

MUSINGS FROM THE OIL PATCH

October 2, 2007

Allen Brooks
Managing Director

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 oilfield service companies. The newsletter currently anticipates a semi-monthly publishing schedule, but periodically the event and news flow may dictate a more frequent schedule. As always, I welcome your comments and observations. Allen Brooks

Alberta Royalties To Raise Natural Resource Take

Albertans do not receive their 'fair share' from the province's energy development activity

The final report of the Alberta Royalty Review Panel was released two weeks ago and examines the current royalty structure and possible revisions based on a view that Albertans do not receive their 'fair share' from the province's energy development activity. Even though the oil and gas industry creates significant employment in Alberta and generates government revenues in the form of income taxes and other taxes, the members of the panel appeared overly concerned about how independent from the industry government officials are viewed by outsiders. If the proposed royalty rates are enacted, Albertans' share of oil and gas industry revenue would rise by five percentage points for conventional oil and gas production and jump by 17 percentage points for oil sands development. Regardless of the decision, Alberta will get more.

Exhibit 1. How Albertans Would Share in Energy Wealth

	Current Sharing		Recommended Sharing		Pct. Point Change	
	Albertans' share	Developers' share	Albertans' share	Developers' share	Albertans' share	Developers' share
Oil Sands	47%	53%	63%	36%	17%	-17%
Conventional Oil	44%	56%	49%	51%	5%	-5%
Natural Gas	58%	42%	63%	37%	5%	-5%

Source: Alberta Royalty Review Panel, PPHB

The recommendations leave room for government officials to lower them while still increasing the overall take

Some industry observers believe the panel gave little weight to the presentations made by industry executives as government officials have been thought to be too closely aligned with them. While the magnitude of the royalty rate increases may be too great, the recommendations leave room for government officials to lower them while still increasing the overall take. The biggest challenge for the government is to design a new royalty rate structure that increases the government's take while not suppressing future exploration and

development activity that could hurt the province overall.

Although the recommendations would impact all oil and gas royalties across the board, it appears that royalties on oil sands development would be the most affected. The proposed changes to the oil sands royalties include:

- 1) Increase the post-payout net royalty rate from 25% to 33% and maintain the current base royalty rate of 1% gross.
- 2) Impose a new Oil Sands Severance Tax, which starts at 1% when WTI oil is at US\$40 per barrel and increases to 9% when WTI prices reach US\$120 per barrel.
- 3) No grandfathering of prior royalty relief schemes.
- 4) Reclassify existing and future primary oil sands wells as conventional heavy oil wells.
- 5) Give royalty credit to encourage construction of new Alberta upgraders up to a limit of \$2 billion.

57% of Alberta's conventional oil and 82% of its natural gas wells will pay less in royalties under the proposed plan

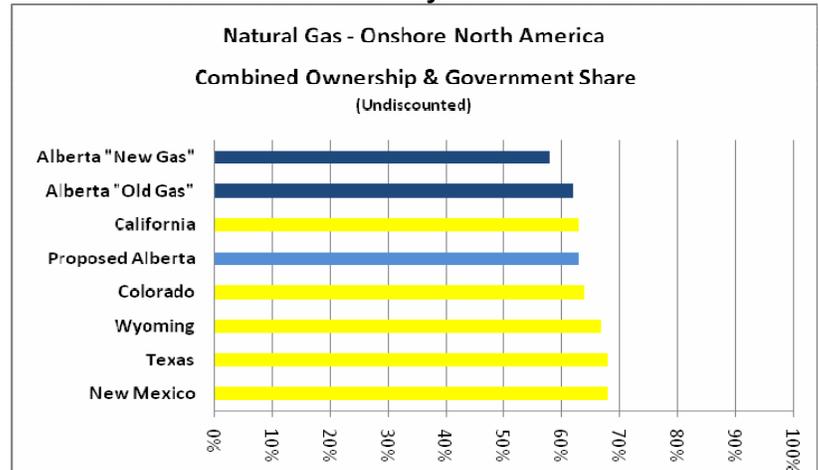
The proposed changes to the royalty structure for conventional oil and gas production are aimed at giving low-productivity wells tax relief to help improve their tight economics, while at the same time extracting greater royalties from more prolific wells where the economics are greater. According to the report, 57% of Alberta's conventional oil and 82% of its natural gas wells will pay less in royalties under the proposed plan. The key recommendations for royalty changes include:

- 1) Eliminate the tiers in natural gas and conventional oil that distinguish "vintages" based on the discovery date.
- 2) Raise the rate caps on the price for natural gas to \$17.50 per million Btu and for conventional oil to \$120 per barrel.
- 3) Eliminate several special royalty programs.
- 4) Change the royalty formulas to be both price and volume sensitive with a maximum rate of 50%. Under the current royalty regime, existing caps are so low that effective royalties are not price sensitive.
- 5) Eliminate the choice of using a corporate average price to determine natural gas royalties and instead use the natural gas reference price for royalty determination.
- 6) Reclassify existing and future primary oil sands wells as conventional heavy oil wells.
- 7) Increase the freehold mineral tax to a flat 6% from the current effective rate of 4% for natural gas and 3% for conventional oil.

The economic future for Canadian energy corporations is being altered with the government being the primary beneficiary

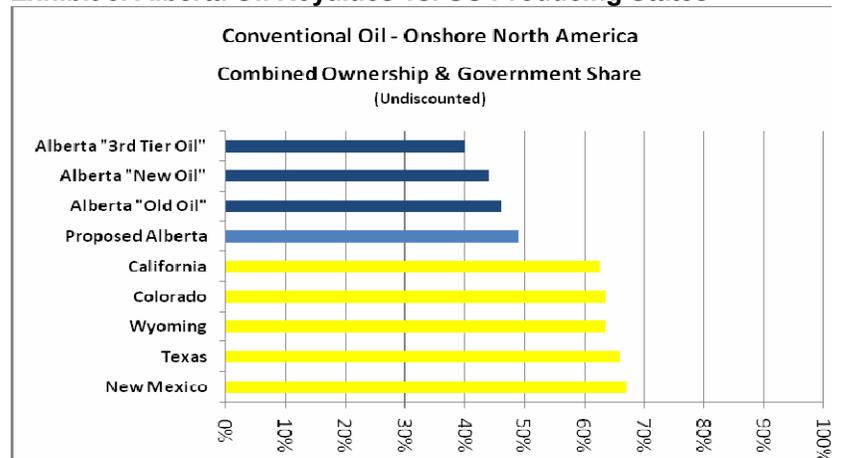
On the day after the proposed royalty revisions were announced, the Toronto Stock Exchange (TSX) dropped about 1% as investors foresaw reduced profitability for oil and gas and oil sands producers. It was surprising that the TSX didn't drop more that day as oil and gas stocks represent a disproportionate weight within the index. So once again, as the federal government did on Halloween night of 2006, the economic future for Canadian energy corporations is being altered with the government being the primary beneficiary.

Exhibit 2. Alberta Natural Gas Royalties vs. US Gas States



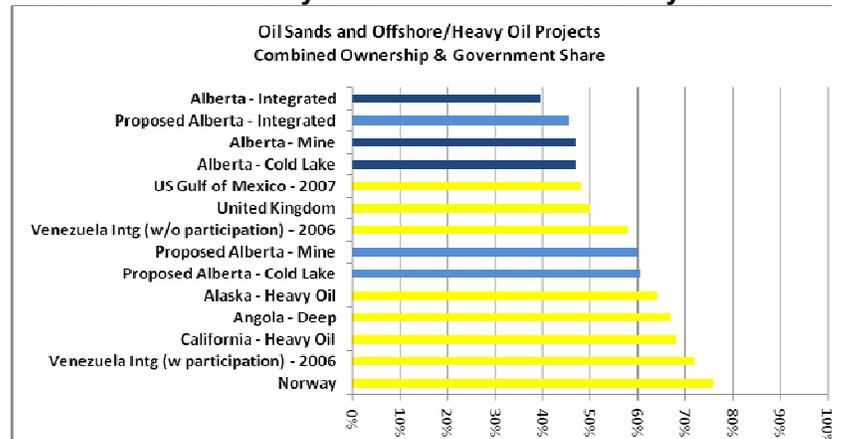
Source: Alberta Royalty Review Panel, PPHB

Exhibit 3. Alberta Oil Royalties vs. US Producing States



Source: Alberta Royalty Review Panel, PPHB

Exhibit 4. Oil Sands Royalties vs. Other Global Heavy Oils

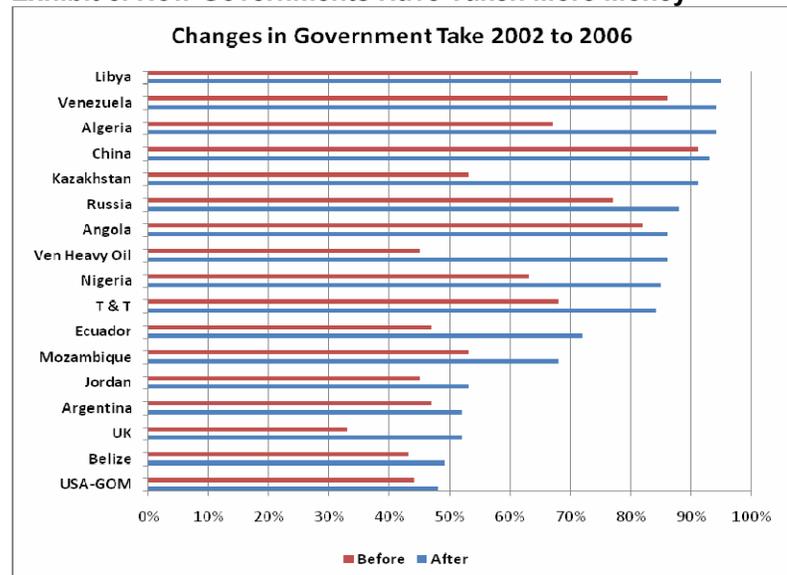


Source: Alberta Royal Review Panel, PPHB

The revised study refuted the presentations by energy industry representatives who argued that Alberta ranked very high in government take

In the report, several interesting charts were presented to highlight the comparative position of current Alberta royalties and the proposed revised royalty take compared to other comparable producing regions. (They are shown in Exhibits 2-4.) In the case of conventional crude oil and natural gas, Alberta was compared against the major oil- and gas-producing states in the United States. For the oil sands royalty comparison, Alberta's various royalty structures and its proposed scheme were compared against the primary heavy oil and offshore regions of the world. The chart presented for this latter comparison was based on the 2007 findings presented in a study prepared for the Alberta Department of Energy by Dr. Pedro van Meurs of Van Meurs Corporation updating his earlier work. The point of using the revised study was to refute the presentations by energy industry representatives who argued that Alberta ranked very high in government take. That conclusion was based on Dr. van Meurs' 1997 study, which appears no longer to be the case based on his 2007 study.

Exhibit 5. How Governments Have Taken More Money



Source: CERA, Chevron, PPHB

One can no longer assume that in the future governments around the world will remain as friendly to the energy industry as they have been in the past

Lastly, the Alberta Royalty Review Panel seized on a slide showing the change in government taxes between 2002 and 2006 developed by Cambridge Energy Research Associates and used by Chevron (CHV-NYSE) in its presentation. A key bullet point on the slide was labeled "Purposely position Alberta." As the panel said, Alberta's current position is not displayed on the chart, but if it were, it would be near the bottom or among the lowest total government takes currently in the world. For energy investors, the issue, as indicated by the changes shown for government takes between the period prior to 2002 and after 2006, seems to be that one can no longer assume that in the future governments around the world will remain as friendly to the energy industry as they have been in the past. Global economic challenges are forcing governments to seek

As global oil and gas prices have outstripped inflation-adjusted finding and developing costs, governments want to increase their share of the economic rent earned

increased revenues wherever they can find them. As long as global oil and gas prices continue to outstrip inflation-adjusted finding and developing costs, governments want to increase their share of the economic rent those producers are earning – regardless of whether the current excess returns merely are making up for past periods of uneconomic rents, or whether an environment of uneconomic rents may return in the future. As F. Scott Fitzgerald once said, “The rich are different from you and me.” Yes. They have more money and governments want to take more of it.

Exhibit 6. How Alberta Would Gain With New Royalty Schemes

	Current			Proposed		
	2006	2010	2016	2006	2010	2016
Alberta Government Revenue (modeled)						
Gas	\$ 5,890	\$ 4,670	\$ 2,362	\$ 6,825	\$ 5,412	\$ 2,737
Conventional Oil	\$ 1,439	\$ 807	\$ 551	\$ 2,252	\$ 1,263	\$ 862
Oil Sands under Crown Agreements	\$ 1,577	\$ 773	\$ 1,068			
Oil Sands Bitumen	\$ 627	\$ 966	\$ 1,578			
Subtotal Oil Sands	\$ 2,204	\$ 1,739	\$ 2,646	\$ 2,354	\$ 2,405	\$ 3,996
Total Revenue to Albertans:	\$ 9,533	\$ 7,216	\$ 5,559	\$ 11,431	\$ 9,079	\$ 7,595
			Change:	20%	26%	37%
			Gas	\$ 935	\$ 742	\$ 375
			Oil	\$ 813	\$ 456	\$ 311
			Oil Sands	\$ 150	\$ 666	\$ 1,350
			Total:	\$ 1,898	\$ 1,863	\$ 2,036

Source: Alberta Dept. of Energy, PPHB

It's Confirmed: There Are Traffic Jams Everywhere

Congestion causes the average peak period traveler to spend an extra 38 hours of travel time and consume an additional 26 gallons of fuel

The [2007 Urban Mobility Report](#) released by the Texas Transportation Institute (TTI) recently confirmed that traffic congestion continues to worsen in American cities of all sizes. The report concluded that traffic congestion in 2005 resulted in the loss of 4.2 billion hours for the drivers and wasted 2.9 billion gallons of fuel, which translated into a \$78 billion hit to the U.S. economy. The study examined for the first time the congestion impact on all 437 urban areas in the nation.

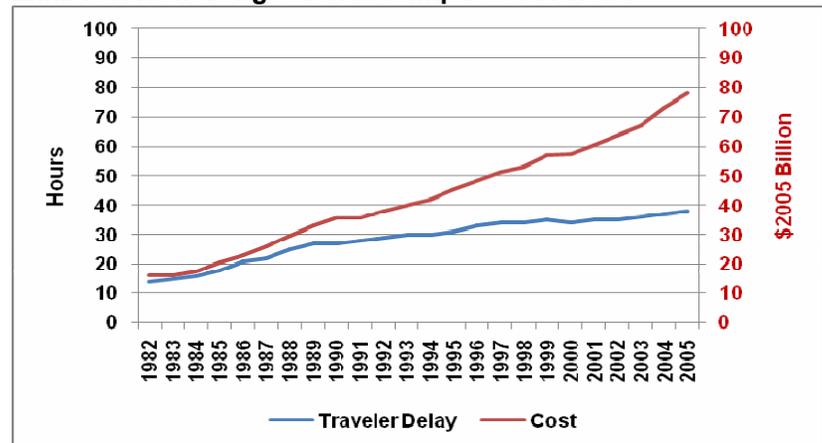
The 2007 study notes that congestion causes the average peak-period traveler to spend an extra 38 hours of travel time and consume an additional 26 gallons of fuel amounting to an incremental burden of \$710 per traveler. The impact of this increased congestion is reflected in the fact that trips are now taking longer; the congestion affects more of the day; it now affects weekend travel and rural areas; it is affecting more personal trips and freight shipments; and it acts to make travel trip-times increasingly unreliable. What is interesting about the study is that we are seeing similar conclusions about traffic congestion, although often presented in different ways, in cities around the globe.

In the TTI study, data on congestion was presented for different periods enabling the reader to see the growing problem. However,

Every metropolitan area must examine its own unique congestion problems and consider the full range of alternative solutions

as the study's authors suggest, there is no one congestion problem just as there is no one solution. This means that every metropolitan area must examine its own unique congestion problems and consider the full range of alternative solutions before determining which solution, or set of solutions, is the best alternative. The summary information for congestion in the TTI study covered 1982, 1995, 2004 and 2005, the latest detailed data available. The institute examined the historic data for the expanded universe of metropolitan areas enabling it to provide more complete and accurate data.

Exhibit 7. How Congestion Has Impacted Travelers



Source: Texas Transportation Institute, PPHB

As one would expect, the impact of congestion over the 23-year period from 1982 has been quite dramatic. We have presented in Exhibit 7, the historic trend in hours of delay per traveler and the total economic cost of traffic congestion. However, if we merely consider the data for the past ten years, the growth in congestion and its economic cost has been astounding. In 1995, the annual delay per peak traveler was 31 hours, which has increased by 22.6% to 38 hours a decade later. There has been an almost 24% increase in wasted fuel over this time period, resulting in an increase in the cost of delay of \$140 dollars per traveler, or 24.6% more.

The total congestion cost has risen from \$45.4 billion in 1995 to \$78.2 billion in 2005, a jump of 72.3%

From the point of view of the nation, the increase in travel delay has resulted in 4.2 billion hours lost, up from 2.5 billion hours ten years earlier. Wasted fuel has grown by over 70% to 2.9 billion gallons from 1.7 billion wasted in 1995. The total congestion cost has risen from \$45.4 billion in 1995 to \$78.2 billion in 2005, a jump of 72.3%. The increased cost has come as daily travel on major roads has grown from 2.79 billion vehicle-miles to 3.73 billion, or a 33.7% increase. Importantly what has happened during that ten-year stretch is that the number of new lane-miles of highways and major streets added each year has dropped from 17,254 in 1995 to only 16,203 miles in 2005.

Another study, [Commuting in America III](#) confirmed that commuting

A greater growth in travel time with substantially fewer additional trips suggests that the transportation capacity built up in earlier decades is being “used up”

times are lengthening. The average travel time to work has grown by two minutes to 25.5 minutes between 1990 and 2000, following a 1.7 minute increase the previous decade. The two-decade trend in commuting time growth raises concerns when compared to the growth in commuter volume – 23 million more solo drivers in the 1980s, but only 13 million more single drivers in the 1990s. A greater growth in travel time with substantially fewer additional trips suggests that the transportation capacity built up in earlier decades is being “used up.” The dimension of this problem is further demonstrated by the fact that annual public transportation travel has grown from 36.4 billion person-miles to 45.1 billion, a gain of 23.9%, as daily public transportation riders added every year has increased from 14.9 million in 1995 to 16.5 million in 2005.

In adding the 352 urban areas not previously studied, the total number of peak-period travelers included in the study increased from 82.1 million to 110.5 million. The impact of the increase was to increase the total delay, but because the smaller urban areas are much less congested than the large regions, it reduced the average hours of delay per traveler. Other methodology changes in the most recent study allowed for more accurate results. First, there is now more data from freeway operation centers available that enabled the study’s authors to better estimate highway speeds. The result was that freeways carry more vehicles at higher speeds than computer models previously estimated.

Another improvement as a result of better highway data is that truck travel estimates available in state and local datasets have improved and have allowed for better measurement of their impact on congestion and its cost than the previous methodology of assuming a constant five percent of trucks on all urban roads. Lastly, the expansion of the study forced the use of an average of daily fuel prices in each study state as opposed to the past methodology of merely sampling a few urban areas. The net result of these data and methodology changes is an improved study with more accurate data enabling planners to make better judgments and recommendations about congestion in the various urban areas.

The 100 largest metropolitan regions contribute 70% of the nation’s gross domestic product and have 69% of the jobs

In the study, the authors pointed out that the primary cause of congestion is “you.” As they said, rural portions of the country support few jobs, have hardly any schools and provide a very small contribution to the nation’s economic production. On the other hand, the 100 largest metropolitan regions contribute 70% of the nation’s gross domestic product and have 69% of the jobs. Thus, it is hard to dismiss the fact that significant congestion exists in large urban areas due to the population and associated truck traffic moving in many directions over the course of the two peak periods of two or three hours each day.

The conclusions of the study suggest that there are a number of possible solutions to urban congestion. These solutions include: getting as much service as possible from existing infrastructure; adding road and transit system capacity in critical corridors; relieving

chokepoints; changing traffic use patterns; providing choices; and diversifying development patterns. The study concluded with the observation that there always is a cost to reducing congestion, but the benefits are enormous. According to one congestion study, eliminating serious congestion returns eight dollars in economic benefit for every dollar spent.

What is interesting about traffic congestion is that it has become a universal issue. We were recently in San Miguel de Allende in central Mexico where the city's economy is hurting. When we were there, people were suggesting that the mayor's decision earlier this year to cancel the traditional running of the bulls was a major contributor to the city's weak economy. However, in reading a recent issue of the local newspaper, *Atención San Miguel*, there was an article discussing the economic challenges facing the city and what it needs to do to improve its future economic outlook. The article cited seven critical issues with the number one being traffic. The other six issues included: water; crime; prices; the increasing population of expatriates; vacation trends and the local airport; and national bureaucracies.

Traffic congestion is a leading cause of stress for most Americans and few tourists are looking for a vacation spot that mimics this unfortunate part of their daily lives

On traffic congestion, the writer specifically identified it as the leading cause of stress for most Americans and said that few tourists are looking for a vacation spot that mimics this unfortunate part of their daily lives. (I guess he must have been aware of the TTI study's conclusions.) He went on to say that San Miguel's streets were built for donkeys, but the traffic overload is creating a distinctly less desirable experience for both residents and tourists. He cited both the volume of traffic in the city and the impact on air quality, especially from the emissions of the town's diesel buses. At the end, the author says that traffic into the city must be limited and controlled if air quality is to improve and congestion eased. Clearly he is implying the need to institute either traffic restrictions or congestion pricing.

Recently there has been an increased interest in congestion pricing as a way to reduce the traffic problems most large urban areas are facing and as a method to help improve the environment and air quality. The City of London, England instituted congestion pricing in 2003 in an effort primarily to reduce its traffic growth and secondarily its carbon emissions. It has also become a way for the City of London to boost its tax take. At the time the traffic fee was introduced, London's central business district was undergoing rapid growth, but its traffic capacity was maxed out. As more vehicles entered the central part of the city, average vehicle speed dropped, which led to business losses and a decrease in the quality of life.

As a result of the fee, the number of vehicles in the affected zone declined by about 20% and greenhouse gas emissions were about 15% lower

The initial fee London put in place, £5 (about \$9 at the time) per day per vehicle, has since been increased to £8 (about \$16 today). As a result of the fee, the number of vehicles in the affected zone declined by about 20%, or roughly 70,000 a day, and greenhouse gas emissions were about 15% lower. Mayor Ken Livingstone pointed out that there has been a marked shift away from cars in

The City of London made significant upgrades to public transportation, primarily focusing on enhancing its bus system

favor of public transport and environmentally-friendly modes of travel. Since 2000 there has been a 4% shift into use of public transport from private cars. The number of bicycle trips on London's major roads has risen by 83%, to almost a half a million a day.

The Mayor went on to point out that the City of London made significant upgrades to public transportation, primarily focusing on enhancing its bus system rather than its subway because it needed to increase capacity in the quickest, most cost-effective way. The number of bus trips a day has risen to six million, an increase of two million from 2000. The City continues to invest in its transport systems with the aid of the income from its congestion charge, or roughly \$200 million annually.

In February, London expanded its congestion pricing zone, nearly doubling its size. The immediate impact was a reduction of traffic in the expanded zone by 13%. In December 2006, the British Treasury commissioned a study on 'pay-as-you-go' road pricing. The Eddington Transport Study concluded that some form of pay-as-you-go pricing was essential to resolve chronic traffic congestion in the UK. The study concluded that the economic benefits of this pricing structure could be £28 billion annually by 2025. Without road pricing, the study estimated that 4,850 kilometers of new roads would need to be built by 2015, but only 2,300 lane kilometers with road pricing.

Polls are showing that opinion has shifted in favor of congestion pricing by a 2-to-1 margin

Most transit experts now believe that it is vital to bridge the gap between the overwhelming government consensus in favor of pay-as-you-go road pricing and the motoring public's almost universal hostility to it. This view helps keep transit experts employed. However, according to London's mayor, before its congestion charge was implemented, polls showed that public opinion was almost exactly evenly split. Since then, polls are showing that public opinion has shifted in favor of the pricing scheme by a 2-to-1 margin.

The next step in London's road pricing plans is to move to an emissions-based charging scheme. The program is designed to try to discourage the worst greenhouse-gas emission vehicles from entering London. Under the program, those vehicles with the highest carbon emissions, like SUVs, would have to pay £25 (\$50) a day. The plan would also abolish the 90% exemption that their owners would receive if they were residents of the congestion charging zone. According to a recent poll, this tax is supported by the public by a 3-to-1 ratio.

Houston at one time favored instituting a congestion pricing scheme for the Westpark Tollway

Congestion pricing is growing in use across the globe. Cities such as Stockholm and Singapore have already instituted pricing schemes, while New York City has considered it only to have the state legislature turn down the plan. In Houston, the Harris County commissioners at one time favored instituting a congestion pricing scheme for the Westpark Tollway, which is capacity-constrained during rush hours, but quickly reversed their vote after a public outcry. The plan would have doubled tolls during the three-hour

Houston drivers protesting congestion pricing said that it discriminated against lower- and middle-income citizens

morning and evening periods along with raising tolls on the remaining Houston tollways by 25%. Threatened by a public revolt – drivers said they would stay off the Westpark Tollway during those time periods and instead rely on local streets such as Richmond and Westpark adding to their daily congestion – the commissioners voted to eliminate the congestion charge and merely increase tolls by 25% on the Westpark Tollway.

One of the views expressed by Houston drivers protesting congestion pricing was that it discriminated against lower- and middle-income citizens who couldn't afford the hike in tolls from \$2.35 to \$5.50 to drive the entire 14-mile long stretch of the Westpark Tollway during rush hours. Reportedly some drivers have resorted to calling the Westpark Tollway the 'Lexusway' in reference to the high-end vehicles that populate the roadway and suggest that they are all owned by wealthy citizens who could afford the toll hike. While questionable, their point about the cost of commuting fits with both the TTI study and other commuting studies that include Houston in their comparisons. The TTI study showed that drivers were cutting back their non-essential trips in reaction to the congestion buildup, but not their commuting. According to David Schrank, a co-author of the TTI study, "We're really not seeing drops in the peak travel times." Census data on commuting reports that about three-quarters of all commuters drive alone to work.

The average Houston commuter spends 20.9% of his annual household costs on getting to work

A study prepared by the Surface Transportation Policy Partnership, a nonprofit research firm, said that based on 2003 Bureau of Labor Statistics data, the most recent available, the average Houston commuter spends 20.9% of his annual household costs on getting to work, putting it among the cities with the highest commuting cost. The drivers in those cities at the top of that list all consume a fifth or more of their household cost in commuting. The study looked at annual transit costs such as gas and tolls, public transit fares and the money spent on car payments and maintenance. According to Robert Puentes, a metropolitan policy fellow at the Brookings Institution, "In Houston, the cost of transportation is the number one household expense, above shelter."

What the study also showed was that when housing costs were combined with transportation spending, Houston's ranking fell to 14 from its number one position based on the transportation cost only. This suggests that Houston's housing costs are very affordable. The study showed that the least-costly commutes tend to be accompanied by high housing costs. New York City and San Francisco were among the cheapest commutes in the country at numbers two and seven, respectively, but they have some of the highest housing expenses and least affordable housing markets in the nation.

So what does the debate over congestion pricing mean? It suggests that given the fact that by next year more than half the world's population will be living in towns and cities according to the United Nations Population Fund report, traffic congestion will become an

Congestion pricing could change current forecasting assumptions about oil demand growth

every growing problem for cities with significant economic costs. By investing in transit infrastructure, it may be possible to mitigate the economic cost. Success in implementing congestion pricing could result in fewer vehicles in the future than projected; more efficient vehicles also helping to offset emission and air quality problems; and more mass transit trips. This shift could change current forecasting assumptions about oil demand growth since transportation is the principle driver influencing consumption projections. Just as we have been surprised by how quickly other energy and economic trends catch on and force us to adjust our forecasts, congestion pricing could create a discontinuity in energy forecasting models.

Melting Ice Heightens Interest In Arctic

The battle over which country owns what part of the Arctic Ocean continues to heat up. The recent marine research ship voyages by Denmark and the United States, coupled with Russia planting a titanium tricolor flag on the floor of the Arctic Ocean and Canada's prime minister making a symbolic journey to that country's most northerly port-city have all been staged to support the respective country's claim to its territory. The most recent developments in this struggle are a proposal from Denmark and semi-autonomous Greenland to host a meeting of the five Arctic nations (Canada, Denmark, Norway, Russia and the United States) next year to discuss the claims and Russia's announcement that soil tests confirm its ownership of the Lomonosov Ridge.

Testing of the samples of the ocean floor taken by Soviet mini-subs confirm that the soil of the Lomonosov Ridge is similar to the soil of Mother Russia

Interfax, the Russian government news agency, reported two weeks ago that testing of the samples of the ocean floor taken by Soviet mini-subs in the August expedition that saw the planting of the Russian flag confirm that the soil of the Lomonosov Ridge is similar to the soil of Mother Russia, thereby strengthening its claim to expanded ownership of the Arctic region and its natural resources. An interesting side light to the Russian expedition is the revelation that footage of the flag-planting shown on Moscow TV turned out to have spliced-in scenes from the 1997 movie *Titanic*, and two members of the mini-sub's crew were foreign tourists who had paid \$3 million apiece for the trip. So much for a scientific expedition.

The Danes have proposed a meeting because they want to discuss how best to establish the borders in the Arctic and to discuss establishing a closer working relationship among the countries in dealing with climate change issues impacting the region. The meeting would come at a time when global warming is being held responsible for melting the Arctic ice and opening up the once frozen region to potential natural resource exploitation and increased transit by ships seeking a shorter route between Europe and Asia.

This year the floating ice cap in the Arctic Ocean retreated more than one million square miles

According to findings just reported by the National Snow and Ice Data Center in Boulder, Colorado, this year the floating ice cap in the Arctic Ocean retreated more than one million square miles, below the average minimum area reached in recent decades.

Experts say that this summer's ice retreat was probably unmatched in the 20th century, including the warm period in the 1930s

Satellite tracking of polar ice has only been done since 1979, but several ice experts have reviewed Russian and Alaskan records going back many decades. These experts say that this summer's ice retreat was probably unmatched in the 20th century, including the warm period in the 1930s. The Northwest Passage was free of ice for weeks this summer and was nearly clear up until about three weeks ago.

Exhibit 8. Northwest Passage Helped By Global Warming



Source: Athropolis.net

As *The Wall Street Journal* wrote in an article several weeks ago, there may now be increased interest in the Northwest Passage from amateur sailors. The newspaper story highlighted the third attempt by Roger Swanson, a 76-year old Minnesota pig farmer turned yachtsman, to travel the 3,200-mile Northwest Passage from the Atlantic to the Pacific Ocean. Having failed in his first attempt in 1994 due to heavy ice and in his 2005 try because he was frozen in, this time he made the trip in 45 days as the sailing was smooth and no ice flows were encountered.

In the past six years, as global warming has shrunk the ice cap, more recreational boats have made the trip

The article pointed out that since the route was developed between 1903 and 1906, only 110 vessels have successfully completed the trip – 80 ice cutters or commercial ships with ice-strengthened hulls and 30 recreational boats. In the past six years, as global warming has shrunk the ice cap, more recreational boats have made the trip than did in the first 95 years following explorer Roald Amundsen's pioneering effort.

As the commercial interest in the Arctic heats up, and the ocean becomes ice free, will native Eskimos begin establishing fueling stations with 7/11s and fast food outlets attached to tap the growing tourist trade, or will they start a NIMBY (not-in-my-back-yard) campaign to keep everyone out?

Will Rhode Island Wind-Farm Be NIMBY-ed To Death?

The governor wants the state to build a wind farm that would supply upwards of 15% of Rhode Island's electricity usage

A week ago, the new stakeholders' group organized by Rhode Island Governor Donald L. Carcieri met to discuss the merits of his plan for the state to build an offshore wind farm. The governor had proposed this plan earlier in the year at the same time he released a state-commissioned study that identified one wind farm site onshore near Little Compton and ten offshore sites in Rhode Island and Block Island Sounds. Gov. Carcieri's plan is to see the state build a wind farm about the size of the proposed Cape Wind project in Nantucket Sound that would supply upwards of 15% of Rhode Island's electricity usage. The proposal is designed to help state residents deal with rising electricity costs due to high and climbing hydrocarbon fuels and to help ease environmental pressures. The estimated cost of the wind farm will be between \$900 million and \$1.9 billion and is planned to be completed in 2010, the last year of the governor's second and final term in office.

The stakeholders' group consists of 35 representatives from various municipalities, agencies and organizations that have a vested interest in the development of low-cost power facilities in the state. The group's charge from the governor is to select a proposed site for the wind farm by the middle of October and then begin the licensing and approval process. During the meeting, some interesting questions about the wind farm were raised. For example, someone wanted to know whether U.S. Navy submarines transiting to the sub-base and repair facilities at Groton, Connecticut would get in the way of the turbine towers. Another asked whether the lights that would mark the tower locations at night would blind ship captains. One person wondered if wind turbines would suck all the wind away from the area and leave sailboats stranded.

"This is a Rhode Island project for Rhode Islanders. What this is about is what does Rhode Island want to do?"

During the discussion, it was suggested that neighboring states – Connecticut and Massachusetts – should be invited to attend the meetings since several of the proposed sites lie close to Rhode Island's borders with them. In fact, Andrew Dzykewicz, the chief energy advisor to the governor, joked that maybe the group should invite a certain senator from Hyannis to join them. He was referring to Sen. Edward Kennedy (D-Mass) who has been a leading opponent of the Cape Wind project. In the course of the discussion about inviting the neighboring states, Mr. Dzykewicz stated, "This is a Rhode Island project for Rhode Islanders. What this is about is what does Rhode Island want to do?" That sounds very much like a man who believes that his neighbors are likely to adopt a "not-in-my-back-yard" approach to the detriment of the citizens of Rhode Island. What a novel view!

When the state-commissioned wind farm study was released last spring, it suggested that wind turbine structures should be built with materials that blend in with the natural environment and that they should not emit noise that affects the quality of life. In addition, they

“Put in the right location, it could be an excellent aid to navigation”

Delaware found that 65% of its residents surveyed approved of the wind farm, 19.5% were opposed and 15.5% were undecided

should be located where they would be compatible with the fish and marine habitat and migrating birds. We haven't figured out how wind turbines can be disguised as evergreen trees the way cell phone towers are, but maybe they merely need to be covered with weathered shingles and old fish nets and lobster pots to give them a 'down east' flavor.

There were two very interesting comments directed toward this wind farm proposal when the study was released. The first was by Capt. E. Howard McVay Jr., president of the Northeast Marine Pilots Association, who said “Put in the right location, it could be an excellent aid to navigation.” He went on to say that the wind farm was likely to be located in shallow water where his members do not operate and try to avoid.

The second observation came from three University of Delaware professors who had surveyed Delaware residents living near the ocean about a proposed wind farm off its coast similar in size to the Cape Wind project. They found that 65% of the residents surveyed approved of the wind farm, 19.5% were opposed and 15.5% were undecided. This survey, similar to the results of various surveys taken about the Cape Wind project, suggests that people have a generally favorable view of wind power in contrast to the few powerful politicians who have been successful in blocking the Nantucket Sound wind farm from gaining approval. In regions of the country where power supplies are being stretched and air quality has deteriorated, alternative power sources need to be considered and politicians need to be on board and not secretly fighting them for personal and selfish reasons.

Canada Becomes Happy Hunting Ground for NOCs

On Monday, September 24, the Canadian oil business awoke to another seismic shift in the business as PrimeWest Energy Trust (PWI-UN.TO) announced it had agreed to be sold to Abu Dhabi National Energy Company (ADNEC) for C\$5 billion, for more than a 20% premium over where the unit price had closed the previous Friday. This marked the third deal by TAQA, the nickname for ADNEC, in the past five months. So far this year, TAQA has spent roughly C\$7.5 billion on oil and gas producing assets.

In May, TAQA spent C\$2 billion to purchase Northrock Resources Ltd., the Canadian oil and gas assets of U.S.-based Pogo Producing Company (PPP-NYSE). About a month ago, TAQA spent C\$540 million on the Canadian assets of Pioneer Natural Resources Company (PXD-NYSE). So what is behind this transaction and what might it portend for the global oil and gas industry.

TAQA's strategy is to build a \$60-billion global oil and gas company

According to TAQA CEO Peter Barker-Homek, the company's strategy is to build a \$60-billion global oil and gas company with one-third focused in Canada, another third in Europe and the remainder spread throughout the Middle East, India and Pakistan.

The reality is that TAQA has a lower cost of capital and lower return expectations

Mr. Baker-Homek spins a storyline that he is a buyer when others are sellers. He argues that this is because his owners represent more patient capital and are willing to take other approaches to exploiting oil and gas properties. The reality, however, is that TAQA has a lower cost of capital and lower return expectations, therefore it can grossly overpay for oil and gas assets and keep competitors from engaging in bidding wars since those buyers cannot accept significantly lower returns.

So far, TAQA's acquisitions have been focused on conventional Canadian oil along with a heavy focus on natural gas. This comes at a time when North American natural gas prices have been under pressure due to a warm winter, a cool summer and a flood of liquefied natural gas (LNG) arriving in the United States that has contributed to record gas storage volumes. As would be expected, a growing gas supply matched against weak demand has led to soft gas prices. Weak gas prices, coupled with continued stock market pressure on income trust shares due to the Canadian government's decision to eliminate their tax holiday, has made them attractive targets for corporate buyers. Foreign buyers have also been helped by Canada's lack of a defined policy regarding foreign takeovers. There is a government-appointed panel examining the issue, but it is probably nine months away from presenting any recommendations – too late to stop much of the current takeover activity.

Will TAQA's next targets will be companies involved in the oil sands?

An additional attraction for Canadian assets is that it has "limited...volume risk, but significant resource potential." This statement has kindled interest in where and when TAQA may seek its next acquisition. Mr. Baker-Homek suggested that TAQA would probably not be buying more assets this fall, but next year was a more likely time for its next move. Given his statement, the burning question on the minds of Canadian energy investors is whether TAQA's next targets will be companies involved in the oil sands. That possible focus is supported by Mr. Baker-Homek's comment that TAQA is interested in acquisitions "across the value chain...from wellhead to burner tip."

If TAQA is targeting the oil sands, there are various targets such as oil sands trusts and smaller oil sands players who have had cost overruns such as OPTI Canada (OPC.TO), UTS Energy (UTS.TO) and Synenco Energy (SYN.TO). However, if TAQA is serious about investing C\$20 billion in Canada, one of the large oil sands players – Suncor (SU-NYSE), EnCana (ECA-NYSE) or Canadian Natural Resources (CNQ-NYSE) – could be a likely target.

If Canada doesn't develop an anti-foreign oil takeover policy soon, the government could watch a significant portion of its petroleum industry fall under foreign ownership

By targeting oil sands investments, TAQA would start playing in an industry segment where large capital resources are an asset. But this is a market where oil and gas production companies owned by government entities of China, Norway and South Korea, for example, have already made investments. If Canada doesn't develop an anti-foreign oil takeover policy soon, the government could watch a significant portion of its petroleum industry fall under foreign ownership. Should Canada worry about this possibility? Or

might this represent merely another period of foreign government-sponsored takeovers such as the Japanese purchases of Rockefeller Center and Pebble Beach in the 1980s, which they ultimately came to regret.

Wind Power and the MMS: Where's The Beef?

An editorial in the *Providence Journal* asked the question: "Getting to the MMS? Why is America 20 years behind Europe?" The editorial writers were questioning why the Minerals Management Service (MMS) is 17 months behind in meeting its Congressional mandate under the Energy Policy Act of 2005 (EPAAct) for developing and issuing operating rules and regulations for alternative power projects located offshore, and in particular wind farms.

The MMS was mandated to issue its operating rules and regulations within 270 days of the act's passage, some 17 months ago

As C. Stephen Allred, Assistant Secretary for Land and Minerals Management of the U.S. Department of the Interior pointed out in his testimony before the Senate Committee on Energy and Natural Resources on June 7, 2007, the effort to develop alternative energy sources in the Federal Outer Continental Shelf (OCS) began in 2002. That effort was eventually merged into the omnibus EPAAct that became law in the summer of 2005. Under the legislation, the MMS was mandated to issue its operating rules and regulations within 270 days of the act's passage, some 17 months ago.

Sec. Allred, in his testimony, described how complex the issue of developing the rules and regulations is given the need to involve all the other agencies that have responsibility over different types of projects. He cited the fact that the new EPAAct jurisdiction for the MMS does not supersede or modify existing Federal authority. Therefore, all activities permitted must adhere to existing Federal law, including the National Environmental Policy, Coastal Zone Management, Endangered Species, Marine Mammal Protection, Magnuson-Stevens Fishery Conservation and Management and Migratory Bird Treaty Acts. As a result, the MMS is working with the Army Corps of Engineers, the National Oceanic and Atmospheric Administration, the Environmental Protection Agency, the U.S. Coast Guard and the Fish and Wildlife Service. It also is developing working relationships with the Department of Energy and the Federal Energy Regulatory Commission.

The public is beginning to worry that the rules and regulations and draft EIS statement are being held up for the same reason that Cape Wind has been held up for six years

Given the complexity of the issues, it is not surprising that the deliberations have taken longer than mandated. However, the editorial writers are wondering why the draft environmental statement (EIS) for the Cape Wind project has not been issued? The editors go on to say that the public is beginning to worry that the rules and regulations and draft EIS statement are being held up for the same reason that Cape Wind has been held up for six years – political meddling by a variety of rich groups and individuals that would prefer that offshore-wind potential not be realized in the United States, or at least in their specific region of the country. In addition, since several of the major objectors to Cape Wind have

**The deputy director of the MMS
said the delays were not
politically spawned**

derived their wealth from the oil and coal businesses, one has to wonder, as does the *Providence Journal*, whether their selfish interests are being put ahead of those of the general population. When questioned by the paper's science writer, Walter Cruickshank, deputy director of the MMS, said the delays were not politically spawned, but rather are due to the complexities of the tasks faced by the agency. Is one of those tasks dealing with the politically-connected objectors?

**Contact PPHB:
1900 St. James Place, Suite 125
Houston, Texas 77056
Main Tel: (713) 621-8100
Main Fax: (713) 621-8166
www.pphb.com**

Parks Paton Hoepfl & Brown is an independent investment banking firm providing financial advisory services, including merger and acquisition and capital raising assistance, exclusively to clients in the energy service industry.