



NEW BUSINESS EXPENSE

The End of Cheap Power in Texas

By Alan Lamme

Texas businesses have enjoyed lower electricity costs for a number of years due to a near five-year long bear market in the natural gas complex. Because natural, gas-fired power generation largely sets the cost that consumers pay for electricity in Texas, it only makes sense that lower-priced natural gas would equate to lower electricity rates. However, it appears that stars are coming into alignment to bring an end to those lower electricity costs as there are several major events taking place that will reinforce higher energy costs as we move into 2015.

Businesses and energy consumers in Texas as well as a sizeable percentage of the United States stand at a historical crossroad of two conflicting, incompatible forces. On one side is the game-changing upsurge in oil and gas production achieved through technological innovations first developed in the Lone Star State. On the other side is federal policy to supplant oil, natural gas and coal—now supplying over 80 percent of U.S. energy. Meanwhile, Mother Nature predicts that a cold Texas winter is factored into the

equation as well, which means that businesses might consider preparing for higher energy costs going into the New Year and beyond.

The EPA Takes Focus on the Lone Star State

Texas businesses are observing the transformative power of energy facing off with the coercive power of government. If not denied by political powers, the energy opportunities created by the shale revolution would confer multiple genuine benefits for human welfare and peace: jobs, increased income, rebirth of “Made in America” manufacturing, national security, and even the basis for geopolitical security.

The federal government’s increasing regulatory efforts to decarbonize the energy supply are not only economically damaging, they are also futile. The Environmental Protection Agency (EPA) recently proposed and has now implemented a Clean Power Plan that essentially mandates re-engineering our nation’s entire system of electric generation to lower CO₂ emissions by a whopping 30 percent, all in the name of controlling global warming. This initiative will only

reduce global warming by an immeasurable 0.01 degrees Celsius by 2050, according to the science endorsed by EPA. When this inconvenient data is brought to EPA’s attention, the agency admits its power plan won’t stop global warming but says it will symbolically demonstrate to the international community that the U.S. is willing to make sacrifices. Unfortunately for energy consumers, including Texas businesses, this means higher energy costs are coming as the EPA justifies a complete overhaul of the U.S. electric power supply, deep-sixing the coal power on which 40 percent of electric generation depends.

Thanks to huge new shale discoveries by Texas coupled with cutting-edge technologies unleashed only within the last few years, there are astonishing quantities of hydrocarbon resources that Texas energy consumers could enjoy for years to come. Yet, the EPA is zeroing in on Texas as the proverbial poster child of their new mandates that are absolutely certain to create a rate hike in the costs that consumers will be paying for their electricity expenses.

Texas: Poster Child for New EPA Mandates

In October of 2014, the U.S. Court of Appeals for the District of Columbia Circuit quietly lifted a stay on the EPA's Cross-State Air Pollution Rule (CSAPR), which is a supportive catalyst to the future prices of natural gas—particularly with regard to the back-end of the natural gas futures curve that is hugely indicative of higher energy costs. The first phase of CSAPR goes into effect as of January 1, 2015. The second, final phase is in 2017. While Texas is one of the primary focuses regarding this rule because of the large coal-fired power generation it will negatively impact, other states such as Illinois, Missouri, and Pennsylvania, to name a few, will also be heavily impacted. In a nutshell, it appears that the nearly five-year long bear market in natural gas is about over.

In terms of hedging for electricity rates for Texas businesses, longer-term contracts are now recommended in order to lock-in at lower rates before the brunt of the higher price trend gathers steam. But it's not solely the EPA that will build a floor under

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energy prices going forward. There are four other catalysts to higher energy costs coming down the pike, which include the use of natural gas in electricity generation, the petrochemical industry, liquefied natural gas (LNG) exports, and a new generation of fuel cell and battery applications.

Cold 2014–15 Winter, Coal Plant Retirement Factors in Higher Energy Costs

The natural gas market, which sets electricity rates in Texas, is now cycling into a seasonal demand pattern that will send prices higher. According

to several long-range weather forecast models and historical weather analog models, this 2014–15 winter is likely to be as cold, or even potentially colder, than last winter in the U.S. This is especially startling as last winter was among the top 10 coldest winters. The fact is, this winter is already off to a running start as the month of November was the 9th coldest on record.

As Texas businesses are bravely forging their way into 2015, in just three short years between 2017 and 2020, at least one-third of the U.S. electricity-generating capacity derived from coal will have been retired since 2012. Additionally, a vast majority of that will be switching over to natural gas, primarily driven by the EPA's initiatives.

It is estimated that for each 10 Gigawatts (GW) of generating capacity, power plants will require an additional 1 billion cubic feet of gas per day. That now stands at an additional 1.2 Billion Cubic Feet of gas per day (Bcf/d), with at least 30 GW moving over to natural gas. To put this in perspective, this transition

alone, ignoring any of the impact on coal from the intensifying EPA standard increases, will eliminate almost twice the current natural gas storage surplus nationwide.

Petrochemicals, LNG Jump into the Higher Cost Mix

The U.S. is also seeing a much bigger transition from oil to natural gas in the production of petrochemicals. This has resulted in an energetic competition among several regions for the building of several multi-billion dollar facilities. These facilities would serve as the sourcing for all manner of petrochemicals from plastics to advanced fuels produced from gas. Currently, there are seven serious proposals on the boards to build three initial plants nationwide.

Then there's the Liquid Natural Gas (LNG) trade, which is a biggie in terms of higher futures natural gas prices, with exports from the U.S. scheduled to be phased in about this time next year. It's worth noting that American exports should account for between 6 percent to 8 percent or more of a rapidly expanding, global LNG market by 2020. That's starting from where we are today, which is ground zero.

Meanwhile, there have been some significant technological changes in battery and fuel cell applications that may result in major additions to natural gas demand in the near future. That, combined with the already developing use of LNG and compressed natural gas (CNG) for higher-end truck engine retrofitting, is adding another primary outlet for natural gas.

Against this backdrop of increasing usage and demand is the massive, unconventional shale, tight, coal bed methane reserves available in the U.S. and progressively elsewhere in the world. It is what will allow Texas and the U.S. to ramp up considerable amounts of new production to meet any new increases in demand. Natural gas prices, therefore, are not going to be moving back up to the almost \$13/MMBtu experienced several years ago in 2008. But with that said, the combination of these factors with most harsh winter means we

now have the makings of a big pricing foundation moving forward.

Therefore, just like airlines have hedged their fuel expenses during periods of lower oil prices, Texas businesses should consider doing the same thing with their electricity expenses before the tsunami of bullish catalysts combine forces to send energy prices

stoutly higher in the relative near-term for years to come. **N**

Alan Lammey has 16 year's experience as a senior markets analyst and journalist and is best known for his forward-thinking energy market analysis. He can be reached via www.TexasEnergyAnalyst.com or alammey@TexasEnergyAnalyst.com.