

**Testimony of Phillip Brown,
Specialist in Energy Policy for the Congressional Research Service,
Before the Senate Committee on Energy and Natural Resources,
Hearing on the Strategic Petroleum Reserve
October 17, 2019**

Chairman Murkowski, Ranking Member Manchin, Members of the Committee, good morning. CRS appreciates the opportunity to testify about the Strategic Petroleum Reserve (SPR). My name is Phillip Brown, Specialist in Energy Policy for the Congressional Research Service. The focus of my testimony is the SPR policy framework, actual, awarded, and planned SPR mandated and modernization oil sales, and policy considerations regarding the SPR. In accordance with our enabling statutes, CRS takes no position on this policy or other legislation.

Background and Policy Framework

In response to the 1973 Organization of Arab Petroleum Exporting Countries (OAPEC) embargo on oil shipments to the United States, an event that contributed to rapidly escalating oil prices and petroleum product scarcity, the Energy Policy and Conservation Act (EPCA, P.L. 94-163) was enacted in December 1975. EPCA authorized the creation of the SPR to hold reserves of up to 1 billion barrels of petroleum products, among other provisions.

As amended, the SPR section of the U.S. Code (42 U.S.C. Chapter 77, Subchapter I, Part B) states that it is the policy of the United States to create an SPR to (1) “reduce the impact of disruptions in supplies of petroleum products,” and (2) “to carry out obligations of the United States under the international energy program.” The Agreement on an International Energy Program is a multilateral treaty (25 UST 1685) that includes a requirement for signatories to maintain emergency reserves equivalent to 90 days of prior year net imports of crude oil and petroleum products. Reserves may be held by the public sector and/or the private sector.

As of October 11, 2019, SPR oil stocks totaled nearly 643 million barrels, approximately 275 days of net import coverage based on 2018 annual data.

SPR Mandated and Modernization Sales

With relatively little SPR utilization in response to emergency global supply disruptions (for example, in response to instability and oil supply disruptions in Libya in 2011); limited, although more frequent, oil exchanges in response to domestic supply disruptions due to hurricanes and other circumstances (most recently in 2017 after Hurricane Harvey); and decreasing U.S. net petroleum (crude oil and products) imports, Congress has recently enacted legislation that requires SPR oil to be sold in order to fund other legislative priorities.

Since 2015, seven laws have been enacted that cumulatively mandate the sale of 271 million barrels of SPR crude oil during fiscal years 2017 through 2028. These mandated sales represent nearly 39% of SPR stocks held at the beginning of 2017. Congress has also authorized up to \$2 billion of SPR oil sales during fiscal years 2017 through 2020 to pay for SPR modernization activities. To date, 44.8 million barrels of mandated sales have either been delivered or have been awarded and 15.3 million barrels of SPR modernization sales have occurred—in total, approximately 60.1 million barrels.

By the end of fiscal year 2028, assuming no additional sales or acquisitions occur, SPR stocks are estimated to be 409 million barrels under existing law. SPR stocks could potentially be lower should additional modernization sales occur in fiscal year 2020. Legislation that requires up to \$450 million of modernization sales in FY2020 has passed the House (H.R. 2740) and has been reported by the Senate Appropriations Committee (S. 2470).

Policy Considerations

Energy Information Administration (EIA) reference case projections indicate that the United States could become a net petroleum exporter as soon as 2020 and remain a net exporter until 2049. However, other cases analyzed by EIA indicate that the United States may continue to be a net importer. Should the reference case projection be realized, the International Energy Program emergency reserve commitment for oil stocks—a quantifiable SPR statutory policy objective—may no longer be binding. However, the statutory policy to provide protection from the impact of supply disruptions—an objective that is difficult to quantify—would remain.

The United States is integrated, through trade, with the global oil market and may continue to be exposed to price escalation that could result from global supply disruptions. For example, U.S. refineries imported approximately 7.8 million

barrels per day (bpd) of crude oil in 2018, and U.S. crude oil and petroleum product exports were approximately 7.6 million bpd. Global market integration means that supply disruptions anywhere will likely be reflected in domestic price levels. However, market integration also allows the U.S. petroleum industry to contribute towards addressing disruptions and mitigating global price impacts.

The September 2019 oil infrastructure attack in Saudi Arabia, which temporarily disrupted production and processing of approximately 6% of global oil supply, resulted in the largest single-day West Texas Intermediate (WTI, the U.S. domestic oil price benchmark) price increase over the last 10 years. This effect on U.S. domestic price levels from a temporary disruption in a foreign country illustrates the integrated and global nature of oil markets. Potential and actual economic dislocation that oil supply disruptions and rapid oil price increases are likely to create are among market conditions the SPR was intended to address. On September 15, 2019, President Trump announced that an SPR release was authorized if needed. However, to date, an SPR drawdown in response to events in Saudi Arabia has not occurred, and the WTI benchmark price returned to near pre-attack levels within two weeks.

As SPR oil sales continue, and should the U.S. become a net petroleum exporter, the future of the SPR is likely to continue to be the subject of policy debates. However, determining an optimal SPR size and configuration that addresses a difficult-to-quantify statutory objective may be challenging due to several factors, including the uncertain size, duration, and nature of future supply disruption events.

Thank you for the opportunity to testify today. I will be glad to answer any questions from members of the Committee.