

## The U.S. Strategic Petroleum Reserve And The Saudi Connection

By Mamdouh G. Salameh\*

When in April 1996 the Congress authorized the U.S. Administration to sell 12 million barrels (mb) of crude oil from the Strategic Petroleum Reserve (SPR), the Federal government-owned and controlled crude oil stockpile, many influential voices in Washington expressed deep concern about the sale at a time of growing U.S. dependence on oil imports particularly from the Gulf region.<sup>1</sup> They could not, however, have been aware that 7,000 miles away the Saudis were virtually completing the construction of their own Strategic Petroleum Reserve (SSPR) with storing facilities for one billion barrels of crude oil and product for their own use and the use of their closest ally, the United States. Nor could they have been aware of the length and breadth of cooperation between the United States and Saudi Arabia and the extent of what has been termed the 'mutuality of interests' between them.

### Success of the SPR

For more than two decades United States petroleum policy has rested on two pillars:

- the ability of the military to protect, defend and, if necessary, take back the oilfields of the Gulf states.
- the SPR, set up in 1974, which acts as an insurance policy to mitigate the impact of a supply disruption on the economy.

These twin pillars have ensured a plentiful and uninterrupted source of oil for the United States. The policy worked. During the Gulf War in 1991 – the only time it was specifically used for the purposes it had been designed to serve – SPR sales provided an instantaneous counterforce to an expected market panic that could have taken place at the outset of the war.

Following the Gulf War sale, the pressure of mounting U.S. Federal government budget deficits began to offset a standing legislative requirement to fill the SPR to 750 mb at the rate of 7,500 barrels per day (b/d). The last purchase of oil for the SPR was made in 1994. Then, in April 1996 Congress passed the Omnibus Appropriations Act which directed the Department of Energy to sell \$227 m worth of oil to allow the achievement of the overall budget target for the year. Also contained in the Bill, as part of the 1997 Administration Budget, was a proposal that the SPR sell \$1.5 bn of oil in 2002.<sup>2</sup>

The SPR cover, which is calculated in terms of the number of days' imports that it holds, has been declining in the face of rising oil imports and this had been attributed to fiscal pressures. Private industry crude oil stocks have also been declining but for different reasons. The adoption of 'just-in-time' inventory management techniques by the oil industry has led to a reduction in private stocks of 100 mb

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<sup>1</sup> See footnotes at end of text.

between 1995 and 1996 alone.<sup>3</sup>

If, however, U.S. crude oil imports continue to rise, as most analysts predict, the effectiveness of the SPR will decrease further and, at some point, decreasing stock levels will undermine the U.S. advocacy that other OECD governments should build and hold strategic oil stocks.

In 1997 net crude oil imports accounted for more than 50 percent of the US oil needs, or 8.93 million barrels per day (mbd) of which 58 percent came from the Middle East.<sup>4</sup> Although there has been some diversification in supply sources, imports in the year 2000 could account for 66 percent of domestic crude requirements, or 12.95 mbd, three-quarters of which will also come from the Middle East.

The American Petroleum Institute (API) believes that the SPR oil should be made available when an emergency exists but should not be used to dampen price increases or to balance Federal budget deficits. The current SPR holdings, about 575 mb, represent only 64 days' supply of imports when it should provide 90 days of import coverage to satisfy standing legislative requirements.<sup>5</sup>

Dr. John Lichtblau, Chairman of Petroleum Industry Research Association (PIRA) estimates that a supply disruption would cost the U.S. economy hundreds of billions of dollars whereas the cash infusion provided by selling the reserve would come to only \$8 bn to \$12 bn. He goes on to warn that even if the SPR volumes were to remain at present levels, they will be sufficient to cover less than 60 days of the Energy Information Administration's projected net imports in 2000.<sup>6</sup>

### The Saudi Connection

The Saudi authorities originally conceived of a project to store vast quantities of oil as a strategic reserve, from which they could pump in the event of disruption to either their own oilfields or those of their neighbours. That was in the years following the Iranian Revolution and the feared cut-off of oil exports through the Strait of Hormuz. Since then, much has changed. The East-West pipeline from the Eastern Province oilfields to Yanbu on the Red Sea has proved its worth within the Kingdom, whilst a host of other pipelines were built to connect Iraq to Western markets, bypassing the strait.

During the pipeline building era of the 1980s Saudi Arabia studied rock storage in depth. Engineering consultants and companies from France, Canada and Scandinavian countries all contributed to studies and assessments intended to determine the practicality of constructing a set of storage facilities that might hold as much as one billion barrels (bb) of crude oil – the equivalent of several months exports.<sup>7</sup>

Neither the Saudi government nor any of the companies involved with the project was prepared to acknowledge publicly their role in the project. In 1987 a decision was taken to proceed with the project but few details were published. Estimates of the project were put at \$3.9 bn and agreements were reached on payment in oil. What was not clear was just what it was that the Saudis intended to construct.

The intention was to construct storage facilities for both crude oil and product in giant underground caverns carved out of the rock. Actual construction work on the Saudi caverns appears to have begun in about 1988/89. But again, little public information was given on the subject.

Then came the Kuwait crisis. The Saudis were anxious, during the run-up to Desert Storm, to show that they, too,

were playing their part in providing the allied forces with the fuel necessary to wage a comprehensive war with Iraq. In January 1991, just 48 hours before the allies began their aerial bombardment of Iraq, a U.S. scientist involved in the Saudi project was authorized to disclose some basic details. This reserve, he said, was considered very necessary to the security of Saudi Arabia and unlike the U.S. SPR, was geared to the storage of product fuel – not crude oil.<sup>8</sup> The Saudis did not need to store crude oil but they have seen how vulnerable their refineries were to air attacks during the Iran-Iraq War.

#### **The Military Nature of the Saudi SPR**

By 1993, work was known to be proceeding at five locations, while a sixth had been identified as a further site. These were: Al-Kharj, south of Riyadh; Bahrah, near Jeddah; Medina, in the Hijaz and Khamis Mushait near the border with Yemen. Site surveys were reported to have been completed at Qassim in Central Arabia and at Hafr al-Batin, near the Iraqi border.

For some time, it had been clear that this was primarily a military project, although sources said that fuel storage would cover civilian as well as military needs. The storage facilities at Al-Kharj were completed in 1996 while those at Bahrah should be ready in 1998. Work at Medina, Khamis Mushait, Hafr al-Batin and Qassim is still proceeding.<sup>9</sup>

There are some indications that the project is proceeding at a slow but steady pace.

Originally, it was envisaged that the Saudis would allocate 300,000 to 350,000 b/d of oil to pay for the project, with completion envisaged by 1998. Yet actual physical construction has now been going for about nine years and the timetable would seem to indicate that the construction of all six facilities will not be completed until the turn of the century. Allocations for the project also appear to have been reduced to 200,000 b/d.

The choice of sites illustrates the project's military

importance. Al-Kharj is one of the Kingdom's major air bases. Khamis Mushait and Hafr al-Batin are the sites of the two military bases guarding the Yemeni and Iraqi frontiers respectively. The other three are on, or close to the existing pipeline network.

Now that work is close to completion, the Saudis are no longer secretive about it. This should mean that if ever Saudi Arabia and its closest allies, notably the United States, have to mount a later-day version of Desert Storm, then the refuelling facilities will be there, even in the event of a direct assault on the Kingdom. It also means supplementing a falling American SPR with a full Saudi one, thus enabling the U.S. government to periodically sell some of its SPR oil to balance the Federal budget without undermining its energy security.

This is what Sheikh Ahmed Zaki Yamani has termed the 'mutuality of interests' between Saudi Arabia and the United States.

#### **Footnotes**

<sup>1</sup> Mamdouh G. Salameh, "Is A Third Oil Crisis Looming Before the End of the 1990s?", *IAEE Newsletter*, Fall 1996 issue, p. 26.

<sup>2</sup> Peter S. Adam, "Questions Concerning the U.S. Strategic Petroleum Reserve", *Petroleum Review*, London, September 1996, p. 413.

<sup>3</sup> Mamdouh G. Salameh, "Crude Oil Prices on an Upward Trend", *IAEE Newsletter*, Summer 1997 issue, p. 10.

<sup>4</sup> *BP Statistical Review of World Energy*, 1998.

<sup>5</sup> Peter S. Adam, "Questions Concerning the U.S. Strategic Petroleum Reserve" p. 414.

<sup>6</sup> *Ibid.*, p. 414.

<sup>7</sup> John Roberts, "Saudi Storage - Between a Rock and a Hard Place", *Petroleum Review*, August 1994, p. 358.

<sup>8</sup> *Ibid.*, pp. 358-359.

<sup>9</sup> *Petroleum Argus*, various issues, 1993-94.

## **International Association for Energy Economics Student Scholarships**

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