Petroleum news

Vol. 18, No. 4 • www.PetroleumNews.com

A weekly oil & gas newspaper based in Anchorage, Alaska

Week of January 27, 2013 • $2

page 3 Feige: House, Senate Resources committees coordinating tax work

January Mining News inside

The January issue of North of 60 Mining News is enclosed.

North Slope explorers mobilizing equipment for drill activities

The Alaska Department of Natural Resources has opened most of the North Slope tundra for winter travel, but actual exploration activities still remain in their earliest stages.

A few companies are beginning to mobilize equipment to drilling locations, while the others are still deliberating about whether to pursue exploration programs this winter.

While the state opened the eastern and western coastal area for travel on Jan. 8 and Jan. 9, respectively, it only conditionally opened the lower foothills because a blizzard scoured the snow pack along a 20-mile swath from milepost 400 of the Dalton Highway to the Franklin Bluffs well pad. As of press

see **WINTER DRILLING** *page 19*

Response team still reviewing Kulluk damage ahead of move

The Kulluk, Shell's floating drilling platform, remains at anchor in Kiliuda Bay on Kodiak Island while multiple organizations review data gathered during inspections of the vessel and prepare a damage assessment report. The U.S. Coast Guard, Shell, Smit Salvage and Det Norske Veritas are all involved in the assessment, the unified command for the Kulluk towing incident reported Jan. 18. The unified command also said that the vessel will not be moved until the assessment report has been completed and a plan for the move evaluated.

The unified command has also come to an agreement with local crab fishermen that the Kulluk will not be moved from Kiliuda Bay during the tanner crab fishing season. According to the Alaska Department of Fish and Game, the crab fishery

see **KULLUK ASSESSMENT** *page 19*

FINANCE & ECONOMY

A question of price

Economist argues for commodity pricing focus in Fairbanks energy options

By ALAN BAILEY
Petroleum News

In a multi-year debate over how to enable residents of the city of Fairbanks in Alaska's Interior to obtain affordable energy supplies, there is at least one point of general agreement: The city is hurting from the impact of high energy prices, thanks to a dependence on the use of expensive liquid fuels for the heating of buildings and for some power generation. But with various people and organizations exploring several future Fairbanks energy supply possibilities, there is a diversity of views on how to tackle the Fairbanks energy problem.

In the interests of clearing some of the ice fog surrounding the Fairbanks energy debate, Antony Scott, senior economist and policy advisor at the University of Alaska Fairbanks, has been working with the Alaska Center for Energy and Power on a

At oil prices above about $70 per barrel that linkage to the Asian market could push the price of gas in Fairbanks higher than the price from a smaller scale pipeline, with the relatively high commodity price overwhelming any economies of scale to be gleaned from a relatively high pipeline throughput, Scott said.

see **PRICING FOCUS** *page 18*

GOVERNMENT

More legacy well drama

Alaska commission convenes public hearing; BLM challenges state jurisdiction

By WESLEY LOY
For Petroleum News

The Alaska Oil and Gas Conservation Commission's tilt with the federal government over so-called legacy wells continued with a pointed hearing Jan. 10.

The commission, led by chair Cathy Foerster, called the hearing to determine who is responsible for five wells located in the National Petroleum Reserve-Alaska.

The commission contends the wells, drilled between 1951 and 1977, were never properly plugged and abandoned or otherwise are out of compliance with state regulations.

The NPR-A landlord, the U.S. Bureau of Land Management, contends at least some of the wells were properly secured.

The question of responsibility was complicated by the fact that four of the wells are now on land conveyed to the Arctic Slope Regional Corp., an Alaska Native corporation.

The four wells are the Gubik No. 1, the Gubik

Rock and the BLM's Alaska director, Bud Cribley, said they didn't believe any hearing was necessary. But they or their representatives showed up at the hearing anyway.

see **WELL DRAMA** *page 17*

PIPELINES & DOWNSTREAM

XL allies pressure Obama

Canadian provincial premier, 10 state governors, seek Keystone pipeline decision

By GARY PARK
For Petroleum News

The sense of urgency among Canadian governments and oil producers facing a crude transportation bottleneck and the looming prospect of shut-ins has prompted one provincial premier to join 10 U.S. state governors in urging President Barack Obama to end procrastination and approve TransCanada's Keystone XL pipeline.

"The energy relationship between the United States and Canada is vital to both our countries. It is an interest we share, transcending political lines and geographic boundaries," the leaders said in a letter to Obama, hoping to gain the president's attention as he embarks on his second term.

Noting that U.S. oil imports from Canada could almost double within seven years to 4 million barrels per day, Saskatchewan Premier Brad Wall said the Keystone XL pipeline "could also provide the

The shortfall in takeaway capacity from Canada and a delay in adding a 120,000 barrel-per-day unit to boost capacity at BP's 337,000 bpd refinery at Whiting, Ind., contribute to the accumulating pressure on realized prices for both Canadian heavy and tight oil, said Chris Feltin, an analyst at Macquarie Research.

see **XL PRESSURE** *page 14*

contents

Petroleum News | North America's source for oil and gas news

● GOVERNMENT

Feige managing House Resources oil work

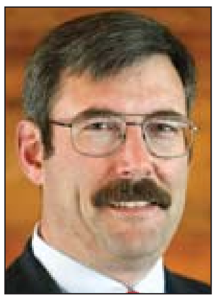
Committee co-chair working closely with Senate Resources chair to coordinate, avoid duplication in work on governor's oil tax bill

By STEVE QUINN
For Petroleum News

House Rep. Eric Feige is among the handful of lawmakers who didn't need to switch offices. That's because he's back at the helm as co-chair for the House Resources Committee. The major issues haven't changed, just the numbers assigned to the bills.

House Bill 110 oil tax reform bill is now HB 72 and went directly to Feige's committee. HB 9 in-state gas line bill is now HB 4 and also will go to Feige's committee.

References to each remain strong, looking back and looking ahead.


REP. ERIC FEIGE

One thing has changed. Rep. Dan Saddler will sit on the committee alongside Feige as co-chair.

He replaces Rep. Paul Seaton, who will remain on the committee.

Feige sat down with Petroleum News to share his thoughts on pending debates with the Legislature already two weeks under way.

Petroleum News: You've done this for two years. What have you learned first about the job and second about Alaska's resources?

Feige: As far as the job, before I came down here, I thought there were some secret squirrel rules that you had to figure out when you got here. It's not rocket science. It just takes a willingness to talk to people and listen to what other people have to say, then try to incorporate everyone's needs, wants and desires into something that has the proper balance. We did that with coastal zone management during the last session, and I expect we'll do that again on oil taxes and all the other issues that come forward. A couple of other pieces of legislation were actually created using that philosophy. We did it with HB 276, which we called the middle earth exploration bill, which got incorporated on the last night of the session into SB 23, which were the tax credits for six different zones throughout the state that had high potential and were also close to population centers. So we're trying to help as many folks in the state as we can. The one good thing about me getting this particular seat right from the start, is that as a commercial pilot in Alaska, I've been all over the state and worked for most of the industries, be it oil on the North Slope, or be it places like Donlin Creek and other mines and exploration activities over the course of my flying career. A lot of these folks I see in committees I've had in my plane. The job gives me the opportunity to get my foot in the door on places I've previously flown over, but I've been inside them now. It gives you the opportunity to get into places and hear from more people in the industry. I've certainly got a pretty good appreciation for what it takes to make money in the resource business and what kind of statutes need to either be changed or be created to help further the resources industry.

Petroleum News: Now looking ahead, what are your legislative priorities?

Feige: Between myself and Dan Saddler, I'll handle oil and gas issues. As the other bills come before us we'll decide on a case-by-case basis who gets what bill. My biggest priority is the oil and gas bill introduced by the governor. I'm working pretty closely with the Senate Resources chair, Sen. Giessel, to coordinate our efforts so there is not a lot of duplication and we can run this thing in a well organized manner. There's been a lot of talk and conversations between myself, the Senate chair and the administration. We are all working together on this to move the bill forward. I spent a lot of time talking to the industry going as far back as August, saying "guys we've had this debate now for the last two years, do you have any new ideas? What do you want to see in a tax bill?" HB 110 when it first came out, the critics were very quick to point out that the governor put this bill together with the help of the oil industry. Well they are the major entity who is going to be affected by it. Why the hell wouldn't you talk to them? I don't profess to know everything there is to know, but I am willing to hear what you have to say and if it can be worked into a bill, and if it's fair to everybody and if it's a wise move to the state of Alaska, then we certainly would be willing to consider it.

Petroleum News: One of the criticisms early on is there is a fear a bill will be rubber-stamped and pushed through.

Feige: Sure that's a fear that anybody might have, but the way I look at is we've got a three-quarters majority in each body and it's a Republican controlled majority in each body. I am operating under the assumption that we will pass an oil tax bill. My job is to make sure the oil tax bill is the best that it can be, that it does what we want it to do, that it's a stable structure that is going to last a long time and be adaptable to changing conditions down the road. I'm certainly not looking to give away our resources. That's not being fair to the people of the state. On the other hand, I'm going to be fair to the companies and let them make a reasonable profit. People have complained about a lack of a guarantee in HB 110. When we write the bill, the structure of the bill and the fact that you have to do something before you get a tax break, is the guarantee that people are looking for.

Petroleum News: What are your thoughts on HB 72?

Feige: I was involved in the development for it. There is nothing new that has been mentioned in any the statements of the governor or his people. It's pretty much in line with what we put together the last three or four months. There is a lot better intellectual underpinning on this bill than perhaps there was on HB 110. I've seen a lot of the analysis that the consultant, Econ One, has generated. Some of the justifications they are using are certainly solid justifications for the statute changes they are looking to make.

Petroleum News: The other criticism was stripping progressivity outright. What are your thoughts on that?

Feige: One of the main problems of ACES (current tax structure), as the price of oil went up, the profit margin didn't necessarily go up, either. It was taking away the upside from the industry as a whole. OK, you can say we are still allowing them to make a profit, but the problem is other oil provinces that we're competing with for investment don't have that limitation, so it puts us at a terrible competitive disadvantage to those other regions of the world that we compete with for investment dollars. You're taking away progressivity, but let's not forget that we're also taking out capital credits. It's roughly a wash. You're cutting back a little more revenue than you are cutting back on expenses.

One of the things brought out in the analysis with the current tax system was that if everything we want to happen — Point Thomson, Brooks Range moving forward, Pioneer moving forward, Great Bear especially moving forward — all those projects that we want to happen so we get more oil in the pipeline, those all come at a cost up front to the state with those capital credits.

So the state was having to give away a lot right up front. The time to get that money back, well, we were looking at a pretty significant financial hit to the state. With the new bill not being as generous up front, but we're also being more generous on the backside by taking away progressivity. The other advantage of taking away progressivity is that you completely eliminate the whole decoupling issue between oil and gas. That was another significant characteristic of ACES. If we did go

see **FEIGE Q&A** page 15

● FINANCE & ECONOMY

Canada mulls deal-making options

Industry wavers when choosing between JVs, acquisitions in shrinking field; some companies opting to keep reserves for long term

By GARY PARK
For Petroleum News

Uncertainty rules as Canada's corporate energy world faces three options in 2013 — joint ventures, mergers and acquisitions or just sitting tight.

And the range of possibilities underwent a radical shift late in 2012 when the Canadian government changed the rules covering takeovers of oil sands companies by foreign state-owned enterprises, SOEs, limiting those bids to "exceptional circumstances."

At the smaller end of the scale, once fertile ground for M&As is turning fallow.

Bryan Mills Iradesso, a marketing and investor communications firm, estimates that only 47 junior conventional oil and gas explorers and producers were trading on the Toronto stock exchanges in the third quarter of 2012, compared with 93 in the opening quarter of 2066.

The firm's yardstick for juniors covers those producing 500-10,000 barrels of oil equivalent per day.

> *"While the U.S. will see the vast majority of investment, Canadian tight oil M&A could grow as embryonic plays are proved up."*
> **—Luke Parker, manager of Wood Mackenzie's M&A service**

Over the same period the ranks of mid-caps — those producing 10,000-100,000 boe per day — rose to 29 from 19.

Although fewer companies overall likely results in fewer transactions, Don Rawson, AltaCorp Capital's managing director of institutional equity research, suggested that some juniors and mid-caps could be forced to take the M&A route because of restricted access to capital.

He said the greater difficulty companies have in financing operations the more likely it is that the pace of M&As will pick up.

New SOE rules a factor

Scott Cochlan, a partner with the law firm of Torys, said the new rules blocking control of oil sands companies by SOEs may force outsiders to explore more creative joint-venture investments, minority investment positions and "comparable structures" that could be more complex than anything seen so far.

He expects foreign investors, especially those in the Asia-Pacific region, may be on the lookout for deals in Western Canada's natural gas sector, especially if the commissioning of LNG projects progresses.

Chris Theal, chief executive officer of Kootenay Capital Management, is also counting on JV capital being robust for larger-scale projects, notably going to those with Duvernay leverage in west-central Alberta, or companies that are well-placed in liquids-rich gas.

Luke Parker, manager of Wood Mackenzie's M&A service, said in a release that key areas to watch are Canadian unconventional gas, along with U.S. tight oil exploration-focused companies and LNG prospects in East Africa.

"While the U.S. will see the vast majority of investment, Canadian tight oil M&A could grow as embryonic plays are proved up," he said. "We also believe that Canadian shale gas will continue to attract interest as a feedstock for future LNG developments, whereas U.S. shale gas M&A is likely to remain relatively subdued."

Two schools of thought

In the realm of trading reserves for heavy oil upgrading capacity in the U.S., or clinging to those assets there are two distinct schools of thought.

Speaking at a BMO Capital markets conference in New York City, Canadian Natural Resources rates reserves as more valuable, meaning it is sidestepping joint ventures, while Husky Energy estimates that negotiating upgrading/refining capacity in the U.S. is preferable because the capital outlay is about half what it costs in Alberta.

Canadian Natural Vice Chairman John Langille said his company is open to more deals along the lines of the 50-50 partnership it has established with North West Upgrading to build an upgrader/refinery near Edmonton, partly because that plant is guaranteed a share of the Alberta's government royalty bitumen.

But he said Canadian Natural does not want to be a refiner. "We think we can make really good returns for our shareholders by sticking to E&P activities and developing the resources that we have."

Waiting for others to de-risk

He also said the company has been deferring capital spending on gas projects for about six years, while waiting for others to de-risk lands such as the Montney in British Columbia and Duvernay in Alberta, just as it did with the Montney Septimus field in British Columbia.

"In order for us to allocate capital to any one project it has to be able to make returns for us," Langille said when asked whether Canadian Natural was interested in swapping land for capital to accelerate development of its Montney and Duvernay holdings.

"We have always taken the position that it's better to keep the resource and have it for the long term," he said. "It's very difficult to get back (a piece of land assigned to a JV) once you've disposed of it."

Husky Chief Operating Officer Rob Peabody said his company had once considered doubling the size of its Lloydminster heavy oil upgrader in Saskatchewan, but dropped the idea because of cost — and "has not fundamentally changed" that view. ●

Contact Gary Park through publisher@petroleumnews.com

Petroleum news
www.PetroleumNews.com

Kay Cashman	PUBLISHER & EXECUTIVE EDITOR
Mary Mack	CHIEF FINANCIAL OFFICER
Kristen Nelson	EDITOR-IN-CHIEF
Clint Lasley	GM & CIRCULATION DIRECTOR
Susan Crane	ADVERTISING DIRECTOR
Bonnie Yonker	AK / NATL ADVERTISING SPECIALIST
Heather Yates	BOOKKEEPER
Shane Lasley	IT CHIEF
Marti Reeve	SPECIAL PUBLICATIONS DIRECTOR
Steven Merritt	PRODUCTION DIRECTOR
Alan Bailey	SENIOR STAFF WRITER
Eric Lidji	CONTRIBUTING WRITER
Wesley Loy	CONTRIBUTING WRITER
Gary Park	CONTRIBUTING WRITER (CANADA)
Rose Ragsdale	CONTRIBUTING WRITER
Ray Tyson	CONTRIBUTING WRITER
John Lasley	DRILLING CONSULTANT
Allen Baker	CONTRIBUTING WRITER
Judy Patrick Photography	CONTRACT PHOTOGRAPHER
Mapmakers Alaska	CARTOGRAPHY
Forrest Crane	CONTRACT PHOTOGRAPHER
Tom Kearney	ADVERTISING DESIGN MANAGER
Amy Spittler	MARKETING CONSULTANT
Renee Garbutt	ADVERTISING ASSISTANT
Julie Bembry	CIRCULATION DEPARTMENT
Dee Cashman	CIRCULATION REPRESENTATIVE
Joshua Borough	ASSISTANT TO THE PUBLISHER

ADDRESS
P.O. Box 231647
Anchorage, AK 99523-1647

NEWS
907.522.9469
publisher@petroleumnews.com

CIRCULATION
907.522.9469
circulation@petroleumnews.com

ADVERTISING
Susan Crane • 907.770.5592
scrane@petroleumnews.com

Bonnie Yonker • 425.483.9705
byonker@petroleumnews.com

FAX FOR ALL DEPARTMENTS
907.522.9583

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

OWNER: Petroleum Newspapers of Alaska LLC (PNA)
Petroleum News (ISSN 1544-3612) • Vol. 18, No. 4 • Week of January 27, 2013
Published weekly. Address: 5441 Old Seward, #3, Anchorage, AK 99518
(Please mail ALL correspondence to:
P.O. Box 231647 Anchorage, AK 99523-1647)
Subscription prices in U.S. — $98.00 1 year, $176.00 2 years, $249.00 3 years
Canada — $185.95 1 year, $334.95 2 years, $473.95 3 years
Overseas (sent air mail) — $220.00 1 year, $396.00 2 years, $561.00 3 years
"Periodicals postage paid at Anchorage, AK 99502-9986."
POSTMASTER: Send address changes to Petroleum News, P.O. Box 231647 Anchorage, AK 99523-1647.

ASSOCIATIONS

AAEE to hear Antony Scott

The Anchorage Association for Energy Economics will hear a presentation by Antony Scott at its Jan. 29 meeting.

Scott, senior economist and policy advisor at the University of Alaska Fairbanks, will speak on "Alaska Energy Commodity Pricing for In-State Use."

AAEE meets from noon to 1 p.m. at the BP Energy Center.

—PETROLEUM NEWS

● LAND & LEASING

State denies Placer expansion request

ASRC wants to increase size of western North Slope unit to original application size of four leases, defer drilling by a year

By KAY CASHMAN
Petroleum News

ASRC Exploration's application to expand the western North Slope Placer unit to nearly 8,800 acres and defer its drilling obligation by one year has been denied by the state of Alaska.

Bill Barron, director of the Alaska Department of Natural Resources, Division of Oil and Gas, said in a Jan. 14 decision that "expansion of the unit is unnecessary to accomplish the activities" ASRC Exploration set out in its application. He said the public interest is not served by granting a "six fold expansion of the unit before AELLC (ASRC Exploration LLC) has met the major initial work commitment upon which the Placer Unit approval was based."

Barron said the application to form the unit, which sits on the western edge of the ConocoPhillips-operated Kuparuk River unit, included "a firm exploration commitment" to re-enter the Placer No. 1 well drilled by ConocoPhillips or to drill a new well by June 30, 2013, to determine "whether sufficient volume of producible hydrocarbons exists in the unit area to warrant commercial development."

That application was submitted in January 2011, and was for 8,769 acres on four state leases — the state accepted ASRC Exploration's work commitment but pared the unit size down to 1,480 acres.

At nearly 8,800 acres, the Placer unit would still be one of the smallest units on Alaska's North Slope, second only to UltraStar's Dewline unit.

Previous work

ARCO Alaska shot a 3-D seismic survey covering the Placer area in 1997 and ConocoPhillips and partners, with ASRC Exploration farming in for a 35 percent working interest in the project, drilled the Placer No. 1 and No. 2 wells in 2004.

Placer No. 1 found "an oil-bearing reservoir in the thin Kuparuk C sand." Barron said no production test was performed but the well was suspended to preserve the ability to test at a later date.

After drilling the second well the partnership decided that the reservoir discovered in the Placer No. 1 was "not economic to develop and the leases were subsequently dropped."

In the state's 2006 oil and gas lease sale ASRC Exploration re-acquired the leases, which had a five-year primary term, and by the time it applied to form the unit in early 2011 it had acquired ownership of the Placer No. 1 wellbore and was in the process of acquiring a license to 3-D seismic that had been shot over the area.

That 2011 application included a commitment to reprocess and reinterpret the 3-D seismic and drill and log a new exploratory well or re-enter and test the Placer No. 1 well by June 30, 2013.

The application was approved in September 2011, but only for a portion of the total leases.

In August 2012 ASRC Exploration applied to expand the unit and extend the drilling obligation to June 30, 2014.

BRPC connection

In its August expansion application ASRC Exploration said interpretation of data "indicates that the Kuparuk sand at Placer extends well beyond the current unit boundaries."

The company also said the Placer sand "is, at best, only marginally large enough to develop," and said the "sand appears to merge with the BRPC (Brooks Range Petroleum Corp.) Appaloosa prospect to the south," and that it "may be prudent to involve BRPC in any unit expansion discussions and in the locating of the delineation well so that the area from Placer to Mustang can be developed in an optimal manner in order to maximize the economic recovery of these thin sands."

Barron said that while ASRC Exploration submitted modeling results from seismic, "No conclusive data has been presented that the oil-bearing Kuparuk sands extend into the expansion area."

He also said that while ASRC Exploration argues that the expansion would allow it to join with BRPC in developing the unit, the expansion area and BRPC's Mustang project to the south, "there is no proposal to expand the unit to include BRPC or its properties in the unit. There is no indication that BRPC has any desire to join AELLC in the Placer unit."

Barron said the application contains no proposal for work beyond the work which was the basis for the original unit approval.

"Neither denial of the proposed unit expansion or drilling extension precludes AELLC from drilling exploration wells in the unit and the expansion areas to obtain data to support a development proposal that would implement efficient recovery of oil and gas resources," he said.

Barron said while an extension of the drilling deadline and a unit expansion, which in his decision was pegged at 8,768 acres, would protect ASRC Exploration's interests, it "would not protect the state's interest because it would delay development."

ASRC Exploration has 20 days to file an appeal with the state.

Should the subsidiary of Native corporation Arctic Slope Regional Corp. elect to move forward with development of Placer, it will make it the sixth operator of oil production on the North Slope, behind BP, ConocoPhillips, and relative newcomers Pioneer Natural Resources, Eni Petroleum and Savant. ●

Contact Kay Cashman at publisher@petroleumnews.com

GOVERNMENT

Albertans find common cause

Even in the often-unfathomable world of Canadian politics, this one ranked as an unlikely event in an unlikely location.

A fundraiser for the embattled British Columbia government of Premier Christy Clark was held in "enemy" territory — Calgary.

At a time when Clark is dug in against Alberta Premier Alison Redford over Enbridge's plan to run its Northern Gateway oil sands pipeline across British Columbia, some of Alberta's energy and political powerbrokers have found reasons to support Clark.

In return for those paying C$125 per person, the organizers offered the chance for them to hold "frank" discussions and "mingle" with two British Columbia cabinet ministers, Rich Coleman (energy, mines and natural gas) and Bill Bennett (community, sport and cultural development).

More than 100 took the chance, figuring that however bad feelings are between Clark and Redford they will likely get worse if British Columbia on May 14 elects a New Democratic Party under Adrian Dix, who is even less inclined to support bitumen pipelines to the Pacific Coast.

Dix has also indicated he will raise corporate taxes and eliminate British Columbia's balanced-budget legislation.

Organizers of the private reception in Calgary included Murray Edwards, chairman of Canadian Natural Resources Ltd., and Rod Love, a political strategist and chief of staff to former Alberta premier Ralph Klein.

The promotional materials said an NDP government in B.C. "poses a number of different risks for Albertans. The possibility of pipelines being delayed or cancelled altogether is a huge risk for the energy sector."

The ultimate warnings said an NDP administration would be "fundamentally anti-free enterprise."

—GARY PARK

E&P

US rig count down by 11 to 1,749

Oilfield services company Baker Hughes Inc. says the number of rigs actively drilling for oil and natural gas in the U.S. dropped by 12 to 1,749 the week ending Jan. 18. The Houston-based company said in its weekly report that 1,316 rigs were drilling for oil and 429 for gas. Four were listed as miscellaneous. A year ago, Baker Hughes counted 2,008 working rigs.

Of the major oil- and gas-producing states, North Dakota gained five rigs, Pennsylvania increased by four and Arkansas by two. Meanwhile, Texas declined by 11 rigs, Oklahoma three, New Mexico two, and Colorado, Louisiana and Wyoming one each. Alaska, California and West Virginia were unchanged.

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

—ASSOCIATED PRESS

● EXPLORATION & PRODUCTION

Buccaneer could begin drilling soon

THE ASSOCIATED PRESS

The president of Buccaneer Energy's Alaska operation said the company could be firing up its jack-up rig in northern Cook Inlet waters this spring.

The jack-up rig, called the Endeavour-Spirit of Independence, has been idling at dock in Homer since late August after encountering numerous problems, including delays caused by repairs and permitting complications.

What was planned as a short-eight day stay in Homer before leaving to drill in northern Cook Inlet waters has turned into a months-long delay. During that period, Buccaneer and the company hired to prepare and operate the $100 million rig, Archer Drilling, parted ways.

The 400-foot-tall jack-up rig, one of the largest such rigs in the world, arrived from Singapore in August. The plan was for the rig to stay a week or two before heading north to drill near Tyonek. But a series of problems has since dogged the rig and causing Buccaneer to miss a drilling window.

Buccaneer Alaska President Jim Watt said Jan. 18 at a luncheon of oil and gas industry officials that drilling could begin possibly in February or March, and at the very least once the snow has melted this spring, the Peninsula Clarion (http://is.gd/ZOE20O) reported Jan. 21.

Suit filed in Texas

Archer has filed a $6 million lawsuit in Texas District Court seeking payment for what it says are past-due bills for services and expenses from Buccaneer. Archer maintains it almost terminated its contract with Buccaneer twice before it eventually did and that the rig was not ready to move from Singapore as more repairs were needed.

Buccaneer has since reached a preliminary agreement with Spartan Drilling to take over repairs. Buccaneer officials said there would be no delay in it reaching its first drilling destination at the Cosmopolitan unit off Anchor Point.

Watt said during his luncheon speech that the rig's delay is an indicator of Buccaneer's commitment to safety and protecting the environment.

"Yes it has taken longer, yes it has cost more money for the company, but we want a rig we can be fully confident in to perform this operation offshore and that's the focus," he said.

Watt was also asked if Alaska's oil and gas permitting processes were a factor in the rig's delay.

"It is just something that slows the activity and it is part of doing business in Alaska," he said.

He said streamlining the process would be helped by a one-stop shop where permits could be obtained for a plan of operations in an area instead of having to get a permit for every well.

Information from: (Kenai, Alaska) Peninsula Clarion, http://www.peninsulaclarion.com. ●

● ALTERNATIVE ENERGY

Fire Island wind farm meets expectations

CIRI's new power generation facility offshore Anchorage has generated more than 18,000 megawatts since startup in August

By ALAN BAILEY

Petroleum News

Although Cook Inlet Region Inc.'s new wind farm on Fire Island, offshore Anchorage, officially opened its doors in mid-September, the electricity generation facility actually started feeding power to Chugach Electric Association, its only customer, in August, during the final stages of testing of the plant.

Between then and the end of December the wind farm delivered more than 18,000 megawatt hours of power, Lee Thibert, senior vice president of Chugach Electric, told the Regulatory Commission of Alaska in a Jan.16 status report for the Fire Island wind project. That amount of power displaced more than 196 million cubic feet of natural gas that would otherwise have been needed for gas-fired power generation, Thibert wrote.

Running smoothly

The power output from Fire Island progressively increased from 2,372 megawatt hours in August and September to 6,265 megawatt hours in December. And, despite a vigorous debate prior to commissioning of the plant about potential problems with integrating the fluctuating power output from the wind farm into the Alaska Railbelt electricity grid, the integration of the plant into the grid has apparently progressed smoothly.

"Chugach is not aware of any electrical system operational issues as a result of Chugach receiving energy from the (wind farm) project," Thibert wrote. "There were no curtailments of project energy deliveries through Dec. 31, 2012."

> *"Chugach is not aware of any electrical system operational issues as a result of Chugach receiving energy from the (wind farm) project."* **—Lee Thibert, senior vice president, Chugach Electric Association**

Thibert said that Chugach Electric personnel are rapidly gaining experience in the scheduling of power that the utilities receive from hydropower and gas-fired power resources, to mesh the fluctuating wind-generated power in with those other power sources.

"Chugach expects that its personnel will gain an even better understanding of how best to integrate the (wind) project as the year progresses," Thibert said.

Thibert said that Chugach Electric is working with Fire Island Wind, the Cook Inlet Region Inc. subsidiary that operates the wind farm, on final testing and commissioning of the computer system that will be used for the monitoring of the energy output of the farm. Meantime, the two companies have been using their separately collected revenue metering data to determine how much electricity the wind farm has been generating.

Renewable energy credits

Chugach Electric has also worked with Fire Island Wind to register the wind farm with the North American Renewables Registry. That will enable the wind farm to create tradable renewable energy credits that, under the terms of the power purchase agreement with Chugach Electric, will belong to the power utility. Chugach Electric is exploring a means of using the credits to implement a green pricing program for its member ratepayers, Thibert wrote.

Thibert said that two issues relating to the wind farm power purchase agreement remain to be resolved following the startup of the facility.

The more straightforward of these issues, a problem over the rating of the switchgear that Fire Island Wind installed in the wind farm, is close to resolution, Thibert said.

Transmission line issues

However, the other problem, the handover of responsibility for the submarine power transmission line that connects Fire Island with Chugach Electricity's onshore substation, appears rather more difficult. The company which built the transmission line, Chugach and Cook Inlet Transmission LLC, or CIT, was supposed to transfer title and custody of the line to Chugach Electric upon completion of the line. But one of CIT's contractors damaged one of the submarine cables during installation and the subsequent repair to the line voided the warranty on a portion of the cable, Thibert said. In addition, CIT did not bury "large sections" of the cable to the required depth of five feet, he wrote.

Although there has been progress in discussions over the submarine cable problems, the problems have not yet been resolved — Chugach Electric is unwilling to take any long-term risk by accepting custody of a system with known defects, Thibert said.

"Chugach has been and will continue to be adamant that it and its member-ratepayers will not bear any increased risk or cost as a result of these outstanding issues," he wrote. ●

Contact Alan Bailey at abailey@petroleumnews.com

● FACILITIES

RFP awarded for west side access study

By KRISTEN NELSON

Petroleum News

The state has contracted for a resource access study focused on the west side of the Susitna Valley in Southcentral Alaska.

"Surface access would greatly benefit Alaskans and create more economic opportunity in the West Susitna River Valley. We remain committed to exploring our options to make the area more accessible," Alaska Gov. Sean Parnell said in a Jan. 17 statement.

The Alaska Department of Transportation and Public Facilities said it has contracted with HDR Alaska to research possible routes to connect the area west of the Susitna River with the existing road system.

"Finding the safest and most efficient way to cross the river is crucially important and every option will be reviewed," DOT&PF Commissioner Patrick Kemp said. "Limited access to the Susitna River diminishes opportunities for many Alaskans and resource development projects. I must also stress that this is an exploratory study, and there is no plan, project design, or commitment to any subsequent project or process."

The study is expected to be completed late this summer. It will measure and document resource development potential in the area; examine Susitna River crossing options; and research the best way to reach the river from the existing road system.

The department said a web page on dot.alaska.gov will be available as the project develops.

Lack of roads

DOT&PF put out a request for proposals for the study in September under the Roads to Resources initiative. At that time the work was estimated to begin Nov. 1 and end April 30 with a cost pegged at less than $100,000.

The RFP described the work as "an evaluation of one or more potential transportation corridors and river crossings to provide surface access to resource development opportunities west of the Susitna River," specifically evaluation of road access options. The department said it was a preliminary analysis which did not include field work but would be based on published sources and interviews with "responsible parties."

The Roads to Resources initiative began under Gov. Frank Murkowski and has been a priority for Parnell, with work done on proposals for roads to Ambler, Nome and Umiat. The Umiat proposal is furthest along, with the U.S. Army Corps of Engineers preparing an environmental impact project. That road would serve fields under evaluation at Gubik and Umiat.

Need for Cook Inlet access

The need for access to the west side was addressed in January 2011 by JR Wilcox, president of Cook Inlet Energy. Wilcox told the Alaska Support Industry Alliance Meet Alaska conference that access in Cook Inlet "stands between a lot of potential prospects and what could be real projects."

Ice roads are expensive and don't work every winter because of variations in the weather, Wilcox said, while the use of gravel is prohibited "except by exception."

He cited Roads to Resources as a "great initiative" but said "the poster child of the whole program ought to be the 28 miles linking the Mat-Su to the Beluga-Tyonek area. That's a very short road; it's across state land in a permitted right of way; it's been on the books since the late '60s and that would immediately lower the operating cost for ... a lot of the western side of Cook Inlet because you could actually access things by truck."

Wilcox said it's a surprise to people that doing business on the west side of Cook Inlet can cost more than on the North Slope. One of the reasons for that, he said, is that there is a road to the North Slope, but not to the west side of Cook Inlet.

The RFP said the resource component of the study involved documenting potential opportunities including prospective mines; timber harvest; energy recovery from oil, gas and geothermal; land that could be developed for residential or other uses; community benefits such as lower delivery costs; recreational access; and long-term opportunities "such as surface access further to the west." ●

Contact Kristen Nelson at knelson@petroleumnews.com

● FINANCE & ECONOMY

Korean firm joins Cardium JV

By GARY PARK

For Petroleum News

Mid-size oil and gas producer Bellatrix Exploration has added to the list of Asian investors ready to participate in the development of unconventional Canadian prospects, but has kept the wraps on the key details of the deal.

Its partner in a C$300 million joint venture is a South Korean firm which Bellatrix spokesman Troy Winsor said Jan. 22 has chosen not to disclose its identity.

Assuming the transaction closes on or before April 30, the Asian company will contribute C$150 million, or 50 percent, to participate in exploiting Bellatrix's Cardium lands in west-central Alberta.

As a result, Bellatrix plans to increase its 2013 capital budget to about C$240 million from its earlier C$180 million, while targeting average production of up to 25,000 barrels of oil equivalent per day, exiting the year at about 31,000 boe per day. Based on latest field estimates, the company averaged about 19,600 boe per day in November.

Other Korean deals

The deal is the latest involving South Korean companies in the Canadian energy sector.

Korea National Oil Corp. acquired Harvest Energy Trust for C$4.1 billion in 2009, giving it control of the BlackGold oil sands project and Harvest's refinery in Newfoundland.

Korea Gas Corp. is a 20 percent partner in the Shell-operated LNG Canada project along with holding a joint-venture stake in the development of Encana gas properties in British Columbia and a 20 percent share of MGM Energy gas discoveries in the Mackenzie Delta.

Assuming the transaction closes on or before April 30, the Asian company will contribute C$150 million, or 50 percent, to participate in exploiting Bellatrix's Cardium lands in west-central Alberta.

Ken Mills, managing partner at the law firm of Blake Cassels & Graydon, said that although the Canadian government has basically closed the door to takeovers of oil sands companies by foreign state-owned enterprises, money will continue to flow from private Asian investors into the Canadian oil patch, predicting his firm is likely to be busy this year on the joint-venture front.

Assets in three provinces

Bellatrix has assets in British Columbia, Alberta and Saskatchewan, with a major focus on the light oil Cardium play, which has been revived through horizontal drilling and multi-stage fracturing.

At the end of 2012, Bellatrix had about 207,000 net undeveloped acres and has identified more than 1,700 net drilling locations with capital requirements of C$8.17 billion based on an estimated 40 years of drilling.

The core Cardium and Notikewin/Falher properties have a combined inventory of 1,093 net drilling sites representing potential capital spending of C$4.34 billion.

The company added 7,000 acres of Cardium and Notikewin/Falher properties in December to provide 46 more locations in those two plays and 66 more net locations in the deeper Duvernay formation. ●

Contact Gary Park through publisher@petroleumnews.com

ENVIRONMENT & SAFETY

Wanted: ideas to cut inlet shipping risk

A panel examining risks associated with shipping in Alaska's Cook Inlet is inviting ideas from the public on measures to reduce the chances of accidents.

The call comes from the Cook Inlet Risk Assessment project, an ongoing initiative to examine the risk of oil spills posed by vessels transiting through the region. Three agencies are behind the project: the Cook Inlet Regional Citizens Advisory Council, the Alaska Department of Environmental Conservation and the U.S. Coast Guard.

A project advisory panel will consider all suggestions from the public on risk reduction measures, a Jan. 16 press release said. The advisory panel is made up of 14 stakeholders including mariners, marine pilots, port directors, fishermen, subsistence users and other experts.

"A risk reduction measure can be any policy, procedure, rule, equipment, system, or service that would lower the chance of a marine incident or reduce the impact of an incident if it should occur," the press release said. "It can be something fairly obvious or traditional such as a Vessel Traffic System that monitors and controls the movement of vessels transiting Cook Inlet. Or, it may be something less obvious, such as a sub-sea pipeline that would take the place of tankers moving oil across Cook Inlet."

A list of some risk reduction measures already slated for consideration is posted on the project website at www.cookinletriskassessment.com.

Ideas can be submitted by email to ciracomments@nukaresearch.com, by regular mail to CIRA Comments, Nuka Research, PO Box 175, Seldovia, AK 99663, or by fax to 240-394-4855.

The deadline for comments is Feb. 4. The advisory panel will meet in late February to consider all suggestions.

—WESLEY LOY

● LAND & LEASING

State issues Beaufort Sea leases

By ERIC LIDJI

For Petroleum News

The State of Alaska has issued leases from its December 2011 Beaufort Sea sale.

The sale yielded 54 leases for eight companies.

Shell Offshore Inc. picked up 18 leases — ADL 392164 through ADL 392181 — in Harrison Bay. The Cook Inlet explorer NordAq Energy Inc. picked up 11 leases — ADL 392182 through ADL 392192 — in Smith Bay off the National Petroleum Reserve-Alaska. Repsol E&P USA Inc. picked up five leases — ADL 392159 through ADL 392163 — adjacent to a block of leases it already held north of the Colville River unit.

Pioneer Natural Resources Alaska Inc. picked up two leases — ADL 392157 and ADL 392158 — at its near shore Oooguruk unit in Harrison Bay. AVCG LLC picked up one lease — ADL 392146 — adjacent to its Beechey Point unit north of Prudhoe Bay.

Dan Donkel picked up 13 leases — ADL 392115, ADL 392116, ADL 392119, ADL 392123, ADL 392127, ADL 392128, ADL 392132 through ADL 392134, ADL 392136, ADL 392140, ADL 392145 and ADL 392148 — from north of the Arctic National Wildlife Refuge on the east to Simpson Lagoon north of Milne Point. Samuel Cade picked up lease ADL 392152 adjacent to the Northstar unit. Andrew Bachner picked up three leases — ADL 392117, ADL 392118 and ADL 392120 — north of ANWR.

Other leasing news

The Jan Donnelly O'Neill 1991 Irrevocable Trust transferred a 0.035061 percent royalty interest in ADL 51667 in the Point Thomson unit to Jan D. O'Neill. The Robert R. Donnelly 1991 Irrevocable Trust transferred an identical interest in the same lease to Robert R. Donnelly. The Jan Donnelly O'Neill 1991 Irrevocable Trust transferred a 0.504878 percent working interest and a 0.4417682 percent royalty interest in ADL 47560 in the Point Thomson unit to Jan D. O'Neill. The Robert R. Donnelly 1991 Irrevocable Trust transferred identical interests in the same lease to Robert R. Donnelly.

In the Cook Inlet basin, Polaris Fund LP transferred small royalty interests in two leases at the West McArthur River unit to four investors. Through the transaction, Polaris transferred a 0.04166 royalty interest in both ADL 359111 and ADL 359112 to The Timothy Draper Living Trust; a 0.04167 royalty interest in both leases to James Lynch; a 0.04167 royalty interest in both leases to James Yarmon; and 0.125 percent royalty interest in both leases to the Alaska Industrial Development and Export Authority. ●

Contact Eric Lidji at ericlidji@mac.com

● GOVERNMENT

Admin proposes DNR permitting changes

Department has been working on streamlining since 2011; DMLW says bill, along with regulatory changes, will help reduce backlog

By KRISTEN NELSON

Petroleum News

The Alaska Department of Natural Resources has been working on streamlining permitting procedures and Gov. Sean Parnell has submitted a bill which would make statutory changes the department has identified as needed for efficiency.

The proposed legislation, House Bill 77 and Senate Bill 26, would make changes in the Alaska Land Act and the Alaska Water Use Act.

The governor has also proposed legislation to give Alaska state primacy over dredge and fill activities in state waters and wetlands, and a bill to authorize the Alaska Industrial Development and Export Authority to provide financing and issue bonds for a liquefied natural gas production system and a natural gas distribution system.

In his transmittal letter for the DNR permitting changes, the governor said the goal of the legislation is to provide Alaskans with "more timely, consistent permitting decisions."

The bill is accompanied by zero fiscal notes from DNR's Division of Mining, Land and Water and the Department of Fish and Game.

"The bill will either create efficiencies or prevent inefficiencies which will allow the Division of Mining, Land and Water to reallocate staff time to other permits and authorizations thus helping to reduce the backlog," Director Brent Goodrum said in the division's fiscal note, characterizing the statutory changes as "intended to continue progress made to the State of Alaska's permitting processes to ensure projects are permitted in a more timely, predictable and efficient manner while safeguarding the environment."

Goodrum said regulatory changes would be required to conform to language changes in the legislation and said DNR anticipates it would take two years from passage of the statutory changes for all regulatory changes to be adopted.

Goodrum said regulatory changes would be required to conform to language changes in the legislation and said DNR anticipates it would take two years from passage of the statutory changes for all regulatory changes to be adopted.

The backlog

DNR Commissioner Dan Sullivan talked about the need for permitting changes in May 2011.

He said the department has been working on identifying the permitting challenges, and noted that permitting became a big issue in the 2011 legislative session, when DNR described to legislators a backlog of about 2,500 permits in the Division of Mining, Land and Water.

Incremental funding from the Legislature allowed the division to add new positions and fill ones that were vacant.

In September 2011 DNR began asking for public feedback in streamlining the permit process. The department said that the governor had requested three departments — DNR, Fish and Game and Environmental Conservation — to evaluate their permitting processes for efficiency improvements.

Areas for public comment included: large projects, small projects within coastal zones, federal permitting, legal challenges and permit backlog.

In 2012 the Legislature passed HB 361, which made changes to the Alaska Land Act relating to the disposal of state land and materials, expanding options for the method of sale. In the division's fiscal note the legislation was described as "intended to increase efficiency, certainty and timeliness of DNR's land permitting, leasing, mining and land sales programs to permitting applicants."

Primacy for permitting

The governor has also submitted bills authorizing the state to assume primacy for administering permitting under the Clean Water Act for dredge and fill activities allowed to states under federal law, HB 78 and SB 27.

"The current federal process has resulted in a large number of projects in Alaska being subject to an expensive and bureaucratic federal permitting system and litigation, delaying and restricting opportunities for Alaskans," the governor said in his transmittal letter.

The legislation would provide authority to develop and implement state primacy of dredge and fill activities in waters and wetlands within the state in accordance with the Clean Water Act.

"The bill is part of a comprehensive financial package relating to the Interior Energy Plan, a strategy that includes low interest loans, gas storage tax credits, and general fund dollars for a moveable liquefaction plant and distribution system," the governor said.

The gas storage tax credits have already been enacted into law, the governor said, and general fund dollars will be part of budget deliberations, while HB 74 and SB 23 authorize AIDEA to provide up to $275 million in financing.

HB 58, by Reps. Tammie Wilson, R-North Pole, Steve Thompson, R-Fairbanks, Doug Isaacson, R-North Pole and Pete Higgins, R-Fairbanks, is also a bill authorizing AIDEA to finance or participate in financing a North Slope LNG facility not to exceed $275 million. ●

Contact Kristen Nelson at knelson@petroleumnews.com

● EXPLORATION & PRODUCTION

BP plans new offshore seismic survey

Company wants to collect 3-D seismic data on north side of Prudhoe Bay to enable more effective management of oil-field reservoirs

By **ALAN BAILEY**
Petroleum News

BP Exploration (Alaska) has applied to the federal Bureau of Safety and Environmental Enforcement, or BSEE, for a permit to conduct a new, high-resolution 3-D seismic survey in the shallow waters of the Beaufort Sea, offshore Prudhoe Bay, starting in the summer open water season of 2013. The company says that the purpose of the proposed survey is to obtain up-to-date, high resolution seismic data for existing oil reservoirs, to allow more effective reservoir management.

129 square miles

The survey would cover an area of 129 square miles, mostly in waters three to 45 feet in depth, and would use water bottom cabling for data gathering, rather than the towing of hydrophones behind a seismic vessel, as is generally done in a marine seismic survey in deeper water. The southern edge of the survey area would extend onto land along the Beaufort Sea coast. The northern edge would extend a short way beyond the three-mile limit that defines the outer edge of state waters, thus placing about 19 square miles of survey on the federal outer continental shelf — hence, presumably, the need for a federal BSEE permit.

Although the survey area primarily lies within the Prudhoe Bay unit, the area includes portions of the Northstar, Dewline and Duck Island units, and some non-unit areas, BP says in its permit application.

Start in July

BP says that it anticipates mobilizing equipment for the survey to Deadhorse in the central North Slope in late May to early June, with survey operations starting at the beginning of July. Demobilization would take place by the end of September. The company does not expect to complete the survey in 2013 and would likely have to return in the 2014 open water season to finish the work.

During the survey period, the survey crew will limit potential impacts on bowhead whale migration and subsistence hunting by only conducting air-gun operations in accordance with dates specified in a conflict avoidance agreement with North Slope whale hunters, BP says.

Seismic data acquisition will take place around the clock during the dates when survey operations are in progress. The entire operation will involve about 220 people.

Cable and sound-source vessels

According to BP's permit application, five or six small cable boats will lay and later retrieve the cables with seismic sound receivers on the seafloor, with the cables running on a series of parallel lines with a minimum spacing of 1,320 feet. Three seismic sound source vessels, each about 79 feet in length, will operate two at a time, while the third vessel is in dock for operations such as refueling. The two operational sound source vessels will tow arrays of air guns along parallel lines at a minimum spacing of 320 feet, running perpendicular to the cable lines. The vessels will discharge their air guns alternately, each at intervals of eight to 10 seconds, thus causing a seismic shot to occur every four to eight seconds.

The seismic operations will require authorizations from the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for the unintended, minor disturbance of marine mammals — BP proposes implementing mitigation measures designed to avoid wildlife disturbance. ●

Contact Alan Bailey at abailey@petroleumnews.com

LAND & LEASING

Potential Alaska state and federal oil and gas lease sales

Agency	Sale and Area	Proposed Date
DNR	Cook Inlet	spring 2013
DNR	Alaska Peninsula	spring 2013
DNR	Beaufort Sea Areawide	fall 2013
DNR	North Slope Areawide	fall 2013
DNR	North Slope Foothills Areawide	fall 2013
BLM	NPR-A	fall 2013
BOEM	Cook Inlet (special interest)	2016
BOEM	Chukchi Sea	2016
BOEM	Beaufort Sea	2017

Agency key: BLM, U.S. Department of the Interior's Bureau of Land Management, manages leasing in the National Petroleum Reserve-Alaska; BOEM, U.S. Department of the Interior's Bureau of Ocean Energy Management (formerly Minerals Management Service), Alaska region outer continental shelf office, manages sales in federal waters offshore Alaska; DNR, Alaska Department of Natural Resources, Division of Oil and Gas, manages state oil and gas lease sales onshore and in state waters; MHT, Alaska Mental Health Trust Land Office, manages sales on trust lands.

FINANCE & ECONOMY

Sunshine rises in oil sands

Canadian startup Sunshine Oilsands is continuing its steady progress towards commercial production that could eventually yield 200,000 barrels per day of bitumen.

The company said C$390 million of its C$430 million capital budget for 2013 will be spent on its West Ells and other oil sands growth projects.

It also confirmed a memorandum of understanding has been signed to share technology with a unit of China's CNOOC.

Company CEO John Zahary said Sunshine expects the company will complete, commission and start the first 5,000 bpd of two phases of West Ells by the end of this year.

He also said Sunshine plans to move ahead with developments at its Thickwood and Legend Lake leases, with the three projects designed for eventual combined output of 200,000 bpd.

West Ells received regulatory approval a year ago for its initial commercial phases from the Alberta Energy Resources Conservation Board, ERCB.

The project is designed to reach peak production of 100,000 bpd of bitumen using steam-assisted gravity drainage technology, with a productive life of more than 50 years.

Applications before ERCB

Regulatory applications are before the ERCB for the first phase of 10,000 bpd at Legend Lake — scheduled for completion by mid-2016 and expected to ultimately yield 50,000 bpd for 23 years — and for the initial 10,000 bpd phase at Thickwood, growing in two more phases to 50,000 bpd.

Sunshine also reported its MOU with China Oilfield Services Ltd., COSL, a unit of CNOOC, to cooperate in developing oil sands exploration technology, which could be used to conduct production tests.

The technology, patented by COSL, is intended to reduce the facility footprint and operation cost for generating steam and other thermal fluids to inject into reservoirs.

Songning Shen, co-chairman of COSL, said the technology has worked successfully in a CNOOC limited offshore project in China and Sunshine believes it could work economically in bitumen reservoirs.

The MOU will be valid for one year and can be extended for another year, unless terminated by either party.

Sunshine holds 1.19 million acres of oil sands leases in the Athabasca region of northeastern Alberta, with eight primary operating regions.

The company's total 2013 capital spending program is expected to be covered through cash on hand and a C$200 million undrawn bank line.

—GARY PARK

● ALTERNATIVE ENERGY

Augustine geothermal leasing approved

By KRISTEN NELSON

Petroleum News

The State of Alaska has approved geothermal leasing at Augustine Island in Cook Inlet, but has also noted difficulties in use of any discovered geothermal energy because of the island's remote location.

The Department of Natural Resources Division of Oil and Gas requested applications for and public comment on geothermal exploration at Augustine, near Kamishak Bay some 60 miles southwest of Homer, in early 2007, and said that based on responses to the call for applications and comments, the DNR commissioner would determine whether to proceed with a competitive geothermal lease sale, issue one or more non-competitive prospecting permits or cancel the offering.

A Jan. 14 finding by Division of Oil and Gas Director Bill Barron, also signed by DNR Commissioner Dan Sullivan, said the state is offering some 65,992 acres in 26 tracts on and surrounding Augustine Island for geothermal resources disposal.

The finding determined that disposal is in the best interest of the state, with potential benefits to the state outweighing possible negative effects. After a 20-day period for reconsideration requests, the decision goes into effect on the 31st day after issuance.

Active volcano

The area proposed includes all of Augustine Island and some tidelands and adjacent waters within three miles of the island, but excludes nearshore tidelands of the mainland, the decision said.

Augustine Volcano on the island is active, the decision said, and at least six major eruptions have occurred in the last 200 years, with ongoing eruptions and debris avalanches shaping the irregular coastline of the island.

"Geologic hazards may exist on the island including volcanic ash clouds, ash fallout and volcanic bombs, pyroclastic flows, debris avalanches, tsunamis, earthquakes, directed blasts, lahars and floods, volcanic gases, and lava flow," the decision said.

While the presence of geothermal energy potential is indicated by the volcano, there is no subsurface and geologic data related to the geothermal resource available.

The island area is "currently primarily used and managed for research and education, and secondarily for commercial and subsistence harvest activities," the decision said.

Energy uses

Geothermal energy can be accessed by wells and the heat energy used to generate electricity, or directly used for heat, the decision said, noting that to be economically recoverable geothermal resources must be near the surface and of very high temperature.

If a geothermal resource were discovered on Augustine Island, it could be converted to electric power, but transporting geothermal energy can be a challenge, the decision said, as it "must be used or converted to electricity within a few miles of its recovery from the ground reservoir. Compared to other energy sources, geothermal resources can only be transported a short distance using conventional technologies."

The decision describes the challenge for transporting geothermal-generated power from Augustine Island, which is "far from existing electrical power grid infrastructure."

The nearest power plants are the Chugach Electric Association-operated Beluga facility, on the west side of Cook Inlet some 150 miles northwest of Augustine Island, and the Homer Electric Association-operated Nikiski generation plant some 112 miles from Augustine. ●

Contact Kristen Nelson at knelson@petroleumnews.com

On the web

See previous Petroleum News coverage:

"Tapping into Alaska's volcanoes," in May 13, 2007, issue at www.petroleumnews.com/pnads/692081840.shtml

"Alaska offers geothermal acreage," in April 15, 2007, issue at www.petroleumnews.com/pnads/207892417.shtml

● GOVERNMENT

Not everyone agrees with oil tax change

Opposing views from Senate Democrats, one Senate Republican, with concern about regressive nature of change, breaking the system

By KRISTEN NELSON
Petroleum News

As the Alaska Senate's Special Committee on TAPS Throughput begins hearings on the throughput aspects of Gov. Sean Parnell's proposed oil tax changes, a couple of Senate players in the last round of tax hearings expressed their concerns with the governor's bill.

Sen. Bert Stedman, R-Sitka, who was a member of the Senate Finance Committee during recent tax changes, and co-chair of the committee when ACES (Alaska's Clear and Equitable Share) was passed in 2007 and through discussion of the governor's proposed ACES last session, said Jan. 16 that he feared the proposed changes would return Alaska to a regressive tax system.

Sen. Bill Wielechowski, D-Anchorage, said at a Senate Democratic press availability Jan. 23 that the governor's proposal to remove progressivity would destroy the balance struck in ACES, where the state gave up surety at low prices in exchange for higher takes at high oil prices.

Regressivity risk

Stedman said that by eliminating progressivity, Parnell's proposal restores the regressive nature of the tax system prior to ACES, so as oil prices rise, the state's percentage take drops.

He said he believes ACES is too progressive, with the state taking too much at very high oil prices, but eliminating progressivity exposes the state at low oil prices. Last year there was progress in getting issues on the table on the state's exposure at low oil prices with the level of credits in ACES, Stedman said.

The state has some problems with the present system and industry has some problems.

"So we have to fix both sides of the ledger and put it in balance," Stedman said.

But prior to ACES the state's system was regressive, "so as the (oil) price advanced our share of the pie as sovereign, people of the state, decreased."

Progressivity was the solution to that problem.

The elimination of progressivity in the governor's bill is "one of the red flags," he said, because while progressivity takes too much at high oil prices in the present tax, "you can't go, in my opinion, to a regressive tax and expose the state to that low," Stedman said.

And, with the source rock on the North Slope, Alaska has "a bright future in front of us; we just need to get over this little bump in the road that we've been working on for a couple of years."

Back to ELF?

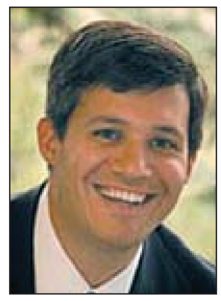
Wielechowski said everyone wants more oil in the pipeline — there are just differences in philosophy on how to get there.

"The governor's philosophy is to go back to a similar tax structure that we had under the ELF, very low taxes."

The state had that system for some 30 years and during 30 years of low taxes there was a "5.2 percent average decline in production," he said.

Eliminating progressivity is a shortcoming in the governor's bill, Wielechowski said, because with the passage of ACES the state gave away its protection at low prices


BERT STEDMAN


BILL WIELECHOWSKI

in exchange for more money at high oil prices.

He also cited the 20 percent gross revenue exclusion on new oil in legacy fields (that portion wouldn't be taxed), saying no experts the Legislature heard from said the state needed to do that.

The governor's bill eliminates the 20 percent capital credit, designed to incentivize companies to reinvest in Alaska. By taking that away, "you are giving companies every incentive in the world to pocket their money and go invest it" elsewhere in the world.

And deferring payment on net operating loss credits, something designed to help small producers, discourages new companies. That was in ACES as a deliberate way to draw new players, because "we knew we needed more competition on the North Slope," Wielechowski said.

Not a durable system

Wielechowski said a change in the system is needed because "we don't have a durable system."

At oil prices of $60-$80 a barrel, "our system is at risk because we don't have a floor."

Wielechowski said Alaskans could be protected on the low price side by establishing a minimum gross tax, or floor, and he would propose that, and capping progressivity at very high oil prices.

But he said the governor's bill makes too many changes. ACES is a system, he said and "when you start pulling strings, the whole thing falls apart."

You can't, for instance, get rid of capital credits and leave everything else in place.

"Once you start pulling on the string, it really does start to fall apart — the philosophy of it falls apart."

Wielechowski recommended Gaffney, Cline & Associates, the consultants who worked on ACES, to advise legislators.

Sen. Johnny Ellis, D-Anchorage, the Senate Democratic caucus leader, said Gaffney, Cline was well thought of in the Legislature, and while he didn't always agree with them, "they were the people that talked Democrats into switching from a gross profits tax to a net profits tax in this modern era," convincing legislators "that we were old fashioned in our simplicity of just counting the barrels." ●

Contact Kristen Nelson at knelson@petroleumnews.com

● NATURAL GAS

BC LNG presses ahead with plans

By GARY PARK

For Petroleum News

The minnow among Canada's LNG whales is now scheduled to come on stream in spring 2015, a year behind its earlier target, but easily two years ahead of its bigger rivals.

The estimated cost of the Douglas Channel LNG Project, to be operated by BC LNG Export Co-operative, is also climbing above its C$400 million initial capital budget, say proponents.

But BC LNG, co-owned by Houston-based LNG Partners and the Haisla Nation of northwestern British Columbia, continues to demonstrate that it has to be taken as seriously as Kitimat LNG (Chevron-operated), LNG Canada (Shell), Pacific Northwest (Progress Energy) and the tentative schemes being led by BG Group and ExxonMobil.

The plans for Douglas Channel are pinned on the use of a barge-based liquefaction plant near Kitimat, which Bill Gwozd, a senior vice president with Ziff Energy, endorses because it avoid issues related to building on land.

He rates BC LNG as a "nimble rabbit rather than some of the big slow tortoises. They can hop in and get something figured out."

Two tankers

In its latest development, BC LNG said Jan. 21 that Bermuda-based LNG shipping company Golar has agreed to provide two tankers to the project to move its initial 700,000 metric tons a year of LNG.

The deal involves contracts for both feed gas supply and LNG purchase and off-take for the first train.

The contract for LNG purchase and off-take was made jointly with Golar and Houston-based LNG Partners and for feed gas supply with LNG Partners.

Like all North American LNG ventures seeking markets in Asia is the demand by potential buyers to introduce North American gas-linked price benchmarks for the LNG, rather than be tied to oil-indexed contracts.

BC LNG managing director Tom Tatham, who is talking to potential customers in Japan, said that shift among Asian buyers represents a "fundamental shift in the marketplace."

Price differential

Japanese gas prices have been above C$15 per gigajoule recently, while Alberta prices at the AECO hub are stuck around C$3, which is not enough to even pay the cost of replacing the gas in many cases.

BC LNG said the gas supply for the Douglas Channel project will be managed by Tenaska Marketing Canada, a division of TMV Corp., a private U.S. gas marketing and power company.

Canada's National Energy Board issued a permit almost a year ago for the project to export 36 million metric tons of LNG over 20 years, or liquefy an annual maximum of 250 million cubic feet per day split between two trains.

Golar said its participation in the project and its commitment to LNG off-take remains subject to the company reaching agreement with the current proponents for financing of the facilities and the approval of permits needed for the project to go ahead on a firm basis. ●

Contact Eric Lidji at ericlidji@mac.com

● FACILITIES

Conoco planning Kuparuk fiber optics

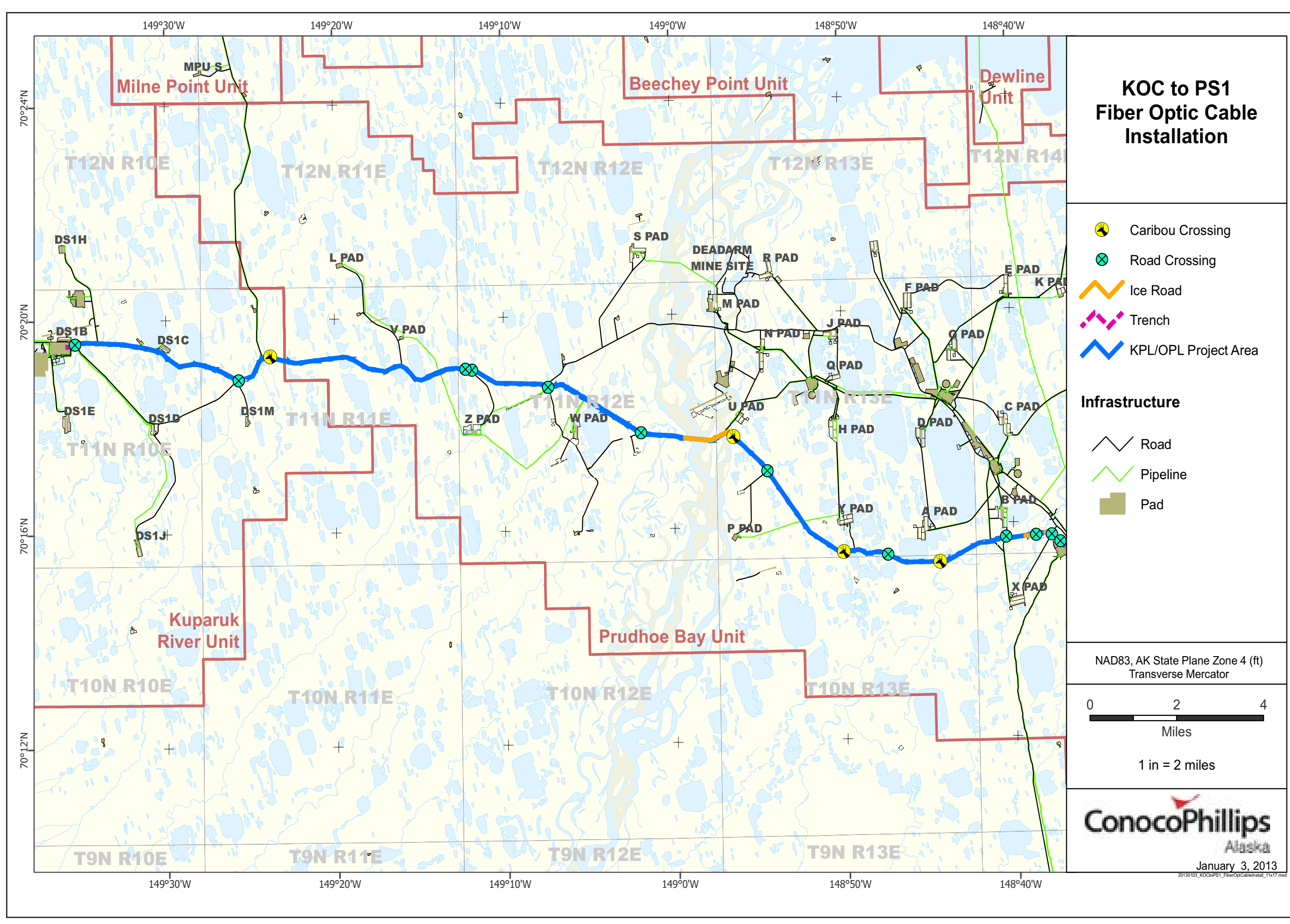
By ERIC LIDJI

For Petroleum News

The end of the United States fiber optic grid could soon be a little farther west.

ConocoPhillips Alaska Inc. wants to install a 96-strand fiber optic cable connecting the Kuparuk River and Colville River units to Pump Station 1 of the trans-Alaska oil pipeline. While Pump Station 1 is already connected to Anchorage, and therefore to the Lower 48, by fiber optic

see **FIBER OPTICS** page 14



● GOVERNMENT

Begich to Obama: remember the Arctic

Senator outlines polar priorities for the president, including icebreakers, Arctic science and timely review of oil and gas projects

By WESLEY LOY
For Petroleum News

As President Obama neared his inaugural for a second term in the White House, he received a list of "Arctic priorities" from Democratic Sen. Mark Begich of Alaska.

On the senator's list: an expanded Coast Guard presence in the polar ocean; more Arctic science; and streamlined review of Arctic oil and gas permit applications.

MARK BEGICH

Begich laid down his priorities in a Jan. 16 letter to Obama.

"Our nation has both an historic opportunity and challenge as we face an Arctic Ocean which is increasingly ice-free," the three-page letter began. "I appreciate all your administration has done to advance responsible development in the region. As the Arctic opens, we will have to carefully balance protection of the natural environment and those who rely on it with the economic needs of our nation for efficient oil and gas development, marine shipping, fisheries and tourism. As you prepare your 2014 and out-year budgets, I urge you to reflect the importance of these Arctic challenges and opportunities to the nation."

Icebreakers

Begich chairs the Senate Commerce Subcommittee on Oceans, Atmosphere, Fisheries and Coast Guard.

Begich and the rest of the Alaska congressional delegation at times have been at odds with the Obama administration over Coast Guard icebreakers, Arctic oil and gas activity and other issues.

With respect to icebreakers, the Alaskans are pushing for more of them, whether it means overhauling old ships or building new ones. Either option will be very expensive.

Begich, in his letter, said the Coast Guard will need adequate icebreaking capability in an increasingly accessible Arctic.

"We should do this through both the relatively cost-effective means of extending the life of our existing icebreakers and making investments in new icebreakers for the long term," he wrote.

At present, the Coast Guard has only one operational icebreaker, the medium-duty Healy. A heavy-duty icebreaker, the Polar Star, recently was refurbished in Seattle and is expected to return to active duty later in the year.

Beyond icebreakers, the Coast Guard also needs "a credible forward operating base in the Arctic to support marine and aviation operations, as well as sufficient Arctic-capable aircraft and cutters to ensure it can execute all of its important missions in the region," Begich said.

Science and permitting

Begich noted the lack of "basic environmental knowledge needed to make the complicated policy decisions we are sure to face as activity expands" in the Arctic.

He urged Obama to ensure adequate operational and capital funds for the National Oceanic and Atmospheric Administration and the U.S. Department of the Interior.

"NOAA has many capabilities to support Arctic development, including gathering hydrographic and meteorological data and mapping sensitive habitats but lacks the operational funding to fully survey the region," Begich wrote. "DOI has broad-reaching interests in Arctic science as well."

Begich said he sought, during Obama's first term, "robust but fair" federal review of Arctic oil and gas permit applications.

"I am pleased your administration has worked with me to make great strides towards this goal," the senator wrote. "I ask that we protect the gains made and pave the way for further improvements" by ensuring NOAA, the Interior Department, the Environmental Protection Agency and other agencies involved in permitting are "funded to fully and efficiently carry out their responsibilities." ●

Contact Wesley Loy at wloy@petroleumnews.com

EXPLORATION & PRODUCTION

CIE to expand West McArthur River pad

Cook Inlet Energy LLC is looking for more elbow room at its West McArthur River oil field on the inlet's west side.

The Anchorage-based company is seeking a permit from the U.S. Army Corps of Engineers to place 7,570 cubic yards of sand and gravel in nearly an acre of wetlands. The West McArthur pad will be expanded by a total of 3.1 acres, including wetlands and uplands.

The expansion is needed for oil and gas drilling operations, said a Jan. 16 public notice from the Army Corps. Specifically, room is needed for a lay-down area and equipment storage.

The wetland parcel to be filled has been degraded by past industrial development including roads, and is no longer connected hydrologically to surrounding wetlands.

"Therefore, compensatory mitigation is not warranted for this low value, previously degraded, isolated wetland parcel," the Corps notice said.

Cook Inlet Energy operates an assortment of oil and gas properties on the west side, including the offshore Redoubt unit and Osprey platform.

Cook Inlet Energy is a subsidiary of publicly traded, Tennessee-based Miller Energy Resources Inc.

—WESLEY LOY

ENVIRONMENT & SAFETY

Study planned on calving Alaska glacier

The Prince William Sound Regional Citizens' Advisory Council is sponsoring a study of the retreating Columbia Glacier, which poses a threat to oil tankers.

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

"Columbia Glacier has long been of interest to the council," said an article in the January edition of the council's newsletter, The Observer. "The glacier has been in a state of rapid retreat since the early 1980s. The reduction in mass has been mostly in the form of calving icebergs. These icebergs sometimes drift with the current and the wind into the vessel traffic lanes used by oil tankers in Prince William Sound. In 1989, the Exxon Valdez grounded on Bligh Reef while avoiding ice in the tanker lanes."

The council, in the late 1990s, helped fund the Columbia Glacier Iceberg Monitoring Project, which looked at the potential for calved ice to damage oil tankers.

Now the council is sponsoring a continuation of that project.

Role of climate change

Glaciologists Tad Pfeffer and Shad O'Neel will conduct the new study.

"Pfeffer is regarded for his work in glacial retreat and for studying tidewater glaciers worldwide," the newsletter article said. "O'Neel has been extensively involved with research conducted at Columbia Glacier."

The researchers will attempt to document the current rate of iceberg calving and drift trajectories.

"Ultimately, over the next year, Pfeffer and O'Neel hope to develop a forecast for iceberg production by Columbia for the next 10 years," the article said.

Columbia Glacier flows mostly south out of the Chugach Mountains to its tidewater termination in Prince William Sound, southwest of Valdez.

Prior to 1980, it had a long history of stability, with a length of 41 miles, the U.S. Geological Survey says. By late 2000, it was about 33 miles long.

"Though perhaps triggered by climate fluctuations, this major glacier retreat once initiated, has progressed due to the nature of the calving glacier cycle with little concern for the climate," the USGS says.

—WESLEY LOY

continued from page 1

XL PRESSURE

critical infrastructure required to transport growing U.S. domestic production from the Bakken shale region to market."

In a major development Jan. 22, Nebraska Gov. Dave Heineman approved the revised route for the pipeline, dropping his earlier opposition to the project.

He said TransCanada would provide evidence that it is carrying $200 million in third-party insurance to cover any cleanup costs from leaks.

The pipeline is designed to carry 830,000 bpd from the Alberta oil sands to U.S. Gulf Coast refineries, picking up Bakken production from Saskatchewan and North Dakota along the way.

Along with Wall, the Republican governors of Arizona, Idaho, Kansas, Nevada, North Dakota, South Dakota, Oklahoma, Texas, Utah and Wyoming were signatories to the letter.

Names not on letter

Montana's newly elected Gov. Steve Bullock said he intends to write his own letter, while Alberta Premier Alison Redford — whose province would be the major financial beneficiary of the pipeline — bypassed the chance to add her name to the letter.

A spokesman for Redford said: "It's not about any one letter. We welcome this letter as it supports (Redford's) longstanding efforts to open new markets for Alberta oil."

Marcel Coutu, chief executive officer of Canadian Oil Sands, the largest partner in the Syncrude Canada oil sands consortium, told an investment conference earlier in January that he anticipates a "couple of tough years" ahead.

However, Heineman, whose state has generated the strongest opposition to the pipeline, was also a notable omission from the signatories, pending a resolution of TransCanada's rerouting of the pipeline to avoid Nebraska's environmentally sensitive Ogallala Aquifer.

A new report by the Nebraska Department of Environmental Quality concluded that any pipeline ruptures would be "localized," cleaned up by TransCanada and pose no threat to the aquifer — a finding that was scorned by a landowners' group.

A decision by the U.S. State Department on Keystone XL has been expected this quarter, although some observers expect further delays, with former Alberta premier Ed Stelmach doubts Keystone XL will be approved, if at all, this year.

Effectively shelved by the Obama administration for the past year, Keystone XL is the most immediate hope of relief for Canadian oil producers who are anxious to gain access to new markets.

Arguments for pipelines

Rick George, former chief executive officer of oil sands giant Suncor Energy, has taken a high-profile public role in hammering home a constant refrain — that more pipelines are vital to the petroleum industry's health and Canada's economic well-being.

The price spread between Alberta's oil sands bitumen and U.S. conventional crude is "serious" and should remind Canadians about the dangers of relying on basically one export customer, he said.

Martin King, an analyst with FirstEnergy Capital, agreed that the squeeze on pipelines and delays in retooling U.S. refineries to handle heavier crudes are forcing Canadian producers to think about shutting in some production.

The trigger point results from the dramatic plunge in prices for Western Canada Select heavy blend, which is now hovering around $50 per barrel, less than half the price for international benchmark Brent crude — a discount that King warns could stretch over a long period.

He said traditional heavy oil production is likely to be hit first as that sector sits on the fringe of prices in the $45-$50 per barrel range that is needed to generate positive cash flow.

King said higher-volume projects that use enhanced recovery methods and oil sands operations that use steam-assisted gravity drainage can probably hang in until prices fall below $30 per barrel and remain there for several months.

Those projects are not easily shut down because of the need to keep steaming the reservoir to force the viscous heavy crudes to flow to the surface.

Pressure on prices

The shortfall in takeaway capacity from Canada and a delay in adding a 120,000 barrel-per-day unit to boost capacity at BP's 337,000 bpd refinery at Whiting, Ind., contribute to the accumulating pressure on realized prices for both Canadian heavy and tight oil, said Chris Feltin, an analyst at Macquarie Research.

And it makes little difference that Canada is the largest source of U.S. oil imports at 2.5 million bpd.

The challenges saw the Toronto Stock Exchange's energy index drop 5.3 percent in the final quarter of 2012, with Penn West Petroleum posting a 22 percent decline in its share value, MEG Energy down 19 percent and Canadian natural Resources off 7.5 percent.

A continuation of the trend points to a "really ugly" first quarter said Andrew Potter, an analyst with CIBC World Markets.

The fist glimmer of hope is the 50,000 bpd of new space Enbridge is scheduled to add to its Line 5 from Superior, Wisconsin, to Sarnia, Ontario, in March.

Marcel Coutu, chief executive officer of Canadian Oil Sands, the largest partner in the Syncrude Canada oil sands consortium, told an investment conference earlier in January that he anticipates a "couple of tough years" ahead.

George said he is counting on the northern segment of TransCanada's Keystone XL pipeline getting U.S. administration approval and the reversal of Enbridge's Line 9 to open the Montreal refining market to Western Canada and U.S. light crude also proceeding, and providing some pricing relief. But that won't be enough.

"We need one new oil line and two natural gas lines to the (British Columbia) coast for Asian customers," he said.

Taking direct aim at the opponents of new oil sands pipeline capacity across British Columbia, George said that "if we think about what is good for this country and not what is best for each individual in it, that is important.

"The infrastructure we need is not risky and not terribly complex and we should be putting it in to protect the Canadian standard of living."

He welcomed "civil conversations" with people who do not hold entrenched views, urging them to "get out of the trench."

Pricing outlook bleak

Alberta Energy Minister Ken Hughes took an even bleaker view of the pricing outlook than George, saying "it's entirely possible that this will take a much longer cycle to work its way through. So I'm not thinking we're facing just a couple of years of pressure on differentials."

"It's going to take time to build pipelines. Do not assume that we will be bailed out by another boom. That is a very dangerous assumption," he said.

Alberta Finance Minister Doug Horner added to the dismal outlook by noting that provincial auctions of exploration rights and royalties from conventional oil will add to Alberta's painful budget troubles, hinting at a deficit-burdened budget on March 7, while noting that his province's returns from natural gas royalties have slumped to C$1 billion in the current fiscal year from C$8 billion five years ago.

He told a business luncheon Jan. 21 that the widening price gap will put Alberta more than C$3 billion below its revenue projections in the fiscal year that ends March 31, shattering the government's hopes of collecting C$11 billion from its resources, and jeopardize projections of C$10 billion in bitumen revenue in fiscal 2014-2015.

"It's not pretty," Horner said. "The price differential has widened out during a period when seasonality would normally indicate we would get a better result. We did not."

—GARY PARK

Contact Gary Park through publisher@petroleumnews.com

continued from page 12

FIBER OPTICS

lines, data transmissions between the two more western North Slope oil fields and Pump Station 1 are currently conducted using microwave signals.

With a fiber optic line, ConocoPhillips said it would be able to increase real time communications and computing between Kuparuk and Anchorage on a range of operations from analyzing production information to improving emergency response.

The proposed line would be mostly buried along existing rights of way. It would cross some 26.8 miles of state land, for which ConocoPhillips is currently requesting an easement, as well as a section of surface land owned by Alyeska Pipeline Service Co.

Two phases of installation

Specifically, the line would begin at the Kuparuk River unit Central Processing Facility No. 1 and follow the Oliktok Pipeline across the Kuparuk River and Prudhoe Bay units.

ConocoPhillips expects to install the line in two phases to work within the winter and summer travel restrictions on the North Slope. The first would run from roughly mid-February to late April. The second would run from roughly mid-July to mid-September.

Although ConocoPhillips did not mention the possibility in its current permitting documents, the line to Kuparuk could one day be extended into the National Petroleum Reserve-Alaska, where ConocoPhillips maintains numerous leases and exploration wells.

Recently, the North Slope Borough began permitting and planning a new fiber optic service into NPR-A designed to accommodate future Chukchi Sea developments. ●

Contact Eric Lidji at ericlidji@mac.com

continued from page 3

FEIGE Q&A

to a major gas sale for export pipe, the state would take another hit on the treasury, just because of the way our tax law was structured. So, getting rid of progressivity is an advantage to the state and beneficial to the Alaskan economy.

Petroleum News: You also have HB 4 before you at some point. You were not in favor of HB 9 last year. Will you be handling this bill?

Feige: Dan Saddler will be handling this HB 4.

Petroleum News: What are your thoughts on the gas pipeline situation right now, be it the in-state line or the export project?

Feige: You've got two projects that are trying to move forward. On the one hand, the bullet line is there and it spurs on the producers to say we better get going on this export line if we are going to do it, or the bullet line is going to go forward and take away the economic advantages of the bigger line. On the other hand, the folks who want to build the big line specifically the folks from Asia — the Koreans and the Japanese who have already approached us about building, definitely have interest in our gas. They are in favor of a bigger line. I understand they are pretty much looking at Valdez as the terminus for that export line. Certainly that would make the folks in my district pretty happy. It's deepwater; it's ice-free; you've got the maritime surveillance infrastructure already in place.

There are a lot of advantages to it. The depth of the water is particularly critical. Parts of Cook Inlet, around Nikiski, is only 40 feet deep, if you look at the chart. Looking at the depth sounders around Valdez arm this summer, 750 feet. Plenty of room. The bigger the LNG tanker you can bring in to export, the better the economics of the project are going to be because you are going to lower the unit cost for transportation. I'm hopeful the companies will eventually end up running that big line to Valdez.

Petroleum News: There are also permitting issues you'll be addressing this session. What do you feel needs to be done?

Feige: This is something that's been looked at for two years over at DNR. They are looking to the future of certain activities. They are looking at how things are done presently. A lot of the regulations go back many years. I think the changes are going to acknowledge how at this point we do certain things in a pretty standard way.

It's a combination of acknowledging the current reality and the current practices and also looking forward to the future, but also saying if we change our tax rates, we are going to get a whole bunch of new activity. That means we are going to get a whole bunch of new permit applications flooding our offices.

We need to look at how can we get ahead of that so that we don't need to increase the number of people processing all of this and do it so we don't increase our operating budget. It all wraps around keeping government at a level that still fills its responsibilities to its people and stewardship to the state's resources.

It's a matter of being out front of the changes we foresee coming and making sure we don't get behind.

Petroleum News: Getting back to HB 72 for a final question, who between you and the Senate Resources will move forward first?

> *"I am operating under the assumption that we will pass an oil tax bill. My job is to make sure the oil tax bill is the best that it can be, that it does what we want it to do, that it's a stable structure that is going to last a long time and be adaptable to changing conditions down the road."*
> **—House Resources Co-Chair Eric Feige, R-Chickaloon**

Feige: Right now the Senate has sent the bill to the TAPS Throughput Committee. For them, it's essentially a third committee of referral. When it comes out of TAPS Throughput, it's going to go to Senate Resources. At that time we'll drop it in House Resources. The Senate and House (Resource) committees will run that bill parallel. At some point, we may diverge, I don't know. We'll have to see how it goes, but our intent is to start hearings on that bill on the same day.

Keep in mind, it's not like the House is sitting idle on this bill. At this point we are analyzing it. We need to figure out what we need to ask the consultants. We are using the time the Senate has the bill to prepare for our own hearings on the bill. We've got a fairly experienced committee on House Resources.

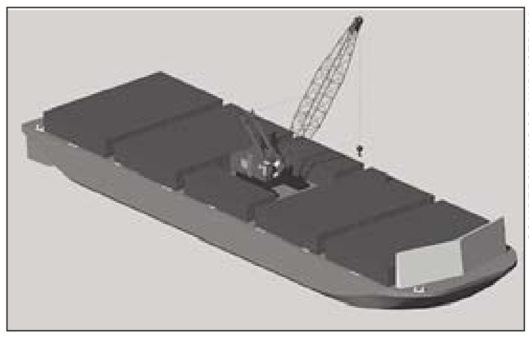
We've got Paul Seaton, Craig Johnson, Mike Hawker, Kurt Olson and Peggy Wilson from the majority. In the minority, you've got Chris Tuck and Geran Tarr. Johnson, Hawker, Olson and Seaton, those guys have been with the Legislature a significant amount of time. Rep. Wilson has an awful lot of experience on the Resources committee. Seaton and Johnson have been chairs on the Resource Committee. Hawker has been chair of the Finance Committee.

A lot of these guys were here for PPT, ACES, for AGIA — all the debates that we've had in the Legislature for the past six to eight years. They bring a lot to the table. I don't need to explain to them what DNR does as a department. We are going to be able to address the issues. They know the history. They know what happened with previous legislative fights. With that expertise, we've got the best shot to come up with a bill that's going to serve Alaska very well. ●

Contact Steve Quinn at squinnwrite@gmail.com

Oil Patch Bits

Harley Marine awards US Fab contract to build barge


COURTESY VIGOR INDUSTRIAL

US Fab, a Vigor Industrial company, said Jan. 22 that it will soon begin construction on a 250-foot by 70-foot by 15-foot eight-inch deck barge for Harley Marine Services at Vigor's Swan Island shipyard in Portland, Ore. This purpose-built barge was designed by Jensen Maritime Consultants to transport a wide variety of cargo between Dutch Harbor and Akutan, Alaska with up to 3 runs per week.

The barge, which will be named Iliuliuk Bay, an Aleut name meaning big island, is designed to house a 230 ton lift capacity Manitowoc 4100 crawler crane. The vessels' unique design features both D-rings to secure containers up to three high as well as eight lashing bars running fore and aft for other cargo such as heavy construction machinery or general equipment.

"Having the ability to collaborate with Jensen and Harley during the initial production design for this barge, will allow us to have maximum efficiency during construction," said Bryan Nichols, sales manager at Vigor Industrial. "We were able to combine shipbuilding best practices with Jensen's considerable design expertise and Harley's requirements to finalize a cost effective, buildable design with quick turnaround."

Larson Electronics introduces safe LED gun light

Larson Electronics said Jan. 21 that it has released a powerful, intrinsically safe, LED blasting gun light designed to withstand abusive conditions and provide convenient cord free operation. Providing intrinsically safe approval and high resistance to the abusive conditions of media blasting operations, this battery powered blasting light is ideal for applications where operators need a hands free light source that can illuminate the work surface while cutting through dusty conditions.

see **OIL PATCH BITS** *page 17*

continued from page 16

OIL PATCH BITS

The BLG-LED-4 intrinsically safe blasting gun light from Larson Electronics provides a powerful LED light beam capable of cutting through the dusty conditions produced by media blasting operations in order to effectively illuminate the work surface. This LED blasting light is designed to be mounted to any standard blasting gun and features battery powered operation for convenient cord free operation and a replaceable heavy duty protective lens to protect the lamp assembly against the damaging effects of media blasting. Features include a heavy duty mounting system which includes all the necessary mounting hardware, a replaceable protective lens, 4 watt LED lamp producing 90 lumens. This LED blasting light is battery powered, and provides up to 80 hours of operation on a single set of AAA size alkaline batteries.

For more information visit www.larsonelectronics.com.

COURTESY CROWLEY

Crowley awards $10,000 in scholarships to UAF students

Crowley said Jan. 18 that four University of Alaska Fairbanks students began spring classes with their semester financially covered thanks in part to $10,000 in Thomas B. Crowley Sr. Memorial Scholarship grants. UAF students Rodney Hobby, Lucas Stumpf, Maggie Ann Beans and Amber Jones, were chosen for having outstanding academic records and meeting other scholarship criteria.

Hobby is working toward a major in biology at UAF's School of Fisheries and Ocean Sciences. He recently worked as a seasonal technician on a migration project for the Cook Inlet Aquaculture Association collecting data for future forecasts of salmon migrating to the area.

Stumpf is also a student in the UAF School of Fisheries and Ocean Sciences and is studying for a bachelor's degree in fisheries with a minor in marine sciences. His love of the subject began as a child after participating in salmon and fishing trips throughout Alaska with his parents and three siblings.

Beans is a freshman at UAF who is working toward a degree in electrical engineering. Her aspirations of becoming an engineer started when she joined her high school's Alaska Native Science and Engineering Program, but it was her hometown of St. Mary's, Alaska, that inspired her to become an electrical engineer.

Jones is a freshman in UAF's nursing program, but her hard work in high school earned her sophomore credits. She is currently applying for internships at local hospitals and study abroad nursing programs.

To learn more about the Thomas B. Crowley Sr. Memorial Scholarship program, visit www.crowley.com/scholarships.

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.

continued from page 1

WELL DRAMA

No. 2, the Grandstand No. 1 and the W.T. Foran No. 1.

A fifth well, the Cape Halkett No. 1, also was believed to be on ASRC land, but the BLM said it remains on federal land.

ASRC: What's the problem?

The commission, which regulates drilling throughout Alaska, has been pushing the BLM to address dozens of legacy wells that might never have been properly plugged and abandoned, or that might need other remediation.

These wells were drilled over many years by the Navy, the U.S. Geological Survey and their contractors in the Maine-sized NPR-A. President Warren G. Harding created what originally was known as the Naval Petroleum Reserve No. 4 in 1923 after geologists found oil seeps. The idea was to establish an emergency oil supply for the Navy.

Taking a new approach to prodding the BLM to deal with the wells, Foerster on June 28, 2012, sent a letter to ASRC saying commission records indicated five legacy wells were on ASRC-owned land. She gave ASRC 60 days to submit a "plan for bringing these wells into compliance with AOGCC regulations."

That drew an Aug. 15 reply from ASRC chief executive Rex Allen Rock Sr., who wrote: "It is unclear to us why you are raising this issue with ASRC."

Rock said the land conveyances did not transfer liability for the wells. And he said Foerster's letter provided "no information to support your contention that these wells were not properly plugged and abandoned."

After exchanges of further correspondence between the commission, the BLM and ASRC, Foerster finally scheduled the Jan. 10 public hearing, saying neither the agency nor the corporation had responded "in any meaningful way" to the question of responsibility for the wells.

Rock and the BLM's Alaska director, Bud Cribley, said they didn't believe any hearing was necessary. But they or their representatives showed up at the hearing anyway.

Legal opinion cited

In an opening statement, Cribley thanked the three-member commission for the "opportunity" to participate in the hearing, then advised he was there in an informal capacity only, out of respect for the commission and the state.

He then informed the panel that the BLM had obtained a solicitor's office legal opinion saying the commission lacks jurisdiction and authority to order the BLM, or ASRC, to undertake any additional plugging and abandonment work on the legacy wells.

Cribley added that his appearance at the hearing wasn't to be interpreted as "BLM acquiescence" to the commission's regulatory jurisdiction.

As for the wells on ASRC land, Cribley said BLM would take responsibility for any work it determines is necessary. ASRC, in turn, has said it will provide access to the wells, he said.

Further, Cribley said the BLM is developing a long-range plan for assessing and responding to legacy wells in and around the petroleum reserve. And he said the BLM would welcome the commission's help on the effort.

Cribley's remarks drew sharp-edged questioning from the commissioners.

"So it is the BLM's position that the federal government can come into the state of Alaska and conduct oil and gas operations anywhere it chooses on federal lands in any way that it chooses with no regard for the laws of the state of Alaska, is that your position?" asked Foerster, an engineer.

Cribley deferred to his attorney, Mike Gieryic, who explained that the legacy wells were drilled at the behest of Congress, and without any intent for the state to have jurisdiction over the exploration program.

"In fact, the Navy's program was begun before there was a state of Alaska and a commission for that matter," Gieryic said.

Commissioner John Norman, a lawyer, posed a hypothetical situation: What if the commission issued an order to ASRC to deal with a legacy well in an unstable condition, and the BLM told the company to "just throw it in the waste basket." Couldn't all parties end up in federal court under such a scenario?

Gieryic said he would "hope that we never really get to that point."

"We're just having fun" with a hypothetical, Norman assured him. ●

Contact Wesley Loy at wloy@petroleumnews.com

continued from page 1

PRICING FOCUS

study into the economics of Fairbanks energy options. And on Jan. 16 Scott presented some of the results of that study to the Alaska Senate Resources Committee.

Scott told the committee that the study results demonstrate the critical importance of the sales terms for fuel commodities, including pricing and the duration of pricing terms, in determining the cost of energy in Fairbanks. And, if Fairbanks is going to rely on natural gas as a primary energy source in the future, it will be particularly important to clarify from the outset the price terms for that gas, especially if people are looking for any price discounts for Alaska communities, he said.

"It's critically important, I would urge, that those considerations get nailed down as soon as possible," Scott told the committee. "There is nothing keeping people from negotiating gas sales contracts, for example, today."

Energy options

The study has used publicly available information from projects targeting future Fairbanks energy supplies, and Scott thanked people involved in these projects for the time they had spent in helping the university with its work. The study evaluated the following options:

- trucking liquefied natural gas from the North Slope to Fairbanks;
- the construction of a small-diameter gas pipeline for the delivery of natural gas to Fairbanks from the North Slope;
- offloading Fairbanks gas from a gas pipeline from the North Slope to Southcentral Alaska, with three potential daily throughput capacities for that line: 250 million cubic feet, 500 million cubic feet and one billion cubic feet;
- obtaining Fairbanks gas through a spur line off a major gas sales line from the North Slope, with that sales line assumed to be delivering gas for export as liquefied natural gas to Asia through a port in Southcentral Alaska;
- shipping gas to Fairbanks through an in-state pipeline north from Beluga on the west side of the Cook Inlet;
- the manufacture of liquids fuels in the Alaska interior using a coal-to-liquids plant; and
- the use of electrical power for both heating and lighting in Fairbanks, with the power coming from a planned hydropower plant at Watana on the Susitna River.
- the use of electrical power generated on the North Slope and delivered to Fairbanks through a high voltage direct current transmission line.

Delivered cost

Scott said that the study compared these options on the basis of the potential delivered cost of energy to Fairbanks energy consumers, without considering other factors such as the resulting cash flow to the state. And the study included the two electrical power options for the purposes of comparison, while accepting that a full evaluation of the complexities of electricity supplies was beyond the study's scope.

To ensure meaningful comparisons, the study used a consistent set of assumptions for project financing for all projects while applying the same sensitivity analysis to each project when assessing project uncertainties. For projects involving the use of North Slope natural gas the study assumed the purchase of untreated gas on the Slope, with the cost of removing impurities from the gas being part of the overall project costs.

For each energy option, the study derived potential energy costs in Fairbanks in 2023, a year that would postdate the completion of any of the projects under review.

Commodity pricing

While recognizing the importance of the cost of energy transportation, such as the shipping of gas through a pipeline, the study particularly focused on commodity pricing as a key driver for the cost of energy in Fairbanks, Scott said. And the study found that for the most part it is possible to index the commodity prices back to the price of North Slope crude oil, as sold in U.S. West Coast markets.

For example, much North Slope gas currently sold for use on the North Slope is priced using a formula agreed in the early 1990s between the state and the North Slope producers for the state's royalty gas. That price formula sets the price per million British thermal units of untreated gas at about 4.6 percent of the oil price per barrel. And, although it may be possible to negotiate a better price than this, North Slope gas pricing is currently indexed to oil pricing in this way, Scott said.

The price of liquefied natural gas on the Asian market is also currently indexed to oil: Historically the per-million-Btu price in this market has been approximately 14.5 percent of the Alaska oil price, plus about 90 cents per Btu, he said. And although people have speculated about Asian prices softening in the future, any significant price softening would jeopardize the prospects for a major Alaska gas sales line.

The price of heating oil in Fairbanks, by comparison, has worked out on a Btu basis to be 22.5 percent of the oil price plus $4.20 per Btu.

One interesting outcome of the oil price indexing is the way in which the multipliers involved in the indexes can magnify the commodity price volatility as the oil price changes — that effect can lead to greatly different risk profiles for projects involving the use of energy resources from different places, Scott pointed out.

Range of prices

Plugging the commodity price models into financial models for each energy option enabled the plotting of potential Fairbanks energy prices for each option across a wide range of North Slope oil prices. One set of energy prices is based on an assumption that the projects would be entirely funded by private capital, and another set of energy prices is based on an assumption that the state would fully fund the projects. An energy option would show promise if its projected price for energy in Fairbanks appears lower that the projected price of heating oil.

The analysis assumed that the North Slope producers would sell gas at the most advantageous price, depending on market access for the gas, with no home-town discount for Alaska residents. And this assumption led to some intriguing outcomes for the 500 million cubic feet and 1 billion cubic feet options for an in-state gas pipeline, on the assumption that the scale of these pipelines would require the sale of at least some gas into the highly priced Asian liquefied natural gas market. At oil prices above about $70 per barrel that linkage to the Asian market could push the price of gas in Fairbanks higher than the price from a smaller scale pipeline, with the relatively high commodity price overwhelming any economies of scale to be gleaned from a relatively high pipeline throughput, Scott said.

Oil price uncertainty

Another intriguing result of the analysis indicates that if future oil prices turn out to be relatively low, the major gas sales line would be the only option to beat the cost of heating oil in Fairbanks, Scott said. And there is major uncertainty about future oil prices, given possible scenarios such as the worldwide implementation of shale oil technologies, he cautioned.

The analysis suggested that both options involving the use of electrical power for the heating of buildings in Fairbanks would prove substantially more expensive than any other energy option, including the use of heating oil.

Comparisons between the estimated cost of Fairbanks energy for privately funded versus state funded projects shows that state funding would substantially reduce the energy cost. That effect mainly results from the fact that all options tend to be highly capital intensive, with the state funding reducing the cost of the capital, Scott said. Under the assumption of state funding, all options start looking preferable to the use of heating oil. Those options involving the dedicated shipment of gas from the North Slope to Fairbanks have energy pricing estimates that are statistically indistinguishable, while options involving a linkage to the sale of liquefied natural gas in Asia have pricing that rapidly escalates with the oil price.

Ramp-up risk

An important issue that people would need to address when implementing a new energy source for Fairbanks is what Scott referred to as "ramp-up risk," the risk associated with the timeframe involved in building the necessary new energy infrastructure. While there is no ramp-up risk for heating oil, a commodity that Fairbanks residents already widely use, an expansion of the natural gas distribution network, for example, might take a couple of years or so to accomplish. The cost of providing energy to consumers during, say, the first year of infrastructure construction would be much higher than after the customer base is fully subscribed, Scott said. And, high initial prices, perhaps above the cost of heating oil, coupled with conversion costs that customers would face, could deter customers from switching to the new fuel.

One particular problem in assessing the ramp-up risk associated with a Fairbanks project is a general lack of knowledge of just how much energy Fairbanks consumers use, Scott said. Whereas in a city like Anchorage it is possible to obtain data about how much gas people are consuming for the heating of buildings, there is no means of obtaining similar data for Fairbanks, where many people heat their houses using heating oil or firewood obtained from multiple sources.

Other complexities facing energy decision makers include the wide range of investment required for the different energy options, and the range of timeframes required for option implementation.

Coal-to-liquids technology presents some intriguing challenges. Because this technology involves fuel that is very similar to heating oil, coal-to-liquids would present no start-up risk. On the other hand, the fuel produced from coal would compete directly in the market with heating oil, thus making it is almost impossible to conceive of a state-sponsored project in which the artificial fuel would bring cost relief to fuel oil users, Scott said. Essentially, any undercutting of fuel oil prices by a state subsidized project would likely result in people buying the subsidized fuel and then reselling it at market rates, he said. ●

Contact Alan Bailey at abailey@petroleumnews.com

continued from page 1

KULLUK ASSESSMENT

opened on Jan. 16. Mark Stichert, shellfish management biologist with Fish and Game, told Petroleum News Jan. 23 that, depending on the weather, it might take another four or five days for the fishermen to exhaust this year's crab quota and hence complete the crabbing season in the area where the Kulluk is anchored.

The Kulluk ran aground on the shore of Sitkalidak Island during a severe storm on the evening of Dec. 31 while being towed from Dutch Harbor in the Aleutian Islands to the U.S. West Coast. The vessel was refloated on Jan. 6 and towed to its sheltered anchorage in Kiliuda Bay on Jan. 7.

Some damage

The unified command says that damage to the Kulluk is "consistent with what is expected from a vessel of this type being on hard ground." The Kulluk's fuel tanks are intact and there has been no reported fuel or oil spill. Some seawater had entered the vessel through damaged hatches, but that water has been captured and stored. Points of water entry such as windows and hatches are being sealed and tow brackets added to the vessel in preparation for the vessel's next move, unified command said.

Assessment crews have surveyed the location where the Kulluk ran aground. Shell spokesman Curtis Smith confirmed in a Jan. 24 email that all four survivor capsules that had broken loose from the Kulluk have been located. The Native corporation from Old Harbor, the village near the grounding site, has a contract for removing the rescue craft and any other debris, Smith said.

Investigation and review

The U.S. Coast Guard has launched a formal investigation into the grounding of the Kulluk. The grounding has also prompted the U.S. Department of the Interior into conducting an assessment of Shell's operations in Alaska in 2012, to examine Shell's safety management systems, the company's oversight of its contracted services and the company's ability to meet the required standards for Arctic development.

Gov. Sean Parnell has requested that officials from the State of Alaska be included in Interior's review. Given the importance of the review to the state, the state administration has also requested Interior to allow the Coast Guard and the North Slope Borough to participate, Parnell said in a Jan. 22 statement.

"We share your commitment to safe and responsible development of energy resources in the Arctic, and agree that these activities are essential to the nation's energy and economic security," Parnell said in a letter to Interior Secretary Ken Salazar. "The recent events should be looked upon as valuable learning moments to further improve safety in future development."

Mayor Charlotte Brower of the North Slope Borough also requested the involvement of state and local Alaska officials in the review.

"As residents of the North Slope, no one is more committed to making sure offshore exploration is done safely and responsibly," Brower said. "All too often there have been discussions and decisions in these matters that are too far removed from the expertise and knowledge of local people. Now, more than ever, our involvement is necessary to ensure that federal reviews and permitting include the voices of those who are the most impacted."

The mayor's office said that Brower would be meeting with David Hayes, assistant secretary of the interior, on Jan. 23 and that during that meeting she would raise the question of the involvement of Alaskans in the Interior review.

—ALAN BAILEY

Contact Alan Bailey at abailey@petroleumnews.com

continued from page 1

WINTER DRILLING

time, the upper foothills area remained closed.

As it stands, the total well count for the 2013 winter exploration season remains uncertain, with three to six companies drilling as few as eight and as many as 18 wells.

Exploration at Cassin?

While ConocoPhillips Alaska President Trond-Erik Johansen recently outlined a $1 billion budget for Alaska operations this year, the company is remaining mum about whether any of that money is being set aside for exploration in the Bear Tooth unit.

The $1 billion would go toward normal development activities at legacy fields, as well as building the CD-5 satellite of the Alpine field and preparing for a 2014 program in the Chukchi Sea, Johansen said in his Jan. 11 speech at the annual Meet Alaska conference.

But Johansen said nothing about the two wells that ConocoPhillips recently permitted in Bear Tooth, one of its two federal units in the National Petroleum Reserve-Alaska.

In late December and early January, the U.S. Bureau of Land Management issued permits for ConocoPhillips to drill the Cassin No. 1 well on lease AA081754 and the Cassin No 6 well on lease AA081833. The leases are both in Unit Area A, a subset of the unit marked for initial work commitments. After getting a yearlong extension of those commitments in June 2011, ConocoPhillips is now on the hook to drill at least one exploration well in Unit Area A and test a previous well it drilled in the unit — Scout No. 1 — by June 1.

On Jan. 18, the Alaska Oil and Gas Conservation Commission issued a permit for ConocoPhillips to drill the Cassin No. 1 well, describing it as a straight vertical hole.

Linc: a rig and permits

Linc Energy Inc. is progressing steadily on its four to six well program at Umiat.

In late December, the Australian company began mobilizing the Kuukpik No. 5 rig to the oil field in the foothills of the Brooks Range Mountains using overland travel and a C-130 Hercules aircraft. The overland portion of the trip is occurring along a new snow road.

Since then, Linc has applied for two drilling permits from the U.S. Bureau of Land Management, which oversees federal lands. The first is for Umiat DSP No. 1, a Class II disposal well on federal lease AA081726. The second is for Umiat No. 16, a vertical well on federal lease AA084141 to test of an oil-bearing interval in the Lower Grandstand formation. While the Umiat prospect crosses the border of the National Petroleum Reserve-Alaska, Linc is focusing its exploration work this winter on federal acreage.

Following Umiat No. 16, Linc plans to drill Umiat No. 16H, a horizontal well into the same Lower Grandstand interval, the Umiat No. 23 well to test deeper gas and oil targets in the Lower Grandstand, and "one or both" of the Umiat No. 18 and Umiat No. 19 wells.

Nuna permit for Pioneer

Although Pioneer Natural Resources Alaska Inc. received an AOGCC permit in early December to drill Oooguruk NDST-02 — also known as the Nuna No. 2 well — the company has yet to spud the onshore directional well to appraise an offshore discovery.

When the company announced its 2013 winter program this year, it mentioned that plans for a four-well development program from its Oooguruk Island, specifically completion activities, would have to wait until "well after the freeze" to accommodate equipment. As an exploration well, Nuna No. 2 is unlikely to require as much time or equipment.

Ice roads for Repsol

Repsol E&P USA Inc. is currently mobilizing equipment to two locations.

The Spanish company recently completed one lane of a two-lane ice road to its Qugruk No. 1 and Qugruk No. 6 wells, located between the Oooguruk and Colville River units.

Qugruk No. 1, or Q1, is a well Repsol permitted last year. Nabors rig 105 is currently en route to the location and Repsol expects to begin drilling Q1 by the end of the month, the company said Jan. 23. As of press time, Repsol said Nabors rig 99 was about to begin moving to the Qugruk No. 6, or Q6, drilling location, where a camp is already in place.

Repsol previously permitted Q6 last year as Qugruk No. 2.

In addition to the ice road, Repsol recently completed a test flight on its ice runway.

Repsol is also planning to drill a Qugruk No. 3 or Qugruk No. 5 well this year.

BRPC and UltraStar unsure

At last check, two smaller independents had yet to finalize exploration plans.

While Brooks Range Petroleum Corp. is permitting infrastructure for its Mustang development at the Southern Miluveach unit, it is still considering whether it will also drill a well and two sidetracks at the Tofkat unit or two wells at the Kachemach unit.

And UltraStar Exploration has yet to finalize plans for its North Dewline No. 1 well.

—ERIC LIDJI

Contact Eric Lidji at ericlidji@mac.com