Petroleums



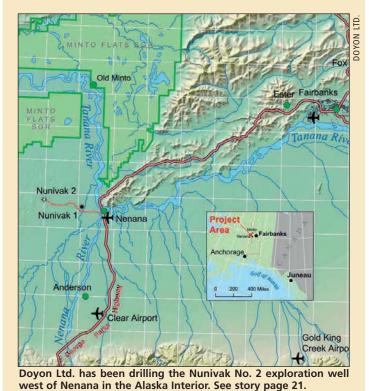
Page Q&A French says windfall focus will drive SB 21 oil tax recall

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Interior basins



Conoco stakes four NPR-A wells

ConocoPhillips Alaska Inc. has staked four National Petroleum Reserve-Alaska wells.

The U.S. Bureau of Land Management recently posted notice of the Rendezvous No. 3, Rendezvous No. 3 South, Rendezvous No. 3 North and Rendezvous No. 3 North 2 wells

ConocoPhillips staked the Rendezvous No. 3 and Rendezvous No. 3 South wells in lease AA-81784 and staked the Rendezvous No. 3 North and Rendezvous No. 3 North 2 wells in lease AA-81803. Both leases are in the federally managed Greater Mooses Tooth unit.

The notices, which BLM posted Sept. 6, show where ConocoPhillips is interested in drilling and how many wells it might drill, but ConocoPhillips must approve drilling plans internally and with its partner Anadarko Petroleum Corp. before moving forward.

In past seasons, ConocoPhillips has said, "Filing notice of

see **WELLS** page 19

Testing new Arctic regime

The Canadian government is seeking a fresh start for oil and natural gas interest in the Arctic region as the industry awaits a change in northern jurisdiction over natural resources.

Against a recent backdrop of waning activity, federal Aboriginal Affairs and Northern Development Minister

Bernard Valcourt has issued a call for nominations for frontier lands within the Inuvialuit Settlement Region in the Beaufort Sea and Mackenzie Delta areas of the Northwest Territories.

Depending on the response by the Sept. 24 deadline, Valcourt may

Sea-Mackenzie Delta has waned in recent years, with only a privately held United Kingdom company participating in a call for bids in the last five years.

Interest in the Beaufort

launch a call for bids for exploration licenses in October.

It will be the last bidding round before responsibility for public lands, water and resource management in the NWT is scheduled to pass from the federal to the territorial government on April 1, 2014.

see ARCTIC page 19

PIPELINES & DOWNSTREAM

Routing pipelines

Furie applies for easement for twin lines from planned Cook Inlet platform

BY ALAN BAILEY

Petroleum News

In another step toward permitting its planned gas field development in the Kitchen Lights unit in the upper Cook Inlet, Furie Operating Alaska has applied to Alaska's Division of Mining, Land and Water for an easement to lay twin gas gathering pipelines between an offshore production platform and a planned onshore gas processing facility near Nikiski on the Kenai Peninsula.

16-mile lines

The pipelines, each about 16 miles in length, will consist of steel piping with an outside diameter of 10 inches, Furie's application says. Pipeline laid offshore will be weighed down by a concrete

The offshore platform, which Furie hopes to install on site as early as April 2014, would sit in the middle of the inlet, approximately halfway between Tyonek on the west side of the Inlet and the Birch Hill area of the northern Kenai Peninsula.

shell to sit stably on the seafloor. And directional drilling will be used to bore a subsurface corridor under the coastal bluff close to the production facility to enable the pipelines from the facility to run underground below the bluff and emerge on the seafloor about 2,500 feet beyond the intertidal zone, the application says.

see PIPELINES page 25

PIPELINES & DOWNSTREAM

A surprise in Valdez

Steel piece carried down trans-Alaska pipeline traced to time of construction

BY WESLEY LOY

For Petroleum News

Something weird happened with the trans-Alaska pipeline recently.

Crews in Valdez, at the end of the 800-mile line, on Sept. 8 discovered a random hunk of steel inside what's known as a backpressure control valve.

The disk-shaped object, about 10 inches in diameter, had come down in the oil stream from roughly midway up the line, north of Livengood.

The discovery prompted Alyeska to launch an investigation, and to rally a significant repair to the pipeline at the point where the stray piece originat-

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GOVERNMENT

DO&G working DR&R

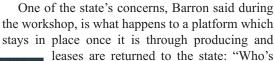
State hears from industry on Cook Inlet platform abandonment issues

BY KRISTEN NELSON

Petroleum News

The State of Alaska is concerned about abandonment plans and costs for dismantlement, removal and restoration, DR&R, for aging oil and gas platforms in Cook Inlet and held a workshop Sept. 10 to hear from the public on how the state might address the issue in regulations.

Bill Barron, director of the Division of Oil and Gas in the Department of Natural Resources, said the purpose of the workshop was "to assist DNR in creating potential regulations regarding offshore platforms."



leases are returned to the state: "Who's responsible for that disposal? Is it the state's responsibility? Is that the previous leaseholder's responsibility? At the end of the day, who's responsible for that platform?"

The state has agreements in place for the Cook Inlet platforms and those agreements are different for different companies, he said.

What the state is looking at, Barron said, is having "a standard that everybody under-



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A MEMBER OF THE UKPEAĠVIK IŇUPIAT CORPORATION FAMILY OF COMPANIES

French sees windfall profits as focus

Anchorage Democrat says referendum repealing new oil tax could succeed; thinks Legislature would then tackle progressivity rate

BY STEVE QUINN

For Petroleum News

Sen. Hollis French helped write the outgoing oil and gas tax regime known as ACES. Now he's advocating for another change. He wants the public to get behind a repeal of Senate Bill 21, Gov. Sean Parnell's rewrite that sets aside ACES as of Jan. 1, 2014.

French said he and other
Democratic legislators understood
ACES needed changing, starting
with the tax surcharge known as progressivity, whi

with the tax surcharge known as progressivity, which captured more net revenue from oil companies as the market price rose.

But French, an Anchorage Democrat who serves on the Senate Resources Committee, says SB 21 goes too far, leaving the state with prospectively little in return.

French discussed his concerns and the prospects of a successful referendum with Petroleum News.

Petroleum News: Now that the elections office has certified the petition for a referendum, what's your take on the effort so far?

French: The effort needed 30,000 signatures; it got 45,000. That's 50 percent more than what was needed. The new, more stringent rules surrounding referendums

and initiatives make it a challenge for anybody who wants to put something on the ballot. Whereas initiatives have sort of an open-ended timeline, referendums are very tightly bound by a 90-day window after the Legislature gavels out.

Typically people rely on the fall to get signatures. The state fairs in Anchorage and Fairbanks are around that time and are an especially great place to get signatures. That was not a possibility in this effort. So this was a huge grassroots effort. There was not a lot of money involved. It was really volunteers and committed folks.

This spanned an array of generations. You had the elder statesmen like (Alaska Constitution delegate) Vic Fisher, (Crude Dreams author) Jack Roderick and (former Senate President) Chancy Croft; folks in the middle of their careers like me, Les Gara and Bill Wielechowski; then you had a whole cadre of younger folks that are stepping up, grabbing signature boards, going out and hitting the streets.

Petroleum News: Now, realistically, you're facing an uphill battle financially. How can you educate folks when you're on a budget, a lean budget at best?

French: I think you will see a large imbalance of money raised on this issue as this campaign moves into next year. A lot of us look back at the cruise ship initiative as an example where a small band of committed people with a powerful message can overcome a huge economic force on the other side. I haven't looked at those numbers recently, but it was anywhere from a five-to-one, maybe 10-to-one disadvantage to the cruise ship initiative people, and yet that was successful.

Petroleum News: On the flip side, the coastal zone initiative did not fare as well under the same conditions. Many voting against this initiative would certainly be in the camp favoring SB 21.

French: I agree that was a more complex issue. It's the same with the clean water initiative. It's another complex issue that you can't necessarily look at and understand. I think folks get this issue at a more basic level. We gave up our windfall profits in exchange for nothing. That's a simple idea that cuts through a lot of op-ed pieces and lovely TV ads.

Petroleum News: So what should the expectations be in return for tax breaks?

French: You know I think ACES established a good system. It set a high rate for companies in harvest mode

and it rewarded the companies that invested in Alaska with generous tax credits for that investment and lowered tax rates accordingly. The actual effective tax rate that Conoco paid under ACES was around 30 to 31 percent. That's not an onerous tax

rate because they were actively re-investing in Alaska.

It's either going to be a dollar invested in Alaska or a dollar invested overseas or in Texas or somewhere else. From my narrow perspective, I'm a fierce partisan for Alaskan investment. It's my job as an Alaska policy maker to make sure we get our fair share of investment. I think ACES set up a good framework. You can tinker with any tax system; you can always make it better. There is no perfect tax system. But the basic framework was pretty sturdy, pretty sound.

Petroleum News: OK, so what would you have altered in ACES.

French: We talked about capping progressivity. A lot of us became convinced that progressivity reached too high a level at super high prices. That's something we were interested in addressing. We also believed the real future of the North Slope lies in true new oil, in heavy oil

and in shale oil. Those are areas where you can offer incentives and lower taxes to try to drive investment in that direction. By the same token, Prudhoe Bay, Kuparuk and Alpine, those are fields that were capitalized many, many years ago. They are enormously profitable, and the state should get its fair share from those fields.

Petroleum News: Let's talk about the new oil issue. There are concerns over drafting regulations that efficiently determine what is truly new oil. Did you foresee these problems?

French: We did. You saw us fighting this on the floor of the Senate arguing for a more narrow definition.

Ultimately the House picked a more narrow definition. We are seeing in the regulation process the industry trying to make an end run around that and get the most expansive definition of new oil possible. That is their prerogative. But that's not what we voted into law. That's why my Democratic colleagues weighed in during the comment period to make sure our concerns were heard.

There are two concerns:

"My view is North Slope natural

gas will come to market. It's too

rich and too valuable a

resource. We offer too stable a

political climate for it to not

come to market." —Sen. Hollis

French, D-Anchorage

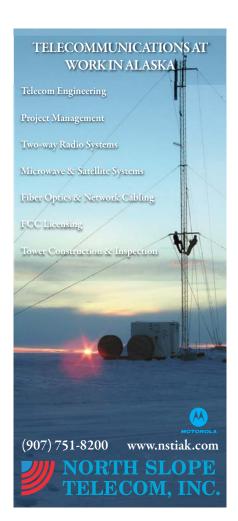
One, the industry is balking at their complexity. That's bad. You should always have things as clear as possible. Whether you agree with SB 21 or disagree with it, everyone should agree that the regulations should be exactly put into affect the language of the statute. There should be no daylight between the regulation and the statute. That's one main point on the drafting of the language and the specificity.

The larger point is how much wiggle room the regulations will allow with respect to finding new oil. The industry has a powerful incentive to get oil already coming out of the ground reclassified as new oil. That amounts to about a \$7 a barrel reduction in the tax and an increase in their profits. That's a big amount of money. It adds up to a lot of money over the years. There's tens of millions, if not hundreds of millions of dollars a year with that question.

Petroleum News: What's the potential fallout if this isn't coming together?

French: Well on the regulation side, you've heard the industry say if the definition doesn't work out, it's going to produce uncertainty. And uncertainty means a cooler investment climate. And that's bad. You have to have certainty. From the state's perspective, the industry gets rewarded for doing what it's already doing right now.

see FRENCH page 4





FRENCH

That's why I have already called for hearings and (House Rep.) Geran Tar has also called for hearings. There's a committee called the regulation review committee. That seems like the perfect place to have hearings to make sure this gets flushed out and nailed down as tightly as possible.

Petroleum News: Do you see the Legislature revisiting this next session?

French: My guess is no. My guess is the Legislature is going to wait for the referendum to play out and address other issues this session. That's my view for

Petroleum News: Getting back to the referendum. What do you think will be done moving forward to get the message out?

French: That's a question for the central referendum organizers. I think you'll see op-ed pieces. I think you'll see social media. I think you'll see letters to the editor. I think you'll see grass root activities to spread the word.

Petroleum News: The criticism against the referendum is that it will have a chilling effect on investment until this gets resolved. What are your thoughts on it?

French: Well we stressed over and over that investment climbed under ACES and investment reached all-time highs during ACES. So if the worst thing that happens to the industry is that we go back to ACES again, they were making record profits under ACES. We had record employment. We had record investment. So it doesn't look too awful from my perspective to the industry if ACES gets put back in place.

Petroleum News: If the referendum does pass. What then? Do you go back to the drawing board?

French: I think you do. I think you go back and get another chance to do oil tax reform right. From our side, we agree that progressivity should be capped. We agree there should be a stimulus provided for new oil, for heavy oil and for shale oil. By new oil, I mean oil outside the legacy areas of Prudhoe Bay, Kuparuk and Alpine. One of the things that I think gets lost in this debate is the degree to which Democrats are interested in oil tax reform. We are not obstructionists on oil tax reform. We are interested on doing responsible tax reform that benefits both sides. We believe we can make this system better as long as you stand by a few guiding principles. And those principles are reward investment in this state. That was one of our biggest complaints of this bill. It eliminated windfall profits in exchange a huge concession. Basically

we got hope on a wing and a prayer for new investment on the North Slope.

Petroleum News: Let's shift to natural gas. What would you like to see next in advancing a project, be it a largediameter line or a smallerin-state line?

French: First things first. Let's celebrate Cook Inlet. Every day it looks like Cook Inlet is getting stronger and

stronger. I worked on a Cook Inlet platform for five years, so it does my heart good to see it revitalized and investment revitalized. For the foreseeable future the natural gas breadbasket for Southcentral Alaska that even if you flipped a switch today and said OK, let's start building a gas line, it's going to be a long time before the gas comes down here, so the news for Cook Inlet helps everybody. There are more stories showing more finds and the so-called shortage is getting pushed into the future as those finds come on line.

Petroleum News: OK, so what about a pipeline project?

French: My view is North Slope natural gas will come to market. It's too rich and too valuable a resource. We offer too stable a political climate for it to not come to market. The point, I believe, is to build the biggest pipeline possible. Building anything short of an enormous project, challenges the economics. That was part of my objection to the small line, and others as well. So my view is to keep working on the big project.

Petroleum News: The governor had his own benchmarks. Most of them have been met; one of them wasn't to his disappointment. If you had your own benchmarks, what would they be?

French: I would be careful about issuing them. I think the governor saw the trouble you get into when you draw a line in the sand, and then it doesn't happen. I think it's better left to industry to drive this train. It's going to be very hard for the state to drive this train. You can set up a fiscal network and a regulatory network and a framework, but ultimately the industry is going to put their money down, and it's got be driven by their expertise.

Petroleum News: Let's shift to the Arctic. What would you like to see in the way of an Arctic policy from the state?

"From our side, we agree that

progressivity should be capped.

We agree there should be a

stimulus provided for new oil, for

heavy oil and for shale oil. By new

oil, I mean oil outside the legacy

areas of Prudhoe Bay, Kuparuk

and Alpine." —Sen. Hollis French,

D-Anchorage

French: the state needs to work better with the feds in stimulating and creating a deepwater port in the north that can be a base for cleanup vessels and other working vessels. That's one of the prime needs we lack to develop infrastructure in a

safe and sensible way. It would be either near Nome or north of Nome. It's impractical to have a working oil field without some kind of working base for all of the ships and steel and people that you need to do that work.

Petroleum News: What kind of partnership do you have in mind? They seem to be rather elusive, any partnership with the feds. How do you reconcile something like that?

French: It's hard to reach out to the feds and say we need your help for a deepwater port when we are poking them in the eye about every other day. I'm as firm a supporter and champion of state sovereignty as anyone else. It just seems like every week, we open up the paper, and we are blistering the feds for this or that policy. I think there is a better way to do business. When they cross the line, yes you say something. It seems like a lot of this is not productive.

The federal government helped build Alaska. We are going to need their help in the future. Working together we can open up the Arctic, but we are going to have to be partners.

Petroleum News: Still on the Arctic are you concerned that Alaska lost a summer season?

French: I think that's a better question answered by Shell, by Conoco and by Statoil. I think it's pretty clear the permits were issued on time. They were given the green light on time. There was one logistical problem after another. I support their efforts. The question for them is, are you going to be ready for next year?



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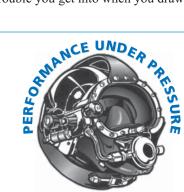
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China resumes Canadian shopping

Drawn by stable, low-risk environment, Yanchang Petroleum bids for Novus, with sights on 'aggressive' drilling, further expansion

BY GARY PARK

For Petroleum News

Tight oil plays in Saskatchewan and Alberta have enticed a revival of Chinese interest in Canadian assets, with a unit of China's fourth largest producer making a C\$320 million bid for Calgary-based Novus Energy.

If completed, the deal will see the Canadian debut of Yanchang Petroleum International, whose controlling shareholder is Shaanxi Yanchang Petroleum, which reportedly has plans for an "aggressive" drilling program and acquisition plan.

Novus, which is currently producing 4,050 barrels of oil equivalent per day (3,452 boe per day in the second quarter, up 20 percent year-over-year), 80 percent of it light crude. It is heavily concentrated in the Viking tight oil play in the Viking Dodsland reservoir of west-central Saskatchewan plus a stake in the Cardium resource play of northwestern Alberta.

It has 140,000 net acres of drilling leases in the Viking play, which accounts for about 90 percent of its production.

Lukewarm response from juniors

But the looming entry into the Viking formation by an acquisitive-minded state-owned Chinese corporation is drawing a lukewarm response from junior Viking players, with Neil Roszell, chief executive officer of Raging River Exploration, predicting that within two years "one or two" large companies will lock up the majority of the play.

David Tuer, chief executive officer of privately owned Teine Energy, which holds up to 2,500 drilling locations, said that "any time you introduce a new competitor you have to be aware of the fact that somebody else is at the table."

He said there is now added pressure on companies to act quickly to seize buying opportunities.

No blocking

But so far there is no evidence of anything blocking the path for Yanchang. The dollar value of the deal is C\$10 million short of the threshold that triggers an automatic review by Canada's foreign investment regulators and does not clash with the federal government's prohibition on foreign state-controlled companies acquiring oil sands producers.

Calgary-based investment dealer Peters & Co. rated the Viking as the most popular non-oil sands reservoir in Canada this year, with producers taking out permits for 877 wells and increasing drilling this year by about 57 percent from 2012.

Novus Chief Executive Officer High Ross said "we don't foresee any issues" with the government intervening in the

Merger and acquisition activity has slowed to a crawl in Canada this year, plunging 77 percent in dollar value during the first half to C\$4.4 billion from C\$19.3 billion over the same period of 2012 and trailing far behind the peak of C\$31.1 billion in 2009.

The number of transactions fell to 45 from 71 during the same period of 2012, with only one of 45 large deals valued at over C\$1 billion.

Ross said in a statement Sept. 4 that Yanchang wanted to get into a "stable, low political risk jurisdiction" and, to that end, has chosen Canada.

which includes the

C\$100 million in

net debt — repre-

sents a 40 percent

premium over its

closing price on

assumption

40% premium

Novus said the Yanchang offer — million short of the threshold that triggers an automatic review by

Canada's foreign investment regulators and does not clash with the federal government's prohibition on foreign state-controlled companies acquiring oil sands producers.

Aug. 27, the last trading day before the offer, and a 44 percent premium over the one-month volume weighted average trading price.

Novus announced 10 months ago it had hired Cormack Securities and FirstEnergy Capital as advisers to explore strategic options, including a sale.

Ross said Yanchang first approached Novus several months after the review was started.

Closure, scheduled for later this year, depends on approval of two-thirds of Novus shareholders and ratification by Beijing's State-owned Assets Supervision and Administration Commission, along with other Chinese government approvals.

Shaanxi Yanchang Petroleum,

Yanchang's largest shareholder, will finalize financing arrangements through a convertible bond issue of about C\$217 million, Novus said.

During the second quarter Novus drilled eight net horizontal wells in the Dodsland area, raising its first half total to 25 wells.

It estimated second and third quarter on-stream costs will be less than C\$875,000 per well.

Analyst: Valuation low?

Juan Jarrah, an analyst with TD Securities, said the transaction appears to value assets at lower prices than other recent Viking sales.

"The transaction implies C\$79,000 boe per day on current production and C\$14 per boe on 2012 (proved plus probable) reserves, about a 35 percent discount on the average of the last seven transactions in the Dodsland Viking over the last 1.5 years," he said in a note.

Jarrah said the heart of the play in the greater Dodsland area remains fragmented

FirstEnergy has noted that the Viking play has lived in the shadow of other popular light oil trends such as the Cardium,

> Montney, Bakken and Beaverhill Lake plays because of its more modest iniproduction rates, even though it has about 21 operators, led by Husky Energy, Penn West Petroleum and

Crescent Point Energy.

That will change radically if Yanchang joins the fold, with C\$25 billion in annual revenue to out-compete its peers for access to capital, although Raging River Exploration's Roszell suggested the Chinese company may also be slowed

down by the need to gain approvals from its parent company and will also face language barriers.

FirstEnergy said the results "appear to be more predictable than most others ... and the resource footprint is already solidly delineated."

The firm said Viking also offers cost advantages of "relatively" cheap drilling in shallow depths compared with other geological formations where horizontal wells with multi-stage fractures are needed to suck up the oil, opening the door for companies large and small.

Roszell: Costs recovered quickly

Roszell said the average Viking well drilled this year will recover all costs and start delivering profits in less than a year.

Raging River recently raised its capital budget to C\$145 million from C\$20 million and expects to drill 140 wells, with average production for 2013 targeted at 5,150 boe per day and the exit rate at 6,300 boe per day (95 percent oil).

Calgary-based investment dealer Peters & Co. rated the Viking as the most popular non-oil sands reservoir in Canada this year, with producers taking out permits for 877 wells and increasing drilling this year by about 57 percent from 2012.

Andrew McCreath, chief executive officer at Forge First Asset Management, said there is a "lot of appetite for Viking assets generally and especially in Saskatchewan. It's light oil and the netbacks tend to be pretty darn high."

FirstEnergy said those best positioned to capture shareholder value from the Viking formation are Crescent Point Energy, Whitecap Resources and Raging River.

The analysts said that in addition to Novus, potential acquisitors could be interested in Renegade Petroleum, WestFire Energy and Charger Energy.

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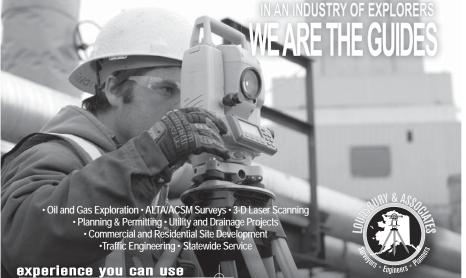
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ENVIRONMENT & SAFETY

EPA fines Shell for air permit violations

Agency settles with oil major over penalties for self-reported excess air emissions from the Noble Discoverer and the Kulluk

BY ALAN BAILEY

Petroleum News

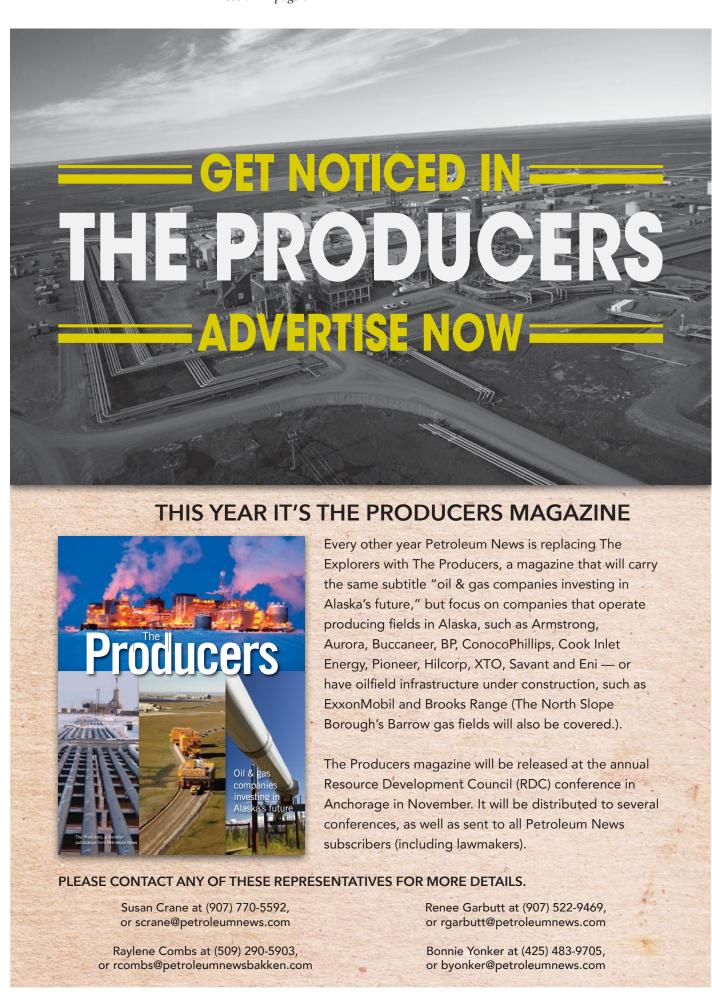
The U.S. Environmental Protection Agency announced Sept. 5 that Shell had agreed to pay a total of \$1.1 million in penalties for violations of air quality permit emissions limits by the company's drilling vessels during the 2012 open water season in Alaska's Chukchi and Beaufort seas. Shell will pay a \$710,000 penalty for violations by the drillship Noble Discover and a \$390,000 penalty for violations by the floating drilling platform the Kulluk, EPA said. The Noble Discoverer, owned and operated by Noble Corp., was drilling in the Chukchi Sea when the violations occurred, while Noble was operating the Shell-owned Kulluk in the Beaufort Sea. Noble Corp. was working under contract to Shell on Shell-operated oil and gas leases

Shell had applied for and was issued air permits for the operation of the two vessels in its Alaska Arctic drilling program.



Noble Discoverer

see **SHELL** page 7



FACILITIES

NSB facilities investment supports O&G

The North Slope Borough said Sept. 3 that it plans to invest to increase infrastructure at its Service Area Ten operations.

The borough said tax relief provided under Senate Bill 21 passed by the Legislature and signed by the governor earlier in the year "creates a more attractive financial environment for investment by the oil and gas industry," but limitations on quality basic utility services at Prudhoe Bay "inhibits increased oil

and gas activity in the greater Prudhoe Bay industrial complex."

North Slope Borough Mayor C h a r l o t t e Brower said the borough "recognizes its responsibility as



NSB Mayor Charlotte Brower

the only provider of water, sewer and solid waste services in the greater Prudhoe Bay area," and said the borough is investing more than \$90 million "to increase and improve the services provided by our utilities."

Study commissioned in 2012

Last year the borough commissioned studies of utility needs at Prudhoe and began the design process.

As a result of the study the borough designed a state-of-the-art 60,000-square-foot facility to house a potable water treatment system, a sewage treatment system and an ondemand hot water system intended for drilling and maintenance.

The borough said the study also identified the need for a 17-acre expansion of the Oxbow landfill, the only solid waste disposal site in the

see NSB page 8

Shell's floating drilling platform, the Kulluk

SHELL

Self-reported

According to notices of violation issued by EPA in January, Shell had self-reported excess emission of nitrogen oxides from the drilling vessels and EPA had determined that there had been multiple permit violations by each vessel.

"For its 2012 operations offshore Alaska, Shell accepted stringent emission limits that were based on assumptions and modeling. Following a season of operations, Shell better understands how emissions control equipment actually functions in Arctic conditions," Shell spokeswoman Megan Baldino told Petroleum News by email in response to EPA's announcement of the penalties. "Despite reported overages in 2012,

see **SHELL** page 8

LAND & LEASING

DNR extending ROW comments deadlines

The Alaska Department of Natural Resources is extending the public comment periods on a pair of right-of-way leases it plans to issue to separate small North Slope gas pipelines.

The department will now take comments for both the Spectrum LNG draft right-of-way lease and the Polar Natural Gas Pipeline draft right-of-way lease through Oct. 3.

Spectrum LNG is looking to build a 1,100-foot pipeline and an associated lique-fied natural gas facility in Deadhorse. The pipeline would connect the LNG facility to the Prudhoe Bay Unit Central Gas Facility. The LNG from the system would supply a trucking operation distributing across the North Slope and along the highway system.

The original comment deadline was Sept. 3.

Polar LNG is looking to build a 3.54-mile pipeline connecting the Seawater Injection Plant feed gas line to a proposed LNG facility at the Fairbanks Natural Gas LLC pad in Prudhoe Bay. The proposed system would supply a trucking operation to the Interior.

The Polar LNG proposal also includes a draft Leasehold Location Order No. 37, which would allow DNR "to keep lands within the proposed pipeline right-of-way open to mining while retaining flexibility through the leasing process to ensure that proposed mining operations would not interfere with the location, construction and operation of the pipeline." DNR said the proposed order would not affect existing mining operations.

The original comment deadline was Sept. 16.

—ERIC LIDJI





continued from page 7 **SHELL**

the EPA did not allege any negative impact from Shell's emissions to local populations, nor did Shell exceed its overall allowable annual emissions for the operating season."

Multi-year saga

The EPA penalties come as the latest event in a multi-year saga relating to the air permits that Shell needs for its Arctic offshore drilling operations. At an early stage in its exploration planning the company had recognized the obtaining of the permits as a major issue and the company upgraded the technology on both the Noble Discoverer and the Kulluk to reduce the emissions of pollutants, while also committing to using low sulfur diesel fuel for its drilling fleet.

EPA, responsible for air permitting on the Arctic outer continental shelf but with no previous experience of air permitting for offshore drilling operations, has strug-

Earlier this year, separately from actions by EPA, the U.S. Coast Guard referred alleged environmental and safety violations involving both the Kulluk and the Noble Discoverer to the U.S. Department of Justice for investigation.

sels within Shell's drilling fleet should be included within the terms of the permit; and determining an appropriate boundary around a drilling operation, beyond which air quality standards should apply.

gled to resolve how
to deal with several
permit complications, including
determining when a
drilling vessel
should be considered a stationary
source requiring an
air permit; determining which ves-

In 2010 a successful appeal by a group of environmental organizations against Shell's permits resulted in a permit rework. And in September and October 2011 EPA issued revised permits which subsequently survived unsuccessful appeals.

Minor changes

When Shell deployed its drilling fleet to the Beaufort and Chukchi seas in the 2012 Arctic open water season, the Noble Discoverer and the Kulluk were operating under the terms of those revised permits. But before the two drilling vessels left Dutch Harbor in the Aleutian Islands to transit to their drilling sites Shell applied to EPA for what the company characterized as some relatively minor changes to the permits. Apparently testing of the vessels' engines immediately prior to the drilling season had shown that some emissions would not fully comply with the permit stipulations, although Shell also said that total emissions would remain below permitted limits.

EPA did allow drilling to proceed under the revised stipulations. However, it appears that during drilling operations both drilling vessels emitted more nitrogen oxides than were ultimately allowed. Shell self-reported these permit violations to EPA. The company commented that it had made every effort to meet the permit conditions for the drilling operations and that it was working with EPA to establish conditions that could realistically be achieved.

Alleged violations

Earlier this year, separately from actions by EPA, the U.S. Coast Guard referred alleged environmental and safety violations involving both the Kulluk and the Noble Discoverer to the U.S. Department of Justice for investigation.

Meantime, following engine problems in the Noble Discoverer and the Dec. 31 grounding of the Kulluk in the Gulf of Alaska, both vessels are in Asian shipyards undergoing repair and upgrade. Shell did not drill in the Chukchi or Beaufort seas in 2013. The company has not said when it anticipates restarting its Arctic Alaska drilling program.

Contact Alan Bailey at abailey@petroleumnews.com

continued from page 6

NSB

greater Prudhoe Bay area. The design for the solid waste utility will include facilities to assist in waste stream reduction and recycling, the borough said.

The borough recently awarded a competitively bid contract to Alaska Interstate Contractors for a passively cooled insulated pad which will serve as the foundation for the new water and sewer treatment plant. Construction is planned to begin early next year.

Brower said the borough is investing in infrastructure "to join the Governor and Legislature in fostering an environment which encourages responsible development" within the borough's boundaries.

"The North Slope Borough recognizes that creating an atmosphere which encourages responsible oil and gas development benefits all Alaskans, and we are both pleased and proud to do our part," she said.

—PETROLEUM NEWS





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ENVIRONMENT & SAFETY

Contracting issues delay NPR-A cleanup

Plan called for work near Barrow to begin as early as this year, now likely to move to 2014, BLM says, citing no risk from delay

BY BECKY BOHRER

Associated Press

ontracting issues have delayed the start of planned cleanup work around abandoned well sites in the Alaska Arctic, a spokeswoman for the U.S. Bureau of Land Management said Sept.

In May, BLM-Alaska released a draft plan identifying 50 abandoned wells in the National Petroleum Reserve-Alaska that it believes require cleanup by the agency. The plan prioritized the remediation of the first 16 of those sites in the reserve. One of those sites — Iko Bay Test Well No. 1, described as lying near a well-traveled winter road, with a building well known for providing shelter to travelers in poor weather — has a gas leak that the agency said could pose a threat to public health and safety.

The plan called for surface work at several sites southeast of Barrow to begin as early as this year, with cleanup of drums submerged in oil seeps and other debris. But Erin Curtis, a spokeswoman for BLM-Alaska, said by email that BLM is in the process of finalizing an agreement with the U.S. Army Corps of Engineers that would allow the Corps to let a contract to do the work on BLM's behalf. She said it's highly unlikely the contracting steps will be completed for work to begin this fall, so it will more likely be next year before the cleanup around those sites is done.

She said in an interview that there is no greater risk associated with the delay. The debris has been out there for a long time and will get frozen over during the winter, she said.

BLM manages the reserve, where more than 130 wells were drilled under the federal government's direction as part of an exploratory oil and gas program from the 1940s to the 1980s. State leaders have pushed for progress on the cleanup and insisted it is a federal responsibility.

The projected cost for that work is \$720,000, which is all the funding the agency has for legacy well work this year due to automatic federal budget cuts, she said in her email.

More than 130 wells drilled

BLM manages the reserve, where more than 130 wells were drilled under the federal government's direction as part of an exploratory oil and gas program from the 1940s to the 1980s. State leaders have pushed for progress on the cleanup and insisted it is a federal responsibility.

It's not clear what the total cost to address the priority sites might be, and Curtis said additional work will be dependent upon funding. Given budget uncertainty, BLM hasn't been able to secure a small drilling rig necessary to complete plugging at the Iko Bay site, and that work isn't likely to happen this winter, she said.

Curtis said she expected the final version of the draft plan to be released soon. The initial hope was to have the plan finalized within weeks after the draft was released. But Curtis said it took a little longer than expected to get comments from interested parties. She characterized

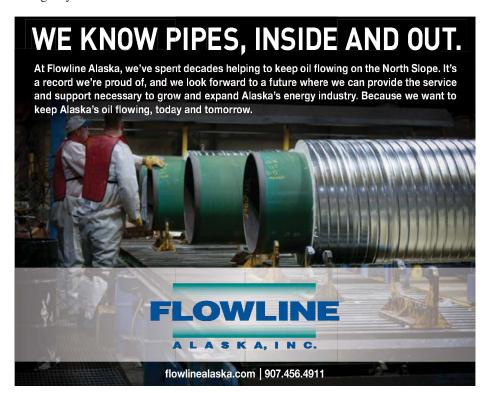
the comments BLM received as generally supportive of the top priorities the agency identified.

Cathy Foerster, a commissioner with the Alaska Oil and Gas Conservation Commission who has been critical of BLM's handling of the legacy well issue, said she was encouraged that BLM was working with her group and others and taking their comments into account.

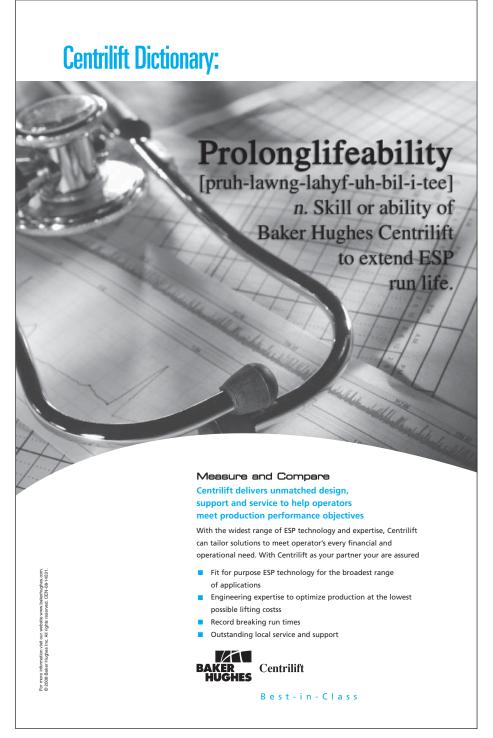
Foerster said she agrees with BLM on the highest-priority wells but worries that the agency doesn't seem concerned about other sites. She remains concerned about the availability of funding and is taking a wait-and-see approach on any work that's done.

"I won't feel good until the work is done and I've seen how it's done," she

Curtis said the draft plan is meant to cover short-term issues. She said the intent is to look at additional sites once the highest-priority sites are addressed.







NATURAL GAS

Buyers, sellers debate LNG pricing change

Tokyo conference puts producers, consumers together in dialogue over whether it will be buyers or sellers market, pricing issues

BY BILL WHITE

Researcher/writer for the Office of the Federal Coordinator

NG producers and consumers talked and pushed, but did not shove at a Tokyo summit Sept. 10 that the Japanese government called to continue the dialogue over high liquefied natural gas prices that are straining its economy.

Kickoff remarks from two heavyweights in the world's LNG economy framed the dialogue.

The first came from Toshimitsu Motegi, economy, trade and industry minister for Japan, the world's largest LNG consumer. A buyers' market looks to be coming, Motegi suggested. Buyers will be buoyed by more LNG supply and new sellers. LNG plants currently under construction will raise global output 30 percent by 2018, he said.

Add to that the potential volumes from

proposed export plants in the United States and such new frontiers as Western Canada, East Africa and Russia, and total global output could reach 600 million metric tons a year, roughly 80 billion cubic feet a day - more natural gas than the United States and Canada consumed in 2012. That much LNG — and that BILL WHITE many new suppliers — all seek-

ing customers will give buyers the nirvana they seek: A stable supply of competitively priced LNG, Motegi said.

But squaring up to answer Motegi strode Mohammed Bin Saleh Al-Sada, minister of energy and industry for Qatar, the world's largest LNG producer. Demand has always outpaced supply, not the other way around, during the 50-year history of LNG trade, he observed. This will remain true as China and India gulp more LNG, as new consumers emerge in Southeast Asia, the Middle East and elsewhere, he said.



"Gas prices will remain regionalized for the foreseeable future," he predicted. Exports of abundant North American shale gas production as LNG will be too small to change the game and meaningfully shake up oillinked Asian and European gas pricing structures. To believe otherwise is to be "over-optimistic," Al-Sada said.

Motegi of Japan and Al-Sada of Qatar delivered the opening keynote speeches of the 2nd LNG Producer-Consumer Conference, a one-day event sponsored by Japan's Ministry of Economy, Trade and Industry and the Asia Pacific Energy Research Center.

2012 conference 'wowzer'

The first conference in September 2012 was a wowzer. LNG buyers told sellers they thought they were being cheated on price; that supply-and-demand fundamentals could not explain or support the stratospheric prices they paid; and that the fundamental relationship between LNG makers and their customers needed to

The 2012 message was the LNG marketplace's shot heard around the world. The topic has reverberated in contract negotiations, at conferences and just about anywhere else LNG has been discussed during the 12 months since.

The second annual conference Sept. 10 was an effort to keep the conversation going ... and keep it public. From remarks of participants this year, a third conference next year is likely.

Voices from just about every region in the LNG constellation were represented on the dais at some point during the day, except for China and South America.

LNG buyers in particular remained feisty and adamant that change must come.

Producers reiterated the cold-hard-cash fact that multibillion-dollar LNG projects are brutally expensive to build. With most of this spending up-front, they need longterm customers paying high enough prices to provide confidence they will earn an adequate rate of return on that investment.

But beyond those broad positions, it became clear at the conference that the buying and selling of LNG in 2013 is evolving from the norm of just a few years ago, when almost all LNG sales occurred under 15- to 20-year contracts that required deliveries of the cargoes to a fixed destination and nowhere else in the world, and that dictated a price tied somehow to oil prices.

Today, the norm remains long-term contracts at oil-linked prices, if only because so much trade is occurring under contracts already in place under those terms.

However, more short- and mediumterm contracts are getting signed, more spot-market sales are occurring, more sales prices have severed the link to oil in whole or in part, and more cargoes are less restricted to fixed destinations, allowing LNG tankers to sail to where the gas is needed — such as Japan after its nuclearpower shutdown — or where the price is better — such as in Asia instead of North America or Europe.

It also became clear at the conference that LNG buyers and sellers have been hearing each other during the past year.

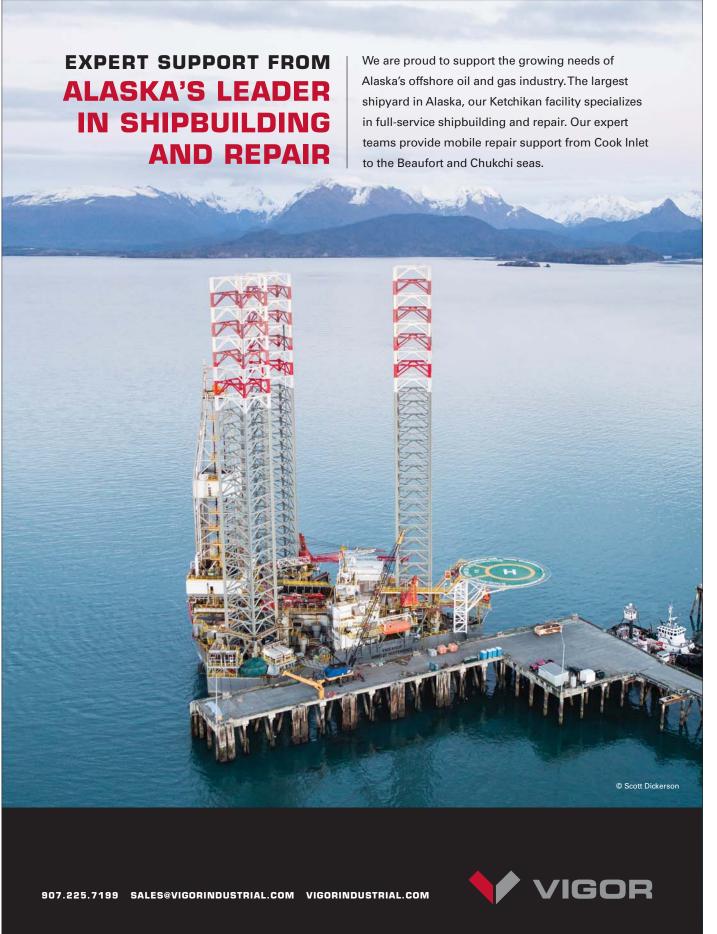
Some sellers, while maintaining their need for a price that provides an adequate return for the investment risk, seemed less locked in to an oil-linked price as the only approach. However, oil prices have the advantage, they noted, of being transparent in an actively traded global marketplace of multiple buyers and sellers, unlike the much smaller LNG market.

And some buyers are acknowledging that if oil-linked prices fade as the standard, they cannot let sellers bear all the risks of that change.

Change comes in steps

In the days just before the conference, several announcements gave evidence to the changes under way as LNG buyers and sellers try to write new rules for their

Japan and India set up a multilateral LNG buyers group to collectively seek lower prices. They will ask other buying countries to join. "LNG prices in Asia are substantially higher than those in other major consuming regions such as Europe



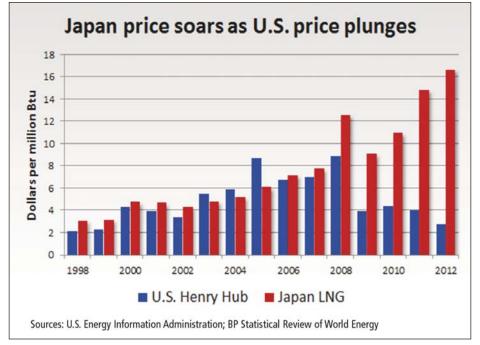
LNG

and North America," the two nations said in a joint statement.

Japan and India also agreed to jointly study solutions to high LNG prices. "The study is an important step towards working on rationalization of LNG prices in Asia-Pacific," the countries' top energy ministers said. Masakazu Toyoda, CEO of the Institute of Energy Economics Japan, which hopes for a role in the research, told the conference the study could identify pathways for joint procurement of LNG, joint upstream investment and joint efforts to create an Asian LNG pricing hub, any and all of which could improve the buyer-seller dialogue about a win-win future.

The Japanese government plans to reform its regulation of gas-buying utilities to cut their thirst for LNG. Takayuki Ueda, director general of Japan's Agency for Natural Resources and Energy, told the conference that a series of steps through 2020 will streamline the nation's fragmented power generation and transmission structure, debundle these services to make them more competitive and efficient, and end utilities' ability to pass through to consumers the prices they pay for LNG. Instead, the regulated price will be the lowest price of gas, and companies will need to get lean to make that work.

Freeport LNG Development signed up Japan's Toshiba Corp. and South Korea's SK E&S LNG to take production for 20 years from a third 4.4 million metric ton per year (almost 600 million cubic feet a day) LNG production train the company proposes to build at its Texas export terminal. Freeport already has long-term contracts with Chubu Electric and Osaka Gas of Japan and BP for 8.8 million tons per year (about 1.2 billion cubic feet a day) from



two other trains at the proposed plant. Like other expected U.S. Lower 48 exports, this LNG won't have oil-linked prices, and the cargo destinations will be up to the shippers, not fixed. Instead of oil linkage, prices will be based on the U.S. Henry Hub gas price plus liquefaction and shipping costs.

Japan also is moving to get more nuclear power generation back online. The nation's annual LNG imports have jumped 20 million tons (more than 2.5 bcf a day), or 25 percent, since 2010, said Motegi, the energy minister. Coal and oil imports grew as well after the March 2011 earthquake and tsunami knocked out nuclear power. More nuclear restarts promise to cut Japan's LNG imports by 10 percent in 2014, said Toyoda of IEEJ.

Besides these moves, a demographic factor could erode Japan's LNG demand, said Takayuki Sumita, resources and fuel department director general for Japan's Agency for Natural Resources and Energy. The population is aging and will shrink, he

said

Twenty years from now, Japan might be importing less LNG due to all of these changes, Toyoda said.

That's the future. The present for Japan involves sobering trade deficits as the country imports more high-priced fossil fuel to replace nuclear power. In 2011 — the earthquake/tsunami year — Japan endured its first trade deficit since the early 1980s' global oil-price shock. The deficit grew in 2012, and in the first half of 2013 it reached a record \$48.7 billion.

Economics say that if you buy a lot you should get a price discount, said Naomi Hirose, president of Tokyo Electric Power. But that didn't happen.

"We learned in economics that price differences will disappear with a lot of transactions," he said. That also didn't happen.

To get more control of its own fate in the LNG world, Hirose said, TEPCO will acquire more upstream equity in natural gas or LNG production, giving it the option

to ship gas to itself. TEPCO is getting tough to remove destination clauses from its purchase contracts, buying LNG from more parts of the world and revamping its infrastructure so its turbines can burn liquids-rich gas from Indonesia or dry methane from the United States, he said.

If rich gas is more expensive, TEPCO will have the flexibility to buy lean gas, and vice versa, he said, just as it did back in the days when oil and gas were substitutes. "We have to be ready to accept that."

Crazy high costs

An ironic twist in the Asia buyer-seller push-pull is that some sellers have been complaining about prices, too — that they are too low.

In recent months, Yemen has told South Korea that it wants to renegotiate the sales price upward for its LNG cargoes. Indonesia's Tangguh operation has been saying the same to China, and Australia's Pluto owners want higher prices from some buyers. Some of the LNG from the three projects is being sold under old contracts at low prices — between \$3.50 and \$8 per million Btu.

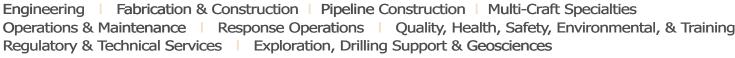
How could this be? Some insight comes courtesy of Singapore, a new LNG importer as of 2013 and a nation that hopes it can build enough spare storage capacity so that it can become a re-export, bunkering and trading hub, something Asia lacks.

At the conference, Lee Seng Wai, director of gas policy and infrastructure development for Singapore's Energy Market Authority, said his agency's research shows that timing — signing a contract during a buyers' market vs. a sellers' market — is a bigger key to price than the volumes purchased.

The pricing message from LNG producers was sharp: We're in a crazy-high-cost

see **LNG** page 12





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continued from page 11

LNG

business and we need to be compensated for the investment risks we undertake if you want us to build more LNG plants.

Annual LNG demand will exceed 600 million tons by 2040 (80 bcf a day) and 40 countries will be importing the fuel, triple the number of 2005, said Rob Franklin, president of ExxonMobil Gas & Power Marketing.

The costs of building LNG export plants have been soaring — escalating faster than even the cost of LNG prices, he said. Long-term commitments from buyers are a must. Another must: Tight government and investor alignment throughout the value chain to help projects come together more easily and cost-effectively, he said.

Liquefaction costs have doubled since 2006, noted Joseph C. Geagea, president of Chevron Gas and Midstream. The average project takes 18 years from discovery to first LNG output, he said. The vast scales of cost and time are part of what make LNG a business dominated by government oil companies and international oil firms like Chevron and ExxonMobil.

"Henry Hub-linked prices are no guarantee of low prices," Geagea said. Historically, Henry Hub gas prices have been much more volatile than oil prices, he said

The Henry Hub and the United Kingdom's National Balance Point gasprice indexes may be getting loving looks from Asian gas buyers today because they're so much lower than the oil-indexed price. But indexing LNG to Henry Hub and NBP could expose Asia to unjust price volatility, echoed Philippe Sauquet, president of gas and power for French oil giant Total

"Oil index doesn't (always) imply high prices," Sauquet said.

"Henry Hub is a spot price for marginal volumes" in the United States, said Martin Hoffman, Australia's deputy secretary of the Resources, Energy and Tourism Department. A Henry Hub-based pricing formula is not a reliable 15-year framework for prices, he said.

Sauquet of Total noted suppliers are competing for buyers, which has given rise to a variety of contract types: long-, medium- and short-term, blended price formulas, destination flexibility. There is room to negotiate key issues, he said.



The Sodegaura LNG receiving terminal on Tokyo Bay opened in 1973 and is owned by Tokyo Gas and Tokyo Electric Power. It's among the largest LNG import terminals in the world, with an annual capacity of almost 30 million tons of LNG (1.5 trillion cubic feet of gas).

Risk goes two ways

Some conciliatory language did get sprinkled into the remarks of LNG buyers as well.

"We will not say we will not take any (price) risk. That is not acceptable," said Tsuyoshi Okamoto, president of Tokyo Gas.

"Risk and reward must be shared," said Bhuwan Chandra Tripathi, chairman and managing director of The Gas Authority of India, GAIL, that nation's largest gas-distribution company. But GAIL has taken risks of its own by investing in LNG receiving terminals and regasification infrastructure, he said. And it faces risks of more volatility from new or hybrid pricing formulas. (GAIL will buy LNG at Henry Hub prices plus liquefaction costs from Cheniere Energy's export plant under construction in Sabine Pass, La.)

GAIL is willing to sign long-term takeor-pay contracts that require it to buy certain volumes from an LNG plant. "But let me choose the destination," Tripathi said.

But generally, buyers talked tough.

The initial pegging of LNG prices to oil was justified 30 years ago because oil and gas were very close substitutes, said Han Jinhyun, South Korea's vice minister for trade and energy. That logic has become irrelevant in today's market. And destination clauses prevent freer trade.

"It's time for change," he said. "Those who cannot change their minds cannot change anything."

The transition away "from oil-linked prices must become a necessary condition

for sellers to sell in Asia," said M. Veerappa Moily, India's minister of petroleum and natural gas.

The LNG price that many sellers are seeking in Asia is far above the extra cost of transporting gas there from other regions. Moily called it the "Asia premium." This premium places "an unreasonable burden" on buyers that ultimately will hurt sellers, too, when buyers get their energy elsewhere, Moily said.

Asia needs to create a reference price that reflects the forces of demand and supply, plus the transportation cost of moving LNG to market, he said.

Neutral voices

The conference wasn't all about butting chests.

An entire session was devoted to LNG's possible new production frontiers.

Dan Sullivan, Alaska's commissioner of natural resources, pitched his state's efforts to push ahead on two projects that could deliver LNG — one in massive volumes and the other in smaller volumes. Sullivan reiterated the Alaska advantages he recited at last year's conference: A short shipping route to Asia that isn't infested with pirates or other perils; proved and developed gas reserves at Prudhoe Bay; a 43-year track-record of reliable deliveries from the now-shuttered LNG plant at Nikiski; and isolation from the politics of Lower 48 LNG exports.

Other pitches were made for British Columbia, Mozambique and Vladivostok, Russia.

And some relatively neutral voices weighed in on the LNG buyer-seller dispute.

"There isn't an Asian premium," said Steve Hill, vice president of global LNG and oil marketing for BG Group. North America and Europe are releasing unneeded LNG to Asia and South America. This is holding down the LNG price outside of Asia and South America, accounting for the price gap that Asia buyers cite, Hill said.

U.K.-based BG Group is a newer breed of player in the global LNG business. It's a so-called portfolio player. It buys LNG from many sellers. It sells LNG to many buyers. Most of its contracts do not dictate which plant will supply the gas or which buyer will get it. BP is developing a similar portfolio play in LNG, as are other companies.

Hill said BG has looked at all the demand-supply forecasts and sees a consensus: The world will need 150 million tons a year more LNG (about 20 bcf a day) by 2025 than is under construction. Demand could be even greater than that if supply could keep up, he said.

The worst situation that could happen to the industry would be projects stalling around the world while developers wait to see how much LNG gets exported from the United States and Canada, Hill said.

R.A. Walker, chairman, president and CEO of Anadarko Petroleum, said his company hopes to decide next year to build an LNG export project to monetize its new discoveries offshore Mozambique. He said his company and others are finding so much gas there that Mozambique could become the world's No. 3 LNG exporter in the next decade — behind Australia and Qatar.

So, what does he think, will a move away from oil-linked pricing toward the Henry Hub or other gas index hurt Mozambique's chances?

"I'm agnostic. We don't have oil-linked contracts now," Walker said.

"We want a price that gives an attractive rate of return for the risks we took," he added. That "formula" will be a win-win for buyers and sellers. "We're not looking for a windfall."

Editor's note: This is a reprint from the Office of the Federal Coordinator, Alaska Natural Gas Transportation Projects, online at www.arcticgas.gov/buyers-and-sellers-debate-lng-pricing-change-tokyo-conference.



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ENVIRONMENT & SAFETY

Study finds Chukchi bears thriving

A federal study says polar bears in the Chukchi are thriving for now despite a loss of sea ice.

A U.S Fish and Wildlife Service study indicates bears in the sea between northwest Alaska and Russia are as healthy as 20 years ago.

Polar bears spend most of their lives on sea ice. They have been added to the threatened species list because of sea ice loss.

Biologist Eric Regehr tells Alaska Public Radio Network (http://bit.ly/14LKgAM) that Chukchi bears have maintained their size and body condition despite significant sea ice loss.

That's in contrast to polar bears in the Beaufort Sea off Alaska's north coast, where U.S. Geological Survey studies indicate food is less easy to find.

Male Chukchi bears averaged 100 more pounds than Beaufort bears.

-ASSOCIATED PRESS

GOVERNMENT

Oil tax repeal on '14 ballot

Alaska residents will decide whether oil companies will keep a tax cut that the Alaska Legislature approved this year.

The Division of Elections has certified a repeal effort that will appear on the primary ballot next August.

Division of Elections Director Gail Fenumiai says in an email there were more than 45,000 qualified signatures. Backers had to only get a little over 30,000 to get it on the ballot.

The Legislature passed a measure this year that cuts taxes for the oil industry as a way to increase production and investment. Supporters of the tax cut, including Gov. Sean Parnell, say this will stem a decline in production.

Critics called it a giveaway to the industry and warned it will be devastating for Alaska's budget.

—ASSOCIATED PRESS

GOVERNMENT



An artist's rendering of what the new Alaska Geologic Materials Center building in Anchorage will look like

Geologic Materials Center to relocate

The Alaska Geologic Materials Center, the state's repository of rock samples, is to move from its current location in Eagle River to new and much larger premises in Anchorage. According to an article by State Geologist Bob Swenson in an Alaska Geological Society newsletter the state has purchased the DeBarr Sam's Club building in Anchorage and will retrofit the building to house the center. Wal-Mart Stores Inc. has contributed \$2.5 million to the purchase, in support of the center's educational role, Swenson said.

The Material Center staff hopes to start moving the rock collection into the new facility in the spring of 2014. State funding for the acquisition of the facility was approved as part of the state budget, Swenson said.

The Alaska Department of Natural Resources operates the center in cooperation with the U.S. Bureau of Land Management, the U.S. Geological Survey and the U.S. Bureau of Ocean Energy Management. The center contains a major archive and library of Alaska rock samples and holds an almost complete collection of core and drill-cutting samples from oil and gas wells drilled in Alaska and on the Alaska outer continental shelf. The collection at the center also includes numerous microscope slides from well samples and many thousands of rock samples from the mining industry.

But over the years the center's collection has outgrown its current location in Eagle River, with more than 60 percent of the collection now having to be housed in a series of shipping containers stacked outside the facility's building. Plans for the layout of the new facility include sample viewing rooms and warehouse space for companies to store private and confidential collections, Swenson said. And future possibilities in the new facility include the hosting of workshops, college courses and university research, he said.

—ALAN BAILEY







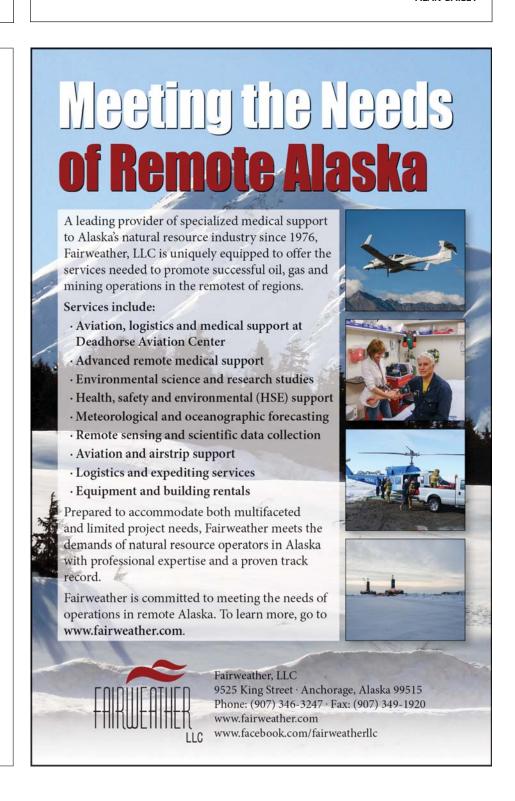
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● EXPLORATION & PRODUCTION

Buccaneer sees options for gas

Independent sounds note of skepticism on Hilcorp contracts, but sees possibilities for new natural gas markets across the state

BY ERIC LIDJI

For Petroleum News

After sounding a warning note to regulators about the potential consequences of a pending contract between Enstar Natural Gas Co. and Hilcorp Alaska LLC, Buccaneer Energy Ltd. outlined a much less dire view of the situation to its investors recently.

"It's a different market than it was six months or a year ago," Buccaneer CEO Curtis Burton said about the Cook Inlet basin during a conference call for shareholders on Sept. 10, "but it is not by any means an overwhelmingly concerning picture at this point."

The Regulatory Commission of Alaska is currently considering APL-12, a gas supply contract under which Hilcorp would supply Enstar's unmet needs between April 1, 2014, and March 31, 2018 — approximately 63.5 billion cubic feet of gas over four years.

In separate comments, Buccaneer Alaska LLC, Cook Inlet Energy LLC and Furie Operating Alaska LLC all said the contract would force small producers — or at the very least their supplies — out of the market. They asked regulators to either force Enstar to diversify its portfolio as new supplies come online, or shorten the term of the contract.

"Hilcorp has effectively locked up the utility market," Buccaneer Vice President of Land and Business Development Mark Landt wrote in his comments, "so the RCA and Enstar should not be surprised when the remaining independent producers either choose alternative markets for

their gas, seek to provide direct sales to Enstar's customers or not fund drilling programs targeting natural gas." Such uncertainty about the market could even keep supplies from coming online by scaring away investors, Landt added.

Less long-term concern

Asked about the contract during the conference call, Burton played down the concern — at least in the long term. "We've always allowed for the fact that at some point you might have more gas coming into the market," he said. By developing both oil and natural gas, and seeking additional markets in Alaska, Burton said the company would be able to compete. The Buccaneer portfolio is weighted toward oil, he said. As far as gas, the company sees some 300 million cubic feet per day in potential demand across the state.

Among the markets Burton listed were the Agrium fertilizer plant, the Kenai

LNG facility, the Interior heating market, mining operations and the Alaska Marine Highway System. All those markets would require leverage to access. The Agrium and Kenai LNG plants both suspended operations for lack of supply. The state is looking to serve the Interior through a North Slope trucking operation. Supplying mines, especially those in remote regions, would take major transportation infrastructure. And the Alaska Marine Highway System would require conversion or replacement of its fleet to run on gas.

A Buccaneer joint venture called LNG Alaska presented a similar proposal to the Senate Resources Committee in October 2011. "It's going to take several groups coming together to say: We want to do this plan," Keith Meyer, CEO of LNG Central, the partner in the joint venture, said back then. "If we come together. It's actually very competitive."

Tight market before March 2018

While a glut of Cook Inlet gas would stir conversations about new markets in the state, any smaller supplies coming online before March 2018 could still face a tight market.

Even so, Burton tried to alleviate concerns by casting doubt on Hilcorp.

"If you know anything about gas fields, and particularly anything about Alaskan gas fields, a couple of months production history is not a long-term projector of what's going to happen going forward," he said, referring to the short time privately held Hilcorp has been operating the assets it acquired from Marathon Oil Co. "So I would be very reluctant, as a public company, to say I know what's going to happen with those wells."

While Hilcorp has claimed success from developing its already-producing

see BUCCANEER page 16





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BUCCANEER

assets, the company has also brought additional supplies online, and announced discoveries

Additionally, Burton expects Hilcorp to face some resistance. "I think the State is very focused on opening up the maximum opportunity that they can across the state," he said.

Some delays ahead

After years of juggling many prospects without enough financing to pursue them all, Buccaneer now believes it can pay for its near-term operations, the company said.

Pointing to state tax credits, several financing deals and a recent farm-in covering most of its exploration commitments for the coming years, "from a capital adequacy point of view, we're pretty comfortable at the moment, but at the end of the day we would like to develop our reserves as quickly as possible," Executive Chairman Dean Gallegos said.

That said, Buccaneer is facing scheduling problems.

While pleased with its results at the offshore Cosmopolitan prospect, drilling took longer than expected. As such, the Endeavour jack-up rig currently at the offshore Southern Cross unit is unlikely to finish work and proceed to the offshore North West Cook Inlet unit before winter puts a halt to exploration activities in the northern end of the basin.

The commitments at North West Cook Inlet have already been postponed from previous deadlines, but Burton said the company is currently in discussions with the Alaska Department of Natural Resources on the issue and expects to announce a resolution soon.

Resignations mysterious

Since Buccaneer last held a conference call for investors, in late June, its shareholders voted three new directors onto the board only to see those directors resign six weeks

"Their resignations were a surprise to us," Gallegos said. "There was no fore-warning or discussion regarding that. I came to the office one morning and had three resignations on my desk. So it took us by surprise and no reason was given for those resignations."

A pair of shareholders — Pacific Hill International Ltd. and Harbour Sun Enterprises Ltd. — nominated the three directors as a way to refocus Buccaneer, claiming that the company had "lost its way" by pursuing too many projects without sufficient funding.

Buccaneer opposed the changed.

The shareholders re-elected two of the four existing board members and added the three new directors. Buccaneer subsequently appointed another director, which split the board.

Despite the potential for animosity, Gallegos said Buccaneer played nice. "What I can say is that those three directors were incorporated into the company as much as possible during their time," he said. "They had full access to the company's data room — there are around 800 documents in that data room — and they were circulated on all the various activities which we update on a daily basis in respect to drilling operations."

On an unrelated note, Buccaneer said its court case against Archer Drilling LLC regarding work on the Endeavour rig is slated for a bench trial in Texas next year.

Buccaneer said it is open to a settlement to avoid a trial. ●

Contact Eric Lidji at ericlidji@mac.com FINANCE & ECONOMY

Pipeline owners file on quality bank

Tesoro and Anadarko request dismissal; pipeline owners don't have position, but ask for consistency between state, federal rules

BY KRISTEN NELSON

Petroleum News

Responses to the Aug. 21 complaint filed by Flint Hills Resources Alaska LLC asking for changes in quality bank determinations for different values of crude oil shipped on the trans-Alaska oil pipeline range from neutral to negative.

The trans-Alaska oil pipeline owners told regulators they have no position on the complaint but are concerned that state and federal quality bank rules remain the same.

Two shippers on the line — Anadarko Petroleum Corp. and Tesoro Petroleum — are jointly asking for dismissal of the complaint.

On the procedural side, the Regulatory Commission of Alaska established a panel for the Flint Hills complaint, but has "not yet determined whether good cause exists to investigate the complaint." The Sept. 5 order from RCA Chairman T.W. Patch designates Patch, Norm Rokeberg and Janis Wilson as the commission panel.

No position from owners

The pipeline owners — BP, ConocoPhillips and ExxonMobil — said in a Sept. 10 filing that they are not taking a position on the Flint Hills' complaint, but

On the procedural side, the Regulatory Commission of Alaska established a panel for the Flint Hills complaint, but has "not yet determined whether good cause exists to investigate the complaint."

want to ensure that quality bank methodology "adopted for interstate barrels transported in TAPS is identical to the methodology that applies to intrastate barrels."

The companies said there have been problems in the past when the two commissions — RCA for intrastate shipping and the Federal Energy Regulatory Commission for interstate shipping — came to different decisions on quality bank issues. They requested that any proceedings on the Flint Hills' complaint be held concurrently by RCA and FERC, "to ensure that both Commissions develop identical records and that the TAPS Quality Bank Methodology continue to apply identically to interstate and intrastate barrels of crude oil transported through TAPS."

The owners also request that any changes to quality bank methodology "be capable of being administered," and not require the administrator of the quality bank "to make complex or controversial calcula-

see **PIPELINE** page 17

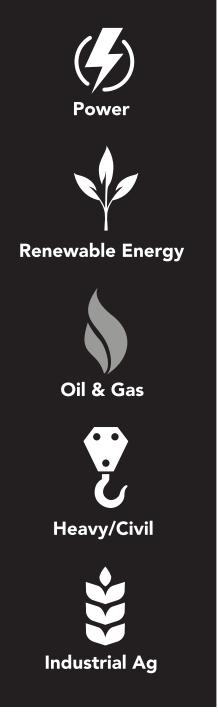


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EXPLORATION & PRODUCTION

Deal is in place for the Webb prospect

Craig signs agreement with Webb Exploration & Production to seek capital to drill for oil and gas on the west side of the Cook Inlet

BY ALAN BAILEY Petroleum News

laska oil and gas investor Paul ACraig has formed an agreement with Webb Exploration and Production LLC to seek capital to drill an exploration well in the Webb prospect on the west side of the Cook Inlet, Craig told Petroleum News on Sept. 6. The prospect, formerly called the Hanna prospect, appears likely to PAUL CRAIG



hold natural gas in rocks of Tertiary age, with the additional possibility of oil in the Jurassic, below the Tertiary, Craig said.

Drilling required

Craig, the owner of the leases over the prospect, has given Webb Exploration and Production an option through March 1, 2015, to acquire a 100 percent working interest in the leases if the company raises sufficient capital to drill down into the Jurassic. And, if the drilling project comes to fruition, Craig will become a member, a part owner, of Webb Exploration and Production. Whatever happens, Craig will retain a 5 percent overrid-

ing royalty in the leases. And, if no drilling results from the agreement, Craig will have three remaining years within the lease terms in which to find some alternative means of funding the drilling, perhaps using some of his own capital in addition to capital from other investors, Craig said.

The concept now is for Webb Exploration and Production to prepare a prospect summary and seek capital, he said.

3-D seismic

Vladimir Kadic, principal of Webb Exploration and

see WEBB page 18

continued from page 16

PIPELINE

tions or independent determinations, which would inevitably lead to further controversy and challenges by shippers."

They also note that Flint Hills did not claim the owners have failed to administer the quality bank in accordance with their tariffs or claimed the owners "should be liable for refunds or reparations. Therefore, the Commission should make clear in an order that the Indicated TAPS Carriers cannot be liable for refunds or reparations on the basis of Flint Hills' Complaint."

Should there be changes?

BP Exploration (Alaska) Inc. and Petro Star Inc. both petitioned to intervene.

Tesoro Alaska Co. and Anadarko Petroleum Corp. jointly petitioned to intervened, but also moved to dismiss the Flint Hills' complaint.

Writing for Tesoro/Anadarko, attorney Robin Brena said the history of quality bank proceedings has been "both protracted and highly contentious" and said RCA has "properly held that a party seeking to challenge an approved Quality Bank methodology is required to demonstrate material circumstantial changes. Changes meeting this standard have, in the past, involved significant, unexpected alterations in the pricing construct under the approved methodology, such as discontinuation of posted proxy prices and/or changes in quality specifications of a particular proxy product."

He characterized the changes described by Flint Hills as "circumstantial changes" which "merely demonstrate that crude markets constantly change." Shifts in supply and demand "can directly impact refinery operations, including coker utilization," he said, but impacts can be positive or negative.

He said Tesoro and Anadarko "have not been able to confirm whether, as Flint Hills claims, significant excess coking capacity currently exists in the United States." Brena said even if the Flint Hills' assertions are true, that "would not necessarily demonstrate circumstantial changes sufficient to justify reopening the current Quality Bank methodology."

If not dismissed

If the Flint Hills' complaint is not dismissed, Brena said Tesoro/Anadarko request that any hearings on the complaint be phased, "with an initial hearing focused exclusively on the changed circumstances inquiry" before the commission considers "broader questions of whether the adjustments urged by Flint Hills are appropriate and whether other distillation cuts must be re-examined."

In its complaint Flint Hills focused on the relative value of the Resid cut, telling the commission the quality bank formula "fails to calculate accurately the relative difference in the market values of the varying qualities of crude oil transported over TAPS as well as the relative value of the Resid cut."

In their answer to the complaint the pipeline owners also provided an update on Unocal Pipeline Co., which "continues to own an interest in TAPS" although it provided final notice of withdrawal effective Aug. 1, 2012, "and is in the process, subject to applicable government approvals, of completing the transfer of

its TAPS interests to the Indicated TAPS Carriers." Pipeline ownership is shared by BP Pipelines (Alaska) Inc., ConocoPhillips Transportation Alaska Inc. and ExxonMobil Pipeline Co. ●

> Contact Kristen Nelson at knelson@petroleumnews.com



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Valdez terminal piping gets close look

Inspectors look for corrosion in overwater lines that deliver huge volumes of Alaska North Slope crude oil to berthed tankers

BY WESLEY LOY

For Petroleum News

The operator of the tanker terminal at Valdez is conducting corrosion inspections on oil pipes that pose a potentially high spill risk.

The piping is mounted on causeways, which lead to the berths where tankers load. Because the pipes are suspended above water, and carry huge volumes of crude oil to the ships, their integrity is vital.

Alyeska Pipeline Service Co. operates the 800-mile trans-Alaska pipeline and the Valdez tanker terminal.

Three years ago, Alyeska launched a special project known as Z683 to "look at

vulnerable areas for external corrosion" at the terminal, company spokeswoman Michelle Egan told Petroleum News.

Part of the project involves inspecting the overwater piping on berths 4 and 5, the two active berths for loading tankers.

Focus on welds

Crews are focusing on inspecting girth welds on berth piping, Egan said.

The crews "have found a few places where the pipe needed coating repairs, and are working to remediate those areas," she said

Crews must remove thermal insulation

see VALDEZ page 19



The causeway to tanker berth 4 at the Valdez Marine Terminal. Workers are inspecting oil pipes on the causeway for potential corrosion. Note the scaffolding and plastic covering erected to support the work.

continued from page 17

WEBB

Production, told Petroleum News on Sept. 10 that prior to drilling in the Webb

prospect his company anticipates conducting a 3-D seismic survey to confirm what appears to be a promising structure in the Jurassic at a depth of 14,000 to 15,000 feet. The company consists of himself, his two sons Robert and Darren, and Patrick Omara, Kadic said.

Craig said that the concept is to leverage state exploration incentives to

make a gas find at the prospect viable, with the existence of both an oil play and

a gas play at the prospect reducing the drilling risk.

Oil kitchen

Craig has been

pursuing the

possibility of drilling

in the prospect

periodically since

1993 when he

purchased his first

lease at the location.

The oil prospect is in what is referred to as the "kitchen," the portion of the geo-

logic section of the Jurassic in which Cook Inlet oil is thought to have generated, Craig said. Drilling would target Naknek and Tuxedni sands towards the top of the Jurassic, he said. And, although there are questions over the permeability, the ability to flow oil, of potential Cook Inlet Jurassic oil reservoirs, the Naknek

sands are known to be very clean at the surface, he said.

Geologists have long speculated about

the possibility of finding commercial quantities of oil in deep rocks of pre-Tertiary age in the Cook Inlet basin, but no one has yet attempted the expensive and relatively risky exercise of drilling a wildcat well into these pre-Tertiary strata.

Started in 1993

Craig has been pursuing the possibility of drilling in the prospect periodically since 1993 when he purchased his first lease at the location. He purchased a second adjacent lease from investor Dan Donkel a couple of years later, Craig said.

Craig said that the promising location of the prospect, on a structure between the Pretty Creek and Lewis River gas fields, in close proximity to an existing gas pipeline, had originally motivated him to purchase the leases. He subsequently discovered that in 1984 Unocal had evaluated a deep oil prospect in the Jurassic at the location and had proposed this prospect as a drilling target. But, presumably because of the oil-price crash in the mid-1980s, the drilling never happened. However, Unocal included this deep oil prospect in its inventory when selling Cook Inlet properties in the 1990s, Craig said.

Multiple deals

In 1997 Craig sold his leases to Forcenergy Inc. But Forcenergy did not drill. In 1999 Forcenergy filed for bankruptcy, with the leases ending up owned by Unocal and Forrest Oil before subsequently expiring, Craig said.

Craig purchased the leases again in a 2001 lease sale and sold the leases to Aurora Gas in 2005 after a couple of deals with other companies fell apart. Aurora Gas subsequently ran into a series of issues, including difficulties in access to capital, and did not drill the prospect before the leases expired again.

Undaunted, Craig purchased the leases again in a 2010 lease sale. He subsequently sold the leases to Escopeta Oil & Gas Co. under a two-year, performance-based agreement. But, with Escopeta not having drilled the prospect, the working interests in the leases returned to Craig, opening the way for the new agreement with Webb Exploration and Production.

But, despite the roller-coaster ride on trying to move forward with drilling in the prospect, Craig remains upbeat.

"I'm still having fun," Craig said. "If there's one thing that I am, it's tenacious."

Contact Alan Bailey at abailey@petroleumnews.com



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FINANCE & ECONOMY

State, LNG financier in Japan, sign MOU

Alaska Natural Resources Commissioner Dan Sullivan signed a memorandum of agreement with Japan Bank for International Cooperation Sept. 11.

Sullivan signed the MOU on a trip to Japan that included a presentation at a global LNG conference and meetings with business and government officials.

"The goal of this trip was to build upon the extensive engagement that the Parnell Administration has undertaken in the past few years to develop strong relationships with the world's leading LNG buyers, their governments and consumers," Sullivan said in a statement.

Sullivan and Japan Bank for International Cooperation Managing Director Koichi Yajima signed the MOU. JBIC is a financial institution that plays a critical role in financing and securing Japan's LNG imports, DNR said.

Sullivan said the agreement "focuses on opportunities for Japanese companies and JBIC to become involved in resource development projects in Alaska — in particular, a large-volume liquefied natural gas pipeline and export facility."

The MOU is for two years and may be renewed every two years. It includes a confidentiality agreement covering information identified by either party as confidential.

Conference, meetings

Sullivan was an invited speaker at the second LNG Producer-Consumer Conference in Tokyo.

While he Japan the commissioner met with senior officials from Mitsui and Co., Osaka Gas Co., Tokyo Gas Co., Anadarko Petroleum Corp., Resources Energy Inc., BP-Asia Pacific, ExxonMobil, Apache Corp., Korea Gas Corp., DOWA Metals and Mining Co. and Sumitomo Metal and Mining Co.

He was also scheduled to meet with senior Japanese government officials.

—PETROLEUM NEWS

ARCTIC

At that time, interests issued in the onshore will also be under the administration and control of the NWT govern-

Apart from giving the NWT the chance to benefit directly from resource development, it is hoped the devolution will of projects.

Apart from giving the NWT the chance to benefit directly from resource development, it is hoped the devolution will streamline approvals streamline approvals of projects.

Waning interest

Interest in the Beaufort Sea-Mackenzie Delta has waned in recent years, with only a privately held United Kingdom company participating in a call for bids in the last five years.

Franklin Petroleum made a work commitment in the 2011-12 round of C\$7.5 million for 100 percent control of 2.24 million acres.

Prior to that, BP Exploration submitted a record C\$1.18 billion in work commitments in 2008 for a 553,000-acre Beaufort parcel and is working jointly with a partnership of Imperial Oil and ExxonMobil on exploration plans.

The joint venture is expected to file a project description and environmental impact statement with regulators later this year.

> Imperial has said that a decision to proceed with an exploration drilling program in the Beaufort would require a "significant financial commitment" by the partners.

At best, industry observers believe that drilling is at least three years away.

The bleak outlook for the region was reinforced earlier this year when five exploration licenses in the Mackenzie Delta were surrendered by MGM Energy, a Calgary-based junior explorer that has been the only company to engage in drilling over a prolonged period.

—GARY PARK

Contact Gary Park through publisher@petroleumnews.com continued from page 1

WELLS

staking forms is a routine action to provide flexibility as we evaluate and try to

The notices, which BLM posted

Sept. 6, show where

ConocoPhillips is interested in

drilling and how many wells it

might drill, but ConocoPhillips

must approve drilling plans

internally and with its partner

Anadarko Petroleum Corp.

before moving forward.

obtain regulatory approvals for possible activity in those areas, but it is not a given that anything will move forward."

Among initial discoveries

The Rendezvous prospect was among the initial discoveries announced after

the federal government reopened the 23 million acre NPR-A to oil and gas exploration in 1999.

Then-operator Phillips Alaska Inc. drilled the Rendezvous A well on lease AA-81803 in April 2000 and drilled the Rendezvous No. 2 well on lease AA-81781 (which is directly adjacent to AA-81784, to the east) in April 2001. Both wells encountered oil and gas.

An un-stimulated test of the Rendezvous A in 2001 flowed at a rate of 360 barrels per day of liquid hydrocarbons and 6.6 million cubic feet per day of gas. A test of Rendezvous No. 2

> early "ranged from about 500 barrels of oil per day to as high as 1,300 barrels of oil per day of high API gravity oil" with gas production "averaged about 1.5 million cubic feet per day for each well," according to the company.

—A copyrighted oil and gas lease map from Mapmakers Alaska was a research tool used in preparing this

—ERIC LIDJI

Contact Eric Lidji at ericlidji@mac.com

continued from page 18

VALDEZ

Three years ago, Alyeska launched a special project known as Z683 to "look at vulnerable areas for external corrosion" at the terminal, company spokeswoman Michelle Egan told Petroleum News.

to get a look at the welds. As of Sept. 10, crews had exposed, inspected, repaired if necessary, and reinsulated 34 girth welds, Egan said.

The inspections will continue this fall and in 2014 as part of Alyeska's ongoing integrity management process, she said.

As in most any aging industrial facility, corrosion is a constant worry at the Valdez terminal, a sprawling complex of enormous oil storage tanks, pipes and piers. North Slope crude has been flowing into the terminal since 1977.

Dr. Rust

Potential corrosion issues with overwater piping came to light in late 2012 after a consultant, Dr. Rust Inc., of Cape Canaveral, Fla., conducted a corrosion survey of the terminal for the Prince William Sound Regional Citizens' Advisory Council.

The council is a congressionally mandated organization that monitors the terminal and associated tanker traffic.

The consultant generally recommended improved inspections of the terminal's more inaccessible piping.

Large-diameter pipes extending over water were a particular focus for the consultant. His report included Alyeska-supplied photos of severe corrosion on piping on berth 4. The corrosion was found after insulation was removed.

The council said its staff on Aug. 2 accompanied Alyeska personnel on a visit to the berth 4 causeway to observe the inspection activity.

"Alyeska indicated and staff observed that the girth welds already inspected, whether coated or not, had at worst only superficial corrosion that was easily cleaned, recoated, and reinsulated," the council said in a recent status report. "No corrosion of the extent that was found during the summer of 2012 on the Berth 4 crude oil riser pipes has been found during this year's inspection activities."

> Contact Wesley Loy at wlov@petroleumnews.com

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EXPLORATION & PRODUCTION

DNR grants road easement for gas project

NordAq Energy pursues Shadura development inside Alaska's Kenai National Wildlife Refuge; project previously received federal OK

BY WESLEY LOY

For Petroleum News

NordAq Energy Inc. continues to advance its Shadura natural gas project on Alaska's Kenai Peninsula.

The Alaska Department of Natural Resources has granted the company permission to build an all-season gravel access road across state land.

The road will run nearly 2 miles from the Captain Cook State Recreation Area south to the Kenai National Wildlife Refuge.

From there, NordAq, under authorization from the U.S. Fish and Wildlife Service, plans to extend the road about 2.5 miles farther to a well pad within the refuge.

Federal approval

NordAq is a small, Anchorage-based independent. It is among a number of companies looking to prove up new supplies of natural gas to replace declining reserves in the Cook Inlet region.

Its Shadura project is northeast of the Nikiski community, and west of the Swanson River oil field.

The federal government owns the surface estate at the Shadura site, while Cook Inlet Region Inc. owns the subsurface estate. NordAq has a lease with CIRI to develop the gas resource.

In early 2011, NordAq laid a temporary ice road to Shadura and drilled a wildcat exploratory well.

The company hasn't made clear the

On June 28, the Fish and Wildlife Service issued a "record of decision" clearing the way for the Shadura development.

size of its apparent discovery.

On June 28, the Fish and Wildlife Service issued a "record of decision" clearing the way for the Shadura development

Tentative development plan

In seeking the federal approval, NordAq offered a two-stage development plan.

The first stage involves construction of a "minimal" drilling pad about a mile east of the wildcat well. One new gas well would be drilled and tested.

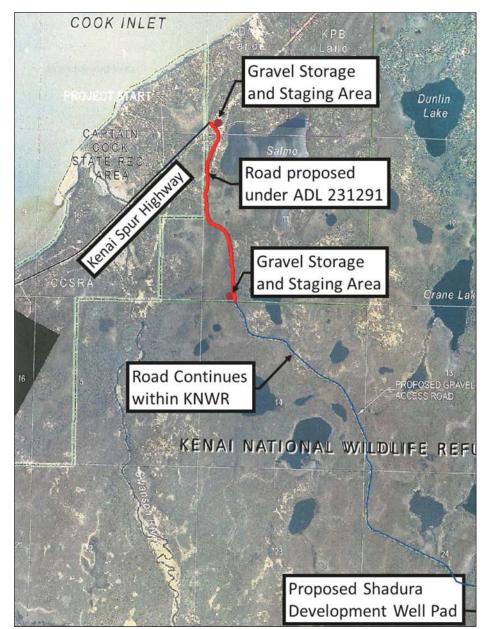
If the test results were unfavorable, all equipment and gravel would be removed and the affected area restored.

If the results were favorable, a second stage would be built. This would involve expanding the pad and drilling five more gas wells. Production facilities also would be installed on the pad.

NordAq plans to lay natural gas gathering lines and a communications cable along the access road.

The gas would tie into a ConocoPhillips Alaska gas line to the northwest. ●

Contact Wesley Loy at wloy@petroleumnews.com



● ENVIRONMENT & SAFETY

Seabirds plague Valdez tanker terminal

Alyeska Pipeline tries to discourage black-legged kittiwakes from nesting on loading berths; guano poses messy workplace hazard

BY WESLEY LOY

For Petroleum News

Alyeska Pipeline Service Co. has a serious bird problem on its hands.

It seems a multitude of black-legged kittiwakes has taken a shine to the Valdez oil terminal as a place to nest.

Specifically, the kittiwakes like the tanker loading berths that extend out into the waters of Port Valdez.

The birds present an operational nuisance and even a safety concern for Alyeska, which operates the 800-mile trans-Alaska pipeline and the Valdez terminal where tankers for BP, ConocoPhillips and ExxonMobil take on Alaska North Slope crude.

In particular, seabird guano can "create quite a mess," and presents a slip-and-fall hazard for workers, an Alyeska spokeswoman said.

Population shift

The black-legged kittiwake is a small gull that normally nests on narrow cliff ledges on offshore islands or inaccessible areas of coastal mainlands. Kittiwake colonies are abundant in Alaska.

Alyeska says the kittiwakes seem to have settled at the tanker terminal as part

of a regional shift of the species to the northern part of Prince William Sound.

"Prior to the mid-2000s the kittiwakes seemed to prefer the nearby Shoup Bay rookery, but the infrastructure of the berths became a favored location for their communal nesting habits," Alyeska spokeswoman Michelle Egan said in an email to Petroleum News.

"Trying to maintain a clean and safe working environment while working around thousands of birds can become challenging," Egan said. "Alyeska personnel are currently working under state and federal permits to limit the availability of nesting locations to cause the birds to move on to more suitable natural habitat. This is an ongoing multi-year effort that has required innovative solutions."

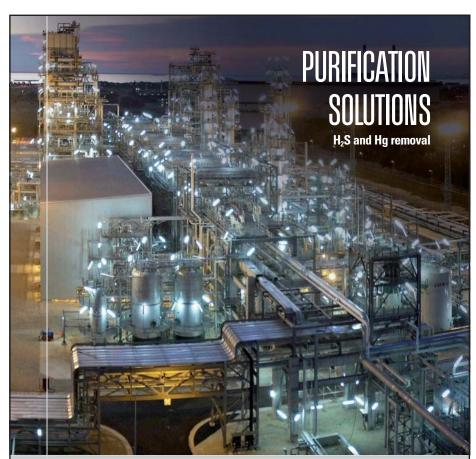
What to do?

One tactic to deter kittiwake nesting is running wires above the berth railings, Egan said.

Another tactic: "We drape netting below the infrastructure so that the birds can't get into areas beneath the berth where they could roost."

The kittiwake problem has caught the attention of the Prince William Sound

see **SEABIRDS** page 21



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EXPLORATION & PRODUCTION

Doyon enthusiastic about interior basins

Schutt says the Native corporation remains committed to exploring for oil and gas in Alaska's Nenana and Yukon Flats basins

BY ALAN BAILEY

Petroleum News

The board of directors for Doyon Ltd., the Native regional corporation for the Alaska Interior, continues to be committed to oil and gas exploration in the Nenana and Yukon Flats basins, and the corporation anticipates investing about \$45 million this year in its ventures in the basins, Aaron Schutt, Doyon president and CEO, told the Commonwealth North Energy Action Coalition on Sept. 6.

"We're very excited about oil and gas in our region," Schutt said.

The corporation is currently in the process of drilling a second well, the Nunivak No. 2 well, in the Nenana basin, about 50 miles southwest of Fairbanks. The drilling operation should last for about another 10 days, Schutt said, adding that he was unable at this point to comment on any results from the drilling.

During the past winter Doyon conducted a 3-D seismic survey in the Stevens Village area of the Yukon Flats basin, to the north of Fairbanks. The data from that survey are still being processed, Schutt said.

Long history

Schutt said that the history of exploration of the two basins goes back to the period before the passage in 1971 of the Alaska Native Claims Settlement Act, or ANSCA, the federal statute which brought Native corporations such as Doyon into existence. Much work was done before the enactment of ANSCA to assess the oil, gas and mineral potential of lands that might be transferred to the Native corporations. And, with people recognizing the possibility of finding oil and gas in the Nenana and Yukon Flats basins, Doyon ended up acquiring subsurface land in both basins, Schutt said.

In the years following ANSCA oil and gas companies showed interest in exploring in the basins, with Doyon licensing exploration rights in its lands. But by the late 1990s and early 2000s, with that interest apparently evaporating, Doyon decided that the time had come to take a more pro-active role in the exploration of its region of the Interior.

"We had not seen activity on our lands for oil and gas in about 15 to 20 years," MINTO FLATS 83

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Figure Fairbanks

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DOYON

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Doyon

Doyon Ltd. has been drilling the Nunivak No. 2 exploration well west of the town of Nenana in the Alaska Interior. Doyon drilled the Nunivak No. 1 well in 2009.

Schutt said. "At that point we started to think about doing something on our own, being more aggressive."

In the Nenana basin the corporation entered into a partnership with some other companies to pursue an exploration program under the terms of a state exploration license. And in the Yukon Flats basin the corporation attempted to increase the exploration appeal of the area by engineering a land swap, to

acquire some especially prospective land owned by the federal government as part of the Yukon Flats National Wildlife Refuge.

The Nenana basin

The Nenana basin, an 8,500-square-mile depression in the Earth's crust filled with river- and lake-borne sediments, primarily of Tertiary age, has long been thought to be prospective for natural gas, generated from coal seams within the basin. Early exploration between the 1960s and 1980s had resulted in the

drilling of two shallow wells in the flanks of the basin, Schutt said.

In 2005 the partnership exploring the Nenana basin, with Andex Resources as operator at that time, conducted a 2-D seismic survey in the basin. And in 2009 the partnership, by then headed by Babcock & Brown Energy, drilled the Nunivak No. 1 well on the eastern flank of the basin, in Alaska Mental Health Trust land a few miles west of the town of Nenana.

Schutt explained that one reason that the partnership had not drilled in Doyon's own Native land in the basin was a provision in ANSCA requiring that any regional corporation developing subsurface resources or timber in its land must share 70 percent of the revenues from that development with the other regional corporations. In effect, the other corporations would obtain revenues from an exploration and development project without contributing to the project costs, thus seriously undermining the project economics for the corporation engaged in the resource development, Schutt said.

The Nunivak No. 1 well, the first deep well in the Nenana basin, found many indications of the existence of gas in the basin, and the well encountered the kind of geology needed in an oil and gas play, Schutt said. And, intriguingly, although the well had been drilled as a gas exploration well, data obtained from the drilling suggested that oil as well as gas might have been generated from the basin's coal seams.

"Following that well and remodeling the basin, we've become more optimistic that this basin could host oil ... generated from the same coals (as the gas)," Schutt gold

Continuing exploration

Doyon's partners dropped out of the Nenana program after completion of that first well. But Doyon decided to continue by itself, converting part of the state exploration license into 400,000 acres of state and Alaska Mental Health Trust leases, wholly owned by Doyon. In 2011 Doyon carried out another 2-D seismic survey, covering the northern and southern parts of the basin. And, having identified several further potential drilling sites, the corporation elected to drill the Nunivak No. 2 well, to the west of the Nunivak No. 1 well. The well site, over

see **DOYON** page 22

continued from page 20

SEABIRDS

Regional Citizens' Advisory Council, a Valdez nonprofit that monitors the terminal and associated tanker traffic.

"Alyeska has indicated that it has spent considerable sums of money and has gone to considerable efforts to make the birds nest elsewhere," the council said in a recent status report.

The bird problem is worst on the rel-

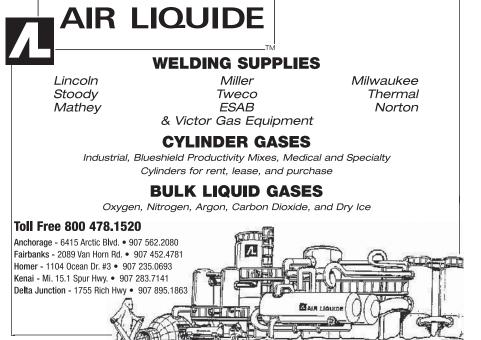
atively inactive tanker berths 1 and 3, the council said. Alyeska uses mainly berths 4 and 5 for tanker loading.

"Actions to date to manage the bird population have been unsuccessful," the council said.

But Alyeska noted: "Studies have shown the population has reversed its growth, and the problem is slowly getting better."

Contact Wesley Loy at wloy@petroleumnews.com





ABANDONMENT

stands what they're going to be expected to do and what the bonding associated with that activity should be. ... So everybody knows that the playing field is."

The state has never really codified that should be done and what the bonding should be, he said.

In advance of the workshop the division put out a letter to the public and a discussion paper on possible financial strength measures that might be required of platform owners, as well as a map of Cook Inlet platforms. These materials are available on the division's website at http://dog.dnr.alaska.gov.

Barron said the next step would be for DNR to consider input from the workshop and consult with other state agencies as it deliberates internally in preparing draft regulations. Once DNR has proposed regulations, there will be an opportunity for the public to review and comment, he said.

AOGA concerns

Kara Moriarty, executive director of the Alaska Oil & Gas Association, said association members are owners or operators of 14 of the 16 Cook Inlet oil and gas platforms

The only Cook Inlet platform owners not listed as members of AOGA on the association's website are ConocoPhillips Alaska (Tyonek platform) and Cook Inlet Energy (Osprey platform).

Moriarty said AOGA member companies operating Cook Inlet platforms (ExxonMobil subsidiary XTO and Hilcorp Alaska) "already have some type of assurance agreement with the state" and asked whether it is the state's intent "to adopt a set formula that will apply to all operators even if the companies already have an existing agreement" or to establish regulations which would cover just new companies.

She said it would be AOGA's preference that regulatory changes be crafted "to allow current agreements to remain in place and to allow the state the flexibility to determine assurances company by company."

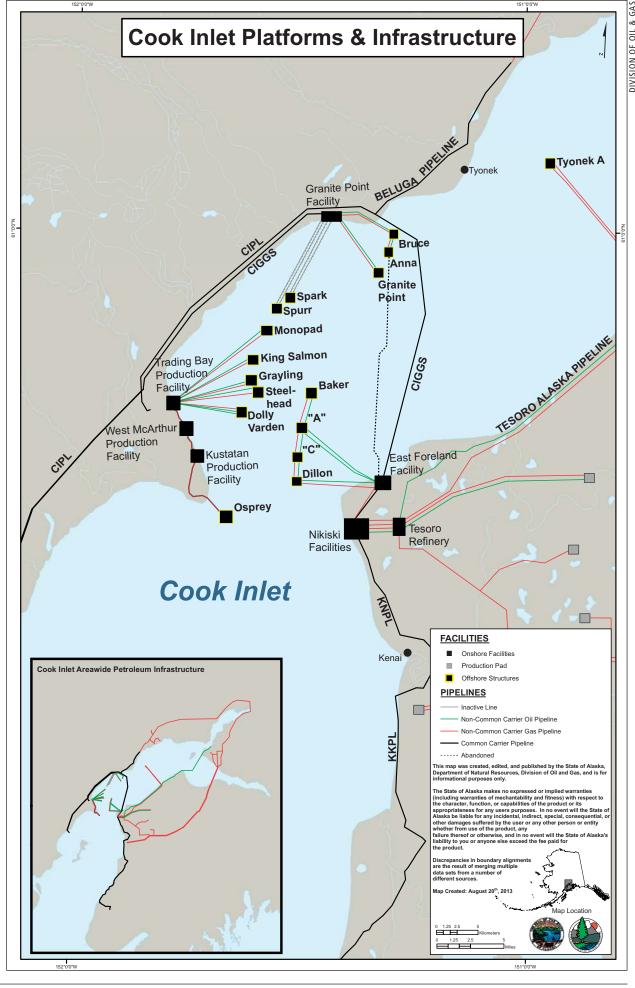
Companies have made investment decisions based on agreements in place, Moriarty said, and if those agreements were to change "it would affect their future investment decisions."

New platform player

Cook Inlet Energy is the newest platform operator in Cook Inlet. JR Wilcox, the company president, said the company has a DR&R agreement in place with the division, and said that like AOGA, his company would want to know "whether the proposed regulations would impact a current agreement in place or whether this idea ... is to shape future agreements."

Wilcox said Cook Inlet Energy also wants to know whether the division is approaching regulations from a cost-benefit standpoint, "looking at the benefits of devel-

see ABANDONMENT page 25



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DOYON

an appropriate drilling target, was conveniently located for extending the access road constructed for the 2009 drilling while also being on dry, sandy land rather than being in wetlands, Schutt explained.

After assessing the results of the No. 2 well Doyon will have many decisions to make, including decisions over whether to shoot a 3-D seismic survey or perhaps to shoot another more broadly based 2-D

survey, Schutt said.

"Certainly we're learning a lot, as we did in 2009," he said.

Yukon Flats

In the Yukon Flats, a 15,000-square-mile lowlands area around the Yukon River, between the trans-Alaska oil pipeline and the Canadian border, the new federal administration in 2008 nixed Doyon's attempt at a swap of land with the Yukon Flats National Wildlife Refuge.

But it turned out that the failed land swap may have worked to Doyon's advan-

tage: A seismic survey conducted by Doyon in early 2010 coupled with a reassessment of geologic and geophysical data indicated the existence of a deep subbasin within the Yukon Flats basin in the area of Stevens Village, the area of some of the land that Doyon had proposed swapping for refuge land.

"So we're kind of happy that land exchange didn't happen," Schutt said.

And, with a geologic analysis of the Yukon Flats basin as a whole indicating the possibility of significant quantities of oil and gas in the subsurface, and with analyses of soil samples indicating the seepage of oil and gas to the surface, Doyon feels encouraged to pursue exploration possibilities in the basin. Last winter's 3-D seismic survey around Stevens Village will fill in the broader coverage of the 2010 2-D survey, Schutt said.

Because the Steven's Village area is only about 25 miles from the trans-Alaska oil pipeline and the Haul Road to the North Slope, with no intervening refuge land for a future Yukon Flats pipeline to cross, the Stevens Village area is conveniently located for an oil and gas development, he said.

However, because all land that could potentially be developed in the Yukon Flats basin belongs entirely to Doyon, the corporation faces some difficult issues relating to the ANSCA revenue sharing requirements. Although the corporation hopes that the next step in the basin will be a drilling program, the ANSCA complication means that Doyon will need to find a company interested in testing the potential of the basin. Besides, Doyon has neither the balance sheet nor the technical expertise to undertake a major oil and gas development, Schutt said. •

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Crowley completes acquisition of Taku Oil Sales

Crowley's Alaska fuel sales and distribution company, CPD Alaska, LLC, has completed its acquisition of Juneau-based Taku Oil Sales Inc. Taku, founded in 1953 by Clarence E. Jacobsen, is a well known and respected local fuel company that has been serving the Southeastern Alaska community of Juneau for more than 50 years.

Jeff Hansen, president of Taku, and the Jacobsen family are leaving the oil business to pursue other interests. The company operates a 2.5 million-gallon bulk fuel storage terminal, a deep-water marine fuel dock and two service stations in the Juneau area.

While the leadership at Taku will change, the company will continue to provide great products and services under the Taku brand name. The company's 13 employees have been welcomed as new members of the Crowley team.

"The owners of Taku Oil Sales are very happy to have made this arrangement with Crowley. We feel like it is the best thing that could have happened for our employees and for the community of Juneau," said Jeff Hansen, president and shareholder of Taku, who will remain with the company for a short period to assist in the transition.

Crowley currently operates 22 fuel terminals in western Alaska and the rail belt, with over 265 employees. This is Crowley's second acquisition of a southeast Alaska fuel distributor. The company acquired Anderes Oil in Ketchikan on July 1.

Doyon Emerald and Alaska Anvil announce joint venture

Doyon Emerald and Alaska Anvil announced they will expand their existing strategic alliance and merge their respective Alaska engineering and consulting operations to create Doyon Anvil, headquartered in Anchorage, Alaska.

This new joint venture is created to better serve clients within Alaska. Doyon Anvil services will include full service multi-discipline engineering and procurement, process safety and risk management, project management, and construction field support.

Werner Plagge will serve as Doyon Anvil's president and general manager. Plagge has worked for Anvil Corp. for 20 years and led the strategic alliance effort with Doyon Emerald

Doyon and Anvil have very similar corporate cultures with complementary experience and values. Both companies focus on developing long-term relationships with their clients and their employees. Their missions are directed toward providing quality services and continually enhancing their position as financially strong companies that provide stable and rewarding careers for their employees.

Global Diving& Salvage ROV group travels to Hawaii

Global Diving & Salvage Inc. said its ROV team, operating off of the Healy Tibbitts 544

see BITS page 26

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

ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS	ADVERTISER	PAGE AD APPEARS
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Computing Alternatives		•		Unique Machine	
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continued from page 1

PIPELINES

For much of their offshore route, the planned pipelines will pass along the same pipeline corridor as the Hilcorp Alaska-operated Cook Inlet Gas Gathering System pipelines, with the Furie pipelines lying approximately 100 feet east of the Hilcorp lines and reaching landfall just north of those lines, the application says.

Gas processed at the onshore facility will be delivered into the existing gas pipeline infrastructure at Nikiski.

Offshore platform

The offshore platform, which Furie hopes to install on site as early as April 2014, would sit in the middle of the inlet, approximately halfway between Tyonek on the west side of the Inlet and the Birch Hill area of the northern Kenai Peninsula. Construction of the pipelines, with a barge laying the offshore sections, may also start as early as April 2014 and may be completed as early as September 2014, the easement application says. The application says that the platform will have a "60-foot diameter platform support footprint" — Furie has previously said that the platform will be of monopod design, standing on the seafloor using a single

The planned pipelines are intended to carry any water collected on the platform as well as untreated natural gas, the easement application says.

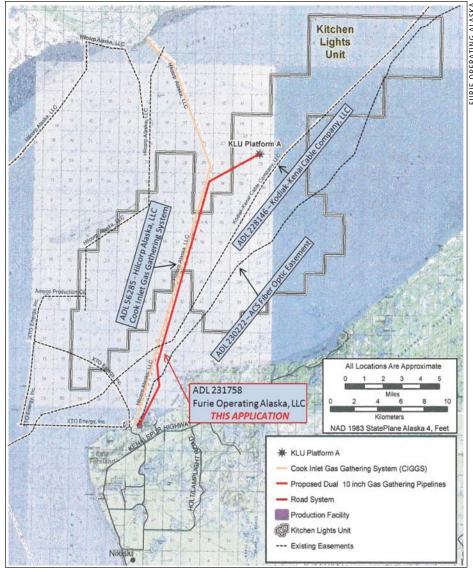
"Each marine gas gathering pipeline will initially transport up to approximately 100 million standard cubic feet of natural gas per day," the application says. "At peak production, an estimated 8,000 barrels of liquid and up to a maximum of 30 billion cubic feet of natural gas will be transported through the lines to the production facility annually."

Gas find

In 2011 Furie announced a major gas find in its Kitchen Lights unit No. 1 well, drilled using the Spartan 151 jack-up rig. Since then the company has drilled two more wells in the unit and has embarked on the drilling of a fourth well. In March 2012 the company told the state Legislature that the find was estimated to have probable gas reserves of 750 billion cubic feet, with a potential production rate of up to 30 million cubic feet per day. But since then the company has remained tight-lipped about the size and nature of its find.

A statement of discovery filed by Furie with the Alaska Department of Natural Resources in July, reported that the Kitchen Lights unit no. 3 well, which Furie completed and tested this summer, encountered multiple productive gas pools in the Sterling and Beluga formations at depths ranging from 3,618 feet to 6,228 feet. ●

Contact Alan Bailey at abailey@petroleumnews.com



Furie proposes to lay a twin natural gas pipeline system from its planned Kitchen Lights unit Platform A in the middle of Cook Inlet to a planned gas production facility near Nikiski on the Kenai Peninsula. The pipelines, for much of their route, would run parallel to the Cook Inlet Gas Gathering System.

continued from page 22

ABANDONMENT

opment in Cook Inlet and the barrier that an overly conservative bonding standard would impose" relative to the risk the division sees from having to pick up abandonment costs.

He also asked what studies have been done about the level of DR&R that would be required — whether full removal of platforms would be required — how the amount of DR&R bonding would be determined and whether different methods, such as insurance pools, would be considered.

Matt Snodgrass, with the division's commercial section, said the division was trying to address the cost-benefit question by measuring risk and helping to offset risks "in an appropriate way" that doesn't extract "undue amounts of capital" from projects, but helps protect the state's best interests.

On the question of whether full platform removal would be required, David Hall, Cook Inlet Energy's chief executive officer, noted the previous operator at Osprey had abandoned the platform, and had removal been required, it would have stranded a large volume of reserves which Cook Inlet Energy is now producing.

"I think there's got to be a pretty good review of the impact if the platforms are going to be removed," Hall said.

Prospective platform owners

Furie Operating is planning a new platform in Cook Inlet as early as next year and Bruce Webb, the company's vice president, said Furie is "uniquely positioned to be very concerned about what these regulations mean ... for us, especially financially."

Webb said Furie understands the "inherent disagreements" between the state and companies "because the state wants to ensure the platforms are abandoned to their standards and the cost of

that is incurred whether the company remains in business or not." But, he said, "the company needs the income and flexibility to use the funds to continue development."

Barron acknowledged what he called "the healthy tension between capital today vs. liability tomorrow," but asked "how does the state protect itself from being the last man standing?"

Another company with future platform plans is Buccaneer Alaska. Jim Watt, the company's president, said asking for full bonding up front from smaller companies "certainly will curtail activities in the basin" and suggested a sinking fund approach — based on ongoing production rates — might be something for the state to look at.

Barron asked how the state would have

access to those funds as a platform changed hands.

Watt said that normally lease abandonment costs are not funds transferred from one owner to the next, but rather a cost that

is recognized in the value of the transaction.

Call for external accounts

Barron acknowledged what he

called "the healthy tension

between capital today vs. liability

tomorrow," but asked "how does

the state protect itself from being

the last man standing?"

Richard Fineberg, who has studied and

written extensively on trans-Alaska oil pipeline ownership issues, recommended that the state look at requirements he has suggested for pipeline DR&R, including requiring owners to set up external trust accounts for DR&R monies; developing regulations ensuring sufficient DR&R monies are collected; reviewing and updating such requirements periodically; distinguishing between independents and owner-operators in regulations; and providing for maximum transparency.

25

Mike Munger, executive director of the Cook Inlet Regional Citizens' Advisory Council, said the council did a report on DR&R for Cook Inlet platforms in 2005 and will be updating that report.

Contact Kristen Nelson at knelson@petroleumnews.com



August crude prices up for fourth month

EIA forecasts \$109 per barrel for Brent in 2nd half of year, 4th quarter average of \$101 per barrel for West Texas Intermediate

EIA is projecting a West

Texas Intermediate crude

oil price averaging \$101

in the fourth quarter and

\$96 per barrel in 2014.

BY KRISTEN NELSON

Petroleum News

he U.S. Energy Information Administration said Sept. 10 in its short-term forecast that average monthly crude oil prices increased in August for the fourth consecutive month, citing increased supply disruptions in Libya and intensified concerns over the conflict in Syria.

The Brent spot price, which averaged \$108 per barrel in the first half of the year, is now forecast to average \$109 per barrel in the second half of 2013 and \$102 per barrel in 2014, EIA said, up \$5 and \$2 respectively from the agency's August forecast.

EIA is projecting a West Texas Intermediate crude oil price averaging \$101 in the fourth quarter and \$96 per barrel in 2014.

The agency said unplanned disruptions among the Organization of the Petroleum Exporting Countries and nonOPEC producers reached an estimated 2.7 million barrels per day in August, the highest level since at least January 2011. Of that total 600,000 bpd were attributa-

ble to non-OPEC producers and 2.1 million bpd to OPEC producers. "OPEC disruptions reached the highest level since at least January 2009, when EIA began tracking this information."

Domestic crude oil production averaged 7.6 million bpd in August, "the highest monthly level of production since 1989," the agency said. It is forecasting U.S. total crude oil production to average 7.5 million bpd this year and 8.4 million bpd in 2014, increases of 100,000 and 200,000 bpd, respectively, from the August forecast.

Tighter world oil market

exacerbated by rising concerns over the conflict in Syria and its regional implications, contributed to a tighter world oil market during the month," EIA said.

> Global consumption is projected to grow by 1.1 million bpd this year and by another 1.2 million bpd in 2014, led by growth in China, the Middle East, Central and South America. Countries outside the

> > U.S. total liquid fuel net

imports, including crude oil

and petroleum products,

reached 12.5 million bpd in

2005 and have been falling

since, to 7.4 million bpd in

2012 and an expected average

of 5.4 million bpd by 2014.

Organization for Economic Cooperation and Development, OECD, are expected to account for "essentially all consump-

tion growth," the agency said. It is projecting OECD liquid fuels consumption decline by 200,000 bpd both this year and next, with those declines "largely due to lower consumption in Europe and Japan."

of growth North America, with production increases of 1.4 million bpd this year and 1.1 million bpd in 2014, "resulting from continued production growth in U.S. onshore tight oil formations and from Canadian oil sands."

OPEC liquid fuels production is projected to decline by 800,000 bpd this year and by 200,000 bpd in 2014, reflecting "unplanned outages of crude oil production among some OPEC producers as well as decreases in Saudi Arabia production in response to the increase in non-OPEC supply," EIA said.

U.S. oil production is projected to continue to grow, from 6.5 million bpd in

> 2012, to a forecast 7.5 million bpd this year and 8.4 million bpd in 2014, with the bulk of the increase coming from "continued focus on drilling in tight oil plays in the onshore Williston, Western Gulf and Permian basins" accounting for the bulk of production growth. Offshore Gulf of Mexico

production is forecast to average 1.3 million bpd this year and 1.4 million bpd in 2014.

U.S. total liquid fuel net imports, including crude oil and petroleum products, reached 12.5 million bpd in 2005

see PRICES page 26

The increase in unplanned liquid fuels production disruptions in August, combined with peak summer demand "and

continued from page 24

BITS

crane barge, was tasked with restoring the pipeline to an asdesigned condition. Many of the tasks required had never been done by an ROV and purpose built tools and fixtures had to be built to perform the work.

All of the tooling and techniques were tested in Seattle prior to departure. Tasks included; removal of marine growth at new clamp locations, cutting 1-1/2" stud link chain, installation of

hydraulic actuated clamps, replacement and tensioning of two 500 foot sections of 1-1/2" stud link chain from newly installed clamps to 40 ton gravity anchors, installation of 1-5/8" stud link chain bridles, and installation of 1-1/2 tons of flotation to each new clamp.

The ROV crew consisting of Warren Posten, Matt Nienow, Chris Moritz, Colins Goertzen, Dan Anderson, Scott Blair, and Eric Crumpton encountered many obstacles but persevered and finished the job to the many thanks of a happy customer.

Editor's note: All of these news items — some in expanded form — will appear in the next Arctic Oil & Gas Directory, a full color magazine that serves as a marketing tool for Petroleum News' contracted advertisers. The next edition will be released in March.

US supply growth

continued from page 1

Construction-era relic

VALDEZ

Service Co.

EIA is forecasting non-OPEC liquid fuels production to increase by 1.6 million bpd this year and by 1.4 million bpd in 2014, with the largest non-OPEC area

The incident did not result in any oil

The pipeline has been in service since

Alyeska was able to trace the steel

1977, moving crude oil from the North

Slope south to the tanker terminal at

leak or pipeline shutdown, said Michelle

Egan, spokeswoman for Alyeska Pipeline

piece to what it termed a threaded O-ring fitting, near pipeline milepost 385, that previously had been welded over, according to an internal company note Egan

provided to Petroleum News. Milepost 385 is north of Livengood and south of the Yukon River. The

pipeline runs above ground at that point. "The area in question includes a construction-era air vent on top of the mainline. In 2012, this vent was encapsulated to mitigate the risk of an unplanned leak," the Alyeska note said.

Most likely, a pig pushed the stray metal down the pipeline, Egan said. A pig is a device that travels through the pipeline to clean it or to test for corrosion or other problems.

Exactly how the piece broke free and entered the oil stream is unclear.

"We just don't know at this point," Egan said.

Patch planned

The incident didn't cause any known damage to the pipeline system, Egan said.

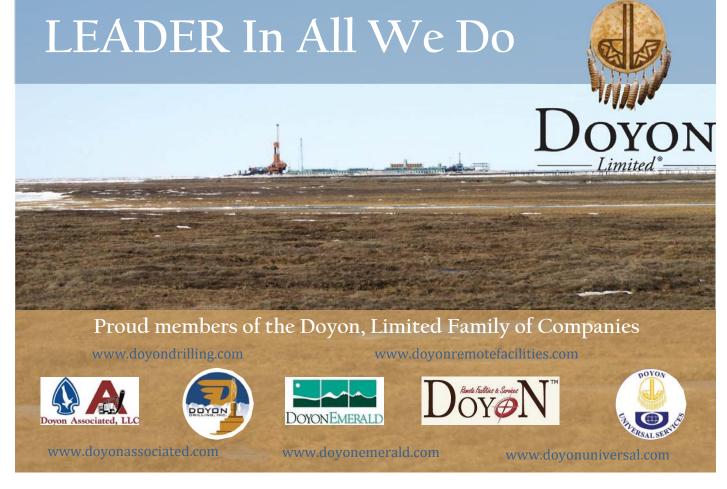
Alyeska put the area at milepost 385 under round-the-clock surveillance, and said there was "no immediate threat of an oil spill."

Crews aimed to make repairs by Sept. 13.

The plan was to install a sleeve, or metal covering, over the problem section of pipeline.

The old air vent, where the stray piece originated, had been used for a procedure known as hydrostatic testing in the days before any oil had even entered the pipeline, Egan said.

Workers in Valdez had been doing maintenance on the backpressure control valve, which hadn't been functioning optimally, she said.



Contact Wesley Loy at wloy@petroleumnews.com

GOVERNMENT

Sullivan resigns as DNR commissioner

Dan Sullivan has resigned his position as commissioner of the Alaska Department of Natural Resources, effective Sept, 24, Gov. Sean Parnell's office announced on Sept. 12.

In a resignation letter to the governor, dated Sept. 11, Sullivan thanked both Parnell and former Gov. Sarah Palin for the opportunity to serve in the state administration — Sullivan served as the state's attorney general before becoming DNR commissioner. Sullivan did not offer a reason for his resignation.

According to a report in the Anchorage Daily News there is speculation that Sullivan may run for an Alaska seat in the U.S. Senate next year.

As DNR commissioner Sullivan has been at the center of some major oil and gas issues including negotiations with ExxonMobil over the development of the Point Thomson field on the North Slope, promoting changes in Alaska's oil production tax and seeking ways to make the state's permitting procedures more efficient. As an enthusiastic proponent of a North Slope gas line and the future export of North Slope gas, Sullivan has travelled internationally and participated in meetings and conferences, promoting Alaska natural gas.

"In his role as attorney general and DNR commissioner, Dan has played a key role in getting big things done to strengthen Alaska's economy and families," said Parnell in a statement announcing that he had accepted Sullivan's resignation. "As attorney general, Dan played a major role in the 'Choose Respect' initiative and fought hard against federal overreach. During his tenure as commissioner, Dan led the state's efforts in resource development and permitting reform, and worked to resolve Point Thomson litigation — setting the stage for a natural gas pipeline. Dan has been an instrumental part of my administration and his leadership will be missed. I wish him much success in the future."

—ALAN BAILEY

NATURAL GAS

Denali gas line bill heads to president

Congress has passed legislation to allow a buried natural gas pipeline to pass through the fringe of Alaska's Denali National Park and Preserve.

"Routing the pipeline through the park would not only make it less expensive to build, but could also take advantage of the existing utility corridor, preventing disturbances to wildlife and environmental impacts on undisturbed lands further to the east or west of the park boundary," said U.S. Sen. Lisa Murkowski, R-Alaska.

Murkowski sponsored the legislation, S. 157, titled the Denali National Park Improvement Act. Sen. Mark Begich, D-Alaska, was co-sponsor.

U.S. Rep. Don Young, R-Alaska, carried similar legislation in the House, which on Sept. 10 passed the Senate bill by voice vote. The Senate had passed the bill in June. S. 157 now goes to President Obama, who can sign it into law.

The legislation says the interior secretary may issue right-of-way permits for a high-pressure natural gas transmission line to run along the seven-mile stretch of the George Parks Highway that passes through the national park.

The secretary also may issue permits for "any distribution and transmission pipelines and appurtenances ... necessary to provide natural gas supply to the Park."

Various proposals have emerged in recent years to tap North Slope gas for export, or to supply local needs in the Anchorage area. Each would require construction of a long and expensive pipeline.

One proposed pipeline route would pass through Denali. Another option, the Richardson Highway route, would swing farther to the east.

"It's important for Alaskans that our North Slope natural gas has a clear legal path to market," Murkowski said. "This bill allows the decisions on the best route for a pipeline to be based on economic and commercial grounds, rather than out of concern about possible delays caused by trying to win access rights across federal lands."

The National Parks Conservation Association supported S. 157.

—WESLEY LOY

EXPLORATION & PRODUCTION

US drilling rig count drops 9 to 1,767

Oilfield services company Baker Hughes Inc. says the number of rigs actively drilling for oil and natural gas in the U.S. dropped nine the week ending Sept. 6 to 1,767.

The Houston-based company said in its weekly report that 1,365 rigs were drilling for oil and 394 for gas. Eight were listed as miscellaneous. A year ago there were 1,864 active rigs.

Of the major oil- and gas-producing states, Colorado gained two rigs and Kansas, Pennsylvania and Utah each gained one rig.

Texas lost eight rigs, California lost three, New Mexico lost two and Louisiana and North Dakota each lost one. Alaska, Arkansas, Ohio, Oklahoma, West Virginia and Wyoming were unchanged.

The U.S. rig count peaked at 4,530 in 1981 and bottomed at 488 in 1999.

—ASSOCIATED PRESS

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PRICES

and have been falling since, to 7.4 million bpd in 2012 and an expected average of 5.4 million bpd by 2014. EIA said the share of U.S. consumption met by liquid fuel net imports peaked at more than 60 percent in 2005 and fell to an average of 40 percent in 2012, with the share of net imports expected to decline to 29 percent in 2014, "which would be the lowest level since 1985."

Domestic natural gas marketed production is projected to increase from 69.2 billion cubic feet per day in 2012 to 69.9 bcf per day this year and 70.4 bcf per day next year, with onshore production increasing while federal Gulf of Mexico production from existing fields

declines.

EIA said natural gas pipeline gross imports, which have fallen over the last 5 years, are projected to fall by 0.2 bcf per day this year and to remain at near 2013 levels in 2014, with LNG imports at minimal levels of 0.4 bcf in both 2013 and 2014.

Natural gas spot prices averaged \$3.43 per million Btu at Henry Hub in August, down 20 cents from July, but EIA said it expects prices to begin to increase in September as temperatures drop and natural gas demand grows for space heating. It is projecting the Henry Hub spot price to increase from an average of \$2.75 per million Btu in 2012 to \$3.68 this year and \$3.91 in 2014.

> Contact Kristen Nelson at knelson@petroleumnews.com

Fire Protection Specialists

GMW has 17 years of experience working in Deadhorse supporting oil field activities on the North Slope of Alaska

GMW Fire Protection has offices in Anchorage and Deadhorse

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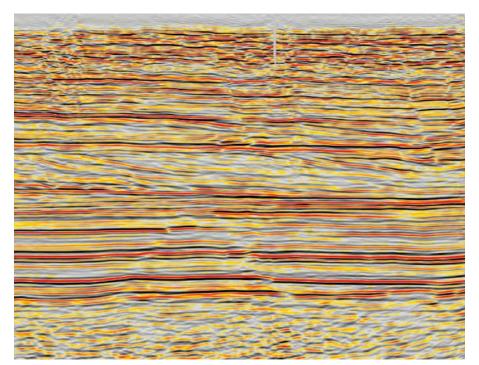
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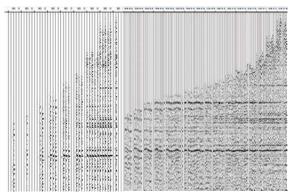
Tabasco: **EmphaSeis** 3D Multi-Client Data

Broadband program on Alaska's North Slope



PSTM shows greatly improved imaging of shallow reflections and steep faults.





Common offset, common azimuth PSTM gathers. Left image gathers with traditional acquisition parameters. Right image gathers obtained from highdensity acquisition.

High-density, broadband seismic is now available located near the Colville River on the Alaska North Slope. The Tabasco North and South 3D datasets were acquired with a slip-sweep HPVA methodology combined with CGG's proprietary broadband **EmphaSeis™** vibroseis sweep to better resolve shallow horizons and image complex faulting in the area. The data have been processed to retain amplitude information contained in the very rich offset and azimuth distribution. Outputs include azimuthal pre-stack time migration and pre-stack depth migration.

Visit our website at cgg.com/Tabasco to download the video about the Tabasco program and the innovative vibroseis techniques deployed in Alaska. Contact: Mike Clement

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