production Operations  
Funding (\$K)**

	<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted (\$)</b>	<b>FY 2023 Request vs FY 2021 Enacted (%)</b>
NPR-1 Closeout	11,000	11,000	11,004	+4	0.0%
NPR-3 Disposition	0	0	0	0	0.0%
<b>Total, Production Operations</b>	<b>11,000</b>	<b>11,000</b>	<b>11,004</b>	<b>+4</b>	<b>0.0%</b>

**Production Operations**  
**Explanation of Major Changes**  
**(\$K)**

<b>FY 2023 Request vs FY 2021 Enacted</b>
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<b>NPR-1 Closeout:</b> FY 2023 budget authority will finance continued environmental assessment and remediation activity, in accordance with NPR-1 post-sale legal agreements.	<b>+\$4</b>
<b>NPR-3 Disposition:</b> No FY 2023 budget authority is requested. NPR-3 ongoing post-sale remediation monitoring activities will continue through NPR-3 closeout in one to four years.	<b>\$0</b>
<hr/> <b>Total, Production Operations</b>	<hr/> <b>+\$4</b>

**Production Operations  
Funding**

**Activities and Explanation of Changes**

FY 2021 Enacted	FY 2023 Request	Explanation of Changes FY 2023 Request vs FY 2021 Enacted
<b>Production and Operations \$11,000,000</b>	<b>\$11,004,000</b>	<b>+\$4,000</b>
<b>NPR-1 Closeout \$11,000,000</b>	<b>\$11,004,000</b>	<b>+\$4,000</b>
<ul style="list-style-type: none"> <li>• Program will continue the ongoing activities to attain release from the remaining environmental findings related to the sale of NPR-1. The FY 2021 Request amount includes funding that supports remediation of 3 sub-areas of concern (AOCs).</li> </ul>	<ul style="list-style-type: none"> <li>• Program will continue the ongoing activities to attain release from the remaining environmental findings related to the sale of NPR-1. The FY 2023 Request includes funding that supports remediation of 3 AOCs.</li> </ul>	<ul style="list-style-type: none"> <li>• Funding supports the ongoing remediation work at the NPR-1 site.</li> </ul>
<b>NPR-3 Disposition \$0</b>	<b>\$0</b>	<b>\$0</b>
<ul style="list-style-type: none"> <li>• Disposition completed; post-sale remediation monitoring activities for the landfill are ongoing.</li> </ul>	<ul style="list-style-type: none"> <li>• Disposition completed; post-sale remediation monitoring activities for the landfill are ongoing.</li> </ul>	<ul style="list-style-type: none"> <li>• No change.</li> </ul>

## **Naval Petroleum and Oil Shale Reserves Management**

### **Overview**

Management provides funding for payments to former NPR-1 M&O contractor employees for post-medical and dental benefits, a legal requirement of the 1998 NPR-1 sales agreement. Management also provides the Federal staffing resources and associated costs required to provide overall direction and execution of the NPOSR. There are a variety of inherently governmental functions, such as program management, contract administration, and budget formulation and execution that require a dedicated Federal workforce. NPOSR uses contractor support services and other related expenses to support the field environmental assessment, remediation, and management of the program.

### **Highlights of the FY 2023 Budget Request**

The NPR-1 funding supports Federal staff that provide oversight, monitor environmental clean-up, and manage disposition activities. The sales agreement also includes payments to former NPR-1 M&O contractor employees for post-employment medical and dental benefits.

NPR-3/RMOTC final office closeout was completed December 30, 2015; however, administrative oversight of the landfill closure will continue to be conducted by the Department of Energy Headquarters office. No new FY 2023 budget authority is requested for NPR-3.

**Management  
Funding (\$K)**

	<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted (\$)</b>	<b>FY 2023 Request vs FY 2021 Enacted (%)</b>
<b>Washington Headquarters</b>					
Salaries and Benefits	531	531	540	+9	+1.7%
Travel	50	50	40	-10	-20.0%
Support Services	425	425	420	-5	-1.2%
Other Related Expenses	1,000	1,000	1,000	0	0.0%
<b>Total, Washington Headquarters</b>	<b>2,006</b>	<b>2,006</b>	<b>2,000</b>	<b>-6</b>	<b>-0.3%</b>
<b>NPR – Wyoming</b>					
Salaries and Benefits	0	0	0	0	0.0%
Travel	0	0	0	0	0.0%
Support Services	0	0	0	0	0.0%
Other Related Expenses	0	0	0	0	0.0%
<b>Total, NPR – Wyoming</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>
<b>Total Management</b>					
Salaries and Benefits	531	531	540	+9	+1.7%
Travel	50	50	40	-10	-20.0%
Support Services	425	425	420	-5	-1.2%
Other Related Expenses	1,000	1,000	1,000	0	0.0%
<b>Total, Management</b>	<b>2,006</b>	<b>2,006</b>	<b>2,000</b>	<b>-6</b>	<b>-0.3%</b>
<b>Federal FTEs</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>0.0%</b>
<b>Support Services</b>					
Technical Support					
Environmental, Safety, Security & Health	0	0	0	0	0.0%
Technical Services	400	400	400	0	0.0%
<b>Total, Technical Support</b>	<b>400</b>	<b>400</b>	<b>400</b>	<b>0</b>	<b>0.0%</b>
Management Support					
Business Administration	0	0	0	0	0.0%
IT Support	25	25	20	-5	-20.0%
<b>Total Management Support</b>	<b>25</b>	<b>25</b>	<b>20</b>	<b>-5</b>	<b>0.0%</b>
<b>Total, Support Services</b>	<b>425</b>	<b>425</b>	<b>420</b>	<b>-5</b>	<b>-1.2%</b>

Naval Petroleum and Oil Shale Reserves/  
Management

	<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted (\$)</b>	<b>FY 2023 Request vs FY 2021 Enacted (%)</b>
<b>Other Related Expenses</b>					
Rent to Others	0	0	0	0	0.0%
Communications, Utilities & Misc.	0	0	0	0	0.0%
Other Services	1,000	1,000	1,000	0	0.0%
Operation and Maintenance of Equipment	0	0	0	0	0.0%
Supplies and Materials	0	0	0	0	0.0%
<b>Total, Other Related Expenses</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>0</b>	<b>0.0%</b>



**Management  
Funding**

**Activities and Explanation of Changes**

FY 2021 Enacted	FY 2023 Request	Explanation of Changes FY 2023 Request vs FY 2021 Enacted
<b>Management \$2,006,000</b>	<b>\$2,000,000</b>	<b>\$-6,000</b>
<b>Salaries and Benefits \$531,000</b>	<b>\$540,000</b>	<b>\$+9,000</b>
<ul style="list-style-type: none"> <li>Continue monitoring activities at NPR-1 (cultural resources mitigation, environmental clean-up, oversight, and audit).</li> </ul>	<ul style="list-style-type: none"> <li>Continue monitoring activities at NPR-1 (cultural resources mitigation, environmental clean-up, oversight, and audit). No new FY 2023 budget authority is requested for NPR-3.</li> </ul>	<ul style="list-style-type: none"> <li>The cost of salaries and benefits has increased due to annual escalation.</li> </ul>
<b>Travel \$50,000</b>	<b>\$40,000</b>	<b>\$-10,000</b>
<ul style="list-style-type: none"> <li>Federal travel will be required for environmental cleanup at NPR-1.</li> </ul>	<ul style="list-style-type: none"> <li>Federal travel will be required for environmental cleanup at NPR-1. No new FY 2023 budget authority is requested for NPR-3.</li> </ul>	<ul style="list-style-type: none"> <li>The cost of travel has decreased due to meetings being held virtually.</li> </ul>
<b>Support Services \$425,000</b>	<b>\$420,000</b>	<b>\$-5,000</b>
<ul style="list-style-type: none"> <li>Support Services for environmental clean-up of NPR-1.</li> </ul>	<ul style="list-style-type: none"> <li>Support Services for environmental clean-up of NPR-1. No new FY 2023 budget authority is requested for NPR-3.</li> </ul>	<ul style="list-style-type: none"> <li>The cost of support services has decreased.</li> </ul>
<b>Other Related Expenses \$1,000,000</b>	<b>\$1,000,000</b>	<b>\$0</b>
<ul style="list-style-type: none"> <li>As in prior years, funding provides for post-employment medical and dental benefits for former M&amp;O contractor employees at NPR 1.</li> </ul>	<ul style="list-style-type: none"> <li>As in prior years, funding provides for post-employment medical and dental benefits for former M&amp;O contractor employees at NPR 1.</li> </ul>	<ul style="list-style-type: none"> <li>No change.</li> </ul>

**Northeast Home Heating Oil Reserve  
Proposed Appropriation Language**

For Department of Energy expenses necessary for Northeast Home Heating Oil Reserve storage, operation, and management activities pursuant to the Energy Policy and Conservation Act (42 U.S.C. 6201 et seq.), \$7,000,000 to remain until expended.

*Note – A full-year 2022 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2022 (Division A of P.L. 117-43, as amended). The amounts included for 2022 reflect the annualized level provided by the continuing resolution.*

**Explanation of Changes**

The FY 2023 Request maintains the Northeast Home Heating Oil Reserve’s storage, operation, and management activities.

**Public Law Authorizations**

- P.L. 109-58, Energy Policy Act of 2005

**Northeast Home Heating Oil Reserve**  
(\$K)

FY 2021 Enacted	FY 2022 Annualized CR	FY 2023 Request	FY 2023 Request vs FY 2021 Enacted
6,500	6,500	7,000	+500

**Overview**

The Northeast Home Heating Oil Reserve (NEHHOR) provides a short-term supplement to the Northeast region’s commercial supply of heating oil in the event of supply interruption. In FY 2012, NEHHOR converted from 2 million barrels of high sulfur heating oil to 1 million barrels of Ultra Low Sulfur Diesel (ULSD) to meet Northeast states’ emission standards. The FY 2023 program will continue operation of the 1-million-barrel Reserve. New lease commercial storages contracts went into effect on April 1, 2020, with the final option year extending through March 31, 2024.

**Outyear Priorities and Assumptions**

In the FY 2012 Consolidated Appropriations Act (P.L. 112-74), Congress directed the Department to include a future-years energy program (FYEP) in subsequent requests that reflects the proposed appropriations for five years. This FYEP shows outyear funding for each account for FY 2024 - FY 2027. The outyear funding levels use the growth rates from and match the outyear account totals published in the FY 2023 President’s Budget for both the 050 and non-050 accounts. Actual future budget request levels will be determined as part of the annual budget process.

**Future Years Energy Program (FYEP)**  
(\$K)

	FY 2023 Request	FY 2024	FY 2025	FY 2026	FY 2027
<b>Northeast Home Heating Oil Reserve</b>	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000

**Highlights and Major Changes in the FY 2023 Budget Request**

FY 2023 will focus on ongoing commercial leases, oversight, management, and quality analysis of the Reserve as well as ongoing information technology support of the Reserve’s sales system.

**Northeast Home Heating Oil Reserve  
Funding by Congressional Control (\$K)**

	<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted (\$)</b>	<b>FY 2023 Request vs FY 2021 Enacted (%)</b>
<b>Northeast Home Heating Oil Reserve</b>					
Northeast Home Heating Oil Reserve	6,500	6,500	7,000	+500	+7.7%
<b>Total, Northeast Home Heating Oil Reserve</b>	<b>6,500</b>	<b>6,500</b>	<b>7,000</b>	<b>+500</b>	<b>+7.7%</b>
<b>Federal FTEs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Northeast Home Heating Oil Reserve  
Funding (\$K)**

	<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted (\$)</b>	<b>FY 2023 Request vs FY 2021 Enacted (%)</b>
<b>Northeast Home Heating Oil Reserve</b>					
Commercial Leases	5,700	5,700	6,100	+400	+7.0%
Information Technology Support	700	700	800	+100	+14.3%
Quality Control and Analysis	100	100	100	0	0%
<b>Total, Northeast Home Heating Oil Reserve</b>	<b>6,500</b>	<b>6,500</b>	<b>7,000</b>	<b>+500</b>	<b>+7.7%</b>

**Northeast Home Heating Oil Reserve  
Explanation of Major Changes (\$K)**

<b>FY 2023 Request vs FY 2021 Enacted</b>
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<b>Northeast Home Heating Oil Reserve:</b> The Request of \$7,000 will cover full requirements in FY 2023, to include the full cost of leased commercial storage contracts, information technology support costs, and costs for product quality control and analysis.	<b>+\$500</b>
<hr/>	
<b>Total, Northeast Home Heating Oil Reserve</b>	<b>+\$500</b>

**Energy Security and Infrastructure Modernization Fund  
Proposed Appropriation Language**

None.

**Explanation of Changes**

No budget request is made for FY 2023. The Bipartisan Budget Act of 2015 (Public Law 114-74) authorized the final sale to raise revenue for the Energy Security and Infrastructure Modernization Fund to occur in FY 2020. Section 14002 of the CARES Act (P.L. 116-136) provided the Department flexibility to conduct the final sale in FY 2020, FY 2021, or FY 2022. DOE conducted the final sale in FY 2021. Funds in the ESIM account will be used for Life Extension Phase II (LE2) SPR infrastructure modernization project.

**Public Law Authorizations**

Public Law 114-74, "Bipartisan Budget Act of 2015."

**Energy Security and Infrastructure Modernization Fund  
(\$K)**

FY 2021 Enacted	FY 2022 Annualized CR	FY 2023 Request
0	0	0

**Overview**

Section 404 of the Bipartisan Budget Act of 2015 directed the Secretary to establish a Strategic Petroleum Reserve (SPR) Modernization Program to protect the United States economy from the impacts of emergency supply disruptions. The Energy Security and Infrastructure Modernization (ESIM) Fund was established in 2016 for the purpose of providing for the construction, maintenance, repair, and replacement of SPR facilities and associated capital equipment. In establishing the ESIM Fund, Congress made the following findings: 1) The SPR is one of the nation’s most valuable energy security assets; 2) The age and condition of the SPR has diminished its value as a federal energy security asset; 3) Global oil markets and the location and amount of U.S. oil production and refining capacity have dramatically changed in the 40 years since the establishment of the SPR; and 4) Maximizing the energy security value of the SPR requires a modernized infrastructure that meets the drawdown and distribution needs of changed domestic and international oil and refining market conditions.

Section 404 also authorizes the drawdown and sale of crude oil from SPR worth up to \$2 billion over four fiscal years (2017 through 2020) to supply revenue to the ESIM fund and thus finance the Life Extension Phase II (LE2) project. Section 14002 of the CARES Act (P.L. 116-136) provided the Department flexibility to conduct the final sale in FY 2020, FY 2021, or FY 2022. The Department has raised a total of \$1.4B through authorized sales of SPR crude oil for this purpose.

The LE2 project will modernize aging SPR infrastructure through systems upgrades and equipment replacement to ensure the SPR is able to meet mission drawdown and distribution requirements and maintain operational readiness for the future.

**Highlights and Major Changes in the FY 2022 Budget Request**

No budget request is made for FY 2023 and beyond.



**Energy Security and Infrastructure Modernization Fund  
Funding by Congressional Control  
(\$K)**

	<b>FY 2021 Enacted</b>	<b>FY 2022 Annualized CR</b>	<b>FY 2023 Request</b>	<b>FY 2023 Request vs FY 2021 Enacted (\$)</b>	<b>FY 2023 Request vs FY 2021 Enacted (%)</b>
<b>Energy Security and Infrastructure Modernization Fund</b>					
Oil Sale Revenue Targets	0	0	0	0	0.0%
Crude Oil Sales Revenue Offsetting Collections	0	0	0	0	0.0%
<b>Total, Energy Security and Infrastructure Modernization Fund</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>
<b>Federal FTEs</b>	<b>23</b>	<b>23</b>	<b>23</b>	<b>0</b>	<b>0.0%</b>

## Energy Security and Infrastructure Modernization Fund

### Overview

The Major Milestones (approved and estimated) for the LE2 project are as follows:

Life Extension Phase II Critical Decisions (CD):

- CD-0 Approve Mission Need – FY 2016 (Approved October 2015)
- CD-1 Approve Alternative Selection and Cost Range – FY 2016 (Approved December 2016)
- CD-3A Approve Long Lead Time Equipment Procurement Items (Bryan Mound, Big Hill, West Hackberry) (Approved July 2017)
- CD-3A Approve Long Lead Time Equipment Procurement Items (Bayou Choctaw) (Approved November 2018)
- CD-3B Approve Long Lead Time Equipment Procurement Items (Bryan Mound, Big Hill, West Hackberry) (Approved November 2018)
- CD-3B/C Approve Long Lead Time Equipment Procurement Items/ Site Prep (Bayou Choctaw – CD-3B) (Other Sites CD-3C) (Approved October 2019)
- CD-3C/D Approve Long Lead Time Equipment Procurement Items / Site Prep (Bayou Choctaw – CD-3C, Other sites – CD-3D) (Approved January 2021)
- CD-2 Approve Performance Baseline BM, BH, BC – (Approved June 2021)
- CD-3 Approve Start of Construction/Project Execution BM, BH, BC – (Approved June 2021)
- Award Construction Contracts BM, BH, BC – This would follow immediately after CD 2/3 approvals in June 2021. I'm sure construction contracts have been awarded by now (I know BM had them in hand and would issue the contracts as soon as CD 2/3 was approved) but I don't get info down to that level. I think it would be safe to say June 2021 but you could be more cautious with July 2021
- CD-2 Approve Performance Baseline WH – September 2021
- CD-3 Approve Start of Construction/Project Execution WH – September 2021
- Award Construction Contracts WH – October 2021
- CD-4 Approve Project Completion (Big Hill, Bayou Choctaw, Bryan Mound) (Estimated April 2025)
- CD-4 Approve Project Completion (West Hackberry) (Estimated October 2025)

LE2 involves work at the Bryan Mound, Big Hill, West Hackberry, and Bayou Choctaw storage sites. The major components of work activities at each site are:

- Bryan Mound and Big Hill: Process Piping, Pipelines, Process & Rotating Equipment
- West Hackberry: Brine System, Civil and Security Systems, Process Piping, and Process Equipment
- Bayou Choctaw: Brine Disposal System, Degas Plant, Roadways and Lighting, Security and Electrical Systems
- Cavern Secondary Well Drilling Program at Bryan Mound, Bayou Choctaw, and West Hackberry sites.

**Energy Security and Infrastructure Modernization Fund  
Funding (\$K)**

	FY 2021 Enacted	FY 2022 Annualized CR	FY 2023 Request	FY 2023 Request vs FY 2021 Enacted (\$)	FY 2023 Request vs FY 2021 Enacted (%)
<b>Energy Security and Infrastructure Modernization Fund</b>					
Oil Sale Revenue Targets	0	0	0	0	0.0%
Crude Oil Sales Revenue Offsetting Revenue Collections	0	0	0	0	0.0%
<b>Total, Energy Security and Infrastructure Modernization Fund</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>

**Energy Security and Infrastructure Modernization Fund  
Explanation of Major Changes (\$K)**

Oil Sale Revenue Targets: No budget request is made for FY 2023.

<b>FY 2023 Request vs FY 2021 Enacted</b>
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\$0

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**Total, Energy Security and Infrastructure Modernization Fund**

\$0

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**Energy Security and Infrastructure Modernization Fund  
Life Extension Phase II**

**Description**

The Life Extension Phase II project funds activities to modernize aging SPR infrastructure through systems upgrades and associated equipment replacement to ensure the ability to maintain operational and drawdown readiness capability. The scope of work includes system upgrades and associated equipment replacement for the following systems:

- Crude oil transfer systems
- Raw water systems
- Power distribution and electrical systems
- Physical security systems
- Firefighting systems
- Crude oil processing (degasification) plant
- Auxiliary systems and facilities

By FY 2023, The Earned Value Management System (EVMS) will be certified by DOE's Office of Project Management. The project technical baseline will be established (CD-2) and approval to begin construction (CD-3) will be achieved for the last remaining site, West Hackberry. During 2023, LE2 will be in the construction phase of the program at all 4 sites.

**FY 2023 Anticipated Major Milestones:**

- LE2 will be in the construction phase at all 4 sites.
- All CD approvals will be granted, excluding CD-4, which is scheduled for FY 2025.

**Energy Security and Infrastructure Modernization Fund**

**Activities and Explanation of Changes**

FY 2021 Enacted	FY 2023 Request	Explanation of Changes FY 2023 Request vs FY 2021 Enacted
<b>Energy Security and Infrastructure Modernization Fund</b>		
<b>SPR Modernization \$0</b>	<b>\$0</b>	<b>\$0</b>
• No Budget Request was made for FY 2022.	• No Budget Request is made for FY 2023.	• There is no further requirement

**Management  
Funding (\$K)**

	FY 2021 Enacted	FY 2022 Annualized CR	FY 2023 Request	FY 2023 Request vs FY 2021 Enacted (\$)	FY 2023 Request vs FY 2021 Enacted (%)
<b>ESIM Program Direction</b>					
Salaries and Benefits	0	0	0	0	0.0%
Travel	0	0	0	0	0.0%
Other Related Expenses	0	0	0	0	0.0%
<b>Total, Management</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>
<b>Federal FTEs</b>	<b>23</b>	<b>23</b>	<b>23</b>		