Our View: Strategic Sense

Philip K. Verleger, Jr.

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The United States Congress last week addressed the US budget deficit and the debt limit. With luck, these issues will not arise again until 2017. One element in the agreement involved the Strategic Petroleum Reserve. As part of the deal, Congress called on the Obama administration to begin selling oil from the SPR. Many in the energy industry, as well as those who earn a living talking about energy security, are horrified. Senator Lisa Murkowski (R-Alaska), who chairs the Senate Energy Committee, has often said those who would sell oil from the reserve are "treating the SPR as a piggybank."

Critics point out that the United States might lose money by selling oil now because the government bought high and would be selling low. This view reflects an ignorance—the one thing the naysayers have in abundance—regarding what the United States paid for the oil and the role of strategic stocks. We bought much of the crude at low prices—for example, to bail out Mexico during that nation's 1982 economic crisis. The cost of that oil on average was probably $25 per barrel. But the price is irrelevant. The critics are unaware that every nation in the world has almost certainly lost money on strategic stocks and that the loss has nothing to do with the security gained from holding reserves.

Our view is the critics have no comprehension of the history of national security or energy. Those who assail selling oil from the SPR ignore the changed nature of the nation's energy structure. They also disregard economics. However, their worst failing is their obliviousness to the history of national security in general and in particular with respect to the United States.

We begin with security. All nations acquire commodities to assure national security. Horses were a key to national security at the turn of the last century. Nations in Europe had large stables ready to provide their cavalry with the "horse power" needed in battle and to pull supply wagons and cannons. No one ever asked whether the money spent on maintaining the stables earned a return. The funds did not earn a return. They did, though, provide protection by keeping a ready stock of horses on hand for military use.

Prior to World War II, the future belligerents spent large sums accumulating inventories of iron, magnesium, other metals, and petroleum in preparation for war. Japan did a better job than any other nation. No one ever asked whether the purchases earned a return. The countries could not have built tanks and airplanes without the metals nor operated them without the oil.

Following the war, the United States found itself with unneeded reserves of various metals, helium, and other materials. Again, no one asked whether the strategic stocks would earn a return or profit. We built the reserves during the World War II effort. When that war ended, the stocks were eventually sold off by an agency at the Department of Defense when it became clear that technology or other factors had made them superfluous. We doubt the country earned a profit from this.

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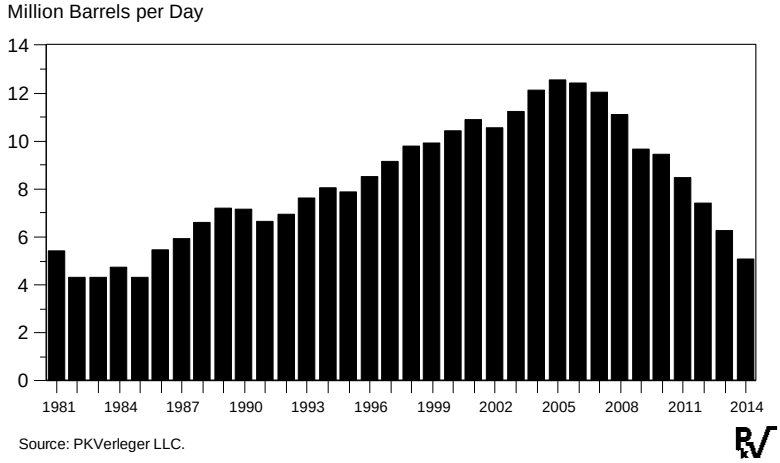
The utter stupidity associated with the "government bought high and would be selling low" comment can best be seen by looking not at stocks but at two weapons systems: the B52 bomber and the Ohio-class ballistic missile submarine now operating for the US Navy. We spent billions if not trillions building both attack platforms with a cash return to US taxpayers of zero dollars and zero cents. However, no one would assert the money was wasted. Since World War II, the maintenance of a nuclear deterrent has generated billions in benefits in terms of security.

The SPR has provided the same type of defense. Created after the 1973 Arab Embargo, it provided in theory a platform of protection should oil imports to the United States be cut. It was a necessary element in the nation's energy security program when US net imports of crude oil and petroleum products peaked in 2006.

However, as can be seen from Figure 1, US net imports of crude and products declined fifty-nine percent through the end of 2014. They have fallen further in 2015. In addition, the nature of US petroleum markets has changed drastically. Again, critics of the SPR sale fail to focus on these factors.

Figure 1
US Net Crude Oil and Petroleum Product Imports, 1981 to 2014



The structural change to the US oil market has rendered the SPR useless. We offer several analogies to drive this point home.

First, the US Army's insistence on keeping large stocks of horses to supply the cavalry well into the 1930s represents one of the more obvious wastes of government money. The horse cavalry was useless and suffered horrible casualties in World War I. It would have been annihilated by German and Japanese tanks in World War II. Today, holding strategic oil reserves on the US Gulf is no more useful than the Army stockpiling horses in the 1930s.

Second, the investment in giant dreadnaughts and battleships in the 1930s when the destructive power of dive bombers and torpedo planes was already obvious represents a second waste. The consequences became obvious on December 7, 1941. Ironically, as Walter Lord noted in his great book *Day of Infamy*, the Navy had asserted that "no battleship has ever been sunk by an airplane" just a week before in the program for the Army-Navy football game. US strategic oil reserves are the current version of the battleship.

The US Strategic Air Command's insistence on maintaining a bomber fleet after the superiority of intercontinental ballistic missiles became evident provides a final illustration of bureaucratic resistance to changed circumstances. Fleets of B52s remained on station, ready to depart on a few minutes notice, for years after we knew any nuclear exchange would involve massive missile salvos.

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To recap, the SPR—like the Army's unneeded horse stables, the Navy's obsolete battleships, and SAC's B52 squadrons—is now defunct.

The US SPR became outdated for two reasons. First, domestic oil production surged thanks to technical progress. Second, the increase in US and Canadian output changed the nature of North American oil flows.

The greater US oil output is old news. Simply put, net US imports have declined from a peak of 12.5 million barrels per day to five million barrels per day at the end of 2014, as Figure 1 above shows. Rising output and declining consumption are credited for the change. The shift in the US oil market's structure is also old news. However, it has been ignored. Combined, these factors have made the SPR superfluous.

The key element in the structural change is the US East Coast becoming energy independent. This development has coincided with the advent of a highly dependent US West. Figures 2 and 3 illustrate the point. Figure 2 shows US West Coast imports. Figure 3 (page 4) shows US East Coast imports. From Figure 2, one can observe that the US West was once a net exporter. As it happens, it was a net exporter when the SPR was created. For this reason, no oil reserves were located there.

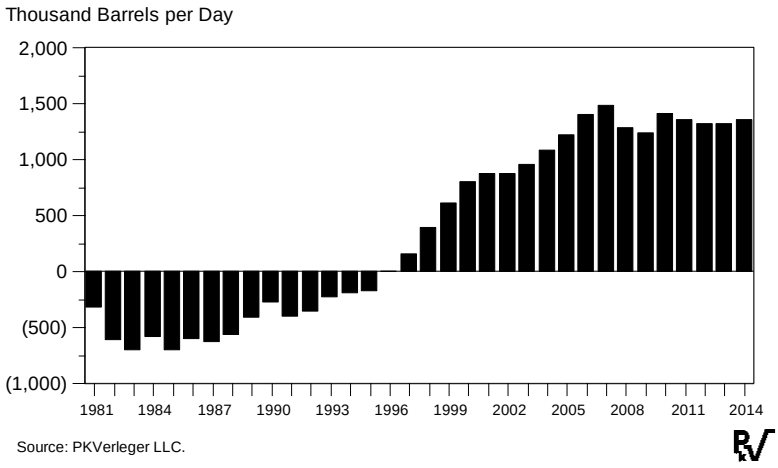
Today, the US West imports almost 1.5 million barrels per day of crude and products. Were the West an independent country and an IEA member, it would have to hold one hundred twenty-two million barrels of inventories to meet its IEA obligation. At the end of 2014, stocks in the West numbered one hundred forty-four million barrels, fifteen percent above the IEA's minimum level. Despite this, the US government owns no crude oil stocks in the West.

Of course, the SPR defenders will assert that strategic stocks held on the US Gulf could be shipped to the West. This claim is fiction. There are no pipelines to move oil from the SPR sites east of the Rockies to the West Coast.

Oil also cannot be moved by rail from the SPR sites to the West because there are no facilities at government-operated storage locations to load rail cars. Nor are there facilities to unload rail cars in the West. Refiners have pushed to build these in San Francisco and the state of Washington. However, the efforts have been blocked by environmentalists who would prefer the US build strategic bicycle reserves in California, Oregon, and Washington.

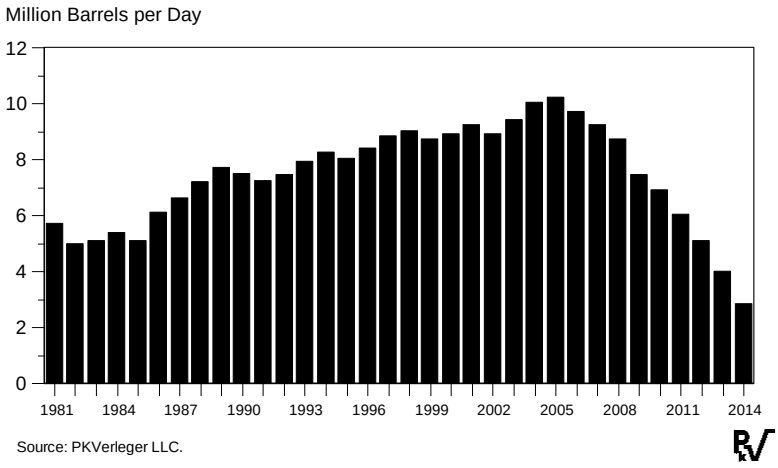
The only way for SPR oil to move to the West is by ship.

Figure 2
PADD V Net Crude and Product Imports including Shipments from PADDs I-IV, 1981 to 2014



Given congestion at the Panama Canal, it might have to travel around Cape Horn, just as goods did in 1860. Is this progress?

Figure 3
PADD I-IV Net Crude and Product Imports including Imports from PADD V, 1981 to 2014



The US West is isolated. In a crisis, the region will, to paraphrase the late John Ehrlichman, be allowed to "hang there and twist slowly, slowly in the wind."

In contrast, the US East does not need strategic petroleum reserves. Figure 3 shows the import dependence of the US East. States east of the Rockies hold inventories equal to four hundred seventy days of consumption, more than five times the amount required by the IEA treaty. Inventory coverage would still be more than two hundred days of consumption were all the oil in the SPR sold.

The numbers, though, hide the East's truly rich position because half of its net imports come from Canada. While the United States exports large volumes to Canada, we import even more.

The numbers also hide the fact that the SPR is useless today. Facilities were sited on the Gulf Coast so oil could be moved to refineries on the Gulf and in Illinois, Indiana, Kentucky, and Tennessee. In the past, these sites all processed crude imported through the Gulf. Today they all process Canadian or US crude. The pipelines have been reversed.

The SPR oil is sterilized. It cannot get to US refineries. Bureaucrats at the US State Department understand this and welcome the development because they can use accumulated oil as an international bargaining chip. The crude was never intended for that purpose, and we would object to letting the "striped pants" set have such a tool.

The US position is strengthened because Canada must send its oil to the United States. The crude produced in Alberta cannot go west or east in significant volumes. It must stay in the ground or come south.

The simple truth is that states in the Rocky Mountains and points east have become energy independent. They do not require the SPR. The situation is analogous to the US defense position twenty years ago. At that time, in their pursuit of a MAD (Mutually Assured Destruction) policy the United States and Russia built enough nuclear missiles to exterminate all humans several times over.

The SPR is the energy equivalent of MAD. It exists today only to perpetuate the jobs of bureaucrats at the Department of Energy, give a few individuals at the State Department something to do, provide a

research topic for some at Columbia University and the Center for Strategic studies, and give power to a few senators and representatives.

The decision to sell fifty-eight million barrels is a small start. One hopes policymakers come to their senses and see the situation as it is rather than living in a fantasy world. Oil prices will rise by 2020. A gradual liquidation of the SPR would moderate the rate of increase and offset the absence of investment that will follow the current price collapse.

Anyone truly interested in energy security (and there seems to be no one concerned about it today) should focus on the vulnerability of the US West Coast. Those in the oil industry and the federal government should worry that, were a crisis to occur today, the person who would emerge as a national leader on energy security would be California' s governor Jerry Brown, not officials in Washington. Governor Brown, if faced with a fifty-percent cut in supply and no strategic stocks, might find a way to reduce oil use by fifty percent permanently. Should he or the next governor succeed in this, the global future of oil would indeed be grim.

The threat of California having to introduce new and novel measures to offset a supply disruption should motivate the oil industry to become active in the SPR debate. Companies with a large exposure to California and the West Coast, such as Chevron, should push to see strategic stocks held on the Gulf sold to fund a strategic reserve where it is required: the West Coast.