



The Shale Gas Paradigm

By Jim Clarkson

It was in 2008 that the financial analysts and prognosticators in the gas industry fully realized that a revolution had occurred with the development of shale gas production. Of course, the drilling sector of the industry had for several years been aware that something big was happening. Gas supplies previously thought to be unrecoverable were not only able to be exploited but proved to be enormous by any standard as well as ever cheaper to develop.

The gas industry is now in a new era. The ramifications of the shale gas phenomena are being understood and acted upon. These are the major lessons and implications of the new paradigm.

There was no plan. Thank goodness!

The shale revolution occurred from the bottom up; it was unforeseen, spontaneous, indigenous and entrepreneurial. Incremental improvements in seismic analysis, horizontal drilling and hydraulic fracturing led to the series of small breakthroughs that became a game-changer in the gas business. There was no comprehensive national energy plan that took into account this amazing development. There were no hearings with experts testifying before politicians to determine what the proper policy should be toward the application of this technology. There were no federal programs with subsidies, tax breaks and mandated markets to favor the shale industry. In fact, if there had been such an approach the industry would probably still be bogged down with interest group infighting and the seeking of politically-granted advantage. Any government energy plan developed five years ago would have emphasized imported Liquefied Natural Gas as the way to meet U.S. future gas needs. Yet, in fact, our enormous shale reserves are enabling us to export LNG. The new shale order of things is a triumph of free enterprise over government planning.

The myth of dwindling resources has been undermined.

What are called “natural resources” are not natural at all but are man-made. Shale gas lay worthless beneath the earth’s surface for the whole of man’s previous existence until human intelligence made it valuable. Shale gas was simply not a resource until a few years ago. Now we understand that we have enough known gas supplies to last many decades, even centuries. The “peak oil” alarmists must be worried as the shale recovery technology is rapidly being adapted and applied to heretofore unrecoverable oil reserves. The next big happening in gas may well be the development of methane hydrates. Providence has favored America yet again.

The existence of huge shale gas and oil reserves is ruining the current Washington-based campaign to make conventional energy sources expensive.

The statements by President Obama and the actions of the Department of the Interior and the Environmental Protection Agency make it clear that the administration's strategy is to make oil, gas and coal so expensive that energy from solar, wind and ethanol can be price competitive. Working hand-in-hand with the green lobby, the EPA is attacking shale gas development. The hysteria about hydraulic fracturing polluting ground water is being fomented in the states of New York and Pennsylvania. Such nonsense would never fly in gas producing states of Oklahoma, Texas or Louisiana. Meanwhile the Department of Interior has made 97% of the onshore and 94% of the offshore areas controlled by the federal government off-limits for gas exploration. The anti-energy strategy may not work. During 2009 and 2010 the big oil companies began buying the small entrepreneurial but politically weak companies that made the shale gas revolution possible. Say what you will about the evils of big oil, but this time they are on the side of the people, and they have the means to fight back.

By the way, the use of shale gas producing techniques developed in the relatively free enterprise system of the U.S. is spreading to the rest of the world with U.S. government encouragement! Increased access to energy is a key to economic progress in the undeveloped world. Too bad we can't export capitalism along with its technical and scientific fruits.

The use of cheap, plentiful shale gas will expand in the years ahead.

We don't need a central plan or any government favoritism to encourage the use of natural gas in transportation and power generation. The stand-alone economics of gas use are facilitating its rapid expansion into these markets. This too was unforeseen just a few years ago. The existing interstate pipeline network has a great deal of capacity to move gas from the Gulf to the Mid-Atlantic population centers. There are new pipelines being constructed to connect gas wells from the Pennsylvania shale fields to the major east coast pipelines. This will leave pipeline capacity available in the Southeast and Mid-West for supplying new gas-fired electric generators. If Washington fails in its efforts to thwart new gas development, then gas-using industries may return to our shores. Some observers are already calling this the century of natural gas. This could also be the century of prosperity and optimism.