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page 9 IOGCC hosts Alaska gas line panel: Canadians, Alaskans on AGIA

Vol. 13, No. 15 • www.PetroleumNews.com — *A weekly oil & gas newspaper based in Anchorage, Alaska* — Week of April 13, 2008 • $1.50

MGM posts Mackenzie success

COURTESY MGM ENERGY

MGM Energy said it believes the natural gas discovery could be developed as a satellite of the existing Langley field, improving the economics of development. See story on page 3.

B.C. makes industry's life easier

Energy Minister Richard Neufeld said an overhaul of the province's oil and gas rules will build on his government's "strong interest" in emerging, but technically challenging gas plays.

The British Columbia government is wasting no time establishing the "structure for success" as some of the largest gas discoveries in Canada place the province in the North American spotlight.

Energy Minister Richard Neufeld announced April 8 that an overhaul of oil and gas rules will build on his government's "strong interest" in emerging, but technically challenging gas plays.

It coincided with an announcement by Apache that its joint venture with EnCana in the Ootla shale play is much larger than originally thought.

Chief Executive Officer Steven Farris

see **OVERHAUL** *page 21*

Deh Cho, feds in quagmire over Mackenzie region land claim

The longer talks drag on the more a gap seems to open between the Canadian government and the Deh Cho First Nations as they struggle to achieve a land claim settlement in a region that occupies 40 percent of the proposed Mackenzie Valley natural gas pipeline route.

Bogged down for years in legal battles and feuding, the negotiations have been stalled again, Deh Cho negotiators told aboriginal leaders, although they said a resumption is scheduled for later in April.

The Deh Cho chief negotiator Georges Erasmus said "there's a big gulf … them, taking a position over there and us taking a position over here."

He said the government has taken a tougher line over the

see **CLAIM** *page 21*

BREAKING NEWS

NATURAL GAS

New gas partnership

ConocoPhillips, BP form company to build Alaska natural gas pipeline

By KRISTEN NELSON
Petroleum News

The prospect for an Alaska gas pipeline ratcheted up several notches April 8 with an announcement by ConocoPhillips and BP that the two were beginning work on a North Slope gas pipeline, a project they are calling Denali — The Alaska Gas Pipeline.

Jim Bowles, president of ConocoPhillips Alaska, and Doug Suttles, president of BP Exploration (Alaska) said at a joint press conference that the companies expect to spend $600 million through an open season in late 2010, early 2011.

see **DENALI** *page 19*

Governor, legislators pleased with Denali

Both the governor and lawmakers seemed pleased by the BP-ConocoPhillips announcement of their joint-venture Alaska North Slope to market gas pipeline project, although both the administration and legislators were left wondering where the announcement leaves the Alaska Gasline Inducement Act process, the state's effort to jump start a gas pipeline with $500 million in matching funds in exchange for meeting 20 state "must haves."

Gov. Sarah Palin was briefed April 8 by BP and Conoco prior to the companies' Anchorage

see **REACTION** *page 18*

NATURAL GAS

New industries for Alaska?

High prices could give state competitive edge to process hydrocarbon feedstock

By ALAN BAILEY
Petroleum News

At the current rate of change, two years is a long time in the oil and gas industry. And it's just two years since SAIC prepared a report for the U.S. Department of Energy assessing future Alaska natural gas demand.

Harold Heinze, ANGDA CEO

That report indicated that continued residential and commercial gas usage, and gas use for power generation, would remain viable in Alaska through 2025. But the report painted a less than rosy picture of future industrial gas demand. There was some economic potential for future petrochemical and propane industries, but other industries such as gas to liquids, liquefied natural gas and fertilizer did not appear competitive on future world markets.

The escalating prices of oil and gas have dramatically changed that 2006 analysis, Harold Heinze, CEO of the Alaska Natural Gas Development Authority, told the ANGDA board on April 9. In particular, the very high oil prices mean that on a price per British thermal unit basis, oil is much more expensive than gas.

"The major change … is the very high oil prices, including gas at a 60 percent parity Btu-

see **INDUSTRIES** *page 21*

EXPLORATION & PRODUCTION

Continuing the dialogue

Shell's Hofmeister talks about his visit to Alaska North Slope communities

By ALAN BAILEY
Petroleum News

When John Hofmeister, president of Shell Oil Co., spoke at the Alaska's Energy Challenge summit meeting in February, he was about to set out on a visit to communities on Alaska's North Slope. Hofmeister talked about Shell's need to address the concerns of communities in Alaska, following the company's return to the Alaska oil and gas industry.

"We can only be successful if we earn and keep the trust of the people of Alaska, which is how we set out on this Alaska re-entry journey several years ago," Hofmeister said.

see **HOFMEISTER** *page 11*

COURTESY SHELL

John Hofmeister speaks with Howard Patkotak of Wainwright.

contents

Petroleum News | *A weekly oil & gas newspaper based in Anchorage, Alaska*

● NATURAL GAS

MGM posts Mackenzie success

By GARY PARK

For Petroleum News

It took five attempts over the past two winters, but MGM Energy has notched a success from its Canadian Arctic drilling program, reporting a natural gas discovery in the Mackenzie Delta.

The Calgary-based junior said April 7 that the Langley E-07 well tested at restricted flow rates of 13 million cubic feet per day on a 2-inch choke.

MGM said the primary target consists of about 25 feet of net pay with 28 percent porosity in the middle Taglu formation.

Located on exploration license 394, the well was designed to test multiple stacked zones to a depth of 4,600 feet.

Well logging and testing information will have to be evaluated before the company can estimate the size of the discovery.

However, the production tests give MGM confidence that it can obtain a significant discovery license from the federal government, effectively granting it indefinite tenure of the leases based on evidence of a sufficient accumulation of hydrocarbons to support sustained production.

COURTESY MGM ENERGY

The Calgary-based junior said April 7 that the Langley E-07 well tested at restricted flow rates of 13 million cubic feet per day on a 2-inch choke.

MGM expects more drilling

Pleased with the discovery, MGM President Henry Sykes said the Langley E-07 well "should result in future drilling programs in this area."

It is about 10 miles southeast of the Chevron Canada-BP Canada Energy Langley K-30 well discovered in 2002 and tested at 18 million cubic feet per day.

MGM said it believes the new find could be developed as a satellite of the existing Langley field, improving the economics of development.

It should also bolster MGM's estimated net contingent gas resources of 300 billion cubic feet on the Delta, which enabled it to sign a capacity request agreement last year for 200 million cubic feet per day of space on the planned Mackenzie Gathering System which would feed into the Mackenzie Valley mainline, if the project goes ahead.

Langley E-07 completed MGM's commitment to drill a minimum five test wells under its farm-in pact with Chevron-BP covering four exploration licenses and concessions.

Seismic also completed

As well, it has concluded two seismic programs on the Delta and one in the Central Mackenzie Valley of the Northwest Territories.

The company said it will move equipment off the drilling and seismic locations before spring melt closes ice roads.

The discovery well, part of MGM's drilling and seismic program expected to cost C$60 million in the 2007-08 winter, came after four wells — Aput C-43 and Atik P-19 in the past winter and Kumak I-25 and Unipkat M-45 in 2006-07 — failed to yield commercial quantities of hydrocarbons.

In a thin year of drilling in the Canadian North, a Husky Energy-led partnership reported two dry holes on Exploration License 423 — the Keele River L-52 well and the Dahadinni B-20 well, which was drilled to a depth of 8,000 feet.

However, the two wells fulfilled a work commitment on the license, extending the term for a second period of four years. ●

● LAND & LEASING

MMS issues call for North Aleutian basin

PETROLEUM NEWS

The Minerals Management Service has issued a call for information and a notice of intent to prepare an environmental impact study for Lease Sale 214 in the North Aleutian basin planning area.

The sale is proposed for 2011 under the 2007-12 outer continental shelf leasing program.

MMS said the April 8 call and notice begin the information-gathering and scoping process and do not indicate a preliminary decision to lease in the area.

The agency said the area is believed to be gas-prone. It covers some 5.6 million acres in the southeastern Bering Sea.

MMS held a North Aleutian Basin Information Status and Research Planning Meeting in 2006 to gather stakeholder input and identify needed research and monitoring activities. MMS recently published a report on the proceedings and a synthesis of the literature related to natural resources of the North Aleutian basin, identifying some 600 new sources of information.

In conjunction with the University of Alaska Fairbanks MMS has contracted with Rutgers University to modify an ice-ocean circulation model for Bristol Bay, a study which will aid in determining necessary actions to protect the area, the agency said. This modeling study began in the fall and will continue for two years.

Right whale being studied

In 2007, MMS and the National Marine Fisheries Service began a study of the North Pacific right whale, a federally designated endangered species, in the North Aleutian basin.

Proposed studies for fiscal year 2008 include research on subsistence food harvest and sharing activities, studies of juvenile and maturing salmon and nearshore mapping of juvenile salmon and settling crab; additional studies are proposed for FY 2009.

The EIS will focus on potential environmental effects of oil and gas exploration, development and production. MMS said it will consider comments received in response to the call and notice in determining the proposed sale area and the scope of the EIS.

Nominations and comments on the call must be received by July 7.

The area was last leased in 1988. The 23 leases that were issued were eventually repurchased by the government in 1995, following an October 1989 congressional moratorium banning Department of the Interior expenditures in support of any petroleum leasing or development activities in the planning area. An executive order issued in 1998 extended the moratorium as a presidential withdrawal until 2012. The congressional moratorium was discontinued in 2004 and in 2007 the presidential withdrawal was modified to exclude the North Aleutian basin. ●

PIPELINES & DOWNSTREAM

TransCanada enters Rockies gas contest

It shapes up as Rockies I as TransCanada and Kinder Morgan go toe-to-toe for natural gas shippers from the burgeoning U.S. Rockies market.

TransCanada invited bids April 7 for its proposed Pathfinder system from Wyoming through Montana and North Dakota to connect with its Northern Border system from Alberta to the Ventura and Chicago area markets.

Kinder Morgan is already moving 1.5 billion cubic feet per day from Colorado to Ohio on its Rockies Express line, while TransCanada in March announced the proposed Sunstone pipeline from the Rockies to Oregon.

They're all scrambling to corner a slice of the only U.S. onshore region to record year-over-year gas production gains in the past decade as it closes in on 16 bcf per day by 2010, at which point it will pass Western Canada.

TransCanada Chief Executive Officer Hal Kvisle said Pathfinder offers access to the Midwest market and possibly to eastern customers.

Initial capacity on the 500-mile system of 1.2 bcf per day on a 42-inch diameter line, starting in 2010, could grow to 2 bcf per day and be extended by 270 miles.

The open season closes May 22 when TransCanada will decide whether to proceed with regulatory applications. Until then it is not able to estimate project costs, although Kinder Morgan spent US$4.9 billion on its 1,600-mile, 42-inch Rockies Express joint venture with Sempra Pipelines and ConocoPhillips.

When extended from Missouri to Ohio, Rockies Express volumes are expected to rise to 1.6 bcf per day in January 2009 and 1.8 bcf per day by mid-2009.

—GARY PARK

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Petroleum News and its supplement, Petroleum Directory, are owned by Petroleum Newspapers of Alaska LLC. The newspaper is published weekly. Several of the individuals listed above work for independent companies that contract services to Petroleum Newspapers of Alaska LLC or are freelance writers.

OWNER: Petroleum Newspapers of Alaska LLC (PNA)
Petroleum News (ISSN 1544-3612) • Vol. 13, No. 15 • Week of April 13, 2008
Published weekly. Address: 5441 Old Seward, #3, Anchorage, AK 99518
(Please mail ALL correspondence to:
P.O. Box 231647 Anchorage, AK 99523-1647)
Subscription prices in U.S. — $78.00 for 1 year, $144.00 for 2 years, $209.00 for 3 years.
Canada / Mexico — $165.95 for 1 year, $323.95 for 2 years, $465.95 for 3 years.
Overseas (sent air mail) — $200.00 for 1 year, $380.00 for 2 years, $545.95 for 3 years.
"Periodicals postage paid at Anchorage, AK 99502-9986."
POSTMASTER: Send address changes to Petroleum News, P.O. Box 231647 Anchorage, AK 99523-1647.

● INTERNATIONAL

Russia law restricts foreign investment

Private companies in energy sector will need government permission to acquire more than 50% of a Russian company

By SARAH HURST
For Petroleum News

A new law that limits foreign investment in key sectors of Russia's economy, including the oil industry, may provide a solid footing for companies that have faced a barrage of regulatory changes during the tenure of outgoing President Vladimir Putin. The Duma, Russia's lower house of parliament, passed a bill April 2 stipulating that private foreign companies will need authorization to buy more than 50 percent of a Russian company in a "strategic" economic sector.

Foreign state-controlled companies will need permission to buy more than 25 percent of a Russian company in one of the 42 sectors listed. The bill is likely to pass the upper house, the Federation Council, and will then go to the president for his signature. Putin's chosen successor, Dmitry Medvedev, who takes office in May, is expected to appoint Putin as prime minister and to continue the policy of maintaining state control over Russia's biggest industrial projects.

"In many ways the legislation codifies the existing de facto procedures. Nothing in the new legislation prevents companies from having access to some of the defined strategic assets — the new law simply means companies need to secure approval first and defines a process," a spokesman for TNK-BP told Petroleum News. BP owns 50 percent of TNK-BP and Russia's AAR (Alfa, Access/Renova Group) owns 50 percent.

"In principle we welcome the greater transparency, comprehensiveness and clarity the new legislation should provide," the spokesman continued. "We understand that Russia, like most OECD countries, has strategic or national interest concerns that may require non-market based restrictions. We also welcome the consultative manner in which this legislation was introduced and developed, that was aimed at minimizing the negative impact that could be made on the investment climate."

Royal Dutch Shell's head in Russia, Chris Finlayson, also reacted positively to the legislation. "In the coming 10 years, Russia must do a lot of catching up in offshore oil production in remote, environmentally sensitive and ice-covered areas the size of the North Sea," Finlayson was quoted as saying in Dutch paper Het Financieele Dagblad. "This offers us new chances. Russia is striving for national control over the energy sector, but that doesn't mean that there are no opportunities for foreign oil companies."

TNK-BP, Shell and other private oil companies have been forced by the Russian government to give up some of their assets in recent years. Just a month ago, an employee of TNK-BP with dual Russian-U.S. citizenship was arrested for allegedly gathering secret information aimed at giving foreign oil companies a competitive advantage. TNK-BP denies the charges. The company has agreed to sell its stake in the Kovykta gas field in eastern Siberia to Russia's state gas monopoly Gazprom.

Shell and its Japanese partners Mitsui and Mitsubishi sold a 50 percent stake in the Sakhalin-2 oil and gas project to Gazprom in December 2006 after the Russian government accused Shell of violating environmental laws. Shell was left with a 27.5 percent stake in the Far East project. ●

GOVERNMENT

Numbers show Palin spends less on travel

Travel expenses have plummeted under Alaska Gov. Sarah Palin. A look at the numbers shows that former Gov. Frank Murkowski spent more than half a million dollars on travel in his last year in office. On the other hand, Palin's first year in office shows she spent less than $115,000 on travel. That is less than any governor in recent memory. It's not just because Palin flies on Alaska Airlines instead of former Gov. Frank Murkowski's executive jet — which Palin later ordered sold.

Palin has been more likely to travel to Naknek for a community potluck, while Murkowski toured east Asian capitals toward the end of his single term as a governor.

"I guess I'd have to say that I'm not surprised," said Sen. Kim Elton, D-Juneau, and a vocal critic in years past of Murkowski's decision to buy a Westwind II jet over the objections of many legislators.

The biggest factor in the decline in travel expenses was the sale of the jet, which cost $1,689 an hour to fly. Palin traveled frequently, sometimes commercial and sometimes by a King Air turboprop owned by the Department of Public Safety.

A look at the numbers shows that even comparable trips by the two governors had different costs. Both Palin and Murkowski, who finished third in his bid for re-election, attended the National Governors Association meeting in Washington. D.C. While Palin spent

$1,885 on lodging, Murkowski spent $6,599, staying in an "executive" suite JW Marriott on Pennsylvania Avenue for a week at a cost of $937 per day, including tax.

—THE ASSOCIATED PRESS

● GOVERNMENT

Alberta auditors disagree over royalties

Report refutes claims by Auditor-General that province could rake in $1B more a year in oil and gas royalties without harming industry

By GARY PARK

For Petroleum News

A 32-page report brushes off claims by the Alberta Auditor-General Fred Dunn that the province could rake in another C$1 billion a year in oil and gas royalties without harming the industry.

And who says so?

Why, none other than Dunn's predecessor Peter Valentine.

His findings, delivered to Alberta Premier Ed Stelmach, said the government is collecting all that it can and should from the industry.

Stelmach ordered the review of procedures for collecting and reporting royalties in response to claims as Alberta prepares to introduce a new royalty framework on Jan. 1, 2009, that includes a 20 percent average hike in royalties and aims to collect another C$1.4 billion a year.

As part of the royalty review last year, Dunn suggested that failings in the royalty system were costing the government and pointed the finger at the government's failure to listen to its own officials.

He said the energy department "estimates that it could collect an addition C$1 billion or more per year without stifling industry profitability."

Disagreement over C$1 billion

Valentine's report, entitled Building Confidence, did find some fault with the government, the royalty review panel and Dunn, but left the industry unscathed.

Alberta Auditor-General Fred Dunn's predecessor Peter Valentine delivered report to Alberta Premier Ed Stelmach (pictured above). The report said the government is collecting all that it can and should from the oil and gas industry.

However, he could "find no evidence that the government missed collecting over a billion dollars in royalties."

He said that if there was a discrepancy, the review panel and Dunn should be asked for an explanation.

Energy Minister Mel Knight, praising Valentine's work, said the government collected the royalties it was entitled to under the policies that were in place at the time.

Valentine, as part of recommending 13 changes to procedures, said existing systems and processes within the energy department ought to be "fail-safe," but fall short because there are no standardized procedures to validate data being used in the department's economic models.

Report calls for changes

Among his proposals, Valentine called for:

• An inter-ministry committee to consult on the impact of the royalty system;

• New ways to help Albertans find the information they need to understand the royalty system; and

• An audit of currently available information about the royalty system.

Hugh MacDonald, energy spokesman for the opposition Liberal party, suggested the government, in "shopping around for a report," had shown a "total lack of confidence" in Dunn, his office and legislation governing the auditor-general.

New Democratic Party leader Brian Mason said the government "got a much easier ride" when Valentine was auditor-general, whereas Dunn "calls it the way it is."

Knight said the government will adopt all of the measures recommended by Valentine. ●

● GOVERNMENT

Alabama looks at higher natural gas tax

ExxonMobil says it's a punitive measure, nothing more than 'disguised massive tax increase,' but revenue commissioner says legislation will guarantee oil companies pay taxes they agreed to pay when Alabama allowed coastal drilling

By PHILLIP RAWLS

Associated Press Writer

A tax battle between Alabama's Republican governor and the nation's biggest oil company swung in the governor's favor April 3 when a legislative committee approved higher taxes on natural gas wells drilled along the Alabama coast.

The House Government Appropriations Committee passed the administration-backed tax measure on a lopsided voice vote. The vote came one week after ExxonMobil persuaded the committee to reject an earlier tax proposal by Gov. Bob Riley.

The committee's reversal occurred after the administration agreed to change the tax proposal from a permanent tax to a temporary tax surcharge. The bill now goes to the House for consideration.

"It's a punitive measure. It's nothing more than a disguised massive tax increase," said Dan Seckers, a tax attorney for ExxonMobil.

Riley's state revenue commissioner, Tim Russell, said the legislation would make sure oil companies paid the amount of taxes they agreed to pay when Alabama allowed drilling along its coast.

Dispute over royalty payments

The tax battle involves the same natural gas wells that were in dispute in the legal battle the governor and ExxonMobil had over royalty payments due the state. A Montgomery jury originally returned an $11.9 billion verdict in favor of the state, but that was cut to $122 million when the Alabama Supreme Court finished with the case last year.

Before the legislative session started in February, Riley's administration and ExxonMobil got into a legal dispute over what expenses the oil company could deduct before paying state taxes on the value of the natural gas it gets from wells along the Alabama coast.

State revenue officials said that if ExxonMobil prevails — and an administrative law judge has already ruled in the oil company's favor — it could get $41 million in immediate refunds. Refunds for all companies covering all years could push the total refunds to between $100 million to $200 million, depending on who's doing the estimating.

ExxonMobil is the biggest producer along the Alabama coast, handling about three-fourths of the natural gas.

Riley initially proposed changing Alabama's tax from a value-based tax to a volume-based tax that would double the amount of taxes paid by oil companies annually from $40 million to $80 million. That bill, which levied a permanent tax, got killed by the House committee in late March.

Riley came back with another bill, which the committee revised and approved April 3, that keeps the current value-based tax. It reduces the tax rate from 10 percent to 8 percent and eliminates some expenses that oil companies deduct before paying the taxes. Legislative fiscal experts said it would produce the same $40 million annually the state gets now.

Tax would make up refunds

But the bill also levies a temporary 6 percent tax on gross proceeds that would stay in place until the state collected enough money to cover all the refunds at stake in the legal dispute with Exxon Mobil. In no case could the temporary tax go beyond six years.

Legislative fiscal experts said the temporary tax would generate another $40 million annually. ExxonMobil officials said it would be much more and would make Alabama's taxes the highest by far on the Gulf Coast.

Russell said the legislation would make sure the state is not hurt by any refunds to oil companies. But he said the administration is willing to back off the temporary tax if ExxonMobil will give up on seeking refunds.

"If those claims are dropped, the surcharge is dropped," Russell said.

Seckers said the legislation sends a chilling message to anyone doing business in Alabama: "Don't take a case to court. We'll make you pay if you do."

The tax legislation must win approval in the House and Senate and be signed by the governor before taking effect. ●

● GOVERNMENT

Lawmakers want share of offshore revenue

By STEVE QUINN

Associated Press Writer

State lawmakers say it's time for Alaska to receive a share of federal revenue collected from offshore oil and gas development.

On April 9, the House unanimously supported a Senate resolution calling on Congress to provide consideration already afforded to four states along the Gulf of Mexico.

The state bears infrastructure costs of offshore development and should receive compensation, said Sen. Bill Wielechowski, an Anchorage Democrat who sponsored the resolution.

But critics in Congress say this kind of provision is akin to an earmark and detracts treasury revenue that should be shared nationally, not locally.

The revenue sharing debate comes as the federal government and the oil industry are looking to develop large tracts of the Chukchi and Beaufort seas for oil and natural gas production.

In February, the Minerals Management Service held robust bidding for outer continental shelf leases in the Chukchi Sea.

State lost $975 million

Wielechowski estimates the state lost $975 million because it was left out of a 2006 law that brings the other states revenue from bid proceeds and production royalties.

"That's enough to fund education for a year in this state," said Wielechowski, who is also a member of the Senate Resources Committee. "It's really a matter of fairness."

The current law, called the Gulf of Mexico Energy Security Act, works like this:

• U.S. coastal waters within three miles offshore are considered state waters, so royalties and production taxes go to the state.

• In areas developed three miles to six miles offshore, states get a 27 percent cut of the royalties.

• Outside six miles, states receive no cut, except for Alabama, Mississippi, Louisiana and Texas.

The four states are to collectively receive a $24.9 million from a recent Gulf of Mexico lease sale.

Markey calls it earmarks

That prompted U.S. Rep. Ed Markey, a Massachusetts Democrat who is chairman of the Select Committee on Energy Independence and Global Warming, to call the revenue sharing: "the king of all earmarks, a giveaway that keeps on giving."

"These four states will reap windfall profits from this deal, giving the other 46 states the short shrift when it comes time to fund important programs," he said in a statement.

The Chukchi and Beaufort seas off Alaska hold 24 billion barrels of recoverable oil and 104 trillion cubic feet of recoverable natural gas, according to Minerals Management Services estimates.

Pushback from people opposing offshore development kept Alaska out of the mix when the revenue-sharing law was drafted two years ago, said Sen. Ted Stevens, R-Alaska.

Stevens and Alaska Sen. Lisa Murkowski are pushing to get Alaska similar provisions this year.

"These projects are nothing to be sneezed at," Stevens said. "We don't want them to go away."

Even as the offshore drilling provides minimal state benefits — mostly new jobs for local workers — state lawmakers support the efforts.

"If the feds want to do it, then the feds should pony up part of the money to pay for the services that are required," said House Majority Leader Ralph Samuels, R-Anchorage.

"If we are going to have these large-scale developments up there and it's going to cost the state money to handle a federal development, then the state should get a piece of it."

The state's nonbinding resolution now goes to Gov. Sarah Palin. If she signs it, it will be forwarded to Congress. ●

GOVERNMENT

DGGS to catalogue Alaska resources

The dependence of much of rural Alaska on diesel fuel for heating and lighting coupled with the escalating price of oil-based fuels is causing a major economic crisis in many communities in the state. To help address this problem Alaska's Division of Geological and Geophysical Services is embarking on an exercise to identify and catalogue Alaska's energy resources.

Known as the Alaska Energy Inventory project, the DGGS initiative will assemble data about energy sources that might be available to individual communities. Those energy sources potentially cover the gamut of fossil hydrocarbons, wind power, hydropower, wind energy and biomass.

"Recent increases in the price of oil have severely impacted the cost of energy throughout Alaska; especially hard hit are rural communities and remote mines that are off the road system and isolated from integrated electrical power grids," DGGS said in its 2008 annual report. "Even though the state has significant conventional gas resources in restricted areas, few communities are located near enough to these resources to directly use natural gas to meet their energy needs."

At present diesel fuel has to be transported at considerable cost to more than 150 roadless Alaska communities by barge or airplane for storage in large fuel tanks for winter use, DGGS said. DGGS will inventory and compile energy resource data to identify locations or regions where economic energy resources or combinations of energy resources could be developed to meet local community needs for space heating and electrical power generation.

The division will make the data it assembles available to the public through the Alaska Department of Natural Resources Land Records Information Section's Alaska Mapper Web site, using Google Earth and the Terrago Technologies GeoPDF format.

—ALAN BAILEY

● NATURAL GAS

Palin asks money for bullet line study

Says AGIA designed to connect Alaskans with North Slope gas; bullet line one of a number of in-state energy options to be reviewed

By KRISTEN NELSON
Petroleum News

Alaska Gov. Sarah Palin said April 4 that she would be asking the Legislature for $6 million to $8 million to update a bullet line study.

A bullet line, or small-diameter natural gas pipeline, would carry North Slope natural gas south for in-state use.

Interest in gas for in-state use has been growing as energy prices in the state skyrocket. Legislators rapidly implemented a decision to spotlight natural gas for in-state use April 2, when joint resolutions were introduced in the House and Senate, asking the governor to expand the call for the June special session to include a line for in-state gas delivery. Senate Concurrent Resolution 22 was approved by the Senate April 2 — the day it was introduced. The House approved the resolution April 6.

Palin, at a press conference featuring Alaska State Energy Coordinator Steve Haagenson, the executive director of the Alaska Energy Authority, said the Alaska Gasline Inducement Act was passed by the Legislature to "bring Alaska's North Slope gas to market."

AGIA "is all about ensuring that Alaska's gas serves Alaskans," the governor said, by ensuring that Alaskans have access to gas from a mainline "at the lowest possible transportation cost"; ensuring that new gas is developed; and helping to sustain Alaska's economy by developing natural gas resources.

Alaska energy plan being developed

Palin said her administration has been examining a bullet line — it's a component of the Alaska energy plan Haagenson is developing, the governor said. The $6-$8 million request is to refine the bullet line study.

The Alaska Energy Authority is putting together an Alaska energy plan, Haagenson said, based on providing energy in a form that can be used in existing infrastructure; evaluating costs on a delivered basis; using low-profit business structures such as co-ops and port authorities; minimizing risk of technology failure; engaging Alaskans in finding solutions; and seeking the lowest-cost energy for each community.

Haagenson said the goal is rapid deployment of energy solutions: finding local companies that can implement quickly; looking for bankable agreements — contracts that utilities can take to a bank; looking for financial institutions that can help fund the projects; identifying cost by areas; evaluating technologies; coming up with the capital cost to build technologies and the money to operate and maintain them.

Rhonda McBride, the governor's rural energy advisor, said in rural areas she often hears that the choice is between heating and eating. But it's more than just that, with fuel costs rising in rural Alaska, fisherman in Bristol Bay are wondering how aggressively they can fish with oil prices so high. "There's just a whole cascade of effects from the cost of high energy," McBride said. As for energy plans for Alaska, she said a lot of people have already been motivated and predicted that Haagenson will be besieged with ideas.

It's "about Alaskans pulling together to find solutions," the governor said.

Bullet line study has been done

Palin said there is already a Department of Natural Resources bullet line study: "We do have a work product," she said, but it needs to be refined — that is what the $6-$8 million would do.

Deputy Commissioner of Natural Resources Marty Rutherford said the bullet line study has been updated, but it's "at a very gross level" and "needs to be refined." Costs for building such a line need to be "looked at more extensively," as well as engineering design and markets. Rutherford said the presumption of the study, which was done under the previous administration, was that the line would have been underwritten by the state and that there were markets that could have generated enough income to repay the outlay.

One of the things that require more study, she said, is "whether or not the markets are actually there," what the tariff would be and "after the costs whether it could be self-sustaining."

As for providing affordable energy to Southcentral, Rutherford said one of the things that needs to be done is to compare a bullet line to alternatives such as a Susitna dam.

The 2007 data assumed the bullet line would cost $3.3 billion and carry less than half a billion cubic feet a day of natural gas.

Rutherford told Petroleum News the bullet line study was done under the Stranded Gas Development Act "and its associated confidentiality provisions" and was completed in 2005. Internal updates were done in 2007, Rutherford said.

A study which is public was done for the Alaska Natural Gas Development Authority in 2005 and discussed by Ward Whitmore, who authored the study for Michael Baker Jr. (See On the Web references.)

AGIA would link Alaskans to gas

Palin said she wanted to reassure lawmakers that AGIA does include linking Alaskans with their North Slope gas: "That's the number one goal of AGIA, is jobs for Alaskans and gas for Alaskans," the governor said.

The state's oil production is declining, Rutherford said, and "the point of AGIA was to move Alaska's gas … line project through to FERC certification, so we can have a new revenue source to begin to backfill as our oil declines."

AGIA's emphasis on open access is to ensure exploration for and development of new gas, she said, and the lowest possible transportation costs ensure the highest revenues to the state, and low transportation costs for Alaskans who want to take gas off the mainline within the state.

Revenue Commissioner Pat Galvin said the market is shifting and with higher energy costs there may be more opportunity for Alaskans "to simply go with a line that would run gas directly to Alaska's market and wouldn't necessarily have to rely upon the economy of scale" of a large gas pipeline. He said a bullet line is something the state should look at, "in conjunction with other projects, to ensure that we look at a full list of options available to Alaskans to lower our energy costs." It's not an alternative to a mainline gas project, he said, but it is one of a number of in-state energy projects that should be considered. ●

Lawmakers favor own bullet line study

Gov. Sarah Palin formally asked lawmakers April 7 to pay for an $8 million study of the idea of laying a small pipeline to bring North Slope gas to the Anchorage area. But key lawmakers said they're not inclined to give the governor the money.

"The gut reaction is no," said Rep. Kevin Meyer, R-Anchorage.

Rep. Mike Chenault, R-Nikiski, said the Legislature could pay for a study, but it might want to retain control of the study itself rather than handing the money to the governor's office. An independent study arranged through the Legislative Budget and Audit Committee, which often hires expert consultants, might be the best way to get an "unbiased" result, he said.

"In my mind, the governor has a lot on her plate," Chenault said, referring to the administration's efforts to try to land a much larger pipeline to carry gas out of state.

Meyer and Chenault are the co-chairman of the powerful House Finance Committee, to which the Palin administration sent its funding request for study of a "bullet line."

Bullet line would be smaller

A bullet line would be smaller, less expensive and possibly could be built much sooner than the big pipeline TransCanada Corp. and others have proposed. It would be a sidekick to the mainline — a way to bring North Slope gas to Fairbanks and to Southcentral Alaska, where supplies of Cook Inlet gas are running out.

But even this smaller gas pipeline could be very expensive at $3 billion or more, state officials have said.

Palin announced April 4 she would ask lawmakers to fund a feasibility study

see **LAWMAKERS** *page 9*

On the Web

See previous Petroleum News coverage:

"Rich gas, small line could be economic," in April 17, 2005, issue at www.petroleumnews.com/pnads/12451312.shtml

A bullet line is described in section 7 ("Enriched Gas Small Pipeline to Cook Inlet") of an April 2005 report done for the Alaska Natural Gas Development Authority by Michael Baker Jr. Inc., "Transport of North Slope Natural Gas to Tidewater," at www.allalaskalng.com/reports/report_transport_ns_gas.pdf

● NATURAL GAS

IOGCC hosts Alaska gas line panel

Canadians, Alaskans will talk about AGIA's progress, Alberta energy minister to discuss conservation, carbon capture, and storage

PETROLEUM NEWS

The Alaska natural gas pipeline will be featured in a panel at the Interstate Oil and Gas Compact Commission's Midyear Issues Summit in Calgary, Alberta, on May 5. The summit runs from May 4 to May 6.

The 38-state commission, chaired by Alaska Gov. Sarah Palin, resolved in 2007 to support an Alaska gas pipeline project that will assure access to all current oil and gas developers and future oil and gas explorers at reasonable transportation costs.

The 38-state commission, chaired by Alaska Gov. Sarah Palin, resolved in 2007 to support an Alaska gas pipeline project that would assure access to all current oil and gas developers and future oil and gas explorers at reasonable transportation costs.

Panelists from different sides of the issue will offer their perspectives on the progress of the Alaska Gasline Inducement Act.

Speakers will include the following individuals from Alaska and Canada:

• Bruce Anders, chief, Leasing, Permitting & PSIO Section, Alaska Division of Oil and Gas, "The Alaska Natural Gas Pipeline Project: History and Update on Alaska's Progress;"

• Drue Pearce, federal coordinator, Alaska Natural Gas Transportation Projects, "Alaska Natural Gas Pipeline Project – the Federal Perspective:"

• Sue Kirby, assistant deputy minister, Energy Sector, Natural Resources Canada, "Alaska Natural Gas Pipeline Project – the Canadian Perspective;"

On the Web

Midyear Issues Summit registration and information:
www.iogcc.state.ok.us/events.html

Headquartered in Oklahoma City, Oklahoma, the IOGCC is a multi-state government agency whose mission is to promote the conservation and efficient recovery of the nation's domestic oil and natural gas resources while protecting health, safety and the environment.

• Tony Palmer, vice president, Alaska Development, TransCanada Corp., "Overview of TransCanada's AGIA Application: Expected Project Timeline, Benefits to Stakeholders and Project Economics."

"Energy demands in North America, particularly the United States, continue to raise the value of Alaska's enormous North Slope natural gas reserves," said Anders, IOGCC panelist and Palin gas line project team member. "The introduction of Alaska's substantial incremental supply will have an immediate and sustained impact on consumer energy costs and will directly reduce America's dependence upon foreign energy sources."

Devon VP to talk about output

As part of the general session agenda, Palin will talk about the status of her goals for IOGCC under her chairmanship, and Devon Canada Vice President Chris Seasons will give an overview of Canada oil and gas production.

In addition, Alberta Energy Minister Mel Knight will discuss Alberta's efforts in conservation, energy efficiency and carbon capture and storage and new executive director Mike Smith will unveil ideas for the future of IOGCC during a summit reception May 4 at the Fairmont Banff Springs.

Registration for the three-day summit is open to the public. IOGCC said it will offer "a detailed look at other major issues affecting domestic oil and natural gas resources such as carbon capture and geologic storage, cross border issues, the NEPA process and net receipts sharing during its various committee sessions."

Headquartered in Oklahoma City, Oklahoma, the IOGCC is a multi-state government agency whose mission is to promote the conservation and efficient recovery of the nation's domestic oil and natural gas resources while protecting health, safety and the environment.

In 1935, six states took advantage of a constitutional right to "compact," or agree to work together, to resolve common issues. Faced with unregulated petroleum overproduction and the resulting waste, the states endorsed and Congress ratified a compact to take control of the issues.

Today, the IOGCC's membership consists of 30 member states, eight associate states and eight international affiliate country members. ●

continued from page 8

LAWMAKERS

on the bullet line.

The announcement came after a contentious week that saw Palin veto some projects lawmakers wanted, and legislators question her attention to supplying gas for local homes and businesses while pursuing a huge pipe to ship gas Outside.

The lawmakers asked the governor to add local gas supply to the agenda of the June 3 special session, when the administration might seek approval to award a license and $500 million subsidy to Trans Canada.

But Palin refused.

Then she announced she would request funding for the bullet line study.

Some studies available

Some lawmakers said April 7 the governor's request seemed designed to counter criticism, and questioned whether an $8 million study is really necessary.

"Eight million dollars is a lot of money," said Anchorage Republican Rep. Ralph Samuels, who chairs the Legislative Budget and Audit Committee.

The state could take advantage of studies either already completed or under way on piping gas to locals, Samuels said. Two examples are studies by Enstar Natural Gas Co., the Anchorage gas utility, and the Alaska Natural Gas Development Authority, a state agency, he said.

"I don't know that we need to reinvent the wheel here," added House Speaker John Harris, R-Valdez.

Harris said he believes the authority has $5 million available in its budget if a bullet line study is needed.

The funding request the Palin administration sent April 7 said the feasibility study on a bullet line would be finished in the last half of 2009, and private engineering firms would do most of the work.

Funding, if granted, would be included in the state capital budget, which House members are now considering with six days left in the session before adjournment.

Palin spokeswoman Sharon Leighow said the governor's office had no immediate comment on the possibility of funding being denied to the governor.

—WESLEY LOY
ANCHORAGE DAILY NEWS

● EXPLORATION & PRODUCTION

ConocoPhillips files Qannik pool rules

Third Alpine satellite due to start up this summer in western North Slope Colville unit; drilling operations to begin in June

By KRISTEN NELSON
Petroleum News

ConocoPhillips Alaska, operator of the Colville River Unit on the western North Slope, has filed an application with the Alaska Oil and Gas Conservation Commission for pool rules for the Qannik oil pool, which overlies the Alpine, Nanuq and Fiord oil pools within the unit. The company said initial plans are to develop approximately 5,000 acres of reservoir from drill site CD2.

Eight new horizontal wells are planned, as well as utilization of the existing Qannik horizontal exploration well, CD2-404.

Six of the wells would be producers and three would be water injectors: horizontal well lengths would range from 6,000 to 9,000 feet.

Recovery would involve waterflood supplemented with gas cap expansion drive.


JUDY PATRICK

Alpine, the first Colville unit field to produce oil, was discovered in the early 1990s and came online in late 2000. It is the third largest oil field on the North Slope, behind Prudhoe Bay and Kuparuk.

Ultimate recovery is estimated at 17 million barrels, with a range of 11 million to 25 million barrels based on reservoir simulation.

Initial production, estimated for late 2008 by ConocoPhillips Alaska President Jim Bowles in November 2006, is currently targeted for summer 2008 start-up. Its peak annual project rate is estimated at 4,000 barrels per day in 2009, with a possible range of 3,000 to 6,000 bpd.

ConocoPhillips said in its application that successful results from this effort would likely result in expanded development activities at drill sites CD2 and CD4.

Working interest partners in the project are the same as at Alpine, ConocoPhillips 78 percent and Anadarko Petroleum 22 percent.

Existing infrastructure will be used

The company said existing infrastructure will be used when possible. Drill site CD2 was expanded by 7.5 acres to allow up to 18 new development wells. CD2 is some three miles west of the Alpine Central Facility.

Assuming receipt of conservation and area injection orders in May, drilling operations would start in June.

Facilities installation began in February; first oil is expected in July; and drilling operations would end in January 2009.

Qannik, which means snowflake, in the local Inupiat language, is a sandstone with a stratigraphic trap, containing both an oil and gas leg.

Original oil in place in the nine-well target area is estimated at 79 million barrels.

Oil from the production test at CD2-404, drilled in May 2006, had an API gravity of 29.4 degrees.

Erec Isaacson ConocoPhillips Alaska's vice president of land and exploration, said when the discovery was announced in July 2006 that the company had basically been drilling through Qannik to reach the Alpine accumulation, which is at about 7,000 feet subsea. They had seen the Qannik accumulation on logs, he said, and used exploration dollars to put in a well to test it.

ConocoPhillips said average Qannik production from CD2-404, drilled in May 2006, was 1,200 barrels per day of 29.4 degree API gravity oil from a 25-foot sandstone at 4,000 feet subsea. The Alpine accumulation, at 40 degrees API gravity, is a lighter oil. ConocoPhillips said results from that well were sufficient to sanction the project.

Open annuli in existing wells

ConocoPhillips said the Qannik interval was not considered a significant hydrocarbon bearing interval and was not cemented during initial Colville River field development. "However," the company said, "improvements in horizontal drilling technology coupled with increased oil prices have caused Qannik to now be considered a viable development opportunity."

Typical western North Slope depletion plans involve alternating water and miscible gas injection, miscible gas injection is not planned for Qannik. "The potential for injected gas to migrate through open annuli has resulted in water injection being selected as the only means of maintaining pressure support and maximizing recovery."

The company said while cross flow is not expected to occur, injected fluids could flow from the Qannik reservoir into either the annular disposal interval or the

see QANNIK page 11

continued from page 1

HOFMEISTER

Shell is planning to embark on exploratory drilling in some of its Beaufort Sea leases and in February established a major Chukchi Sea lease position in the MMS Chukchi Sea lease sale, as part of a company strategy to seek oil and gas in Arctic regions.

"We believe, as many others do, that the most prolific remaining conventional oil and gas resources are in the Arctic or sub-Arctic, because we've pretty much developed the geologies south, whether that's in the United States or whether that's in Europe or Asia," Hofmeister told Petroleum News after the February summit.

But North Slope communities have in the past opposed offshore oil and gas development because of concerns about potential impacts to subsistence hunting and the natural environment.

Continuing dialogue

On April 8 Hofmeister spoke to reporters about his visit to the North Slope and reflected on Shell's approach to its new Alaska oil and gas interests. Hofmeister emphasized that his North Slope trip formed part of a continuing dialogue with the communities and did not involve any negotiating about upcoming Shell offshore exploration plans.

The purpose of the visit was to assure people about the seriousness with which he and Shell views its future in Alaska, Hofmeister said.

Hofmeister said that he visited Barrow and several villages, including Nuiqsut, Point Lay and Wainwright. He met a wide variety of people including villagers, whaling captains and mayors, to demonstrate respect for who the people are, what they do and how they live. Shell wants to work together with North Slope communities to find solutions for the development of the natural resources that Shell hopes to find, he said.

While staying in each village the Shell contingent participated in "virtually the life of the village," including evenings spent with the communities, Hofmeister said.

Hofmeister said that he assured people that Shell's Alaska program is "a long-term play" and that natural resource development would take many years to accomplish. In fact during visits to elementary schools in Nuiqsut and Barrow it was interesting to note that many of the youngsters could be among some of the first employees that would be working on platforms, perhaps in the Chukchi Sea, he

see **HOFMEISTER** *page 12*

COURTESY SHELL

John and Karen Hofmeister participate in dancing at Nuiqsut potlatch

COURTESY SHELL

Hofmeister speaks with Joseph Ahmaogak, the City of Wainwright Mayor

continued from page 10

QANNIK

Lower K2 interval, "via the open annuli of existing CD2 Alpine wells." This possibility primarily exists in the near wellbore region of Qannik injectors, "where Qannik reservoir pressures are at their highest."

ConocoPhillips said cross flow would have no appreciable impact on ultimate recovery, but would make planned waterflood less efficient. The company said its Qannik development plan includes comprehensive monitoring to address the open annuli situation in CD2 wells. The plan includes installation of wireless pressure transducers on the outer annuli of the 19 Alpine CD-2 wells that fall within a quarter mile of Qannik injectors, allowing continuous monitoring of the outer annuli. A quarterly review of pressure trends would also be conducted in those Alpine CD-2 wells.

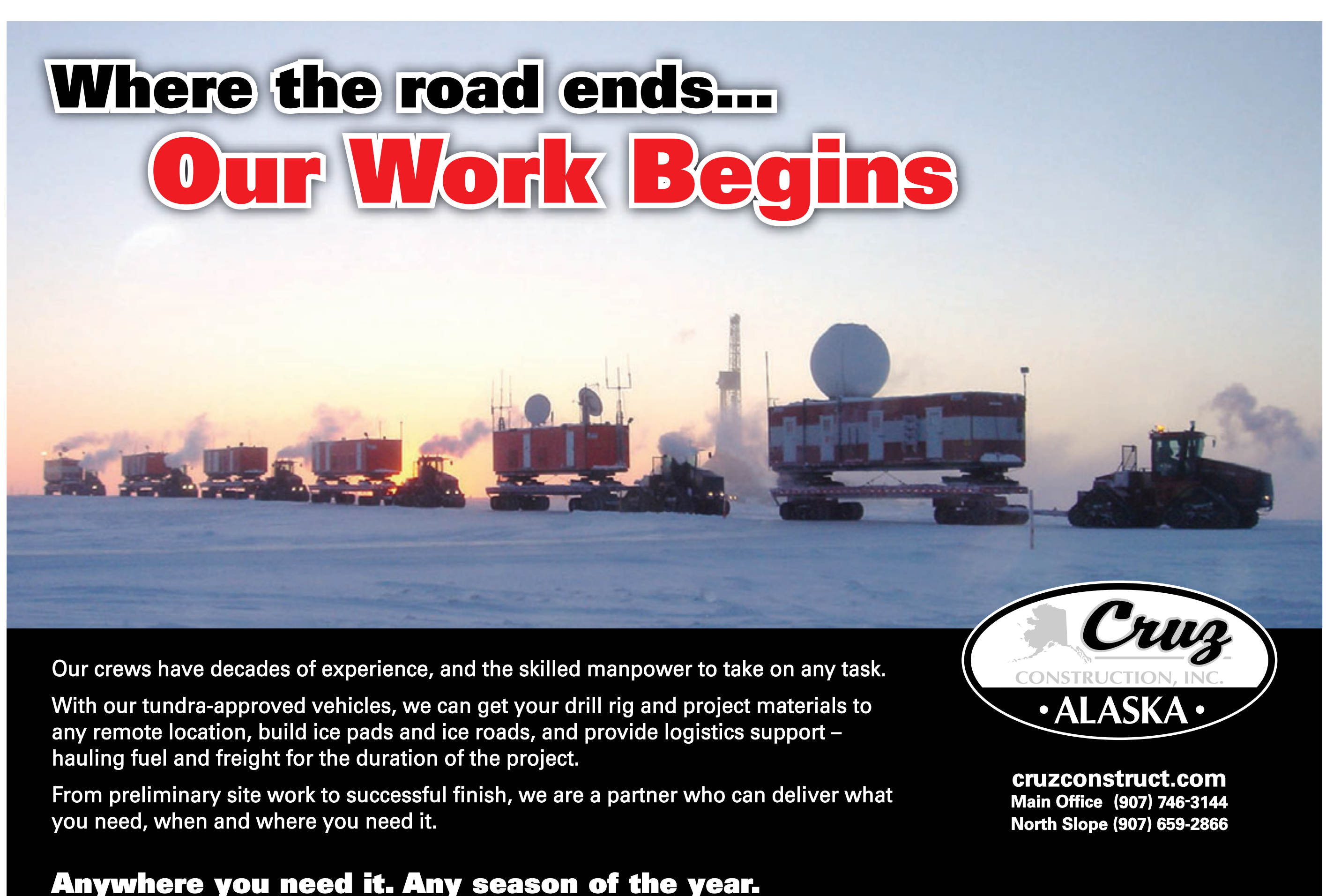
Colville production history

Alpine, the first Colville unit field to produce oil, was discovered in the early 1990s and came online in late 2000. It is the third largest oil field on the North Slope, behind Prudhoe Bay and Kuparuk. Production averaged less than 30,000 bpd in November 2000, but by June 2001, at 88,551 bpd, Alpine had topped Northstar production and has been the third most productive field on the North Slope since.

Production at Alpine neared 130,000 bpd as satellite Nanuq came on line in late November 2006. At the time Prudhoe and Lisburne had combined November high production volumes of almost 380,000 bpd and Kuparuk had peak November 2006 production of almost 210,000 bpd.

When the two Alpine satellites, Fiord and Nanuq, were sanctioned in late 2004, ConocoPhillips said combined production from Alpine, Fiord and Nanuq was expected to peak at 135,000 bpd in late 2007. In fact, they peaked in May 2007, averaging 138,984 bpd that month, their high-production day at 142,523 bpd on May 10.

In March 2008, Alpine, Fiord and Nanuq averaged 114,144 bpd. ●



continued from page 11

HOFMEISTER

said.

Shell made a significant contribution to the Ilisagvik College in Barrow for the development of Inupiat language skills, Hofmeister said.

Open discussion

At each of the villages the Shell people had open discussions with a group of citizens that the village had assembled.

"We requested the village leaders to gather who they would like, so that we could meet and greet and have a discussion about the issues that they were concerned about," Hofmeister said.

The meetings focused on how Shell's plans would come together and what benefits there would be to the people of the North Slope. There were discussions about both short-term job possibilities and the outlook for jobs in the longer term.

"I talked at great length about Shell's keen interest in advocating for revenue sharing, such that revenue sharing would benefit both the state and the affected villages," Hofmeister said.

Shell talked about training requirements and the importance of math and science education in preparation for oil industry work, he said.

"I came away with a sense that there was a desire to receive the benefits of economic development," Hofmeister said.

There was also a sense of resignation to the inevitability of offshore oil and gas development to meet the energy needs of the nation, he said. That led to discussions about the pace of that inevitability, and how Shell's plans could be compatible with maintaining the local lifestyle. There was ongoing concern that the traditional way of life be protected and that it should be integrated into Shell's activities.

"We had lots of discussion about the environmental impacts of things like drilling and platforms and maneuvering of ships and so forth," Hofmeister said. "We had discussions about wildlife and the mitigation that's required to operate in the Arctic."

There was also discussion about the use of traditional knowledge in Shell's plans, he said.

Every village raised questions about the impacts of climate change, and the importance to the traditional way of life of adapting to nature. Hofmeister said that he described Shell's approach to carbon dioxide management and the company's view that appropriate legislative action can manage carbon dioxide emissions downward while also enabling the production of hydrocarbons necessary to sustain the economy.

Met the governor

Hofmeister also said that while in Alaska he had met Gov. Sarah Palin.

"This is a totally new frontier for the future of Alaska," Hofmeister said. "Governor Palin was delighted to see the manner in which Shell is going about it. … She was encouraged to see we were committed to the hiring of Alaskans."

Hofmeister said that he also visited the University of Alaska Anchorage and met with Chancellor Fran Ulmer. In the course of a meeting with Herb Schroeder of the university's Department of Civil Engineering, Hofmeister discussed with students possible future career opportunities with Shell.

"We had very interesting meetings with a number of students in that regard," Hofmeister said.

And the timing of Shell's program?

It would likely be the middle or later part of the next decade before operations have a sizable impact, with major economic benefits to the state and local people perhaps flowing through in the 2020s. Hofmeister said. And offshore production will require an infrastructure to bring products to market, he commented. ●

"I talked at great length about Shell's keen interest in advocating for revenue sharing, such that revenue sharing would benefit both the state and the affected villages."
—John Hofmeister, president of Shell Oil Co.

COURTESY SHELL

The Hofmesiters are presented with masks by Leonard Lampe, President of the Native Village of Nuiqsut; Hazel Kunaknana, recreation director and tribal council for the Native Village of Nuiqsut; and Bernice Kaigelak with the Native village of Nuiqsut.

COURTESY SHELL

Hofmeister meets with Wainwright representatives during his North Slope Borough tour

Hofmeister: U.S. must open federal lands, allow Americans access to new oil, gas

In the course of answering questions from reporters during an April 8 teleconference, John Hofmeister, president of Shell Oil Co., linked high fuel costs in Alaska and elsewhere to the withdrawal of federal lands from oil and gas exploration. Lack of new oil and gas supplies in the United States is driving prices higher, he said.

"This is the consequence of a deliberate, in my opinion callous, policy of the federal government of the United States to deny access to new hydrocarbons to the American people for more than 30 years," Hofmeister said. "The moratorium on 85 percent of the outer continental shelf of the Lower 48 … has denied U.S. oil companies the opportunity to produce more hydrocarbons."

The nation needs short-term, medium-term and long-term solutions to its use of energy, and will remain dependent on hydrocarbon fuels for decades to come, he said.

"This nation needs an energy strategy. It needs a federal policy. Those policies must deliver more access. … Shell would be interested in seeing how the opportunities present themselves and at the same time … we … approach the operating opportunities as and when we can also manage the social and the environmental and the cultural (issues)."

It is necessary to balance all of the issues involved in oil and gas development and production, by managing and mitigating the effects on wildlife and by managing the integration of traditional cultures, he said.

And Hofmeister slammed people who litigate against oil and gas development.

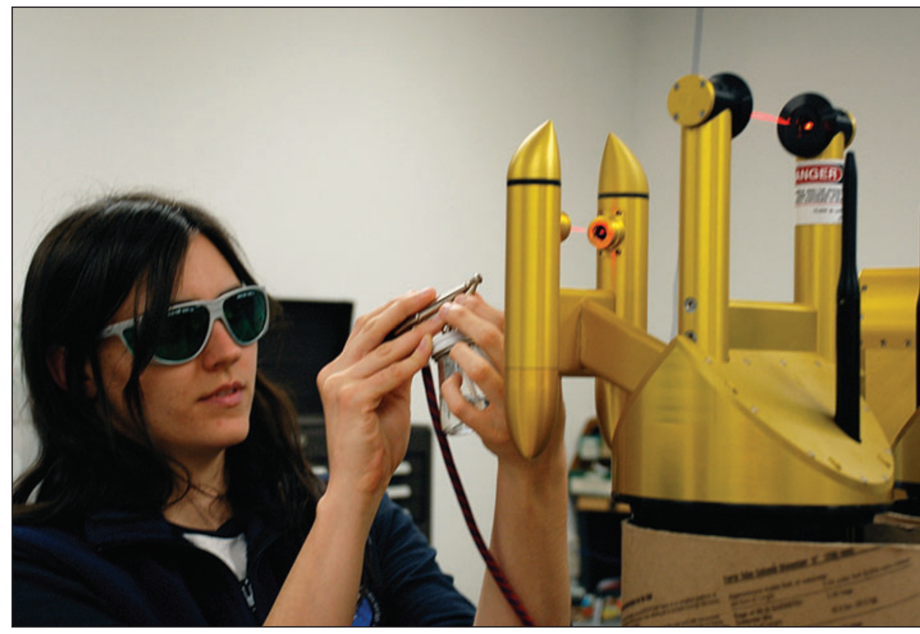
"I think those who use litigation efforts … to try to prevent development of Arctic or Alaska gas and oil are in a sense being unfair on the entirety of the American people and to the State of Alaska because of their parochial concerns," Hofmeister said.

The people of America really do need more energy, he said.

—ALAN BAILEY

COURTESY NOAA

NOAA WP-3D lands in Fairbanks on April 3.



COURTESY NOAA

NOAA Earth System Research Laboratory employee Sara Lance with a DMT (Droplet Measurement Technologies) cloud probe.

● ENVIRONMENT & SAFETY

NOAA aircraft probing Arctic pollution

By KAY CASHMAN

Petroleum News

Scientists from the National Oceanic & Atmospheric Administration are flying through "springtime" Arctic pollution north of Alaska to find out why the region is warming — specifically why summertime sea ice is melting faster than predicted.

In late March some 35 NOAA researchers joined their government and university colleagues in Fairbanks, Alaska, to conduct the study, which will end on April 23. Called ARCPAC — Aerosol, Radiation and Cloud Processes Affecting Arctic Climate Change — the study is a NOAA contribution to International Polar Year 2008, the federal agency said in an April 7 press release.

On the Web

ARCPAC project:
http://www.esrl.noaa.gov/csd/arcpac/

"The Arctic is changing before our eyes," said A.R. Ravishankara, director of the chemistry division at NOAA's Earth System Research Laboratory in Boulder, Colo. "Capturing in detail the processes behind this large and surprisingly rapid transformation is a unique opportunity for understanding climate changes occurring elsewhere."

According to NOAA, observations from instruments on the ground, balloons and satellites show the Arctic is warming faster than the rest of the globe.

COURTESY NOAA

NOAA Earth System Research Laboratory employees David Thomson and Chuck Brock, ARCPAC co-lead mission scientists, with the PALMS (Particle Analysis by Laser Mass Spectrometry) instrument pod.

The agency said "summer sea-ice extent has decreased by nearly 40 percent compared to the 1979-2000 average, and the ice is thinning."

Industry, transportation and biomass burning in North America, Europe, and Asia, NOAA said, are "emitting trace gases and tiny airborne particles that are polluting the polar region, forming an 'Arctic Haze' every winter and spring." The agency's scientists suspect these pollutants are speeding up the polar melt.

Coordinating with NASA, DOE

NOAA's study is being coordinated with the agency's long-term climate monitoring station at Barrow, Alaska, and with ongoing projects conducted by NASA and the U.S. Department of Energy.

"This is our first airborne deployment of a powerful new suite of instruments in the Arctic," said ARCPAC lead scientist Dan Murphy, also of NOAA's Earth System Research Laboratory. "When we analyze all the data, we'll be able to piece together the equivalent of a high-def movie of the atmosphere as springtime sunlight warms the region and sparks a chain of chemical reactions."

Scientists aboard the NOAA WP-3D research aircraft will use nearly 30 airborne sensors to answer questions about airborne particles, altered clouds, low-altitude ozone and soot deposited on snow.

NOAA said all the particles are produced or affected by human activities and "may be playing key roles" in the rapid warming of the Arctic.

Greenland and Barents seas

In a related study the NOAA-led International Chemistry Experiment in the Arctic Lower Troposphere, ICEALOT, will gather shipboard measurements of atmospheric fine particles and trace gases in the air above the Greenland and Barents seas, ice free areas that are closer to sources than the ARCPAC study area.

ICELOT's cruise began in March from Woodshole, Md., and will terminate April 24 in Iceland. A port stop is planned for April 12 and 13 in Tromso, Norway.

NOAA said its scientists are eager to compare the pollution north of Alaska with the more recent emissions near Europe.

NOAA, an agency of the U.S. Commerce Department, describes itself as "dedicated to enhancing economic security and national safety through the prediction and research of weather and climate-related events and information."

Through the emerging Global Earth Observation System of Systems, NOAA is working with its federal partners, more than 70 countries and the European Commission to develop a global monitoring network. ●

● FINANCE & ECONOMY

Gas, diesel prices hit new records

Analysts reluctant to define a single day's decline as the end of crude's bull run; many see continued investment in futures

By JOHN WILEN
Associated Press Writer

U.S. retail gas prices extended their record run Thursday, April 10, adding to the pain consumers feel every time they fill up. Experts predict prices will rise even higher as peak summer driving season approaches.

Meanwhile, crude oil futures fell as the dollar strengthened, giving investors an opportunity to collect profits from the previous session's record run above $112.

At the pump, the national average price of a gallon of gas rose 1.4 cents overnight to a record $3.357 a gallon, according to AAA and the Oil Price Information Service. Prices have set a string of records in recent weeks, and are 56 cents higher than a year ago.

Retail diesel, the fuel of trucks, trains and ships, rose overnight to a new national record of $4.045 a gallon.

This year, the spring price spike is being exacerbated by two unusual factors: tight supplies of key gasoline blending components and record oil prices. Analysts say alkylate, an ingredient critical to the manufacture of summer grade gasoline, is in short supply and will push prices higher.

DOE expects gasoline to average $3.60

The U.S. Department of Energy expects gasoline prices to average as much as $3.60 a gallon this summer, but believes the national average price could spike as high as $4 a gallon at times.

"Gas hitting $3.60, $3.65 a gallon seems like a done deal," said James Cordier, president of Tampa, Fla., trading firms Liberty Trading Group and OptionSellers.com.

Gasoline prices are rising, in part, because of a supply crunch that occurs every spring when refiners switch over from making winter grade gasoline to the less polluting fuel they're required to sell during the summer. Summer grade gasoline is more expensive to make. Also, refiners try to sell off all of their winter grade fuel before the switchover, which drops supplies to very low levels.

Two factors exacerbate spike

This year, the spring price spike is being exacerbated by two unusual factors: tight supplies of key gasoline blending components and record oil prices. Analysts say alkylate, an ingredient critical to the manufacture of summer grade gasoline, is in short supply and will push prices higher.

Meanwhile, crude oil, the main ingredient in gasoline, dipped April 10, but remains close to record levels.

Light, sweet crude for May delivery fell $1.67 to $109.20 a barrel on the New York Mercantile Exchange as the dollar strengthened against the euro, giving some investors an opportunity to take profits. Crude prices rose to a new trading record of $112.21 on April 9 after DOE said supplies unexpectedly fell the previous week.

Many analysts place most of the blame for oil's run above $100 in recent months on the steadily falling dollar. But the effect reverses when the greenback rises, making commodities such as oil a less effective hedge against inflation. Also, oil is more expensive to investors overseas when the dollar strengthens.

However, analysts are reluctant to define a single day's decline as the end of crude's bull run. Many believe investors will continue plowing money into crude futures on expectations that Federal Reserve rate cuts — perhaps two more this year — could weaken the dollar further.

"We could now see a lot of 'system money' join the upside breakout, propelling prices even higher," said Edward Meir, an analyst at MF Global UK Ltd., in a research note, referring to hedge fund investors.

May gasoline futures fall

In other April 10 Nymex trading, May gasoline futures fell 2.74 cent to $2.7468 a gallon, while May heating oil futures fell 1.95 cents to $3.215 a gallon. Heating oil futures are trading near record levels due to falling supplies and strong demand overseas.

Nymex natural gas for May delivery rose 7.6 cents to $10.132 per 1,000 cubic feet. DOE said natural gas supplies fell by 14 billion cubic feet the previous week, in line with analyst expectations.

In London, May Brent crude fell $1.19 to $107.28 on the ICE Futures Exchange. ●

PIPELINES & DOWNSTREAM

Plains All American Pipeline lands Alberta oil line

Plains All American Pipeline is buying a key crude oil line in northern Alberta, gaining access to markets in the U.S. Midwest, the Pacific Coast and two Edmonton refineries.

It is acquiring Rainbow Pipe Line Co. — owned by Imperial Oil, ExxonMobil and Royal Dutch Shell — for C$540 million and paying an additional C$120 million for 1.1 million barrels of crude already in the line.

The assets include 480 miles of 20-inch and 24-inch diameter pipe covering 485 miles from Zama to Edmonton and 138 miles of gathering pipelines which collect oil from 50 oil batteries along the pipeline corridor.

The assets include 480 miles of 20-inch and 24-inch diameter pipe covering 485 miles from Zama to Edmonton and 138 miles of gathering pipelines which collect oil from 50 oil batteries along the pipeline corridor.

Capacity 200,000 barrels per day

Rainbow has capacity of 200,000 barrels per day and has average throughput of 190,000 bpd.

Plains, whose largest shareholder is Microsoft billionaire Paul Allen, views the system as an "excellent complement to our existing asset base in Canada and the Rockies," said Chief Executive Officer Greg Armstrong.

He said Rainbow will be "substantially" integrated into Plain's existing operations once the deal is concluded in June.

The Rainbow mainline is a continuation of Enbridge's pipeline from Norman Wells in the Central Mackenzie Valley of the Northwest Territories.

It also carries oil from the Pace River and Athabasca oil sands regions, where Plains expects to benefit from the rapid expansion of heavy oil output.

—GARY PARK

INTERNATIONAL

Germany backs off plan to double ethanol

Germany's environment minister has scrapped a plan to double the amount of ethanol that can be mixed into gasoline, saying that too many cars would be unable to cope with the change.

The government planned to increase to 10 percent from 5 percent next year the amount of ethanol that can be mixed into ordinary gasoline as part of an effort to encourage the use of biofuels. However, it said it would give up the plan if more than a million cars were unable to use the new mix.

Environment Minister Sigmar Gabriel said April 4 that the auto industry has now reported that "significantly over 3 million" imported cars would be affected, along with 189,000 made in Germany. If a more heavily cut standard gasoline had been introduced, their owners would have had to fill up with more expensive premium-grade fuel.

"I decided that I would not start a long debate and new uncertainty over possibilities of refitting (cars) and delaying deadlines ... we are simply saying that we won't do this," Gabriel said on ARD television.

He said that the aim had been merely "to make it possible for the German auto industry to reach its climate protection aims more cheaply."

Gabriel said that the existing 5 percent ethanol limit for normal gasoline would stay in place — along with a 7 percent cap on biodiesel in diesel fuel.

—THE ASSOCIATED PRESS

● EXPLORATION & PRODUCTION

BP's Kodiak discovery ranks high in GOM

Deepwater oil find could be among largest in Gulf of Mexico, but exploration CEO stopped short of declaring it commercial

By RAY TYSON
For Petroleum News

BP America says its latest discovery in the U.S. Gulf of Mexico contains 500 feet of "hydrocarbon-bearing sands," ranking it among the largest deepwater oil discoveries in the U.S. Gulf based on pay thickness alone.

However, BP stopped short of declaring Kodiak a commercial success, explaining that further appraisal work would be required to determine Kodiak's true size and economic worth.

Nevertheless, "This discovery … has the potential to become an important new source of production for the USA," Andy Inglis, BP's chief executive officer for exploration and production, said in an April 3 statement.

The Kodiak prospect is located relatively close to BP's 2003 Tubular Bells discovery, BP noted, suggesting that Kodiak and Tubular Bells may be able to be developed jointly.

The Kodiak discovery well, located on Mississippi Canyon block 771 about 60 miles southeast of the Louisiana coast, is in about 5,000 feet of water. The well is operated by BP Exploration & and Production Inc., a BP subsidiary.

500 feet of net pay

The Kodiak well was drilled to a total depth of about 31,150 feet and encountered the 500 feet of net pay in the Middle and Lower Miocene reservoirs, BP said, adding that the well was deviated with a horizontal step-out of 7,400 feet.

BP Exploration & Production holds a controlling 63.75 percent working interest in Kodiak. Italy's Eni holds a 25 percent working interest and Japan's Marubeni Oil & Gas (USA) Inc. has an 11.25 percent working interest.

The federal lease containing the Kodiak discovery was acquired at OCS Lease Sale 182 in March 2002.

"This significant discovery is a further step in Eni's growth strategy in the region," Eni said in a statement, noting that Kodiak is located in one of Eni's core focus areas, around five miles from the company-operated Devil's Tower producing platform.

The Mississippi Canyon block containing Kodiak is part of an exploration portfolio recently acquired by Eni from U.S.-based Dominion. Eni currently owns lease interests in 408 U.S. Gulf blocks, 70 percent of which are located in deepwater. Eni also has rapidly grown into a major Gulf player with equity production in excess of 110,000 barrels of oil equivalent per day, of which 60 percent is Eni-operated. In addition, Eni owns lease interests in 158 tracts on Alaska's North Slope.

"This significant discovery is a further step in Marubeni's growth plans for the region," Marubeni said. The Kodiak discovery is part of a deepwater exploration

see **KODIAK** *page 17*

● INTERNATIONAL

Mexican report: Pemex needs outside help

By JESSICA BERNSTEIN-WAX

Associated Press Writer

Mexico's state-owned oil company must work with outside firms to boost sagging production and gain access to better equipment, the federal Energy Department and Petroleos Mexicanos said in a report issued March 30.

Pemex particularly needs help tapping deepwater oil reserves in the Gulf of Mexico, where extraction on the U.S. side is changing pressure conditions that could diminish Mexican reserves before they're tapped, according to the report.

"While Mexico has only drilled six oil wells in recent years, on the U.S. side of the Gulf of Mexico, 167 wells are drilled each year," the report said. "As a result, Pemex needs to work with other companies to develop diverse activities ... and to obtain better equipment and maximize the country's oil income."

Pemex, a top foreign supplier of crude to the United States, recently reported a 2007 net loss of $1.48 billion despite soaring world oil prices. The company has had to increase fuel imports in the face of falling domestic production and rising demand.

Debate emotional

The country is currently engaged in an emotional national debate over the state oil monopoly's future, with President Felipe Calderon supporting more private partnering for the drilling of Mexican crude.

Mexico's constitution bans most outside involvement in the company, although the government has eased restrictions slightly in the past 15 years to contract with private companies. The March 30 report is among many voices saying outside help is needed to modernize the company.

But critics, led by former presidential candidate Andres Manuel Lopez Obrador and his Democratic Revolution Party, have called private investment in Pemex a threat to national sovereignty and accused Calderon's administration of seeking to sell off the whole industry — a charge the president denies.

Mexico's ruling National Action Party delayed the introduction of a bill into the lower house of Congress the week of March 24 that would allow the state oil monopoly to contract with private and foreign companies to extract deepwater reserves from the Gulf of Mexico.

The measure's author, federal congressman Alonso Manuel Lizaola, said party legislators will likely add the initiative to an upcoming energy reform package.

New refineries needed

At a news conference March 30, Pemex director Jesus Reyes also said the company needs to build new refineries, or risk gasoline imports increasing from 40 percent to half of the country's consumption. Calderon announced plans for a new refinery earlier in March.

"It's indispensable for the country to strengthen Pemex so we won't keep losing opportunities," Reyes said.

The company's production dropped 5.3 percent last year to an average 3.1 million barrels a day, primarily due to plunging output at the massive Cantarell oil field off the coast of Veracruz state. ●

● GOVERNMENT

Energy assistance proposed for Alaskans

By ANNE SUTTON

Associated Press Writer

The Alaska House has added more money in a $2.3 billion capital budget to help cushion the state's neediest residents from the financial crunch they're feeling from high oil prices.

But that could spell the end of a proposal to dole out $500 to every Alaskan.

The House Finance Committee put in $10 million as a state match to a federally funded block grant program called LIHEAP, or Low Income Home Energy Assistance Program. The money is distributed to low-income Alaskans to help pay their heating bills.

"I think LIHEAP is a better substitute because it goes to the low-income and the people who truly need it." — Kevin Meyer, R-Anchorage

Committee co-Chairman Kevin Meyer, R-Anchorage, said he preferred the targeted distribution over a measure that would pay every Alaskan $500 from the Alaska Permanent Fund earnings reserve, estimated to cost about $360 million.

That bill, from Rep. Bill Thomas, R-Haines, stalled in the finance committee the first week of April and is not likely to resurface, said Meyer.

"I think LIHEAP is a better substitute because it goes to the low-income and the people who truly need it," he said.

Capital budget unveiled April 8

The capital budget, which pays for construction projects and equipment around the state, was unveiled in the committee on April 8.

That version of the budget totals $2.3 billion and includes $835 million in general funds, $746 million in other state funds and $782 million in federal receipts.

It spends $200 million more from the general fund than the Senate version on projects for individual districts, and it is certain to grow even bigger.

The House has not yet added back the projects Gov. Sarah Palin wants, but Meyer said he is meeting with the administration and expects "most of her projects will get funded."

In early April, Palin lambasted the Senate for what she called an "irresponsible" budget that she said both spent too much money and failed to cover necessary state expenditures, like filling potholes and finishing up work on a communications system for the Alaska State Troopers.

It's also unclear how a separate $220 million transportation bond package approved by the House will fare in the Senate. Senate finance leaders have said they prefer to use cash in a time of high surpluses to pay for road and bridge improvements.

If the bond package fails to pass the Senate, many of those projects could wind up in the capital budget.

Meyer said no one felt comfortable with the price tag. Instead the capital budget contains $17 million for planning and design of the lab.

The House committee was expected to take up testimony and amendments on the budget April 9, the day before Petroleum News went to press. ●

continued from page 16

KODIAK

portfolio Marubeni acquired from Pioneer Natural Resources in March 2006. Marubeni now owns lease interests in 82 U.S. Gulf exploration blocks.

The nearby Tubular Bells discovery is located on Mississippi Canyon block 725, about 135 miles southeast of New Orleans. The discovery well is situated in about 4,300 feet of water and was drilled to a depth of 31,131 feet. It reportedly encountered 90 feet of net oil pay. Like Kodiak, Tubular Bells will require appraisal drilling to determine the extent of the discovery. BP operates Tubular Bells with a 50 percent interest. Hess Corp. holds a 20 percent stake and Chevron has a 30 percent working interest. ●

continued from page 1

REACTION

press conference.

"It sounds great for the State of Alaska," she told reporters later in the day.

Palin said she looked forward to hearing more details from the companies and "to the progress that they'll be able to show us on this project."

She credited the competition AGIA created, and said "this further proves that competition does work, that AGIA being built on competition and ultimately allowing choices for Alaskans, the resources owners" will allow the state to finally commercialize North Slope gas.

"Whichever project gets us there first — in Alaska's best interest — is what we'll be supporting," she said.

Palin said the announcement does not change the administration's May 19 schedule to produce findings on the TransCanada application for an AGIA license.

The governor said BP and ConocoPhillips told her they were "very open" to third parties in the project and said she thought that movement could be attributed to AGIA, "because remember AGIA invites competition, what we wanted to build that on was inviting new companies into the state to explore, to produce, to hook up with one another … and create a partnership to … finally progress this project."

Palin said she credits Alaska's lawmakers for the position the state is now in, because "they did not cave last time to demands of an administration and of the producers," referring to the Stranded Gas Development Act fiscal contract the Murkowski administration urged the Legislature to approve. The Legislature never voted on the contract.

"They changed the playing field here; and I believe that is what has allowed the companies to get off the dime, to start working towards commercializing our gas; and I think credit is due to lawmakers."

Having producers in the game a good thing

House Speaker John Harris, R-Valdez, said at a Republican leadership press conference that he believes "that the actions that the Legislature and the administration have taken in the past year or two have helped to facilitate this; I think that's positive."

Harris said that when he met with BP and ConocoPhillips he "encouraged them to not only push their project forward but also work with Alaskans and the folks who want to do in-state gas and who want to get gas for Alaskans."

There was general agreement that having the producers in the game was a positive thing.

Senate Resources Chair Charlie Huggins, R-Mat-Su/Chugiak, said with BP and ConocoPhillips there are two large organizations which "bring pipe and they bring gas," and said the announcement "puts Alaska on the high ground."

House Majority Leader Ralph Samuels, R-Anchorage, said having two shippers in the game isn't "a silver bullet that's going to get us a gas pipeline, but it is, for sure, a step in the right direction. They're going to play a role in this process and the sooner that they play a role in the process and are willing to engage in a public forum or with government the better off we all are."

House Rules Chairman John Coghill, R-North Pole, agreed. "I think one of the questions we've asked … under AGIA is where are those people that produce the gas — and so here they are. So I think this could be a win-win." He credited the governor and AGIA with getting "us on the quest of asking the questions: what's economical; what's not; what are the criteria."

Should state have equity interest?

Senate President Lyda Green, R-Wasilla, said while the companies haven't asked for state participation, there has been regret that Alaska did not have a seat at the trans-Alaska oil pipeline table.

Samuels said he would certainly "oppose the state owning 51 percent and having … a political body managing the pipeline," but thinks there were a lot of reasons the state might want to have a small equity position.

There didn't seem to be any sentiment in favor of dropping AGIA. Harris said keeping the process competitive if the state didn't award an AGIA license was an issue that has a lot of people concerned.

Sen. Gene Therriault, R-North Pole, the Senate Minority Leader, told the press April 10 he wasn't convinced AGIA should be dropped. BP and Conoco didn't have to ask the state's permission to start their project, he said, and they don't have to ask the state's permission to stop.

If competition is good for AGIA, he said, competition for the BP-Conoco project is good, too.

Therriault said he expects the companies to come back and ask about fiscal certainty, and credited the governor with standing up to the companies — along with the high price of energy — for the BP-ConocoPhillips joint venture announcement.

—KRISTEN NELSON

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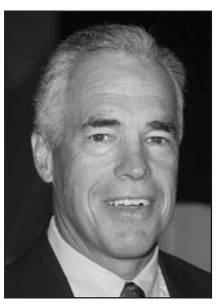
DENALI

In a joint statement issued earlier that day the companies said the project would move some 4 billion cubic feet of natural gas per day to markets and would "be the largest private sector construction project ever built in North America."

An open season is planned to begin within 36 months. Following a successful open season the companies said they plan to obtain Federal Energy Regulatory Commission and National Energy Board certification and move forward with construction.

"The Alaska gas pipeline will be an historic project and we are pleased to be working with ConocoPhillips to move it forward," Tony Hayward, BP Group Chief Executive, said in the prepared statement.

Jim Mulva, ConocoPhillips chairman and chief executive officer, said: "ConocoPhillips is pleased to be working with BP on this project; our companies have a long history of successfully developing projects on Alaska's North Slope, in Canada, and around the world. The time is right to start moving this project forward."


JUDY PATRICK

Jim Bowles, ConocoPhillips

The companies said the project consists of a gas treatment plant on the North Slope and a large-diameter pipeline to Alberta.

If additional pipelines are required into the Lower 48, "BP and ConocoPhillips will seek other equity partners, including pipeline companies, who can add value to the project and help manage the risks involved," the companies said.

Staff have been assigned to the project; project headquarters will be in Anchorage; and a new company will be formed to manage the project.

Gas in as little as 10 years

"It's an important event — probably the most significant event for BP since the discovery of oil at Prudhoe Bay in 1968 and the decision to develop our North Slope oil fields," Suttles said at the Anchorage press conference.

"We will begin work immediately — gas could be flowing in as short as 10-years time," he said.

Suttles said field work will begin this summer, along with "critical engineering cost estimating and permitting planning work," with an open season beginning in late 2010 or early 2011.

The new company, Denali, will have 150 employees by the end of 2008, he said, and 500 employees and several thousand contractors within three years.

"For years North Slope gas has been utilized to increase recovery out of Prudhoe Bay," Bowles said, resulting in recovery of billions of additional barrels because of gas reinjection. "But the time has come now, with the value of gas increasing and the need in the United States for that valuable commodity, for us to find a way to bring that gas to market." The 4 billion cubic feet a day the line will carry "represents upwards of 6 to 8 percent of the entire U.S. demand," Bowles said.

> **On the Web**
>
> Web site for Denali — The Alaska Gas Pipeline:
> www.denali-thealaskagaspipeline.com/

BP and ConocoPhillips have been major operators on the North Slope for more than 30 years, he said, and bring years of Arctic experience "as well as a vast amount of pipeline experience" to the project, and a collective market capitalization of more than $300 billion, "so we have the financial wherewithal to see this through," he said.

What about fiscal certainty?

Fiscal certainty from the State of Alaska will need to be addressed before an open season, the companies said, but is not a requirement for the project to move forward.

Late last year ConocoPhillips proposed a gas project to the state and asked for negotiations on fiscal issues up front.

Bowles said the companies are not asking for anything from the state now. "This project is moving forward on its own."

The governor asked in February that "before any discussion on a fiscal framework takes place that both ourselves and the state better understand what the costs of this project might be," he said. Bowles said that is what the companies are doing now, with the expectation that a fiscal discussion with the state will take place before open season.

Suttles said BP has been "encouraged by the number of people who have spoken out and recognized that there are fiscal issues to sort out." That, he said, has given BP "the confidence that we can now actually move it forward and that people will work with us to solve the issues to get this gas moving."

Bowles said that fiscal certainty is something pipeline owners expect to be necessary to "give future shippers confidence to make that 20- or 25-year shipping commitment."

The pipeline needs "to put together a project which will attract customers," Suttles said, "because without customers there won't be a line and there won't be the ability to build a line." That will require the most efficient project.

"I think our customers are going to be looking for a number of things to make sure that they're going to get an adequate return and I expect the fiscal issues to be part of that," Suttles said.

"We're pretty confident — or we wouldn't be doing this — that over the next three years, between now and an open season, people will work that issue. If we didn't actually believe that, we wouldn't be doing this," he said.

The shipping commitment will probably be in excess of $100 billion, Bowles said, and "any group of companies before making that type of commitment would want to understand that they've got a very predictable fiscal framework in front of them."

Bowles said "predictability of future fiscal issues" is probably the key thing, and noted that the governor's original proposal of 10 years of fiscal certainty when the Alaska Gasline Inducement Act was introduced was probably a good start.

Why now?

Bowles and Suttles said the companies have talked off and on about a gas pipeline project through the years, but the joint venture proposal came together over the last two months.

Bowles said it was in the last two months that the companies put together the idea for the new company Denali — The Alaska Gas Pipeline.

"Both of our companies, I think, since day one on the North Slope, have tried to figure out how to maximize the value of this gas," Suttles said.

The gas has been used to produce more oil, but over that time the companies have tried to figure out what happens next, he said.

A lot of things have changed over the last few years, Suttles said, including the price of energy and energy security, "and so for the last several years we've been working very hard trying to figure out how to unlock this." Sometimes those discussions didn't go anywhere, he said, "sometimes they have, and over the last couple of months I think we both came to the realization we have to find a way to unlock this thing. We can't continue to wait. This is such an important project for Alaska, for America and for us."


Doug Suttles, BP

For BP, Suttles said, North Slope natural gas is the company's "single biggest undeveloped gas resource in the world."

Over the last five or six years BP's "outlook on energy and the outlook on energy prices" have "changed dramatically," he said. The company wouldn't be making the commitment and spending the money if it didn't believe it could deliver an economic project, Suttles said. "But fundamentally the big thing I think for BP that's changed over the last five or six years has been the outlook on energy and energy prices."

Where's ExxonMobil?

BP and ConocoPhillips are major North Slope natural gas owners — but so is ExxonMobil, a major Prudhoe Bay working interest owner as well as the unit operator at the contested Point Thomson unit.

ExxonMobil is not part of the Denali partnership.

Bowles said ConocoPhillips and BP "do see other players potentially coming into this as we move forward. And Exxon is certainly a company that we would like to see in the project if that's something they would like to join. It's obviously nice to have a matchup between the big resource owners and the pipe ownership."

Suttles said there had been discussions with Exxon, and "a partnership document" between BP and ConocoPhillips was shared with ExxonMobil. "They're aware of what we want them to do and it's out there and I would anticipate we will have future discussions with them."

Margaret Ross, a spokeswoman with Exxon Mobil Corp. public affairs, said in an e-mail that the company was invited to participate.

"However, ExxonMobil was only made aware of the ConocoPhillips-BP plan a few days prior to the announcement," she said. "We need to better understand their approach to ensure that it will lead to a commercially viable development on a cost and schedule basis that will deliver maximum benefits to the State of Alaska, the producers and consumers in the United States and Canada."

She said the company "remains committed to commercializing North Slope gas resources," and is continuing "to evaluate all options for pursuing an Alaska gas pipeline including the State of Alaska's consideration of a project under the AGIA process."

Commercializing North Slope gas "has the potential to increase ExxonMobil worldwide gas production by 10 percent and add over 1 billion oil equivalent barrels of proved reserves nearly enough to replace a full year of our worldwide production."

"Given the significant value to our company, we are keen to be part of a project that commercializes the gas," Ross said.

She also noted that the project — moving North Slope gas to markets in Canada and the Lower 48—"will be among the largest, costliest and most complex projects ever undertaken. Ensuring that a quality project planning and execution approach is in place from the outset is critical to protect the interests of the State of Alaska, the producers, and consumers in the United States and Canada," Ross said.

What about Point Thomson?

With a 4-bcf a day line, "we believe that Point Thomson gas is going to be critical to the success of that line. And what's important is that there be a clear owner of that gas at open season," Suttles said.

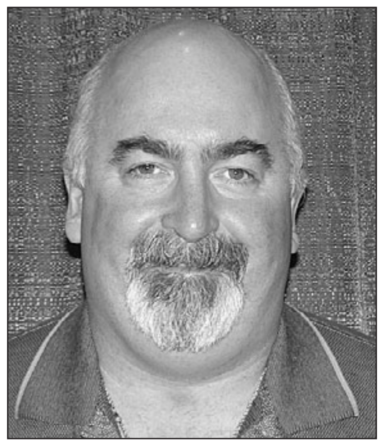
The State of Alaska and the Point Thomson Unit working interest owners are in litigation over the state's termination of the unit last year; unit operator ExxonMobil proposed a new plan of development earlier this year and a determination by the

see **DENALI** *page 22*

Petroleum news

Business Spotlight

GPS Environmental LLC


COURTESY PHOTO

G. Paul Schuitt, Principal

Alaska-owned and operated GPS Environmental LLC focuses on marketing, sales, operations and maintenance of water and wastewater treatment equipment; solar, wind and hydro power systems; modular camps and facilities; marine equipment; alternative energy; and industrial equipment. The two principals have more than 50 years of combined industrial operations and maintenance experience to serve the oil, mining, and government sectors.

Since beginning a career in 1978 at Prudhoe Bay, Paul Schuitt has worked throughout Alaska in the emergencies services, water and wastewater industries. He's been a principal at GPS Environmental for 11 years, holds Level IV certification in water and wastewater treatment, and has an MBA in technology management. Paul and his wife Luz Angelica (who operates Bambinos Bilingual Montessori School) have three grown sons.

— PAULA EASLEY

Emerald Alaska


COURTESY PHOTO

Michael High, Kenai Branch Manager

Emerald Services is a family-owned 250-employee company with roots in the waste management business going back to 1938. Emerald delivers one-stop recycling and environmental services throughout the Northwest, serving Alaska, Idaho, Montana, Oregon, Utah, Hawaii and Washington. The company specializes in recycling, management, cleanup, processing and disposal of non-hazardous and hazardous organic liquids and petroleum wastes for industrial, marine, automotive and government clients.

Mike High has been in the business for more than 20 years. Prior to joining Emerald Alaska five years ago, he spent 10 years with Tesoro as an environmental technician and in sales. He also has done consulting in Alaska and Aruba. Mike, his wife Leigh and their children Kayla 2, and Connor 7 months, live (and fish) in Kenai, Alaska.

— PAULA EASLEY

Companies involved in Alaska and northern Canada's oil and gas industry

ADVERTISER — PAGE AD APPEARS

All of the companies listed above advertise on a regular basis with Petroleum News

Petroleum news

Oil Patch Bits

Frank Chandler joins AIC

Alaska Interstate Construction LLC said April 4 that Frank Chandler has joined the company as chief estimator. Chandler brings 35 years of professional experience in highway, airport, waterline, sewerline, subdivision and building construction to AIC. Before moving to Alaska 35 years ago, he majored in Literature and Survey Technology and spent his first dozen years in the state as a surveyor before moving into construction management. Formerly marketing vice president of Beta Construction, and before that sole estimator at Tam Construction and Pruhs Corp., Chandler will be based at AIC's headquarters in Anchorage, where he will handle bidding and manage prospects worldwide in the oil and gas, mining, public contracting, international and Cook Inlet region private development divisions.


FRANK CHANDLER

Northwest Technical rolls out series of workshops

Northwest Technical Services has introduced a series of Employability Skills Workshops that are designed to work with both businesses and individuals. Does B2 (Baby Boomers) + (Gen) X + (Gen) Y = Chaos? It doesn't need to, says NWTS' general manager Mary E. Shields. Learn how generational differences affect your workplace. By examining a generation's characteristics, "you will be able to develop a strategy to enhance the strengths of your workplace and close the generational gap," Shields said. Interested in brushing up your presentation skills or resume and interview skills? Or taking a class in Microsoft Software? Check out Northwest Technical's Web site at www.nwts-ak.com. (And watch for the full story on NWTS in the next edition of the Petroleum Directory magazine.)


COURTESY ALASKA RAILROAD

Alaska Railroad says it had a banner year

The Alaska Railroad Corp. released its annual report in early April, which said the state-owned railroad made $16.3 million in earnings on total revenues of $169.3 million. "The Alaska Railroad had another banner year," said John Binkley, chairman of the railroad board. The report says ridership was at an all-time high and that corporate assets grew by a robust 17 percent. "2007 allowed us to pause, re-baseline, and prepare a follow-on five-year plan," said Pat Gamble, ARRC president and CEO. Revenue generated by the railroad covers all its operating costs.

continued from page 1

INDUSTRIES

wise," Heinze said. "You end up with a large margin … when you are competing against oil."

And the high price of natural gas across the Pacific Rim compared with elsewhere provides Alaska with a tremendous export opportunity, Heinze said.

Value-added debate

Alaskans have long debated the possibility of locating industries such as petrochemical production in state, to add value to hydrocarbon products before those products cross the state boundaries. But to date, the only in-state value-added export industries that have come to fruition have been the LNG and fertilizer plants on the Kenai Peninsula. Those plants have used natural gas from Cook Inlet, but gas shortages in the region have caused the fertilizer plant to close.

With exception of relatively minor amounts of oil used for in-state refining, all North Slope crude oil and has been exported, unprocessed, along with some North Slope natural gas liquids.

Heinze said that in December Rep. Mark Neuman, chair of the Alaska House Special Committee on Economic Development, Trade and Tourism, had asked ANGDA a series of questions regarding the potential for value added gas industries in Alaska.

In response to Neuman's request, ANGDA contracted with SAIC to update the 2006 DOE gas demand study using current commodity prices. All aspects of the analysis other than the pricing remained the same as in the original study.

"We got the same team. We got the same models. We got the same assumptions," Heinze said. "… What we wanted to know was how does that (price change situation) change the basic result of value-added industry potential here in Alaska."

Preliminary results

Heinze said that on April 5 he presented some preliminary results of the new study to the House committee. He emphasized the results were still subject to revision, but that they at least pointed in the direction of answers to the committee's questions.

The analysis assumed a world-class facility located in Alaska for each potential value-added industry, Heinze said. The SAIC analyst then stacked up the estimated gas demand for each facility in the order of the highest price that each facility could pay for its feedstock.

Then by overlaying an estimated range of future in-state Alaska natural gas prices, it became possible to assess which industries might in the future be viable, and how much gas demand those industries might generate.

The new pricing model has produced some startling results, with a potential petrochemical industry coming in strongly and even a world-class gas-to-liquids plant appearing viable (gas-to-liquids technology converts natural gas into a diesel-like liquid fuel). A propane industry would also appear to be very viable.

LNG prices in excess of $12 per thousand cubic feet in Japan result in a huge boost to the potential viability of an Alaska LNG industry.

see **INDUSTRIES** *page 24*

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CLAIM

past three months, particularly on how much land should be included in a comprehensive claim.

The Deh Cho wants rights to 29,000 square miles, while the government has offered less than half that area.

The disagreement is now so deep that the issue is off the table for the time being.

The government has also said it will not negotiate any power- or land-sharing agreement with the Deh Cho and has rejected the Deh Cho's bid to protect 70 percent of its land from development.

Deh Cho negotiators say the federal side has refused to give the First Nations its own resource management body and have accused the government of scrapping all points agreed on in 2005, including a promise to consult more closely before making decisions on a Mackenzie pipeline and other new oil and gas exploration programs.

—GARY PARK

continued from page 1

OVERHAUL

said the independent's estimated net resource potential is now 9 trillion to 16 trillion cubic feet, compared with the 3 tcf to 6 tcf calculation just five months ago.

During a C$100 million winter drilling program, three horizontal wells tested at 8.8 million, 6.1 million and 5.3 million cubic feet per day in the Muskwa shale.

"Although we are still in the very early stages of understanding the full scope of this play, these three wells help validate our view that Ootla has the potential to be one of the larger shale gas accumulations in North America," Farris said in a statement.

Apache started acquiring acreage in the area — about 60 miles from Fort Nelson — in 2000 and completed the first producing well from Muskwa in 2005.

Apache and EnCana have formed an area of mutual interest controlling more than 400,000 acres, with Apache holding a net 207,000 acres.

EnCana has drilled, but not yet completed two horizontal wells and is drilling a third.

"While it will take significant investment in infrastructure to unlock this play, we estimate the gas resource potential at Ootla could be in the range of 9 to 16 tcf net to Apache," Farris said.

Act consolidates requirements

The government's new Oil and Gas Activities Act consolidates regulatory requirements, improves permitting processes and creates new appeal processes.

The legislation also includes greater protection for environmental and landowner interests and toughens existing penalties, setting fines of up to C$1.5 million for non-compliance.

It comes at a time when British Columbia is enjoying record-setting land sales from its two major developing plays — Montney tight gas and Horn River Basin shale — which have generated C$278 million so far this year, compared with just C$202 million in Alberta. That puts the province on track to break last year's record of C$1 billion.

Companies have acquired rights to 154,748 hectares (382,382 acres) at an average C$1,793 per hectare, up 65 percent from last year's average C$1,084.

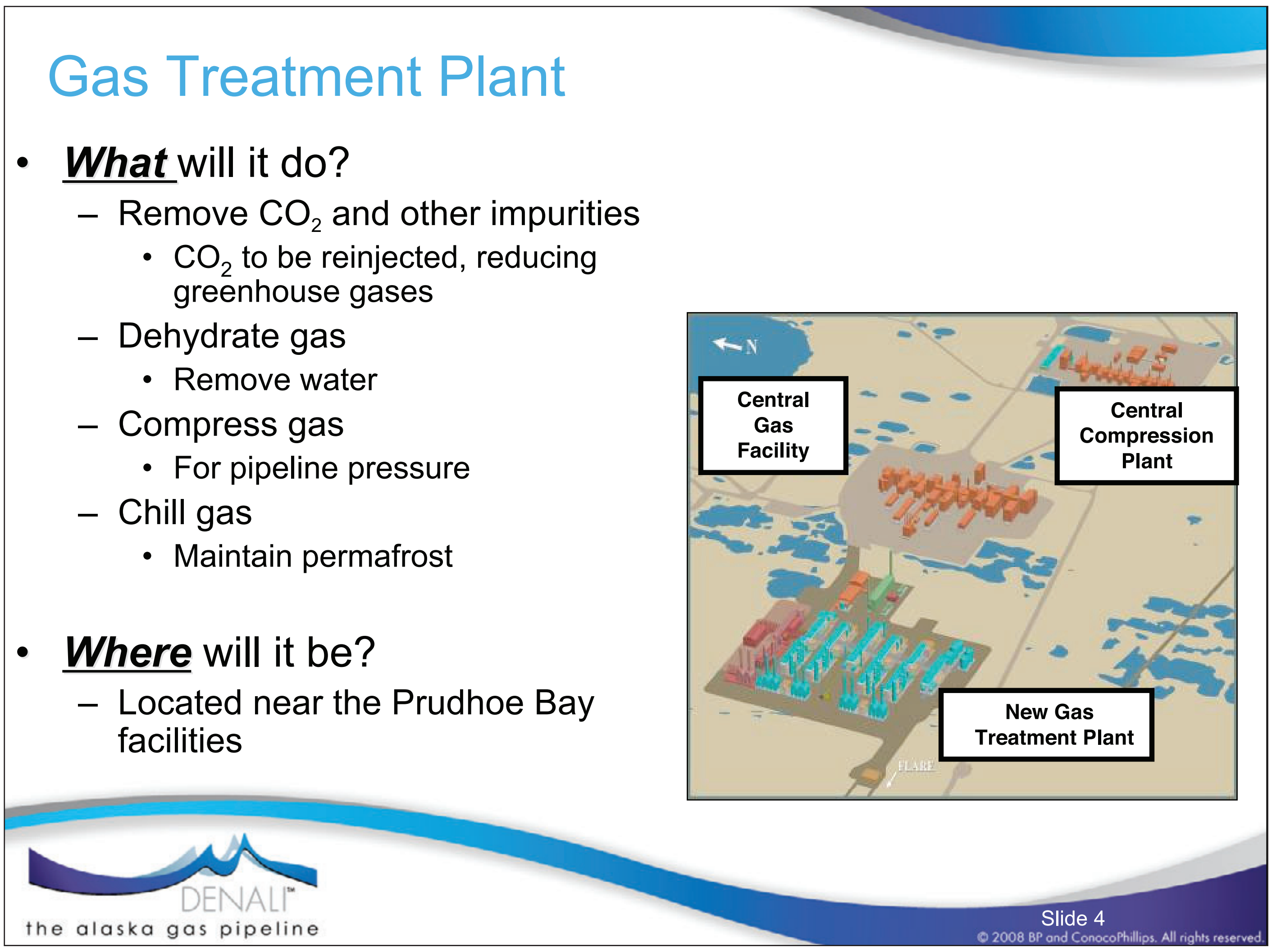
Typical of the rush to secure rights, Quicksilver Resources — a leading coalbed methane operator in Alberta — acquired 19 licenses covering 127,000 net contiguous acres in the Horn River Basin at an average C$655 per acre at the last auction.

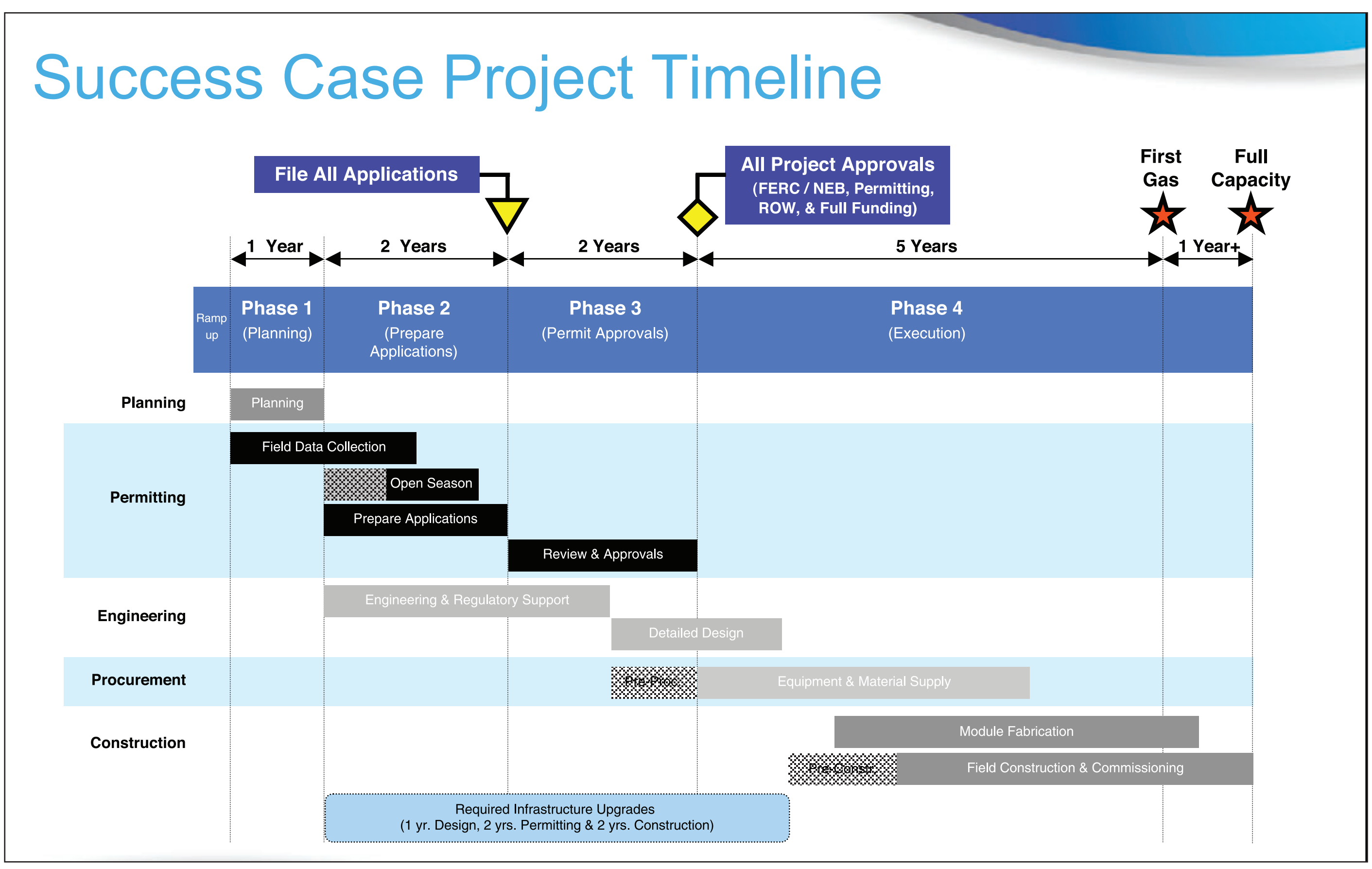
It has identified more than 500 feet of gross thickness from the Upper Devonian Muskawa and Klua shale formations at depths of 7,800 to 9,000 feet.

Quicksilver Chief Executive Officer Glenn Darden said the shales have the "right characteristics which we believe can provide a significant resource opportunity" for his company.

The company plans four wells on the licenses in the 2008-09 winter season.

—GARY PARK





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DENALI

Department of Natural Resources on whether to terminate the unit is in process after a March hearing.

Suttles said Point Thomson gas will be necessary both to fill the line and "manage the recovery of oil as well from the oil fields where the gas exists."

Prudhoe Bay natural gas is being reinjected to produce more oil.

A natural gas takeoff rate for Prudhoe Bay was set when the field went into production.

That rate, 2.7 bcf a day, includes gas used for fuel.

The Alaska Oil and Gas Conservation Commission, which regulates gas offtake rates, held Prudhoe Bay gas offtake hearings "and concluded that the current offtake allowable of 2.7 bcf per day is appropriate until such time as the operator applies to us with adequate technical justification for an increased allowable," AOGCC Commissioner Cathy Foerster told Petroleum News in an April 9 e-mail. Forester said "the ball is in BP's court," to file a request for a higher Prudhoe Bay offtake rate. BP is the Prudhoe Bay operator.

The commission's "study work is still fairly fresh. I think we can still rely heavily on that but, as always, the burden will be on BP to demonstrate why a higher allowable is justified." Foerster also said that "a substantial amount of the technical justification will likely be introduced into the public record."

"Unless they've done something vastly different that requires a new, hard look from us, then the hearing process should be about normal," she said.

The commission began looking at Prudhoe offtake rates in 2005 and wrapped up its study last year.

The TransCanada conundrum

TransCanada, a major pipeline company, has been working on advancing a North Slope gas pipeline for as long as the North Slope producers — it and companies that are now its subsidiaries were involved in competing plans to commercialize North Slope natural gas in the late 1970s and early 1980s.

TransCanada has continued to work on an Alaska Highway gas pipeline project since.

It holds permits for the Canadian section of the pipeline, and maintains that those permits give it the right to be the first pipeline to move Alaska North Slope natural gas through Canada.

The company is also the surviving bidder under the Alaska Gasline Inducement Act to receive incentives from the State of Alaska to build a North Slope to market natural gas pipeline. A decision from the commissioners of Natural Resources and Revenue on whether to recommend awarding the AGIA license to TransCanada is expected May 19; the Alaska Legislature would then have to approve that license.

"TransCanada has sought for several years and continues to seek alignment" with the North Slope gas producers and the State of Alaska, TransCanada spokeswoman Shela Shapiro told Petroleum News in an April 9 e-mail. TransCanada is "encouraged that two of the three producers are ready to advance the project and get Alaskan gas to markets in the Lower 48 states. We see this as positive news for consumers across North America as well as Alaskans," she said.

"TransCanada believes that it is the best independent pipeline company for the project," she said.

On issues related to permits the company holds in Canada, Shapiro said: "We hold

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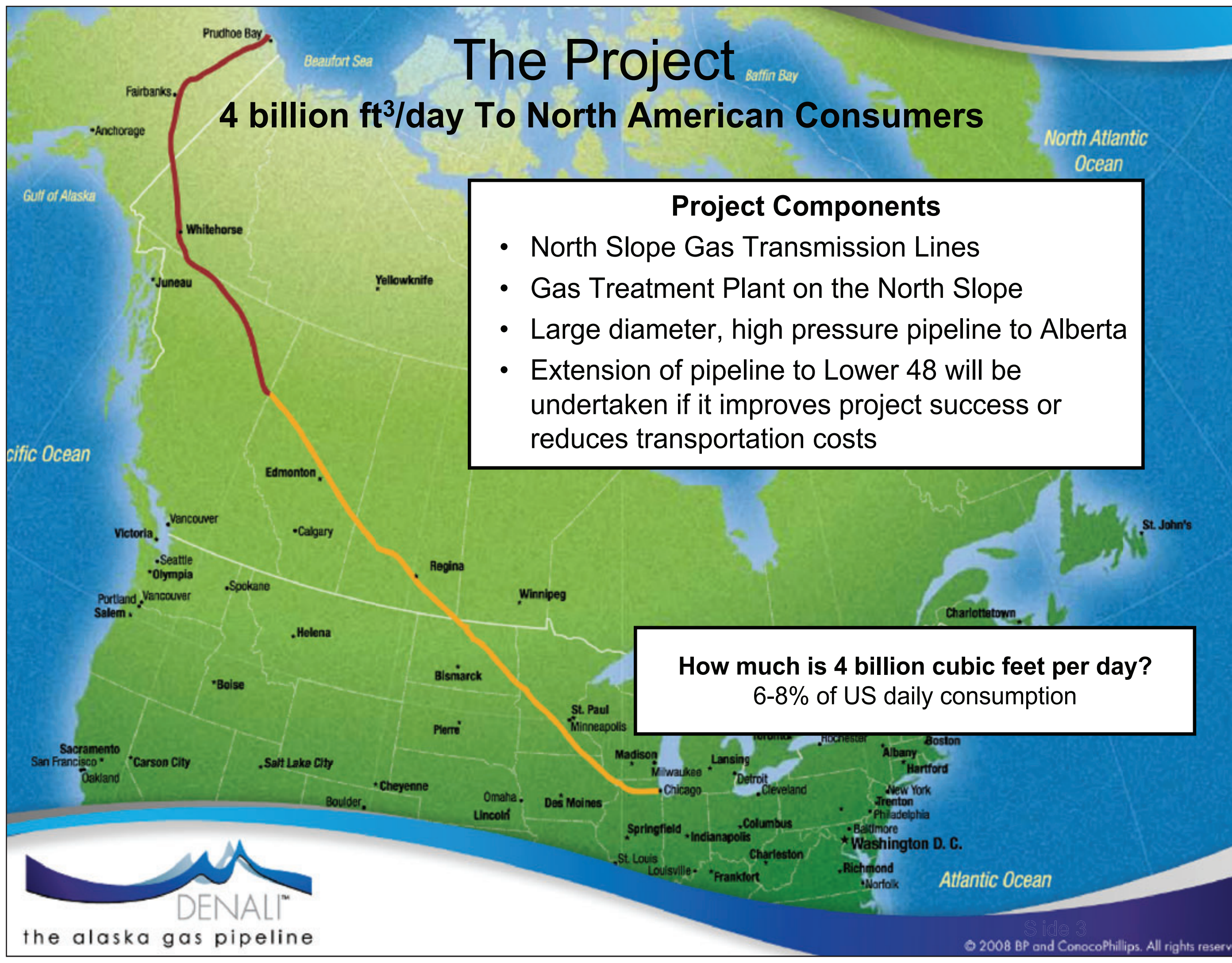
DENALI



valid NPA (Canada's Northern Pipeline Act) permits for the Canadian section of the project which means that TransCanada has the rights to be the first pipeline project to move gas through Canada."

Project looks to NEB process

"Are there going to be people who will challenge what we're going to do?" Suttles asked. "Yes. There will be many challenges on this project as we go forward," and the TransCanada permits could be one of those challenges.

"That's part of doing something like this," he said.

He said with both energy costs and energy security at play, he hopes "people will have a will to get this project done, both in Canada and in the United States."

"With regard to any permits that TransCanada may hold in Canada," Bowles said, "Canada does have a federal process to pursue for any new pipelines. Just as the United States has the FERC process, Canada has the NEB or the National Energy Board process. That's the process that we would pursue through Canada and it's a viable process that we think applies."

The NEB process is different than the Northern Pipeline Act under which the Alaska Highway pipeline permits were issued.

Suttles said Denali is a new project and the companies are "not relying on elements from previous projects to make this work."

As for possible competition between a BP-ConocoPhillips project and a TransCanada project, Suttles said there are many examples in the U.S. "of competition going into open season and we're happy to do that."

Suttles said Denali is separate from the AGIA process.

"We're open to the idea of pipeline companies or other third parties joining this project," he said. "What we look for, of course, is what value they bring to the project."

Bowles said while the partners are "leaving the door open to how this partnership could change over time," they "want to get this project moving ahead, not lose a summer's worth of field work or another year of making this pipeline a reality."

Work this summer

Field work will begin this summer, the companies said.

The new company will be registered soon, Suttles said, and within two months will open an office in Anchorage.

"We have already let some contracts out as far as some of the field work," Bowles said.

So work is starting, he said, and the companies anticipate spending $100 million over the next 12 months.

"This is not an announcement to build a plan," Suttles said: "This is an announcement to start the project."

While the project will be built by the Denali joint venture, the companies have split up whose company's processes will be used. "BP will take the lead role at least initially at the gas treatment plant on the North Slope," Bowles said, and ConocoPhillips will take the initial lead for the pipeline from the North Slope to Alberta. BP would take the lead on a pipeline from Alberta to the Lower 48.

Suttles had noted in opening remarks that a pipeline into the Lower 48 would only be constructed "if required."

With Canadian natural gas production in decline, it is generally expected that by the time a gas pipeline from Alaska reaches Alberta there will be capacity available on existing pipelines to move the gas into Lower 48 markets.

The companies listed near-term Alaska programs in a slide packet, saying they will make available $30 million to fund: job training programs; in-state gas feasibility; and infrastructure upgrade studies of roads, bridges, ports, etc.

Bowles said the $30 million would be used to study in-state offtake points and in-state gas needs, "so with that effort right there we'll be in a much better position as far as how the state needs can best be served with those takeoff points."

$600 million to start

The companies cited a figure of $600 million to get to open season, $100 million of which is expected to be spent in the next 12 months.

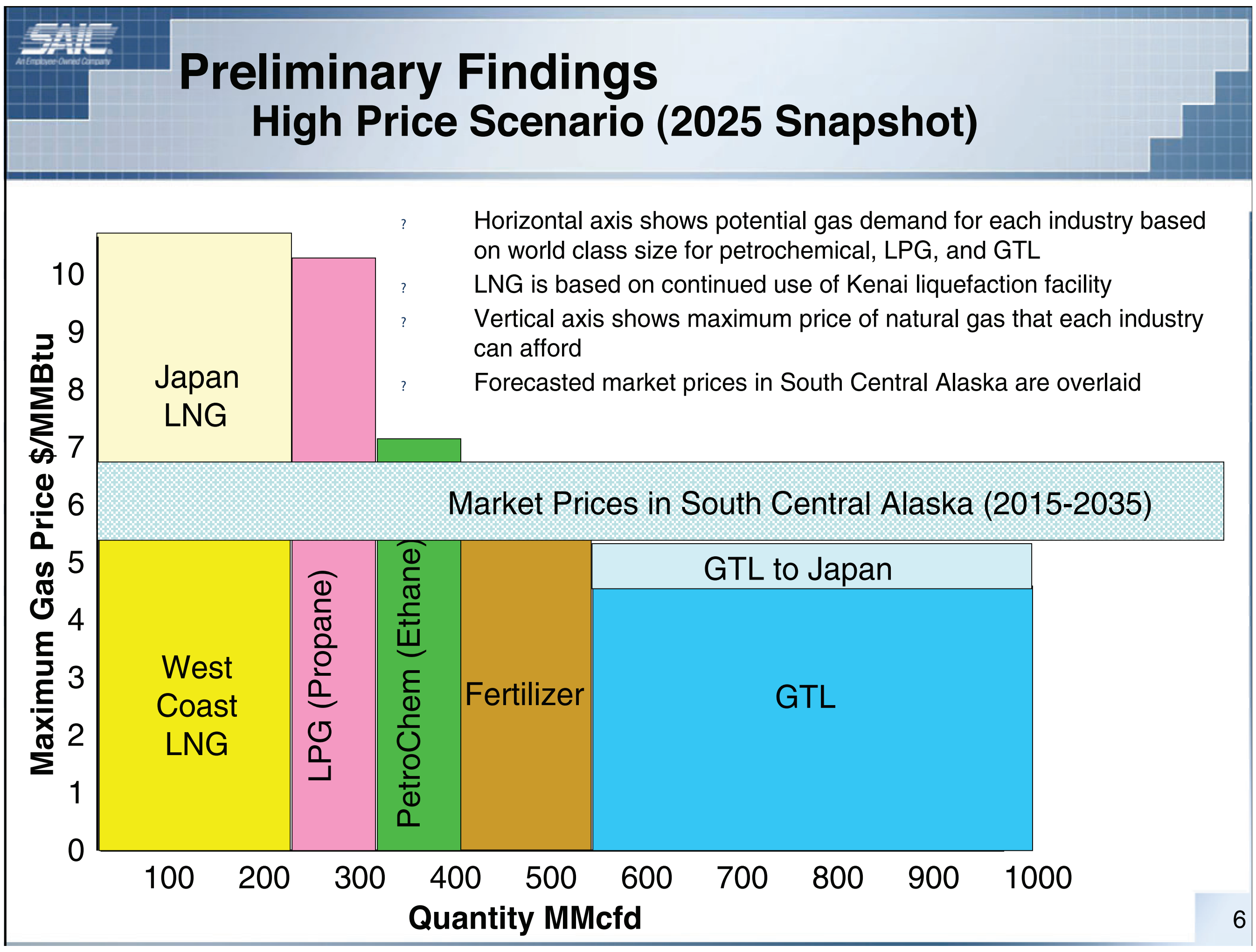
Board sanction would be required for commitment of gas to an open season, Bowles said, and for monies for a final design, another billion dollars or more.

Suttles said actual construction wouldn't be sanctioned until after the project has FERC and NEB certificates, probably five years into the project.

"But between now and then we're going to spend several billion dollars and they'll obviously want to approve that spending as we get to each of those steps," he said.

The total cost isn't known, but the last cost estimate the companies did for a project to the Midwest was $20 billion in 2001.

"Since 2001 steel prices have doubled; collectively between both of our companies we now see that price in excess of $30 billion, but we need to do the work necessary to really see what the price will be," Bowles said. ●



ALASKA NATURAL GAS DEVELOPMENT AUTHORITY

At the high end of projected future commodity prices, a 500 million to 1 billion-cubic-feet-per-day Alaska value-added gas industry might be viable in the future.

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INDUSTRIES

Fertilizer viable?

Of special interest is a finding that a fertilizer industry may even be viable in the future, although Heinze emphasized that the closure of the Kenai fertilizer plant may well have been an appropriate decision for the owner, Agrium.

"If you just look at it as a world plant, not necessarily an Agrium plant, it might even have an economic future right now," Heinze said.

From the perspective of gas demand, the new analysis boosts the potential in-state industrial gas demand from the modest value of 100 million cubic feet per day of the 2006 study to volumes up to1 billion cubic feet per day, Heinze said. And there would be enough in-state gas and NGL to support that demand, he said.

A substantial piece of the high end of the demand range represents consumption by a GTL plant. Given that GTL does not have the industrial track record of more established industries such as petrochemicals and LNG, a conservative view of the future demand would remove GTL from the picture. But that results in a projected demand of around 500 million cubic feet per day, a significant figure in the equation of Alaska gas economics.

"Half-a-billion cubic feet per day is a pretty significant number all of a sudden," Heinze said.

Potential scale

This does not mean that someone will immediately build a new industrial facility, but the figures do provide an idea of the potential scale of an Alaska in-state industry, Heinze said.

"It does start to define what's in play here from value-added industry, wherever you think it is in Alaska or whatever you think it is exactly," he said. "… It doesn't tell you that people are going to start lining up tomorrow and building plants. It doesn't tell you that's the best thing in the world to do. But it does at least start to answer the question of economic feasibility."

Scott Heyworth, acting chairman of the ANGDA board, also commented that establishing a takeoff point from a North Slope gas line for the volumes of gas and NGLs that an Alaska value-added industry might require would be a major issue.

"It's a big deal that we take a look at this," Heyworth said.

And a world-class gas or NGL processing plant of any type would not come cheap — the SAIC analyst estimated a cost of around $5 billion for each plant, Heinze said. But the SAIC analyst also estimated annual gross revenues of $5 billion for each plant and the creation of perhaps 2,000 in-state jobs.

"In terms of local communities, the tax base, jobs, economic development … it's a pretty potent thing," Heinze said.

But do the numbers in the gas demand analysis represent reality?

"There's no attempt to predict that these prices are necessarily the prices of the future, but the assumption is that if we have achieved those prices today it is reasonable that at least at some point in the future we will revisit this world," Heinze said. "… The conclusion reached here as to industrial potential is huge." ●

F&E

Fossil fuels to rule for 50 years

Saudi Arabia's Oil Minister Ali Naimi said April 10 that he expects fossil fuels will supply the bulk of global energy needs for at least the next 50 years.

To meet future demand, the No. 1 producer, and by far the most influential member of the Organization of Petroleum Exporting Countries, is boosting production, he told delegates at the International Oil Summit in Paris.

"Moving from our current sources of energy, primarily fossil fuels, to a dominant new source will require at least half a century and perhaps more given the various challenges associated with such a broad based convergence," he said. "Fossil fuels can be and should be made environmentally friendly sources of energy, particularly as they will continue to meet the lion's share of energy needs for the foreseeable future."

Naimi said carbon capture and storage will help to clean up fossil fuels, which "should be supplemented with truly renewable energy sources."

Ethanol and other biofuels do not meet environmental and energy security goals, he said. Their cultivation eats into the human food supply, reduces the absorption of carbon dioxide as forests are cut down, has not improved the security of energy supply and has not reduced petrol prices, he said. Biofuels also enjoy "financial favoritism" from governments.

The Saudi minister flagged solar energy as "perhaps the best source" of alternative energy, predicting researchers will succeed in making solar cells ?more effective? to expand use.

Saudi Arabia is spending over US$90 billion (?56.6 billion) in next five years to boost its production capacity, he said.

Saudi Arabia has 264 billion barrels of crude oil reserves with the potential to increase this by at least 200 billion barrels, he said. Natural gas reserves of 268 trillion cubic feet could be doubled, he said.

—THE ASSOCIATED PRESS