
MUSINGS FROM THE OIL PATCH

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Note: *Musings from the Oil Patch* reflects an eclectic collection of stories and analyses dealing with issues and developments within the energy industry that I feel have potentially significant implications for executives operating and planning for the future. The newsletter is published every two weeks, but periodically events and travel may alter that schedule. As always, I welcome your comments and observations. Allen Brooks

Saudi Succession To Be 2015's Energy And Mideast Wild Card?

When the Saudis added that they were fine with oil prices in the \$70-\$80 per barrel price range for up to two years, panic swept the oil industry

The top energy story of 2014 was how the modest slide in oil prices that began in June suddenly turned into a crash when Saudi Arabia announced it was abdicating its role as the swing producer within the Organization of Petroleum Exporting Countries (OPEC) organization, and would instead rely on market forces to set the global oil price. When the Saudis added that they were fine with oil prices in the \$70-\$80 per barrel price range for up to two years, panic swept the oil industry. For the final two months of 2014, analysts and political theorists speculated on the Kingdom's motives behind the policy shift. Was Saudi trying to punish its fellow OPEC members who were continuing to cheat on their production quotas to capitalize on \$100 a barrel oil prices? On the other hand, was the new policy designed to inflict pain on Saudi's neighbor and Middle East political rival, Iran? Or maybe it was part of a conspiracy with the United States to drive down oil prices to punish Russia? Then again, many respected energy analysts speculated that Saudi was primarily lowering prices to disrupt the expansion of the shale oil revolution in the United States, which has driven Saudi oil sales here to modern day lows. Our own view has been and remains that Saudi Arabia, having only oil to sell, is worried about the lack of global economic growth, especially in Europe, and its negative impact on global oil consumption growth. Moreover, just as Saudi watched in the late 1970's and early 1980's, the high oil prices of the past five years have stimulated the oil industry to develop new supplies, further undercutting OPEC's and Saudi's market share potential. They expect low oil prices will shut down exploration and development of these new oil supplies, especially those with long production lives such as Canada's oil sands and offshore deepwater oil fields, which will allow Saudi to regain its recently lost market share.

A wild card in assessing the probabilities for answering the low oil price depth and length questions is a possible change in the leadership of Saudi Arabia

After speculation about Saudi Arabia's motives, the biggest game at year-end was guessing how low oil prices would go and for how long. For many, the uncertainty of the duration for low oil prices remains the greatest problem since the industry's ability to start and stop oil exploration and production is difficult meaning that the longer the prospect for low oil prices, the greater the need to shut down major and costly new E&P projects requiring long lead-times. An event that could play a wild card in assessing the probabilities for answering the low oil price depth and length questions is a possible change in the leadership of Saudi Arabia.

The Saudi royal family watched with envy the smooth leadership change to the next generation in Qatar

Saudi Arabia plays a key role in the Middle East and within the U.S. government's Middle Eastern foreign policy. Sunni-dominated Saudi Arabia has been the religious counterweight to Shiite-dominant Iran in the struggle for influence over the region's Arab Islamist population. The Arab Spring uprisings in the Middle East led to the overthrow of the dictatorial leaders in Egypt and Libya and the start of a civil war in Syria. It was viewed as a serious threat by other Middle Eastern countries, especially Saudi Arabia. A rapidly growing Saudi youth population, anxious to participate in western social activities in contrast to the religiously-dictated government policies, has forced the royal family to ramp up social payments to buy political and social peace. The Saudi royal family watched with envy the smooth leadership change to the next generation in Qatar that was facilitated by the country's small population and wealth.

According to later reports, the King's pneumonia problems were treated with a breathing tube and he was reportedly doing better

On the last day of 2014, 90-year old Saudi Arabia King Abdullah bin Abdulaziz (spelling of his name varies) entered a hospital suffering from pneumonia. The Saudi stock market dropped due to the uncertainty about his health. According to later reports, the King's pneumonia problems were treated with a breathing tube and he was reportedly doing better. In 2012, there were widespread rumors that the king was seriously ill, and some media outlets even reported his death, but King Abdullah recovered and has continued to rule the Kingdom. The recent hospitalization has raised royal succession to a suddenly real and potentially serious issue not only within the Kingdom but throughout the Middle East and even the world.

Each transition was accompanied with internal tensions as family members competed for power, especially in the first two transitions in the 1950's and 1960's

Since the Kingdom of Saudi Arabia was formed in 1932, it has undergone a leadership change five times. Each transition was accompanied with internal tensions as family members competed for power, especially in the first two transitions in the 1950's and 1960's. King Abdulaziz bin Saud's eldest son, Prince Saud, succeeded his father in 1952, but was forced to abdicate by his brother and the former king's second son, Faisal, in 1964. Following that transition, Faisal established a policy that a future Saudi king must not only be a senior member of the family, but he must also be viewed as having national leadership credentials. This informal qualification requirement was reinforced when Prince Khaled became king in 1975. His two older brothers lacked senior leadership experience and thus were passed over in the succession.

There are three main branches of the family: the family of the late King Faisal, which is weakening over time; the seven sons of Abdulaziz’s favorite wife, Hassa al Sudairi, known as the “Sudairi Seven”; and King Abdullah’s descendants

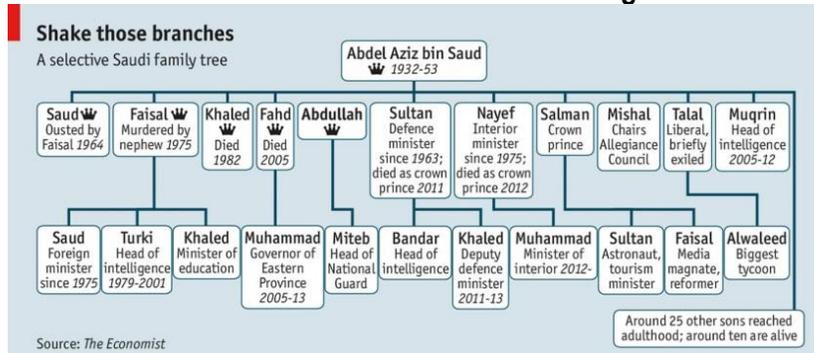
Another informal standard adopted was that a balance of power among the various branches of King Abdulaziz’s extended family be maintained in the succession process. There are three main branches of the family: the family of the late King Faisal, which is weakening over time; the seven sons of Abdulaziz’s favorite wife, Hassa al Sudairi, known as the “Sudairi Seven”; and King Abdullah’s descendants. King Faisal imposed a separate informal policy, which was that not only would a crown prince be appointed, who also held the title of first deputy prime minister, but also that a second deputy prime minister, who would be third in line of succession, would be appointed. This policy was designed to ensure that the order of royal succession would be clear, but this policy was upset by the aging of the second generation of royal sons.

The purpose of the council is to ensure a smooth transition in the event of the incapacitation or death of the King or Crown Prince

In 1992, King Fahd introduced the Basic Law of Government that created two significant succession policies. First, it established the right of the King to appoint or dismiss his heir based on suitability rather than seniority. Before, succession was based exclusively on the son’s seniority and a family consensus. The rule also legalized the passing of the title of king to the grandsons of King Abdulaziz.

In 2006, King Abdullah formed the Allegiance Council composed of representatives from the families of each of King Abdulaziz’s sons. The purpose of the council is to ensure a smooth transition in the event of the incapacitation or death of the King or Crown Prince. This mandate, along with King Fahd’s earlier decree about succession has opened the door to the possibility of considering a successor from the third generation of the family assuming he meets the standards of national leadership. The Council votes by secret ballot and is intended to determine the line of succession after the reign of King Abdullah. Importantly, the Council has the right to remove a sitting king for reasons of health, something that may come into play sooner than envisioned. The Council is headed by Prince Mishal, an older brother of Prince Muqrin, currently the second in the line of succession.

Exhibit 1. The Succession Of Saudi Arabia’s Kings



Source: *The Economist*

Crown Prince Salman is in his 70's, has been the ruler of the province of Riyadh, but reportedly suffers from Alzheimer's disease

At the present time, the royal succession provides for Crown Prince Salman of the Sudairi Seven to succeed King Abdullah upon either his death or abdication. The latter is a rarely used transition mechanism. Salman's elevation to Crown Prince followed the turbulent period of 2011-12 when both Crown Prince Sultan and his successor Crown Prince Nayef died. Following Nayef's death, King Abdullah took a long time before appointing Prince Muqrin as second deputy prime minister in February 2013, raising speculation that he was considering whether to introduce the first grandson of King Abdulaziz into the succession line. Crown Prince Salman is in his 70's, has been the ruler of the province of Riyadh, but reportedly suffers from Alzheimer's disease. Exactly what his condition is we do not know, but if the reports of his health issues are true, it sets up the possibility that the Allegiance Council could determine the royal succession upon King Abdullah's death. It could rule that Crown Prince Salman's health prevents him from ascending the throne, leaving it open for Prince Muqrin to become King.

While Prince Muqrin is thought to be a steady hand and close to the king, probably because he is strongly anti-Iranian, the fact that his mother was from Yemen and thought to have been a concubine, introduces a new dynamic into the succession thinking

Prince Muqrin is the third youngest son of King Abdulaziz. He is a pilot having been trained at a Royal Air Force college in Britain. He is a former chief of the General Intelligence Directorate and served as a governor of several provinces in the country including the one containing the holy city of Medina. While Prince Muqrin is thought to be a steady hand and close to the king, probably because he is strongly anti-Iranian, the fact that his mother was from Yemen and thought to have been a concubine, introduces a new dynamic into the succession thinking. At the current time, Islamist revolutionaries have seized control of Yemen and are actively fighting Saudi Arabia. We wrote about that development in the context of how Saudi Arabia is being surrounded by Islamist terrorists, which was manifest in the overthrow of the Kingdom's political supporters in Yemen. The Saudi government admits it ignored Yemen in recent years, which contributed to the power shift and the loss of its allies there.

At the time Prince Muqrin was elevated to his position as second in line to the throne in 2013, we and others commented that the choice indicated King Abdullah's focus was on maintaining the historical consistency in the selection process rather than introducing politics into the selection. It also suggested that the King was entrusting Prince Muqrin with the future responsibility for selecting the first Saudi Arabian ruler from the family's third generation, which will mark a significant event in the history of the country.

The current fighting between Saudi Arabia and Yemen could present a succession issue

The current fighting between Saudi Arabia and Yemen could present a succession issue within the Allegiance Council as family lines (loyalty) are considered very important in the Islamic world. Is it possible that Prince Mishal, as head of the Allegiance Council, might exercise power to alter the current royal succession line, and not just in dealing with the elevation of Prince Salman? Would he welcome his younger brother as King, or would he rather see the leader come from the next generation?

Does that mean he would be more willing to endure low oil prices for longer to ensure that the Kingdom's Islamist enemies' economies might be truly broken – possibly even leading to the overthrow of their governments?

The commentator is suggesting that the current Saudi King's health issues may mark a repeat of the 1986 experience

We have read that Prince Muqrin is not motivated by wealth and because of his strong anti-Iranian views may be more willing to use Saudi Arabia's oil policy as a weapon against its neighbor. Does that mean he would be more willing to endure low oil prices for longer to ensure that the Kingdom's Islamist enemies' economies might be truly broken – possibly even leading to the overthrow of their governments? What about social unrest in Saudi in response to reduced government income? If low prices hurt Russia, would that be a problem? What would it mean for Saudi Arabia's relations with the U.S.? We guess the Obama administration would be happy to have low oil prices for its remaining time in office as it should provide a powerful stimulus for economic growth. Low oil prices might also be welcomed by the presumed Democratic presidential nominee, Hillary Clinton. It would certainly set back the energy self-sufficiency arguments made by the oil and gas industry and many Republican politicians, including some vying for their party's presidential nomination, and it would hurt the economies of Texas, Oklahoma and North Dakota, among the handful of leading energy state economies, all states dominated by Republican politicians.

One thought we recently heard expressed was that the oil market turmoil caused by the new Saudi Arabian oil policy is similar to what transpired in 1986 and that should be used as a guide to this period. You may remember 1986 was when Saudi Arabia declared war on its fellow OPEC producers who were ignoring pleas to cut production to deal with falling global oil demand. Saudi had been defending the stated OPEC oil price of \$34 a barrel since 1981 by cutting its output. After cutting Saudi production by nearly 70% to three million barrels a day, the world oil price had fallen below \$20 a barrel and was heading lower. At that point, Sheik Yamani, Saudi Arabia's oil minister, cut the country's oil price and boosted its production in order to restore the Kingdom's market share. Supposedly, King Fahd, who had ascended to the throne in 1982, was ill, which the commentator suggested contributed to that period of extended oil price weakness and then the move to recapture the Kingdom's oil market share. The commentator is suggesting that the current Saudi King's health issues may mark a repeat of the 1986 experience. Since we do not currently have access to many of our research sources, we can't substantiate that historical scenario, other than to state that King Fahd, who ascended to the throne at age 63, was known to be a heavy smoker, over-weight, and suffering from arthritis and diabetes. Could he have been ill in 1986? Quite possibly he was. Did his illnesses contribute to or facilitate professional oil officials hijacking the Kingdom's oil policy? We aren't ready to accept that scenario, nor are we ready to endorse the possibility of a repeat of that scenario now. What we do know is that a succession struggle at this point in time could open the door for chaos in global oil markets, and possibly an uprising of terrorist elements within the Kingdom. Shiites and foreigners dominate the population in the Eastern Province of Saudi Arabia where the major oilfields are located.

An extended period of low oil prices will create economic and social pain in Saudi Arabia even with the government holding an estimated \$750 billion in foreign currency reserves that can be used to offset its current budgetary losses

What internal actions might be required to deal with the social unrest triggered by a period of severe austerity within the Kingdom?

Could there be a move to upset the planned succession via the Council picking a third generation grandson to assume the throne; and who might that be?

What we do understand is that many unusual events are unfolding in Saudi Arabia. Based on what we have recently learned about events within Saudi Aramco, which is the source of most of the Kingdom's income and wealth, we wonder whether an internal struggle over oil policy is already underway. We can only speculate. An extended period of low oil prices will create economic and social pain in Saudi Arabia even with the government holding an estimated \$750 billion in foreign currency reserves that can be used to offset its current budgetary losses. How generous will a new King be in order to keep the peace, or would he be more willing to act to boost prices and income in order to ease the social pain? So what should we make of the stories about the assumption of an \$80 a barrel oil price in the 2015 Saudi government budget? Was that budget made up at the time of Saudi Arabia's declaration of its willingness to accept a lower oil price for up to two years, or before? Now that Brent oil prices are at \$50 a barrel, does that make the Saudi budget inoperative? What do the current potential royal successors feel toward that price? The King's recent speech seemed to be a declaration of oil market austerity for an extended period.

Do the events underway signal that Prince Muqrin's elevation might be in the offing? Does that mean that Aramco's management needs to be readied for its new role as an enforcer of low oil prices, which possibility means that internal policy disagreements are best resolved by ridding the organization of employees whose loyalty might be questioned? Could the rumors be true that Saudi Arabia would not be opposed to letting oil prices drop as low as \$40 or even \$20 a barrel, at least for some period of time? Or even that this is what Prince Muqrin would endorse? What about a different potential ruler, whoever that might be? What internal actions might be required to deal with the social unrest triggered by a period of severe austerity within the Kingdom? What repercussions might that bring?

On the other hand, is it possible that these moves are being taken to forestall the possibility of the Allegiance Council trying to overturn the succession plan because more family members are opposed to the use of oil as a weapon? Do they fear the impact of the genie that has been unleashed by the new oil policy? Could there be a move to upset the planned succession via the Council picking a third generation grandson to assume the throne; and who might that be? Would or could that move trigger an internal battle in Saudi Arabia that might lead to a radically different government – one less beholden to the religious powers in the country? How would that reverberate, both politically and economically, throughout the Middle East? We will leave our commentary at this point with lots of questions and few answers. We will watch for the next developments from Saudi Arabia.

Future For Natural Gas Prices Depends On Winter Weather

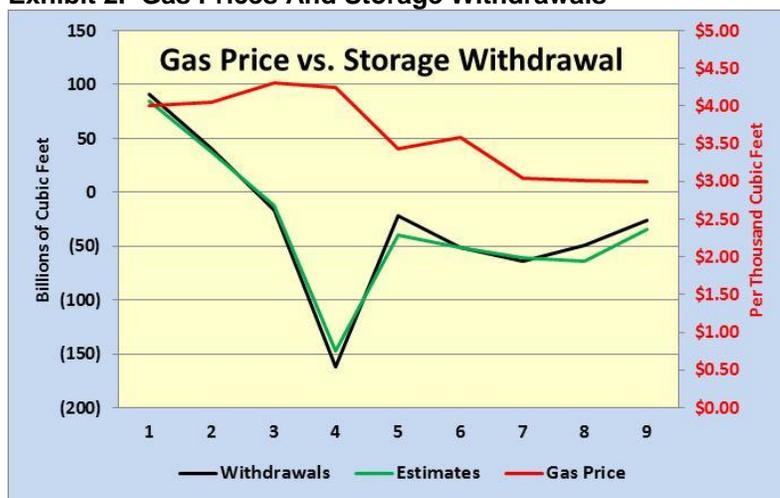
The price decline has been totally due to the mild weather and the prospect that warm weather may prevail not only for much of January, but that it could also be the theme for the balance of the winter months

Last winter, gas storage grew during the first four weeks, while in the winter of 2011, which was the warmest in the past 20 years, there were five weeks of injections

The winter of 2014-15 got off to a rousing start with an early blast of cold weather around America's Thanksgiving time, but the winter has since been engulfed by a warming trend, albeit the Northeast experienced a brief year-end cold snap and other regions have had extremely short periods of cold temperatures. The result has been that natural gas prices that once were healthy at nearly \$4.50 per thousand cubic feet (Mcf) of gas due to cold weather, have recently fallen into the sub-\$3.00/Mcf range as warmth has taken control of the thermostat. The price decline has been totally due to the mild weather and the prospect that warm weather may prevail not only for much of January, but that it could also be the theme for the balance of the winter months. Continuing growth in natural gas output has also contributed to the deteriorating optimism for gas markets. Notwithstanding the possibility of a warm winter, many weather prognosticators still predict we will have bouts of severely cold weather that could make for the entire winter to be a relatively colder than normal one. The blast of Arctic cold air that swept through the country last week was a reminder of this potential.

When we examine what has transpired so far this winter, through the end of the last week of 2014, we can see how the withdrawal season has been totally influenced by the one week of bitter cold weather in late November. This withdrawal season also experienced gas storage injections, but interestingly, there were fewer initial weeks of storage injections than experienced either last winter or in any of the winters we used to model how storage levels might look by the end of winter. Last winter, gas storage grew during the first four weeks, while in the winter of 2011, which was the warmest in the past 20 years, there were five weeks of injections. The average winter we

Exhibit 2. Gas Prices And Storage Withdrawals



Source: EIA, PPHB, EnerCom

selected for modeling purposes – 2004 – experienced three weeks of injections. Thus, with this winter experiencing storage injections during the first two weeks and then followed in week four with a huge withdrawal – 162 billion cubic feet (Bcf) – the gas bulls were feeling good about the upcoming winter gas demand and its impact on drilling and gas prices.

That bullishness has disappeared as temperatures have moderated and gas withdrawals have been limited. In fact, all the forecasters have been proven wrong for virtually every one of the past five weeks. In only one week did the actual withdrawal exceed the estimate; while another week they were the same. Otherwise, the models have estimated weekly withdrawals to be higher than the actual results.

Since 1994, the coldest winter resulting in the largest seasonal gas withdrawal was last year (2013-14)

Since 1994, the coldest winter resulting in the largest seasonal gas withdrawal was last year (2013-14). Surprisingly, the least gas withdrawn occurred in the winter of 2011-12. We then looked for a winter withdrawal season that fell almost equidistant between the largest and smallest withdrawals, which turned out to be 2004-5. The five winters with the largest withdrawals are listed in Exhibit 3.

Exhibit 3. Five Cold Winters

Five Largest Winter Withdrawals	
Winter	Bcf
2013-14	2,957
2002-03	2,476
2007-08	2,261
2010-11	2,242
1995-96	2,230

Source: EIA, PPHB

Thus far, we are averaging about two-thirds the weekly average experienced in our largest withdrawal season, but four times the average of our smallest withdrawal year

Another measure of where we are in the withdrawal season so far is to look at the average weekly withdrawal for the year-to-date period this year against those of our coldest, mildest and average winter withdrawal seasons. This year, we have averaged a weekly withdrawal of 44 Bcf. That compares to an average of 62 Bcf for 2013-14, the coldest winter; 11 Bcf for the warmest season in 2011-12; and 28 Bcf for our average winter of 2004-05. Thus far, we are averaging about two-thirds the weekly average experienced in our largest withdrawal season, but four times the average of our smallest withdrawal year. Compared to our target average winter season, we are running a weekly average that is about 160% greater. This performance so far suggests we are heading for a winter that falls somewhere between an average and the coldest winter. That should make those in the industry hoping for a rebound in natural gas prices happy.

Last year we found ourselves with only about 822 Bcf of gas in storage at the end of the season

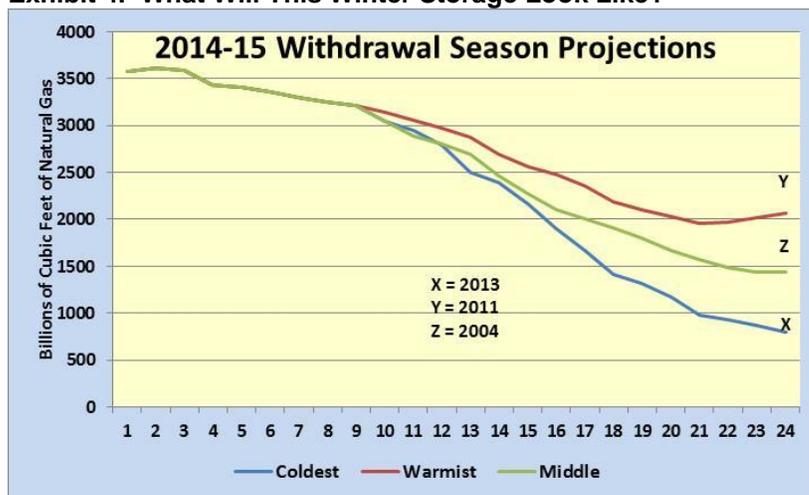
If the balance of this winter mirrors the withdrawals of last winter, we will end the storage withdrawal season with less gas in storage than we did last year

Another way to look at what might happen to natural gas prices as the remainder of the winter plays out is to examine where we would wind up the winter gas withdrawal season. We know that last year we found ourselves with only about 822 Bcf of gas in storage at the end of the season, which, because of the growth in gas consumption for power generations, led people to believe the gas industry would struggle to replace all the gas consumed. As we found out, however, a cooler summer, cheap coal and a lack of air-conditioning load to boost gas-powered electricity generation needs, coupled with continued growth in gas output enabled the industry to rapidly rebuild gas storage volumes, ultimately depressing gas prices. What might this winter present?

In Exhibit 4, we present the current gas storage withdrawal season to date (as of January 2, 2015) with forecasts based on the weekly withdrawal records for the coldest, warmest and average winter seasons. As shown, if the balance of this winter mirrors the withdrawals of last winter, we will end the storage withdrawal season with less gas in storage than we did last year (739 Bcf vs. 822 Bcf), which is likely to send gas prices up sharply in the February/March/April period. The gas price rise could also be helped by the discovery of exactly how much associated natural gas has been coming from oil wells. While there will still be substantial associated natural gas volumes flowing, the decline in new oil well drilling will send gas buyers into overdrive to secure new supplies since they cannot count on the continued associated gas bonanza from a rising new oil well count.

If this winter's gas withdrawals follow either the pattern of the warmest winter or the average winter, our gas storage volumes by the end of winter should be healthy, albeit below the volumes for those winter seasons we modeled. That likely means gas prices will

Exhibit 4. What Will This Winter Storage Look Like?



Source: EIA, PPHB

The question of how cold this winter may become represents a significant joker in attempting to forecast gas use and thus the amount of supply that will be in storage at the end of the withdrawal season

We would suggest we will end the winter with prices below \$3.50/Mcf

Energy Stocks – From Worst To First In 2015?

While investor optimism for energy reigned during most of 2014, the underlying industry fundamentals were not all that positive for most of the year

strengthen some, but not as much as the gas price bulls would like. How much will the prospect for lower-than-expected gas prices impact producers' plans for new gas drilling in 2015?

The projections in Exhibit 4 (page 9) follow a similar analysis we undertook this past summer to track and project where we might wind up with gas storage volumes at the end of the injection season. Our forecasting then led us to feel comfortable that we would have plenty of gas in storage for this winter even if it turned out to be as cold as the winter of 2013-14. Our optimism was exceeded by a surge in storage injections at the tail end of the season as mild weather and cheap coal cut the use of gas for power generation enabling producers to put greater gas volumes into storage. As noted in another article in this issue, the question of how cold this winter may become represents a significant joker in attempting to forecast gas use and thus the amount of supply that will be in storage at the end of the withdrawal season. The potential for more polar vortexes (despite efforts to ban the use of that term) this winter still exists (such as last week), which could materially alter the balance of this winter's weather and natural gas consumption, even though the federal government's winter temperature forecast calls for warmer than normal conditions in New England and in the western half of the country. The government expects normal temperatures for the upper Midwest and Great Plains states while cooler than normal in the Mid-Atlantic and Southeastern states.

The conclusions of our modeling present some interesting points. If the balance of the 2014-15 winter mirrors the 2013-14 winter, it would rank as the second greatest withdrawal season. Likewise, if it mirrors the warmest withdrawal season, this winter would mark the third smallest withdrawal since 1994. The impact of these two extremes reflects how difficult it is for gas analysts and traders to map out what might happen to natural gas prices during the balance of the winter months. If we were pressed to suggest a future path for natural gas prices, other than stating we expect volatility, we would suggest we will end the winter with prices below \$3.50/Mcf. Given the volatile nature of the gas market, we plan to update our gas storage charts and this analysis frequently over the next 90 days.

Energy stocks were strong performers throughout the first half of 2014, but the erosion in global oil prices that began in June, and which ultimately led to a collapse last fall when Saudi Arabia announced it would not cut its production in order to support higher prices for OPEC, rapidly reversed their fortunes making them the worst performing sector within the Standard & Poor's 500 Stock Index for all of 2014. While investor optimism for energy reigned during most of 2014, the underlying industry fundamentals were not all that positive for most of the year. Investor optimism was based

When OPEC announced it would continue with its 30 million barrels a day of output, prospects for the global oil supply glut to continue growing resulted in the plug being pulled on oil prices

primarily on the perception that long-term oil and energy fundamentals remained positive due to signs of, and an expectation for, continued global economic recovery in 2015 and thereafter. What caused the dramatic change in industry fortunes?

While people were surprised that Saudi Arabia would not continue to support high oil prices, they were dumbfounded when the Kingdom announced it was willing to live with oil prices in a range of \$70 to \$80 a barrel and for up to two years duration. This was at a time when oil prices were in the \$90 a barrel range. Saudi's support for low oil prices started a stampede on Wall Street, especially when the confidence of traders and oil industry analysts that the Kingdom would reverse its position at the OPEC meeting in late November failed to happen. When OPEC announced it would continue with its 30 million barrels a day of output, prospects for the global oil supply glut to continue growing resulted in the plug being pulled on oil prices. Oil prices continued to fall throughout December with only sporadic rebounds. Falling oil prices, coupled with the growing realization that they would not be rebounding anytime soon, turned energy investments into toxic assets on Wall Street.

Some investment strategists posited that no S&P sector has been the worst performing industry sector for two consecutive years, suggesting there was a low risk associated with buying energy stocks for 2015

After energy stocks were crushed, some speculators and investment strategists began to dust off theories that the worst performing stock sectors could easily rebound and become among the best performing ones in the following year. Some investment strategists posited that no S&P sector has been the worst performing industry sector for two consecutive years, suggesting there was a low risk associated with buying energy stocks for 2015. If oil prices were to rebound at any point during 2015, aggressive investors who had dumped energy stocks late in 2014 due to their deteriorating earnings outlook might be tempted to repurchase them as their operating leverage could significantly boost the stocks' 2016 earnings prospects, and thus their share prices.

Most investors know that when an industry sector comes off its business cycle bottom the company analysts seldom estimate accurately the rate of earnings improvement

As we enter 2015, oil and gas producers, along with the oilfield service companies, are aggressively reducing capital spending plans, reallocating what capital investment they are making to high-return projects, and cutting oilfield service capacity and laying-off employees in order to become more efficient. As industry fundamentals improve and boost oilfield activity levels, company profit margins expand significantly in the early phase of the rebound, quickly driving company earnings substantially higher. Most investors know that when an industry sector comes off its business cycle bottom the company analysts seldom estimate accurately the rate of earnings improvement. Investors also know that earnings growth and earnings' surprises drive stock price improvement.

We decided to examine the claims about industry sector performance. In Exhibit 5, we compiled the sector performance for the ten broad industry sectors of the S&P 500 for the 40-year period 1974-2014. We have placed in boxes the years when sectors put

There have been only three times when energy generated a string of four or more years of similar performance

together a string of at least four consecutive years of similar market performance, either positive or negative. People will find it interesting to track the runs of the various sectors, but when we focus on energy there have been only three times when the industry generated a string of four or more years of similar performance – the late 1970's, 1987-90, and the mid 2000's. All three periods marked strings of positive investment returns.

Given the data from this table, we would caution investors about blindly accepting the view that energy stocks are not likely to experience negative performance in 2015

What we also found was that there was one period for energy and another for financials when the sector experienced two consecutive years of negative performance and those years' performance ranked that sector as the worst performing one within the S&P 500 for the year (marked in red). Those periods refute the claim by the market strategists that no industry sector was the worst performer for two consecutive years. It is also interesting to observe how many strings of consecutive negative annual stock price performance were registered by the various industry sectors. For energy, there were four periods of two consecutive years of negative stock price performance with the late 1990's being a period of three consecutive years of negative performance. Given the data from this table, we would caution investors about blindly accepting the view that energy stocks are not likely to experience negative performance in 2015. That said, we aren't telling investors to avoid energy stocks, rather we suggest investors should look carefully at the pace of development of industry fundamentals and whether the trends would support better-than-expected company earnings results.

Mr. Kass writes: "Energy goes from the worst-performing group in 2014 to the best-performing group in the first half of 2015 and then falls back later in the year."

In light of this debate about the future course of energy stock price performance, we read with great interest the newsletter published by noted investor Doug Kass of hedge fund Seabreeze Partners. We will comment elsewhere about other economic/political/investment surprises for 2015 he has written about since some of them will impact the outlook for the energy business. Now, however, we highlight his Surprise No. 9 for readers as it is specific to our discussion about energy investments. Mr. Kass writes: "Energy goes from the worst-performing group in 2014 to the best-performing group in the first half of 2015 and then falls back later in the year."

Mr. Kass' view is that investors will be able to make money in energy stocks during the first half of 2015, but may elect to bail out of them as industry fundamentals deteriorate during the second half of the year

Mr. Kass characterizes 2015 as a "roller coaster" year for energy stocks due to his view of the course for oil prices during the year. He describes his outlook for oil prices and energy stock prices in the following manner. "As the price of crude oil rises steadily (towards \$65 a barrel) in early 2015, the energy sector (which was among the worst in 2014) becomes the best market group in the first half of the year. Slowing global economic growth during the last half of the year leads to profit-taking in the energy sector as the price of crude oil closes the year at under \$50 and at its lowest price in 2015." If his view about the direction of oil prices proves correct, Mr. Kass' view is that investors will be able to make money in energy stocks during the first half of 2015, but may elect to bail out of them as industry fundamentals deteriorate during the second half of the year.

This outlook suggests that any industry fundamental improvement this year may prove fleeting, setting up another challenging year for energy companies in 2016!

Exhibit 5. 40 Years Of S&P 500 Sector Performance

Annual Sector Total Return vs. S&P 500 (1974 to 2014)												
Year	Energy	Materials	Consumer		Staples	Health Care	Financials	Information		Telecom Services	Utilities	
			Industrials	Discretionary				Technology	Services			
1974	2.2	5.2	(6.4)	(7.8)	3.5	8.3	2.4	(9.1)	19.4	1.6		
1975	(13.2)	9.1	(0.7)	32.3	(2.7)	(26.7)	6.7	(3.5)	(11.7)	15.9		
1976	11.2	(0.8)	9.3	(5.9)	(11.0)	(21.9)	11.0	1.5	11.2	10.3		
1977	5.3	(15.7)	3.8	(7.7)	3.3	(1.7)	(3.5)	2.5	9.6	17.4		
1978	5.2	(5.3)	3.3	(6.2)	(1.1)	2.6	(0.8)	7.9	(0.5)	(11.9)		
1979	26.9	14.0	2.0	(9.3)	(14.0)	5.0	(0.1)	(13.0)	(18.9)	(3.9)		
1980	42.0	(4.6)	7.8	(14.4)	(17.1)	(1.2)	(15.0)	(15.1)	(29.0)	(15.5)		
1981	(18.7)	(3.8)	(7.3)	11.0	22.4	8.3	15.4	(10.5)	39.6	13.8		
1982	(33.8)	(12.0)	0.8	27.0	16.0	0.4	3.0	32.6	(7.4)	7.5		
1983	3.3	6.6	10.4	(0.5)	(3.6)	(14.9)	(4.1)	4.9	(10.8)	(3.0)		
1984	1.8	(13.3)	(7.0)	(2.5)	8.5	0.2	4.4	(7.2)	14.3	20.5		
1985	(13.2)	(0.9)	(1.7)	0.3	11.7	11.2	9.2	(8.0)	7.0	(3.6)		
1986	(1.7)	7.5	(1.4)	1.8	15.1	11.6	(7.9)	(25.0)	5.7	7.5		
1987	3.5	17.1	(2.6)	(3.8)	6.8	1.4	(21.9)	8.9	(0.1)	(12.6)		
1988	4.8	(6.4)	(4.2)	8.2	13.2	(3.6)	0.7	(19.0)	4.7	(1.5)		
1989	8.7	(9.2)	(4.8)	(10.3)	16.6	11.2	1.7	(37.6)	29.9	6.2		
1990	6.7	(8.5)	(3.4)	(10.9)	20.9	17.3	(18.3)	5.4	(12.1)	2.6		
1991	(25.2)	(5.5)	(1.0)	(1.6)	17.8	21.6	19.4	(18.0)	(16.4)	(6.5)		
1992	(5.3)	2.9	2.0	12.1	(0.8)	(23.2)	15.8	(4.2)	8.8	0.9		
1993	2.7	4.5	9.6	10.6	(16.7)	(15.9)	1.1	9.7	4.9	3.5		
1994	1.3	4.0	(4.1)	(8.4)	4.5	12.0	(4.6)	18.5	(5.8)	(12.8)		
1995	(7.2)	(20.1)	2.2	(15.4)	(0.7)	21.0	16.2	1.0	3.6	(6.1)		
1996	2.8	(9.5)	1.9	(9.1)	1.6	(0.8)	13.3	19.3	(22.2)	18.8		
1997	(8.6)	(25.4)	(5.7)	(3.8)	3.5	7.9	16.2	(5.3)	7.3	(8.4)		
1998	(26.1)	(37.1)	(19.1)	4.5	(5.7)	12.8	(19.5)	48.5	23.0	(14.2)		
1999	(6.0)	9.0	(2.0)	(0.1)	(22.7)	(30.4)	(17.3)	56.4	(1.4)	(30.8)		
2000	29.1	(8.8)	13.0	(15.2)	14.7	47.3	35.0	(29.4)	(28.9)	67.5		
2001	1.0	15.3	4.5	16.5	8.7	(0.2)	3.0	(13.0)	(0.4)	(20.2)		
2002	5.9	14.6	(3.7)	(3.9)	15.5	2.9	8.0	(14.7)	(11.7)	0.7		
2003	(2.5)	9.7	3.7	6.8	(12.8)	(13.6)	3.5	18.2	(21.7)	(4.5)		
2004	20.4	2.8	7.9	0.2	(2.5)	(8.9)	(0.5)	(6.3)	8.4	9.5		
2005	26.5	(0.2)	(2.9)	(10.0)	(1.4)	1.1	1.5	(5.1)	(9.3)	9.7		
2006	8.5	3.0	(2.3)	2.8	(2.2)	(8.1)	4.0	(7.7)	21.3	6.1		
2007	28.9	16.4	6.3	(18.4)	7.7	1.7	(24.1)	11.5	6.0	12.5		
2008	1.4	(8.6)	(2.9)	2.9	23.0	13.6	(18.3)	(6.7)	6.0	7.3		
2009	(12.4)	21.9	(5.2)	15.9	(12.7)	(7.3)	(10.4)	35.6	(18.1)	(14.9)		
2010	5.4	7.2	11.5	12.8	(0.8)	(12.3)	(2.8)	(4.9)	4.0	(9.5)		
2011	2.6	(11.9)	(2.7)	4.0	11.9	10.6	(19.2)	0.3	4.2	17.9		
2012	(11.4)	(1.0)	(0.7)	7.9	(5.2)	1.9	12.8	(1.2)	2.3	(14.7)		
2013	25.1	25.8	40.7	43.1	26.1	41.4	35.6	28.5	11.5	13.2		
2014	(9.6)	4.9	7.4	7.3	12.5	23.8	13.1	18.0	(1.4)	25.0		

Source: FactSet, Goldman Sachs Global ECS Research, S&P, Fidelity, PPHB

Gas Prices Sink To Multi-Year Lows On Warm Temperatures

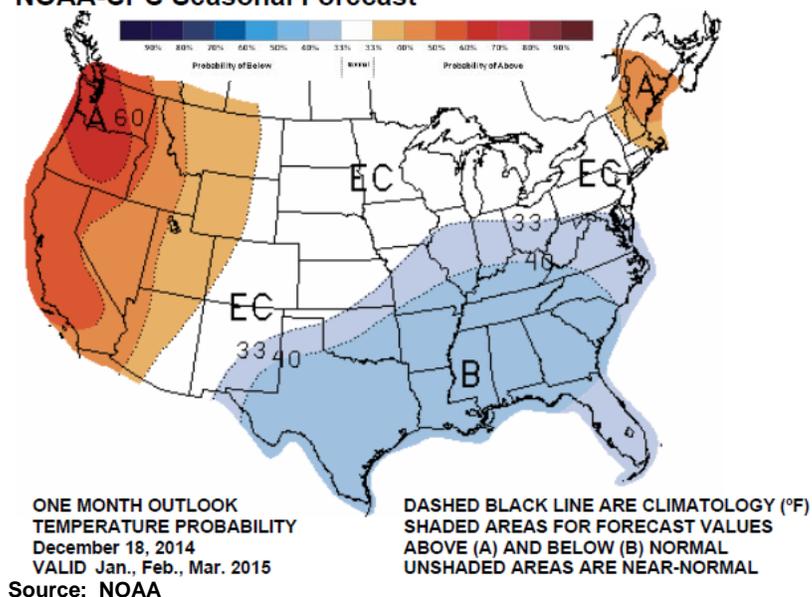
The key to their forecast depends on the weather and the continued growth in gas supply

Prices below \$3.00 per thousand cubic feet (Mcf) of natural gas at year-end 2014 are not encouraging for oil and gas producers. Some forecasters are suggesting that a warm winter combined with continued growth in natural gas production will lead to high storage levels by the end of winter and then a rapid storage fill-up during the summer will sink gas prices below \$3.00/Mcf this coming fall. The key to their forecast depends on the weather and the continued growth in gas supply, especially in the Marcellus and Utica formations that are close to the large Northeast gas-consuming region of the country.

The idea that we are destined to have a warm winter is based on the latest three month forecast from NOAA

The idea that we are destined to have a warm winter is based on the latest three month forecast from the National Oceanic and Atmospheric Administration (NOAA). The forecast calls for near normal temperatures from the western portion of New England through New York and Pennsylvania into the upper Midwest and the Great Plains states. Most of New England along with the West Coast and the Rockies should have above normal temperatures. Only the Southeast and South Central portions of the country will experience below normal temperatures. This outlook suggests that most of the major gas-consuming regions will experience above or near normal temperatures, which is not good for gas demand.

Exhibit 6. NOAA's Winter Temperature Forecast
NOAA-CPC Seasonal Forecast



Two other forecasters largely agree that the U.S. will experience very cold weather this winter. However, neither the forecasters at

Regional impacts are similar among all three forecasts, but it seems they disagree as to the severity of the cold

Impact Weather nor Evelyn Browning Garriss of the *Browning Newsletter* are sure where or when the cold will assault the country, but they are confident it will. What we find quite striking is that the regional impacts are similar among all three forecasts, but it seems they disagree as to the severity of the cold that will hit the country.

Exhibit 6. Browning Winter Weather Outlook



† A moderate Russian volcanic eruption will make this region colder

*If El Niño conditions continue..

figs 12A-C © Evelyn Browning Garriss

Cold 5°C or more lower than normal temps.	Cool 2-4°C or more lower than normal temps.	Warm 2-4°C or more higher than normal temps.	Dry 75% or less of normal moisture	Wet 125% or more of normal moisture
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Source: *Browning Newsletter*

The combination of extremely cold Arctic air and the changing air pressures in the northern Atlantic and Pacific oceans will cause that air to enter North America

In her December newsletter, Mrs. Garriss describes her view of the winter weather as “Like the Sword of Damocles – The Arctic Cold.” According to her, the combination of extremely cold Arctic air and the changing air pressures in the northern Atlantic and Pacific oceans will cause that air to enter North America. But when or where will be determined much like the thread holding the sword over the throne highlighting the danger of holding power. To understand the drivers of why the Arctic cold will enter North America in predictable patterns, once the driver is established, one needs to be familiar with the volcanic activity of the past several years up to as recently as last November, which not only helps generate the extremely cold Arctic air but also sets it in motion. In her view, the cold Arctic air along with the unofficial El Niño conditions in the southern Pacific Ocean are likely to send cold air into the Midwest and Eastern states of the U.S. and the Prairie Provinces and Eastern Canada as well as Eastern and Central Europe. This eventuality will drive up heating demands in these regions. Mrs. Garriss’ view of the 2015 winter in the United States is summarized in the charts in Exhibit 6 on the previous page.

One always needs to be prepared for unusual events that make reforecasting weather outlooks imperative

This view of the 2015 winter is similar to the one presented by Impact Weather’s meteorologist, Fred Schmude, in a mid-December webinar describing his organization’s outlook. It may seem that all three forecasts are quite similar, but from our reading/listening, we sense the latter two are expecting a colder winter than does NOAA. Given the dynamic conditions shaping the various forces that control the cold Arctic air as set forth in the *Browning Newsletter*, we continue to hold our breath for a possible polar vortex event. (There certainly was one last week, but we wonder whether more will be coming.) While the concept of a polar vortex is no longer unknown following last winter’s two episodes, if it comes it will still be a surprise to the people impacted, much like the lake-effect snowstorm that buried Buffalo, New York under 8-feet of snow last November. Such extreme weather events may be rare, but they do have a history of happening numerous time during the past few decades. Their unpredictability makes it difficult to factor them into the typical long-term weather forecasts, which means one always needs to be prepared for unusual events that make reforecasting weather outlooks imperative.

Some Of Doug Kass 2015 Market Surprises Involve Energy

Annually, noted hedge fund manager Doug Kass of Seabreeze Partners publishes his list of 15 surprises for the following year that he provides to counter the consensus economic and investment viewpoint of Wall Street economists and investors. Some of his surprises involve specific companies, and others reflect differences from anticipated macro-economic events and trends. In some cases, Mr. Kass also dips into the realm of politics if it could impact the future of the economy and/or stock market. This year his list of 15 surprises and his alternative list of 10 surprises that failed to

“Surprise No. 3 – The drop in oil prices fails to help the economy.”

make his final list provide a few of great importance for energy investors. We have already commented on his Surprise No. 9 in an earlier article. (Energy goes from the worst-performing group in 2014 to the best-performing group in the first half of 2015 and then falls back later in the year.)

Here are the other surprises that could impact the energy sector. “Surprise No. 3 – The drop in oil prices fails to help the economy.” Conventional wisdom is that the drop in global oil prices will provide huge savings for consumers at the gas pump and in their home heating bills, especially in the Northeast. The *Financial Times* economic columnist Martin Wolf has suggested that a \$40 a barrel drop in oil prices shifts \$1.3 trillion, equal to about 2% of world gross output, from oil producers to oil consumers. But a November 14, 2014, daily comment from hedge fund Bridgewater Associates, LP reported its analysis that the recent positive impact on domestic growth from oil investment and production of about 0.5% annually will shift to a negative -0.7% cost for the next year if oil settles out at \$75 a barrel. If oil settles around \$50 a barrel, the hit to the economy could be worse. More importantly, according to Mike Levitt of *The Credit Strategist*, the reduction in GDP growth will translate into a 1.0-1.5% negative impact on income growth, which has a direct bearing on consumer spending.

Some of the savings from lower oil prices will be saved by consumers worried about slowing domestic growth

Mr. Kass pointed out that the higher costs for food, rent, insurance, education, etc. will eat up the benefit of lower oil prices. Additionally, he anticipates that some of the savings from lower oil prices will be saved by consumers worried about slowing domestic growth, a slowdown in job creation as the energy sector swings from adding jobs to shedding them, and a deceleration in the rate of growth in wages and salaries as most energy jobs are high-paying ones. Lower oil-related capital spending will also hurt economic growth, especially in the primary energy producing states that have been the bright spots economically for the past few years. For example, U.S. Steel (X-NYSE) announced it was shutting down two pipe mills in Ohio and Texas and laying-off roughly 750 employees. This comes shortly after two drillers announced cutting over 1,000 jobs from idled onshore and offshore rigs.

“Surprise No. 11 – Food inflation accelerates after Russia halts wheat exports.”

The food cost impact is further amplified by Mr. Kass’ “Surprise No. 11 – Food inflation accelerates after Russia halts wheat exports.” That move would come in response to the pain inflicted on the Russian economy from the financial sanctions, the drop in world oil prices and the need to provide relief to Russian citizens.

Kass’ “Surprise No. 6 - China devalues its currency by more than 3% vs. the U.S. dollar.”

Another negative for energy would be Mr. Kass’ “Surprise No. 6 - China devalues its currency by more than 3% vs. the U.S. dollar.” That would be done in response to China’s efforts to stimulate its lagging economic growth, which appears to be falling below the 7% growth target. In fact, China just last week announced a \$1 trillion infrastructure investment initiative designed to help boost its

Mr. Kass' prediction that oil prices could fall below \$40 a barrel in the second half of 2015 as global economic growth weakens in response to the failure of central banks to prop up economic growth

We have been intrigued by the moves Mr. Buffett has made in the chemical and energy space recently as he appears to be betting that lower oil prices will cause producers to refocus their development efforts on increasing the recovery of oil from existing fields

economy. This surprise fits with one of Mr. Kass' other surprises that failed to make his top 15, in which he calls for China's real GDP growth to fall below 5% in 2015 as the country's economic growth decelerates markedly in the second half of 2015.

Another surprise that didn't rank among his top 15 was Mr. Kass' prediction that oil prices could fall below \$40 a barrel in the second half of 2015 as global economic growth weakens in response to the failure of central banks, especially in Japan and Europe, to prop up economic growth through aggressive quantitative monetary easing. Economic weakness fits into Mr. Kass' "Surprise No. 12 – Home prices fall in the second half of 2015." A reversal in home price fortunes quickly translates into the homebuilding sector becoming weak and detracting from the economic stimulus it has contributed to the U.S. economy over the past two years further pressuring energy demand growth.

The one positive development for energy is "Surprise No. 14 – Berkshire Hathaway (BRK.A) makes its largest acquisition in history." According to Mr. Kass, "[d]uring the depths of the market's swoon in the later part of the year, Warren Buffett scoops up his largest acquisition ever. The \$55+ billion acquisition is not in his customary comfort zone (a consumer goods company), but rather the deal is for a company in the energy, retail or construction/equipment areas." We have been intrigued by the moves Mr. Buffett has made in the chemical and energy space recently as he appears to be betting that lower oil prices will cause producers to refocus their development efforts on increasing the recovery of oil from existing fields. Two of the three sectors Mr. Kass suggests might house Mr. Buffett's next great acquisition likely contain opportunities to expand on Mr. Buffett's investment thesis that is slowly unfolding via his recent acquisitions. We would stay tuned for developments in this area as it may provide a significant growth opportunity.

Mr. Kass' list of 2015 surprises do not represent predictions but rather fit with his "...five core lessons I have learned over the course of my investing career that form the foundation of my annual surprise lists:

1. How wrong conventional wisdom can consistently be.
2. That uncertainty will persist.
3. To expect the unexpected.
4. That the occurrence of black swan events is growing in frequency. [ed. Maybe due to the lack of contrary thinking among investors.]
5. With rapidly-changing conditions, investors can't change the

direction of the wind, but we can adjust our sails (and our portfolios) in an attempt to reach our destination of good investment returns.”

We cannot disagree with his lessons. Mr. Kass’s surprises and core lessons should make energy industry executives and investors rethink how they anticipate 2015 to unfold, in order to make sure they have taken these contrary scenarios into their strategic planning.

Nebraska Supreme Court Rules For Governor And Keystone

Nebraska Supreme Court threw out the case against Keystone allowing it to move forward

As rumored and as we reported, the Nebraska Supreme Court ruled that the three landowners who had sued the governor and TransCanada (TRP-NYSE) over the constitutionality of the law that allowed the governor to approve the revised pipeline route did not have standing, thereby throwing the case out and upholding the law. The White House said the State Department will consider the ruling in its final deliberations before recommending a course of action to President Barack Obama. This would suggest we are about to go forward, notwithstanding the theater in Washington over Keystone legislation. Our only question is will the State Department wait long enough for the opponents of Keystone to find some landowners who would have standing to file a new suit? Stay tuned.

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