Petroleum news

Vol. 19, No. 15 • www.PetroleumNews.com

A weekly oil & gas newspaper based in Anchorage, Alaska

Week of April 13, 2014 • $2.50

page 3 Q&A: Olson thinks North Slope gas project has strong chance this time

Barrels nudge up

JUDY PATRICK

Revenue's spring forecast shows North Slope production up 13,300 barrels per day over fall forecast. See story page 5.

House Resources moves amended enabling legislation after 3 weeks

House Resources moved a committee substitute for Senate Bill 138 April 9, capping three steady weeks of committee work on the bill, the governor's enabling legislation for state equity participation in an Alaska LNG project. Resources spent five days working through what co-Chair Eric Feige, R-Chickaloon, noted was a record number of amendments. A referral to House Labor and Commerce was waived and the bill now goes to House Finance. Once it passes the House it will need Senate concurrence to House changes. The Legislature is nearing the April 20 end of its regularly scheduled 90-day session.

AGDC board, legal counsel

The committee approved two amendments affecting the board of the Alaska Gasline Development Corp. One was the

see **SB 138 UPDATE** *page 14*

Nutaaq seeking large rate increase

Just months after taking over the system, the new owner of the Badami Pipeline is seeking a 30 percent increase to its tariff rate on the eastern North Slope pipeline.

The increase is needed to cover operating costs, according to the company. The hike would restore the rate to 2013 levels, before a former operator voluntarily reduced it.

The Regulatory Commission of Alaska is allowing Nutaaq Pipeline LLC to charge the higher rate on a temporary and refundable basis while it investigates the request.

With the increase, it now costs $12.25 to ship a barrel of oil from the Badami central processing unit to the start of the Endicott Pipeline, up from a previous rate of $9.42.

The state is taking comments on the matter through April 18.

The request is the latest in a series of revisions connected to the transfer of the pipeline.

Ownership transferred in 2013

Last year, as part of a larger transfer of the Badami unit and its associated facilities, BP Transportation (Alaska) Inc. transferred

see **RATE INCREASE** *page 16*

EXPLORATION & PRODUCTION

Kulluk report out

USCG cites inadequate risk management in grounding of Shell drilling rig

By ALAN BAILEY
Petroleum News

The U.S. Coast Guard has published its report documenting the findings from its investigation of the grounding of the Kulluk, Shell's floating drilling platform, in the Gulf of Alaska on Dec. 31, 2012.

The report says that a series of events led to the grounding but that the most significant factor in the accident was the inadequate assessment and management of risks associated with a complex winter vessel movement in Alaska's unique and challenging operating environment.

see **KULLUK REPORT** *page 15*

U.S. COAST GUARD

PIPELINES & DOWNSTREAM

Stray metal investigated

Regulators question trans-Alaska pipeline safety, propose corrective actions

By WESLEY LOY
For Petroleum News

Federal regulators are citing potential integrity threats at dozens of points along the trans-Alaska pipeline.

The U.S. Pipeline and Hazardous Materials Safety Administration proposed a list of corrective measures in a March 13 letter to Tom Barrett, president of Alyeska Pipeline Service Co.

The agency began an investigation after a stray piece of metal, 10 inches in diameter, was discovered on Sept. 8, 2013, inside a valve at the Valdez Marine Terminal at the end of the 800-mile pipeline.

An analysis showed that as the epoxy cured, pressure built up inside the encapsulation, and this resulted in a "punch-out" of a piece of the steel pipeline wall. This piece, called a coupon, entered the oil stream and rode to Valdez.

Alyeska traced the piece back to milepost 385, about 70 pipeline miles north of Fairbanks.

There, in 2012, Alyeska had installed a dome-like "encapsulation" over an unused air vent that had posed a risk for oil leaks.

see **STRAY METAL** *page 13*

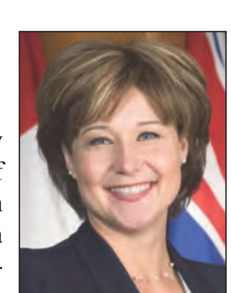
NATURAL GAS

Jobs plan for LNG boom

Canada, BC allow hiring temporary foreign workers; skills-training plan in works

By GARY PARK
For Petroleum News

British Columbia Premier Christy Clark, supported by a delegation of top cabinet ministers and petroleum leaders, has persuaded the Canadian government to declare that the LNG sector is a potential "nation-builder" which could create 100,000 jobs.



CHRISTY CLARK

Although the accord signed in Ottawa earlier in April is non-binding, it includes a commitment to promote the active use of temporary foreign workers, TFW, which could ease one of the deepest concerns among investors in the industry. \

Clark said that her province's enormous LNG potential hinges on access to skilled Canadian workers and, if necessary, those from offshore.

"You cannot build an economy without people who are trained and ready to take those jobs," she told a gathering of federal and British Columbia legislators.

British Columbia Jobs Minister Shirley Bond said industry executives were impressed by the level of cooperation shown by both levels of government.

She told the Vancouver Sun that British Columbia is trying to "avoid what happened in Australia," where wage inflation caused by a shortage of skilled works has caused project cost overruns.

"We're hearing that this is the first time they've

see **JOBS PLAN** *page 14*

contents

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

● GOVERNMENT

Olson thinks gas project has a chance

Soldotna Republican has seen other North Slope projects fall apart, says this time around everybody is 'trying to make it happen'

By STEVE QUINN
For Petroleum News

State Rep. Kurt Olson has seen his share of natural gas pipeline drama. First came negotiations between Gov. Frank Murkowski's administration and North Slope leaseholders BP, ExxonMobil and ConocoPhillips that created rancor among the legislators. Then there was the Alaska Gasline Inducement Act that stirred the memory of former Majority Leader Ralph Samuels casting the lone vote against Sarah Palin's plan. All this stacked against decades of hope by Alaskans clamoring for a pipeline to bring North Slope natural gas to market.

Olson is a member of the House Resources Committee that wrapped up Senate Bill 138, Gov. Sean Parnell's offering to advance a liquefied natural gas plan. Olson also chairs the Labor & Commerce Committee, which received a committee referral to SB138. While not the most common destination for an oil and gas bill, Olson has overseen debates on bills this hearty. He ran the House Special Committee on Oil and Gas during the debate over Palin's oil tax bill, the former Alaska's Clear and Equitable Share.

Olson, a Soldotna Republican, sat down with Petroleum News to share his thoughts on the discussion that took place in House Resources and the prospects of the bill ever landing in his committee.

Petroleum News: What drove your interest in hearing the bill?

Olson: I didn't ask for the bill. I was asked if I would take it. I'm on Resources. Two of the Labor and Commerce members are also on Resources: me and Dan Saddler. Craig Johnson is also on Resources and an alternate on Labor and Commerce. So I've got someone who is not only experienced but down here for the last rodeo. It was my impression I was asked because if there were minor tweaks that needed to be done after it left from Resources, they could be done prior to going to Finance. I can't give you an example because the only thing to give me a little consternation is about TransCanada. I don't think there is anything that warrants it going to Labor & Commerce. But the top binder that I lug back and forth, I had one of those made for every member of Labor & Commerce just in case. Dan and I have been in the meetings. We've had other people drifting in and out of the Resource meetings.

Petroleum News: Did you feel prepared regardless because you've led the hearings on ACES when you ran the House Special Committee on Oil & Gas in the fall of 2007?

Olson: Handling it was not an issue. I just wanted to make sure my committee was up to speed. That's why we've been encouraging them to read the documents and come to a meeting when they can. They actually have been reading them.

Petroleum News: Do you have any concerns you're going to get back to that divisive time during the Stranded Gas Act?

Olson: No. Not at this point in time. If you ask me that in a year, it might be different. Hopefully in a year, we'll be in a good place. At this point, I'm optimistic. Most of the people in this building want to see it happen. Not all of them. There are some who want to defend decisions they made in the past. I know I've made a number of mistakes, but I try not to make the same ones over and over again. If I make them, I'd rather tell somebody I made a mistake than try to find a way to bury it.


REP. KURT OLSON

Petroleum News: As someone who has been through these debates before, what's different from past committee hearings and debates?

Olson: Speaking for the Resources Committee, I think we as a committee are going to in greater depth, to a degree that I haven't seen in six or eight years. It was more committee driven than administration driven.

Petroleum News: You mentioned consternation with TransCanada. Can you talk about that?

Olson: TransCanada is more than qualified to do the pipeline. My major concerns deal with how TransCanada got to the table. The main thing that TransCanada brought to the table was the AGIA contract: The fact that it would be extremely expensive for the state to cut them loose. My personal feeling was we could have cut them loose when they missed some deadlines or in the last two years. The bill that would have done that (HB142 three years ago led by House Speaker Mike Chenault, and Reps. Mike Hawker and Craig Johnson) could have taken care of that but it didn't get out of the Senate.

There is a letter that has been issued in the last couple of days that will terminate AGIA in the near future. That to me was never in good faith. The main reason I probably would have brought the bill to Labor & Commerce would have been to get a better deal, that letter or something. It looks to me like they got a great deal. You've got El Paso that could have done the pipeline and you've got Enbridge, and I'm guessing all three of the majors would have been qualified to do so as well. One of the questions we asked of TransCanada was for a list of their largest projects. The definition the state has been using for mega project the last few years was a project in excess of $1 billion.

TransCanada listed one and I believe that was Keystone and that was worth about $6 billion. On that one they were over budget by about 12 percent but in the big scheme of things I think we've had a lot worse than that on some of their projects.

During the AGDC (confirmation) hearings, and I think it was two for one person and three for another.

TransCanada is qualified. I've been aware of their company for a number of years. I've been involved with the industry from the outside when I was with the insurance industry. The company I worked for was out of Canada and so was TransCanada's predecessor.

Q AND A

Petroleum News: I realize TransCanada's involvement is a tough pill to swallow for some people. Is it because there are hard feelings from AGIA?

Olson: I think it's partly from AGIA and the sweetheart deal that they got. I've never seen something like that, but then again I'm not in the oil industry. I've worked with the industry from the outside. Me, personally, I would not want to be responsible for killing a deal that's brought us closer to this since I've been involved.

Do we want to bring it out in court and buy our way out of AGIA or do we want to work it out with them. I want people to come to their own conclusions rather than me say that I didn't vote for ACES or the AGIA (license) ratification. (Former Majority Leader) Ralph Samuels was the only one who voted against AGIA.

There are still four or five of us around who have that institutional knowledge.

Petroleum News: Going back to Ralph's vote of no. Looking back, did that take courage?

Olson: You had a very popular governor and you knew it was going to go through. So, yeah it was a courageous thing to do. I did it one time. I won't tell you when, but it was pretty lonely feeling. Most of my peers agreed with me about three years later on the issue. So I know how Ralph feels.

Petroleum News: What gives you a sense that you're actually moving forward? We've heard so much these last six to eight years how this is the way to go.

Olson: The first thing is Point Thomson. It's a class facility. They have quarters for 350 people and they plan to have it doubled by this time. I haven't talking to anyone from Exxon to discuss whether that's the case yet, but I suspect it is by all of the materials I saw stacked up there. That impressed me.

I know I've said this before since I've been back but the runway is incredible. The runway, considering the size, it's probably the best runway in the state. It was necessary and it's an incredible runway and airport operation for such a remote project.

The amount of money and just the sophistication of the landing strip there is incredible. I believe they had to put in eight or 10 feet of gravel to put in frost heaves. It's a lighting system more sophisticated than Anchorage international. That tells me they are there to stay.

I ran into several people I know from Soldotna up there who had been paramedics and firefighters who had retired and taken jobs up there. When I looked around there were a lot of people who were not roustabouts who were in their late 40s, early 50s. One was a retired trooper, another was high up in APD who retired. I was told by the woman running operations, they were looking for people who have been in crises and emergency situations and know how to handle it. The

see OLSON Q&A page 13

● PIPELINES & DOWNSTREAM

Shrinking the field

Canada's NEB applies new federal legislation in limiting intervener status at Kinder Morgan Trans Mountain expansion hearings

By GARY PARK
For Petroleum News

The Canadian government's new rules to expedite the regulatory phase of large-scale energy projects and eliminate repetitive presentations are getting their first test as Kinder Morgan prepares for public hearings on its plan to triple capacity on the Trans Mountain pipeline to the British Columbia coast.

For those accustomed to stonewalling the regulatory process the change of rules limiting participation to those directly affected by a project or those with relevant expertise or information, is taking a heavy toll on their game plans.

Of the 2,118 individuals and organizations who applied for intervener status at the hearings, the National Energy Board said it "considered each application and has determined that 400 will participate as interveners and 1,250 as commenters," giving them the right to submit a comment letter to the NEB without participating directly in the hearings.

The NEB said the new federal legislation "is meant to avoid parties that may be affected by a project from being 'lost in the crowd' of parties whose issues are unrelated to a specific project."

They include First Nations, the Alberta Federation of Labor which opposes the export of raw bitumen to Asian refineries, B.C. Nature, B.C. Wildlife Federation, Living Oceans, Raincoast Foundation, BP Canada, the Canadian Association of Petroleum Producers, the Chamber of Shipping of British Columbia and several major cities.

The Canadian government's environment, aboriginal affairs and fisheries and oceans departments will also have intervener status, along with the British Columbia and Alberta governments.

Some relegated to commenter status

Of the applications received, 452 that requested intervener status were relegated to commenter status, while another 468 were denied participation, including Kennedy Stewart, a British Columbia Member of Parliament from the opposition New Democratic Party, the Business Council of British Columbia, the Canadian Center for Policy Alternatives and the Canadian Natural Resource Alliance.

The 400 full participants will be allowed to question experts and company officials and present their evidence.

The NEB will hear aboriginal traditional evidence in August and September and start oral hearings next January, all within the timeframe of 18 months set by the federal government for a final recommendation from the energy regulator no later than July 2, 2015.

The hearings will examine 12 issues, including potential environmental, socio-economic, aboriginal, landowner and land use impacts.

The C$5.4 billion project involves twinning the existing Trans Mountain system and increasing capacity to a tanker terminal in Port Metro Vancouver and refineries in Washington State to 890,000 barrels per day of oil sands bitumen from 300,000 bpd, primarily targeting new markets in Asia.

Objection to limits

Stewart represents the Burnaby area, which will be crossed by the pipeline, in the Canadian House of Commons.

He said far too many applicants got rejected or got limited status by the NEB, dismissing the board's claim that 78 percent who got applied were accepted.

Stewart said the NEB's estimate is "deceptive" based on its claim that 78 percent "were not kicked out of the process, many were downgraded from interveners to commenters," noting that interveners can call witnesses, make oral statements and submit evidence, while commenters can "only send a single letter."

He said many landowners along the pipeline right of way have been excluded, even though their properties could be expropriated, or crossed by the pipeline.

Caitlyn Vernon, campaigns director for the Sierra Club of B.C., said the NEB's selection process is "profoundly undemocratic (and is) deliberately designed to silence the legitimate voices of British Columbians. This is a rigged process."

NEB: Focus on affected parties

The NEB said the new federal legislation "is meant to avoid parties that may be affected by a project from being 'lost in the crowd' of parties whose issues are unrelated to a specific project."

It said the amendments to the National Energy Board Act will promote fairness and efficiency in the review process.

The pressing need for the Trans Mountain expansion among oil sands producers has been reinforced by Imperial Oil, which is testing 22 refineries with diluted bitumen from its C$12.9 billion Kearl operation in northeastern Alberta.

Chief Executive Officer Rich Kruger said "a couple" of cargoes have been shipped to a refinery in Malaysia via the existing Trans Mountain pipeline, adding Imperial's name to Husky Energy and Cenovus Energy which have made their own shipments to Asia in recent months. All three are signed up as potential shippers with Kinder Morgan.

Kruger said the Kearl bitumen has been well received in the market, adding that refiners are "not having operational issues" with the crude.

But he conceded Imperial is still working to remove manufacturing and installation-related hitches at Kearl, which started production almost a year ago and averaged 70,000 bpd in the first quarter of 2014, up 18,000 bpd from the final quarter of 2013, but short of nameplate capacity by 40,000 bpd.

Imperial is counting on a smoother startup for the second phase of Kearl, which is due on stream in 2015 to double output to 220,000 bpd. ●

Contact Gary Park through publisher@petroleumnews.com

Petroleum news
www.PetroleumNews.com

Kay Cashman	PUBLISHER & EXECUTIVE EDITOR
Mary Mack	CEO & GENERAL MANAGER
Kristen Nelson	EDITOR-IN-CHIEF
Susan Crane	ADVERTISING DIRECTOR
Bonnie Yonker	AK / NATL ADVERTISING SPECIALIST
Heather Yates	BOOKKEEPER & CIRCULATION MANAGER
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
Judy Patrick Photography	CONTRACT PHOTOGRAPHER
Mapmakers Alaska	CARTOGRAPHY
Forrest Crane	CONTRACT PHOTOGRAPHER
Tom Kearney	ADVERTISING DESIGN MANAGER
Renee Garbutt	CIRCULATION SALES
Ashley Lindly	RESEARCH ASSOCIATE
Dee Cashman	RESEARCH ASSOCIATE

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. 19, No. 15 • Week of April 13, 2014
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
Canada — $185.95 1 year, $334.95 2 years
Overseas (sent air mail) — $220.00 1 year, $396.00 2 years
"Periodicals postage paid at Anchorage, AK 99502-9986."
POSTMASTER: Send address changes to Petroleum News, P.O. Box 231647 Anchorage, AK 99523-1647.

● FINANCE & ECONOMY

Revenue sees some production improvement

Spring revenue forecast an update from the primary fall forecast; changes show $374 million increase in unrestricted revenue

By KRISTEN NELSON
Petroleum News

The Alaska Department of Revenue released its spring revenue forecast April 7 showing an uptick of $374 million from the department's fall forecast for 2014 fiscal year general fund unrestricted revenue. The state's fiscal year runs from July 1 through June 30.

Revenue said the 10-year forecast, starting with FY 2016, showed a modest increase in revenue, while FY 2015 showed a slight decrease of 0.2 percent from the previous forecast, based on reductions expected in investment earnings.

Revenue Commissioner Angela Rodell said the spring forecast also shows an increase in production.

"Based on actual production data, we have seen an increase of 13,300 barrels per day of North Slope oil production in FY 2014 compared to what we had forecast just five months ago," Rodell said in a statement.

She also said that "in both FY 2014 and FY 2015, unrestricted revenue from oil production is higher than the fall 2013 forecast."

The department's production forecast "follows a consistent and prudent methodology, and while we have incorporated some increase in production, as well as a significant increase in capital investment into our fall 2013 forecast, please note that the spring 2014 forecast is simply an update of the previous fall 2013 forecast."

The commissioner said the fall 2014 forecast will be the first "under the new tax system" and the first budget cycle for companies where they "can evaluate projects with tax certainty."

"I expect to see many questions answered between now and then, hopefully resulting in high enough levels of certainty to begin incorporating new production into our revenue forecast," Rodell said.

Stable unrestricted state revenue will require "higher oil prices and/or stable or increased production," Rodell said.

Increased production

Rodell said the spring forecast shows, in general, "more Alaska oil production, especially in fiscal years 2016 and beyond."

She also noted short-term revisions related to increased drilling activity and changes in planned summer 2014 North Slope maintenance activity.

While unrestricted revenue from oil production is higher than the fall forecast for both FY 2014 and FY 2015, "a slight reduction in the forecast of unrestricted revenue in FY 2015 is due to reductions in expected investment earnings."

General fund unrestricted revenue is forecast at $5.3 billion for FY 2014 and $4.5 billion for FY 2015. Actual general fund unrestricted revenue for FY 2014 was $6.9 billion.

The fall forecast is when the department collects planned production information from companies.

The spring forecast is for 521,500 barrels per day for FY 2014, up from the fall forecast of 508,200 bpd, a change which the department said "reflects actual daily production levels that have consistently outperformed what was forecast in the fall of 2013."

The revised oil price forecast is also up, $106.61 per barrel vs. $105.68 per barrel in the fall forecast, "based on actual prices realized over the past several months and an overall better market outlook for oil prices."

Because there have been "no structur-

see **REVENUE FORECAST** *page 6*

NATURAL GAS

Husky eyes Atlantic LNG

Husky Energy is adding some substance to the prospects of LNG exports from Canada's Atlantic coast by disclosing that it is responding to interest from European buyers who are examining alternatives to their reliance on supplies from Russia.

Malcolm Maclean, Husky's senior vice president for the Atlantic region, told the Financial Post that the company is "constantly looking at ways to monetize some of our gas discoveries" in Newfoundland's offshore where Husky is one of the leading producers of crude.

He said Husky is weighing the possibility of conducting preliminary studies based on its appraisal of discoveries to date in a region where it produces only oil, while reinjecting the associated gas.

Maclean said Husky has its sights set on a world-class project to ship LNG to Europe and possibly as far off as Southeast Asia.

Unsettled by Russian President Vladimir Putin's annexation of Crimea and uncertain about what other territories he might covet, European countries fear they could be cut off their supplies.

Four U.S. ambassadors in Europe have prodded the Obama administration to accelerate LNG export licenses for shipments from the U.S. Gulf Coast.

Maclean said the scramble for secure energy supplies was gathering pace even before the Ukraine crisis and Husky believes that interest could grow even more

Husky has produced up to 45,000 barrels per day of oil in Atlantic Canada and has been involved with Norway's Statoil in three new discoveries in Newfoundland's Flemish Pass.

Maclean said a number of companies are considering investment in Atlantic Canada, but was unable to identify them for confidential reasons.

So far, three possible LNG projects are being mulled for Nova Scotia, led by Pieridae Energy Canada, which has conditional approval from the Nova Scotia government for a US$8.3 billion project to produce up to 10 million metric tons a year of LNG.

In New Brunswick, Spain's Repsol, as 75 percent owner and Irving Oil as 25 percent partner, are keeping their options open to convert their existing Canaport terminal at Saint John, which imports 1.25 billion cubic feet per day of gas for re-export.

Also in the running to ship LNG from Nova Scotia is India's privately held H-Energy, which has tentatively proposed a C$3 billion liquefaction plant, with initial capacity of 4.5 million metric tons per year.

It has regulatory approval from the New Brunswick Department of Environment and Canada's National Energy Board to load vessels with LNG at the terminal, but has set no deadlines for a decision.

—GARY PARK

UTILITIES

Trent replaces Posey as ML&P manager

Anchorage Mayor Dan Sullivan has appointed James Trent as the new general manager of Municipal Light & Power, the Anchorage municipality-owned electricity utility. Trent replaces James Posey who retired in December after serving as general manager since January 2003.

"Mr. Trent has 30 years of leadership expertise in power system planning, design and operations experience managing gas and electric utilities," Sullivan said in an April 2 press release.

Trent comes from a position as senior consultant for Rockwell Automation in Colorado, where he was involved in the design and construction of power generation programs, including being senior strategist for trash-to-energy power generation programs in Puerto Rico, Idaho and Texas.

His career in the world of energy utilities has included a directorship of the Yankee Gas Services Co. in Connecticut and being president and CEO of Pacific Utilities Management Inc. in California. From 2005 to 2008 he was general manager of Southern Missouri Natural Gas.

Municipal Light & Power supplies electricity to consumers in the northern part of Anchorage, including the downtown area of the city, and to two military bases. The utility is part owner of the Beluga River gas field on the west side of the Cook Inlet.

—ALAN BAILEY

NATURAL GAS

AIDEA issues distribution loans

The board of the Alaska Industrial Development and Export Authority has approved two loans meant to expand natural gas distribution infrastructure in the Interior region.

The loans came from the Sustainable Energy Transmission and Supply Development Fund, as part of the Interior Energy Project, which is a public-private initiative to building a North Slope liquefaction plant and truck liquefied natural gas to the Interior.

The first is a $15 million loan to Fairbanks Natural Gas LLC to fund the current year of expansion of its existing distribution system in the Fairbanks region. The program involves 32 miles of distribution lines to connect 100 businesses and 2,500 residences. The private utility recently lost a bid to expand its system into other corners of the region and is not asking state regulators to free it from filing bi-monthly status reports about its activities, specifically its attempts to replace its strained Cook Inlet natural gas supply.

The second is an $8.1 million loan to the Interior Gas Utility to develop their initial distribution system, which includes engineering design, permitting and management.

Having recently received a Regulatory Commission of Alaska certificate to provide distribution service to the city of North Pole and other less populated segments of the Fairbanks North Star Borough, the municipal utility is looking to build a broad system.

The utility hopes to begin construction by mid-2015.

The loan is no-interest for 20 months, followed by a negotiation, according to the Interior Gas Utility. Without a negotiation, the loan would jump to 3 percent over 40 years.

—ERIC LIDJI

continued from page 5

REVENUE FORECAST

al changes or significant change in oil price triggers" since fall, the longer term, FY 2015-FY 2023, forecast prices remain unchanged.

North Slope lease expenditures were $6.06 billion in FY 2013 ($3.12 billion in operating expenditures and $2.95 billion in capital expenditures). For FY 2014 the total is estimated at $6.96 billion ($3.31 billion opex and $3.66 billion capex) and $7.75 billion for FY 2015 ($2.9 billion opex and $4.85 billion capex). ●

Contact Kristen Nelson at knelson@petroleumnews.com

● NATURAL GAS

The North Slope gas offtake conundrum

The desire to produce natural gas for export as LNG must be reconciled with the need for the gas in producing higher value oil

By ALAN BAILEY

Petroleum News

Amid the current lively debate around the potential for exporting North Slope gas as liquefied natural gas via a gas pipeline to Southcentral Alaska, there seems to be an implicit assumption that, unless it can be exported, the gas is valueless, stranded on the North Slope. But this assumption is far from correct, given the way in which vast volumes of the gas are recycled through the aging North Slope oil fields, to pry ever more elusive oil from underground reservoir rocks.


JUDY PATRICK

CATHY FOERSTER

And, given that oil is a more valuable product than gas, and with growing concerns about declining North Slope oil production, gas may be best used as an oil recovery tool, rather than simply being sold as a commodity through the global LNG market.

AOGCC role

The Alaska Oil and Gas Conservation Commission, the state agency charged with ensuring the optimum development of Alaska's hydrocarbon resources, is well aware of this issue and has for a number of years been expressing caution, alerting people to the need to consider the oil recovery value of North Slope gas. And, in an April 8 meeting of the Senate Special Committee on TAPS Throughput, AOGCC Commissioner and Chair Cathy Foerster reviewed the various aspects of this tricky issue.

"The AOGCC is charged by statute to prevent hydrocarbon losses and ensure greater ultimate recovery of total hydrocarbons. Those two charges have enormous implications around North Slope gas sales," Foerster said.

Foerster pointed out that the Prudhoe Bay oil field, the field holding by far the largest portion of the gas that people envisage exporting, still holds about 2 billion barrels of oil, a resource volume greater than any of the biggest discoveries made in the Lower 48 in the last 15 years. And the state views Point Thomson, the field viewed as the other major source of gas, as an oil field, with a priority to produce a liquid hydrocarbon called condensate, rather than natural gas.

"Point Thomson is also an oil field by technical definition, and by the State of Alaska's legal definition," Foerster said.

In addition, it is possible that the optimum use of Point Thomson gas would be to inject the gas into the Prudhoe Bay gas cap, an operation that would perhaps result in the production of an additional half-a-billion barrels of oil from the Prudhoe Bay reservoir, she said.

Best use of gas

Rather than holding the North Slope gas hostage, as some people have suggested, "the operators are really doing the best thing for the State of Alaska by using that gas to produce more oil right now," Foerster said, commenting that an AOGCC projection had indicated that the gas might retain its value as an oil recovery tool until 2028, and possibly for many years after that.

Foerster also pointed out that access to natural gas is highly likely to prove critical in unlocking the huge potential for viscous oil development on the North Slope, an oil resource that could help slow the decline in North Slope oil production.

But Foerster also commented that the oil companies are well aware of the gas offtake issue and are fully aligned with AOGCC in dealing with it. Essentially, if the companies can maximize their profits by using gas for oil recovery rather for export, they will use the gas for oil recovery, a use that would then be in both the companies' and the state's best economic interests, Foerster said. And the oil companies know that they will need an authorization from AOGCC before they can export gas from the North Slope, with that authorization being predicated on an explanation by the companies of how they

see GAS OFFTAKE *page 7*

● LAND & LEASING

Buccaneer transfers offshore leases

State also approves lease deals for Repsol and partners on the North Slope and various small transactions across the state

By ERIC LIDJI

For Petroleum News

The Alaska Department of Natural Resources approved a transfer of a 50 percent working interest and some 39 percent royalty interest in two Buccaneer Alaska LLC leases — ADL 391108 and ADL 391789 — to Hilcorp Alaska LLC in March.

The leases were formerly part of the offshore Southern Cross unit, which Buccaneer voluntarily terminated earlier this year along with its offshore Northwest Cook Inlet unit.

Hilcorp already owned the other half of the two leases.

The majority of the leases at those units have now expired retroactively.

The state is also considering requests from Buccaneer Royalties LLC and from Stellar Oil and Gas LLC to transfer small royalty interest those same remaining leases to Hilcorp.

The state denied a request by Buccaneer Cosmopolitan LLC to transfer small royalty interests in four leases to Buccaneer Royalties LLC and Stellar Oil and Gas LLC. After operating the Cosmopolitan prospect and drilling an exploration well, Buccaneer recently sold its 25 percent working interest in the leases to its majority partner BlueCrest Energy Inc. The leases are ADL 391899, ADL 391902, ADL 391903 and ADL 391904.

> *The state denied a request by Buccaneer Cosmopolitan LLC to transfer small royalty interests in four leases to Buccaneer Royalties LLC and Stellar Oil and Gas LLC.*

Also in March, the state finalized the second revision of the Qannik participating area, involving segments of six leases from the ConocoPhillips-operated Colville River unit.

The state approved a request from Repsol E&P USA Inc. to transfer 7.5 percent working interest and 6.25 percent royalty interest in some 50 Beaufort Sea leases to GMT Exploration Co. LLC. The state also approved a request from 70 & 148 LLC to transfer 7.5 percent working interest and 6.25 percent royalty interest in 16 leases to GMT Exploration Co. and a 70 percent working interest and 58.33 percent royalty interest in 16 leases to Repsol E&P USA. The three companies are partners on an exploration program.

The state is considering a request from William Armstrong to transfer a 0.025 percent royalty interest in 160 North Slope leases to Colorado-based Reed Ligc LLC.

The state also extended two Repsol leases — ADL 391441 and ADL 391428 — until May 31, 2018. The onshore leases are south of the Prudhoe Bay unit, in the vicinity of the Repsol Tuttu No. 1 exploration well. The leases were set to expire on May 31.

The state is considering a request from Black Stone Natural Resources I LP to transfer small royalty interests in four North Slope leases to Matagorda B1 LP and Black Stone Minerals Co. LP. The leases are ADL 47433, ADL 47437, ADL 47438 and ADL 47466.

The state is also considering a request from the Estate of W.G. Stroecker to transfer small royalty interests — all less than 1 percent — in eight leases to Stroecker Oil and Gas LLC. The leases are ADL 364470 and ADL 364471 at the Colville River unit, ADL 379301 at the Oooguruk unit, ADL 355016 at the Milne Point unit, on the North Slope, and ADL 359111 and ADL 359112 at the West McArthur River unit in Cook Inlet.

The state is considering various requests from the Estate of John W. Peery, the Estate of Robert S. Searls Jr. and the Estate of Jeanne Alice Searls to transfer a small royalty interest in ADL 51667 in the Point Thomson unit to various individual royalty owners.

The Aurora Gas lease ADL 391265 also expired in March, retroactive to October 2013. The lease had surrounded the Nicolai Creek unit on the west side of Cook Inlet. The state had extended the term of the lease when Aurora drilled by the Nicolai Creek No. 5 well.

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

Contact Eric Lidji at ericlidji@mac.com

continued from page 6

GAS OFFTAKE

are going to optimize oil production, she said.

Gas exports possible

That does not, however, preclude the possibility of exporting gas for manufacturing LNG. The oil companies may, for example, implement new methods of oil recovery, such as the use of carbon dioxide, that achieve equivalent oil recovery rates to current techniques but that do not require such large quantities of natural gas.

Moreover, the construction of a natural gas export pipeline would surely motivate companies to start exploring for and developing some of the huge quantity of gas thought to exist on the North Slope outside the existing oil fields, Foerster pointed out. The U.S. Geological Survey has estimated the possibility of 150 trillion cubic feet of undiscovered natural gas on the Slope, she said.

"If there's a gas line being built, that exploration is likely to begin," Foerster said. ●

Contact Alan Bailey at abailey@petroleumnews.com

● NATURAL GAS

Enstar defends its tariff proposals

Alaska's largest natural gas utility says changes aren't meant to block competition, but rather to ensure fairness for all customers

By WESLEY LOY

For Petroleum News

Enstar Natural Gas Co., the major gas utility serving Southcentral Alaska, has proposed tariff changes that rankle some folks.

One change would require commercial customers to provide a one-year notice before leaving, or returning to, the Enstar system.

The proposal is a response to gas producers aiming to sell gas directly to select Enstar customers.

Direct marketers would use Enstar's distribution lines to deliver their product. They argue the one-year notice proposal is anti-competitive.

Critics also complain that Enstar is insisting on expensive metering equipment at locations taking gas from alternative suppliers.

The Enstar proposals are now pending before the Regulatory Commission of Alaska.

Petroleum News invited Enstar to explain its proposals in plain language. Enstar contends the tariff revisions are important for customer fairness, and wouldn't benefit the utility financially.

Enstar's full response follows.

Enstar is seeking to protect its customers from additional costs brought about by other customers' decisions to pursue gas supply with alternative suppliers.

Enstar has made gas supply, storage and transportation commitments based on a reasonably estimated number of customers, and based on some modest growth of that customer base. With very limited — and de minimis — exceptions, Enstar cannot modify its gas storage and gas supply contracts. If significant numbers of customers pursue supply from alternative suppliers, Enstar's other customers run the risk of paying for gas supply or gas storage services that Enstar does not need.

Conversely, as has happened in the past, if significant numbers of customers return to the Enstar system with little warning, it is probable that any replacement gas will be at a higher cost if negotiated at the last minute. Again, without adequate tariff protections to prevent it, Enstar's other customers will be forced to bear the costs associated with this additional gas supply.

To mitigate these risks to Enstar's existing customers, Enstar is proposing a one-year notice period. The point of this notice period for customers leaving the Enstar system to pursue supply from alternative suppliers is to give Enstar time to address the surplus storage and supply arrangements, and attempt to mitigate any cost on its existing customers as a result of the change. The point of the notice period for customers returning to the Enstar system is to allow Enstar time to negotiate for additional gas supply, hopefully at prices that will not impose an unfair burden on Enstar's other customers.

Enstar's proposals are revenue neutral; Enstar neither gains nor loses money when a customer chooses to purchase gas from an alternative supplier.

While those opposed to Enstar's tariff filing insinuate that Enstar is proposing these changes for its own gain, this is not true. When Enstar supplies gas to a Gas Sales Service Customer (one that is supplied by Enstar-acquired gas), Enstar does not make money on the sale of the gas to that customer. Instead, Enstar's RCA-approved margin is earned on the per-mcf transportation rate applied to that gas. Similarly, when Enstar transports gas to a customer that is using gas acquired from an alternative supplier, Enstar still makes the per-mcf transportation rate, and thus still earns its margin. Thus, Enstar is financially ambivalent as to whether it has those customers as Gas Sales Service Customers or as Transportation End Use Customers.

Enstar requires "load following" to ensure its customers don't unfairly pay for peak deliverability service.

Some alternative suppliers have complained about Enstar's longstanding practice of requiring real-time data reads on gas flow in locations where customers are purchasing gas from alternative suppliers, which Enstar is proposing to codify in tariff at this time. Enstar's historical experience is that, when alternative suppliers do not provide gas at a rate that meets their customers' needs, Enstar ends up picking up the slack. This is unfair to Enstar's other customers.

Enstar has, on its customers' behalf, entered into gas storage and gas supply contracts which allow it to meet its customers' deliverability needs, even on very cold days. In the past, when an alternative supplier did not meet its customers' load, Enstar delivered the gas at the varying rates needed by the alternative supplier's customers, but it was Enstar footing the bill associated with making the varying deliveries. In this scenario, Enstar's existing customers are left subsidizing the commercial arrangement between the alternative supplier and its customers.

By installing the required equipment, Enstar can be sure that the alternative supplier meets its customers' load, and can take remedial action if the alternative supplier fails to do so.

Enstar's proposal doesn't stifle competition.

Opponents of Enstar's proposed tariff changes argue that the changes stifle competition. This argument is troubling for several reasons. First, Enstar is a very highly regulated company, and each of its firm gas supply contracts has been approved by the RCA as being in the public interest. Enstar has a firm obligation to serve its gas supply customers; this is an obligation it takes seriously.

In the 2009-2012 period, in part due to the unpredictable and sudden course reversals by the alternative suppliers, gas became extremely scarce, and very expensive, in Cook Inlet. Enstar went into each of those

see TARIFF PROPOSALS page 10

GOVERNMENT

Senate passes Arctic infrastructure bill

The Alaska state Senate has passed a bill authorizing the Alaska Industrial Development and Export Authority, or AIDEA, to offer financing options designed for public-private partnerships in the development of Arctic infrastructure. Senate Bill 140 now goes to the House for consideration there.

Sponsored by Sen. Lesil McGuire, the bill stems from a recommendation in a report published by the Alaska Arctic Policy Commission, an entity that the Legislature established in 2012 to formulate a state Arctic policy and implementation strategy. The report identified a need for public and private investment in Arctic infrastructure, including the aviation and maritime emergency response infrastructure. McGuire is co-chair of the commission, along with Rep. Rob Herron.

"This bill is the culmination of hundreds of hours of work by the members of the Alaska Arctic Policy Commission," McGuire said in an April 2 press release. "As we traveled the state to listen to the people in the communities, the one recurring theme was the need for Arctic infrastructure. This bill sends the message to the federal government that we feel fortifying and strengthening our assets in the Arctic is critical and we are not afraid to lead this massive undertaking."

The funding mechanism proposed in SB 140 follows a similar scheme to the Sustainable Energy Transmission and Supply Fund, or SETS fund, that AIDEA already administers. Under the SETS program, AIDEA is providing loans to help with the funding of a North Slope liquefied natural gas plant, to provide a gas supply for interior Alaska.

"This bill gives AIDEA the tools it needs to reach out to the people who are looking to invest in the north. Right now, there is an estimated $100 billion of private capital that is looking for investment opportunities in the Arctic," McGuire said.

—ALAN BAILEY

NATURAL GAS

Allowing non-resident on AGDC board

Since a non-resident appointed to the Alaska Gasline Development Corp. board has become an issue, House Speaker Mike Chenault, R-Kenai, has introduced a bill to amend AGDC statutes to allow for an out-of-state resident to be named to the corporation's board. AGDC board members are named by the governor and approved by the Legislature.

In a sponsor statement for House Bill 383 Chenault said statutes for AGDC, approved in House Bill 4 last session, "articulated board requirements, without specifically stating whether members had to be Alaskans or not, with the understanding that by not specifying, appointments could be U.S. citizens as stated in the Alaska Constitution. Legal guidance at the time, plus testimony, was that House Bill 4 language allowed both out-of-state citizens and Alaskan residents to serve," he said.

Chenault said it was an oversight in HB 4 that AGDC was not specifically exempted from an Alaska statute which requires board members to be Alaskans unless otherwise provided.

At issue is the appointment of Richard Rabinow, formerly with ExxonMobil and president of a firm which provides consulting services to the pipeline industry.

The Alaska Constitution provides that board members "shall be citizens of the United States."

The Alaska Railroad is an example of a board whose statutes specifically allow non-resident to be named to the board.

The issue cited for allowing non-resident appointment to the board is ensuring that the governor has access to the best expertise available in naming members to the AGDC board.

The bill was amended in House Rules to require the governor to submit a letter explaining why a non-resident was appointed.

The House passed HB 383 by a 27-12 vote April 9.

—PETROLEUM NEWS

GOVERNMENT

BSEE to publish Arctic OCS rule soon

Brian Salerno, director of the Bureau of Safety and Environmental Enforcement, or BSEE, said in an April 8 note on his agency's website that BSEE will soon issue for public comment a new Arctic drilling rule that BSEE has been developing jointly with the Bureau of Ocean Energy Management.

"The Arctic is a pristine and austere environment which poses unique challenges for energy exploration and production," Salerno said. "The potential energy reserves in the Arctic are compelling; and several companies have made substantial investments in their bid to develop these resources. At the same time, preservation of the Arctic environment is also essential to Native communities' cultural and subsistence needs, and for the overall health of a fragile ecosystem."

In July 2013 Mark Fesmire, BSEE's Alaska regional director, said that the rule would take account of some issues unique to drilling in the Arctic offshore. ...

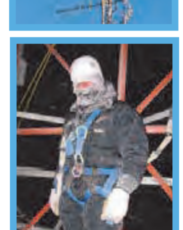
The new rule, a set of Arctic-specific regulations for oil drilling on the outer continental shelf, stems from a recommendation made in 2012 by a safety advisory committee established in the wake of the 2010 Deepwater Horizon disaster. In July 2013 Mark Fesmire, BSEE's Alaska regional director, said that the rule would take account of some issues unique to drilling in the Arctic offshore, such as the need to secure a well at the end of an open-water drilling season, and the need to avoid conflicts with subsistence hunting.

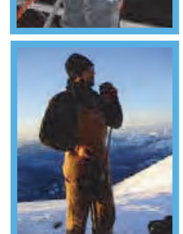
Salerno said that, in addition to preparing the new rule, BSEE has been developing relationships with other regulators through the agency's involvement in working groups under the Arctic Council, and through the agency's leading role in Arctic initiatives under the U.S. National Ocean Policy.

A key focus for BSEE has been the need for oil source control and containment systems for Arctic offshore drilling, to prevent or minimize oil releases during emergencies, Salerno said. This approach, different from past ways of addressing risks associated with oil and gas development, is consistent with lessons learned from Deepwater Horizon, he said.

"Most importantly, our goal is to ensure that operators have taken the necessary steps to ensure that drilling operations performed in the Arctic are done safely," Salerno said. "This includes proper internal controls and planning, two areas that were highlighted in both the Department of the Interior's and U.S. Coast Guard's reports on Shell's operations in Alaska."

—ALAN BAILEY





GOVERNMENT

HB 77 comes to a halt in Senate Resources

House Bill 77, the proposed legislation aimed at streamlining the permitting of resource development projects, is dead, at least for this year's legislative session. The bill had been reviewed by the Senate Resources Committee but on April 3 Sen. Cathy Giessel, the committee chair, announced that, given the controversy surrounding the bill, she had decided to hold the bill in the committee indefinitely.

"What began as an efficiency permitting bill has morphed into a heated debate and it's driving Alaskans apart," Giessel said. "It is clear that this bill raised a lot of concern among constituents and at this point there doesn't seem to be a resolution."

The House passed the bill during the 2013 legislative session but the bill subsequently stalled in the Senate.

Dubbed "The Silencing Alaskans Act" by some environmental groups, criticized by opponents as potentially subverting the public comment process for permit approval, and slammed by some Native groups as undermining traditional rights to water use, the bill would allow the administration to issue general permits for some resource development activities, would make some changes to the law relating to appeals over agency permitting decisions and would also change the law relating to the reservation or sale of water in the state.

The House passed the bill during the 2013 legislative session but the bill subsequently stalled in the Senate. During the current legislative session Gov. Sean Parnell introduced a new version of the bill, which the state administration said addressed the concerns raised in 2013. But, with a storm of objections to the new bill version voiced during a public hearing arranged by Senate Resources, and with a number of senators still expressing misgivings over the bill, it appears that Alaskans remain sharply divided in their response to the bill's proposals.

—ALAN BAILEY

ENVIRONMENT & SAFETY

Arctic sea ice reaches 5th lowest maximum

The extent of the Arctic sea ice has reached its maximum winter extent for the year, with the fifth lowest maximum area recorded since satellite observations began in 1979, the National Snow and Ice Data Center, or NSIDC, reported April 2. At 5.76 million square miles on March 21, the maximum area was consistent with a decline rate of 2.6 percent per decade, NSIDC said. The lowest maximum on record, observed in 2011, was 5.65 million square miles.

However, this winter has seen a distinctly larger amount of multiyear ice in the Arctic Ocean than was observed at the beginning of last winter. NSIDC attributes this increase in part to the survival of more first-year ice at the end of the summer than has been typical in recent years. In addition, the circulation of the multiyear ice pack in an ocean current known as the Beaufort Gyre and a reduced transportation of multiyear ice out of the Arctic through the Fran Strait both helped bolster the survival of multiyear ice in the Arctic Ocean, NSIDC says.

A pattern of surface winds associated with a change in the climatic conditions late in the winter freeze-up season caused a late-season surge in the ice extent, spreading out the ice pack in the Barents Sea and pushing the ice pack southwards in the Bering Sea. However, air temperatures remained unusually high throughout the Arctic in the second half of March, NSIDC says.

—ALAN BAILEY

ALTERNATIVE ENERGY

Susitna-Watana land use agreement formed

The Alaska Energy Authority has formed an agreement with Cook Inlet Region Inc. and several Cook Inlet villages for the use of land needed for the planned Susitna-Watana hydroelectric dam, in remote country around the upper reaches of the Susitna River, to the south of the Alaska Range. The lack of a land-use agreement had become an impediment in the Susitna-Watana project and had prompted Gov. Sean Parnell to make some funding for the project in next year's budget contingent on an agreement being achieved.

Six Native village corporations from the Cook Inlet region own some surface land within the area of the Susitna-Watana project, while Cook Inlet Region Inc., the Native regional corporation for the Cook Inlet region, owns subsurface land.

"This permit is the result of months of negotiations and is a step toward continuing a long-term positive relationship between AEA, the Cook Inlet village corporations and CIRI," said Sara Fisher-Goad, AEA executive director. "This permit protects land owners while providing AEA the necessary access to conduct Susitna-Watana Hydro environmental study. We look forward to the continued development of this partnership."

"Completing this monumental task has been an historic achievement requiring much commitment, time, effort and willingness to compromise for the greatest good for the greatest number of people," said Greg Encelewski, president of the Ninilchik Natives Association, one of the village corporations involved.

AEA requires an access permit for the Native land to conduct field work for environmental studies needed as part of a Federal Energy Regulatory Commission licensing effort for the massive hydropower project.

—ALAN BAILEY

continued from page 8

TARIFF PROPOSALS

winters without its peaking gas under contract, and its customers paid up to $22 per mcf for gas to cover deliverability on those days. When given an opportunity in 2013, Enstar chose to enter into long-term contracts with three Cook Inlet suppliers to meet its needs through spring of 2018. Through a competitive RFP (request for proposals) process, Enstar offered each of the alternative suppliers the opportunity to sell it gas. Following this RFP process, Enstar entered into contracts with the entities that had firm volumes of consequence to sell.

When they failed at that competitive process, alternative suppliers began pursuing the direct marketing route. Enstar encourages increased exploration and production activities by these alternative suppliers, and has firm contracts with Anchor Point Energy/Cook Inlet Energy, Buccaneer Energy, and interruptible contracts with others. However, alternative suppliers' efforts, while admirable, should not come at a cost to Enstar's existing customers. ●

Contact Wesley Loy at wloy@petroleumnews.com

GOVERNMENT

Timeline slips for Arctic port report

The target date has been pushed back for release of a draft report with a recommendation for development of a seaport to support rising activity in the Arctic Ocean.

The U.S. Army Corps of Engineers and the Alaska Department of Transportation and Public Facilities have been working together to study the idea of a deep-draft port.

"The Corps is anticipating a release of the draft report by the end of the calendar year," the Corps said in an April 1 email.

The Corps previously had aimed to release the report in March.

"Much is unknown about conditions of navigation in the Arctic and the ADOT&PF and USACE team is completing the evaluations necessary to develop a sound and justifiable recommendation," the email said.

In January 2013, the Army Corps issued a study that picked two sites for port feasibility analysis: Nome and nearby Port Clarence. Both sites are south of the Bering Strait, gateway to the polar ocean.

The forthcoming draft feasibility report and environmental impact statement is expected to examine the costs and benefits of a number of port "configurations," weighing options on dock length, port depth and so forth.

It will be up to Congress to authorize and fund the recommended project.

—WESLEY LOY

● ENVIRONMENT & SAFETY

US reaches $5.15B environmental settlement

Issue with Anadarko Petroleum arose from Kerr-McGee Corp., acquired by Anadarko in 2006; money will largely go to cleanup efforts

By ERIC TUCKER & DINA CAPPIELLO

Associated Press

The federal government on April 3 reached a $5.15 billion settlement with Anadarko Petroleum Corp., the largest ever for environmental contamination, to settle claims related to the cleanup of thousands of sites tainted with hazardous chemicals for decades.

The bulk of the money — $4.4 billion — will pay for environmental cleanup and be used to settle claims stemming from the legacy contamination.

The settlement resolves a legal battle over Tronox Inc., a spinoff of Kerr-McGee Corp., a company Anadarko acquired in 2006.

The Justice Department said Kerr-McGee, founded in 1929, left behind a long legacy of environmental contamination: polluting Lake Mead in Nevada with rocket fuel, leaving behind radioactive waste piles throughout the territory of the Navajo Nation, and dumping carcinogenic creosote in communities throughout the East, Midwest and South at its wood-treating facilities.

The company, rather than pay for the environmental mess it created, decided to shift the liabilities between 2002 and 2006 into Tronox, the Justice Department said, while Kerr-McGee kept its valuable oil and gas assets.

Issue from Kerr-McGee

"Kerr-McGee's businesses all over this country left significant, lasting environmental damage in their wake," Deputy Attorney General James Cole said. "It tried to shed its responsibility for this environmental damage and stick the United States with the huge cleanup bill."

The settlement releases Anadarko from all claims against Kerr-McGee.

"This settlement ... eliminates the uncertainty this dispute has created, and the proceeds will fund the remediation and cleanup of the legacy environmental liabilities," said Anadarko CEO Al Walker.

> *"This settlement ... eliminates the uncertainty this dispute has created, and the proceeds will fund the remediation and cleanup of the legacy environmental liabilities."*
> **—Anadarko CEO Al Walker**

The settlement funds will be paid into a trust that covers cleanup of contaminated sites across 22 states and the Navajo Nation.

Among the sites targeted for cleanup under the settlement are a former chemical manufacturing site in Nevada that has led to contamination of Lake Mead and a Superfund property in Gloucester, N.J., contaminated with thorium. About $1 billion will be directed to the Navajo Nation to address radioactive waste left behind by the region's abandoned uranium mines.

$25 billion initially sought

The U.S. initially sought $25 billion to clean up decades of contamination at dozens of sites. A U.S. bankruptcy judge in New York in December found Kerr-McGee had improperly shifted its environmental liabilities to Tronox and should pay between $5.15 billion and $14.2 billion, plus attorney's fees. Cole said at a news conference April 3 that the government decided that the $5.15 billion amount was more than enough to cover the damages.

"It provides us with recovery now as opposed to years and years down the road," he said.

Tronox said in a statement that the settlement means environmental cleanup can begin and that people harmed by the pollution can be compensated.

After the settlement's announcement, Anadarko's stock rose 15 percent, to $99.43. ●

Petroleum news

Oil Patch Bits

AACA awards 2014 scholarship to Brett Merboth of Nome

The Alaska Air Carriers Association scholarship, underwritten by Crowley Maritime Corp.'s petroleum distribution group in Alaska for the second year in a row, was recently awarded to Nome student Brett Merboth. Merboth is the youngest member in a long line of aviators including his grandparents, Dick and Joyce Galleher, who owned Munz Northern Airlines based in Nome. The airline flew groceries, freight, Alaska residents and state tourists between the surrounding villages with the slogan "Flying the arctic before it's paved!"

At 14 years old, Merboth decided that he wanted to be an aviation mechanic and has since gained 10 years of experience in the mechanical and metal fabrication skills furthering his skills mainly in auto body shops. He also worked for the Alaska Department of Transportation and Public Facilities out of Nome for two summers.

Merboth has been accepted to the UAA Aviation Technology Center in Anchorage. "I will push myself everyday to make sure my appreciation shows, and this money will not go to waste," he said of winning the scholarship.

"We sincerely thank Crowley for their generosity and commitment to inspiring the youth of Alaska to serve their communities," said AACA Executive Director Joy Journeay. "Crowley's longstanding support of the Alaskan aviation industry has been outstanding. This is the second year that Crowley has underwritten a scholarship to encourage the deserving youth of rural Alaska. We cannot thank Crowley enough!"

CGG and Baker Hughes sign RoqSCAN agreement

CGG announced that it has signed an exclusive agreement with Baker Hughes Inc. for RoqSCAN technology offered by CGG.

RoqSCAN is a real-time, fully portable, quantitative and automated rock properties and mineralogical analyzer. Developed by Robertson, a CGG company, and Carl Zeiss Microscopy Ltd., RoqSCAN delivers highly quantitative compositional and textural mineralogical data from drilling cuttings or core pieces, revealing the mineralogical DNA of the reservoir. This service can be provided at the wellsite during drilling operations, or later in core stores, field offices and laboratories.

"RoqSCAN is the latest addition to a suite of reservoir characterization services offered by Baker Hughes," said Derek Mathieson, vice president, strategy and corporate development for Baker Hughes. "The data provided by RoqSCAN significantly improves the real-time evaluation of laterals, thereby allowing

see OIL PATCH BITS page 16

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

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

continued from page 1

STRAY METAL

As it turned out, the encapsulation proved faulty, dislodging the metal piece that then traveled down the pipeline.

PHMSA is concerned that numerous other encapsulations installed on the pipeline might also be faulty.

'Full confidence'

The agency issued a "notice of proposed safety order" calling for Alyeska to monitor the encapsulations, to test some of them, and to fix any problems. The proposed order sets deadlines to complete much of the work by the end of September.

Alyeska, however, can try to negotiate terms with PHMSA.

The company is in the process of responding to the proposed safety order, Alyeska spokeswoman Michelle Egan told Petroleum News on April 9.

She noted that the stray metal incident did not result in an oil spill or a pipeline shutdown, and that Alyeska "took immediate steps" to repair the failed encapsulation at milepost 385.

"Extensive testing and investigation is ongoing and Alyeska is operating (the system) with full confidence in pipeline integrity," Egan said.

In its proposed safety order, PHMSA laid out the preliminary findings of its investigation.

In August 2012, Alyeska encapsulated what was described as "a construction-era high point vent" at milepost 385. The pipeline in that area runs above ground.

The job involved welding the encapsulation to the pipeline, and filling it with epoxy.

An analysis showed that as the epoxy cured, pressure built up inside the encapsulation, and this resulted in a "punch-out" of a piece of the steel pipeline wall. This piece, called a coupon, entered the oil stream and rode to Valdez.

The safety order reveals that Alyeska work crews found a small oil leak from the encapsulation the day after it was installed.

Alyeska secured the milepost 385 site by installing a "full-encirclement, pressure-containing sleeve" on the pipeline, PHMSA said.

Dramatic lab test

The safety order also describes a rather dramatic laboratory experiment to simulate the pipeline failure. About 3½ hours after epoxy was poured into an encapsulation installed on a mock-up section of 48-inch pipe, the encapsulation "bulged and then failed during the curing process."

Pipeline wall material and epoxy shot into the mock-up, and the "explosion" resulted in a lab safety incident that itself required an investigation, PHMSA said.

The concern now is the condition of about 90 other encapsulations Alyeska installed over vents and drains between 2010 and 2013, the agency said.

Concerns include cracking of the pipe underneath the encapsulations, and internal pressure in the encapsulations as a result of epoxy curing or crude oil leakage, PHMSA said.

"Despite significant field testing to date, PHMSA believes Alyeska still has not fully addressed the integrity conditions at all of the other encapsulation sites," the agency's proposed safety order says. "Alyeska proposed a plan to address many of our remaining integrity concerns through additional field testing ... but that testing cannot be accomplished until weather and site conditions improve."

PHMSA is proposing a list of corrective measures. These include developing a protocol for increased monitoring of the encapsulations, conducting ultrasonic and other field tests, and relieving encapsulation pressure.

Anchorage-based Alyeska operates the pipeline on behalf of the owners, including BP, ConocoPhillips and ExxonMobil.

The line has been moving Alaska North Slope crude since 1977.

Barrett, the Alyeska president, formerly headed PHMSA. ●

Contact Wesley Loy at wloy@petroleumnews.com

continued from page 3

OLSON Q&A

people I talked to all were senior people who had years of experience who knew what to do if the unexpected happened: plane crashes, storms, fires, triage casualties. They are covering all the bases. From the safety standpoint, the camp looked like a class act. That made me think they were serious, putting not only the time, but the money and labor into it so they are ready.

Down on the south end of the state, in Nikiski which is Mike Chenault's district. Our districts used to be referred to as the doughnut and the doughnut hole and not because of our sizes, either. It's the fact that his district goes around mine. Half of the people in my district work in his and half of the people in his district work in mine. I spend a lot of time in his district and likewise he spends a lot of time in mine. We're both seeing things like ASRC doing an expansion, new people moving in and ExxonMobil in the process of acquiring leased land: office space and warehouses. That tells me they are serious.

There was a quote by TransCanada's CEO that came out in 2008 that talked about Exxon's significance (essentially the project won't go forward until Exxon is happy with it), and I think that's happened.

Petroleum News: How about within the bill, the MOU or the HOA? Is there anything among those documents that gives you confidence?

> *"It has a strong chance of happening because everybody who is involved is trying to make it happen. It's never going to happen until a bunch of moving wheels and gears are in place. We are getting close to that. We are not there. But we are close."*
> **—Rep. Kurt Olson, R-Soldotna**

Olson: They had the head of the Alaska operations from all three companies, an Exxon contract attorney from D.C., plus Tony Palmer from TransCanada come into my office to sit down and ask if I had any questions. They were all here at the very beginning of session. They were speaking with one tongue. They said you've got all of us right here. That's the best way to get a question answered. And it wasn't just me. It was everyone around the building. I've never seen that.

Petroleum News: Not even during the Murkowski administration when they had a deal struck?

Olson: No, I always thought it was two out of three. Well, one lukewarm, one wanted it and another was ambivalent. I think everything is starting to come together.

Conoco has some of their export license back already. We lost the export licenses as a result of over regulation by the RCA when they cut back the length of time that they would allow for contract sales to Tokyo Electric. I know I've mentioned this before but we've never had a gas shortage in Cook Inlet because of the relationship between Tokyo Electric and ConocoPhillips. They would peak shave loads with the consent of the Japanese when we had a cold snap. Rather than put into production gas that would only have demand during a month or two out of the year, they could make up for it by shorting the gas going to Japan. Because it was sold on a Btu basis, they could put a richer gas on the next load. They wouldn't need to put out an extra ship for another load. The RCA then said, Enstar and other users had a concern that we are going to have a shortage. My gut feeling is the RCA didn't know how peak shaving worked. Now that I see they are getting contracts again, we'll see how it works out. We went from having 100 percent of the Tokyo Electric market down to a much smaller percent.

Petroleum News: You mentioned AGDC: There is the issue whether someone from out of state (Richard Rabinow of Texas) should be on the board. Do you support that?

Olson: Yes, I've had a chance to interview him. The guy has been out of the business for 10 years. He has no stock with the company. I like the institutional knowledge, where he's worked, the projects he's been associated with and expertise that he brings. I liked his humility a lot.

Petroleum News: Well, the House took care of that with HB383 that allows the governor to select someone from out of state for a board.

Olson: I just think we need the best person for that particular job, and we took care of that.

Petroleum News: What do you like about AGDC's role?

Olson: I think we need it. I think we have good people in there. I've known Dan Fauske a long time. I'm impressed with any number of things that he's done. I knew of him when he worked on the North Slope. At Alaska Housing Finance Corp. we had 3 to 4 percent default when the rest of the country was under water because Dan would only allow Alaska Housing to make loans to people who were qualified to get loans not find a way to qualify them. I like his style. I like the way he will find a way to take on different things.

Petroleum News: In wrap up, where do you think the state is headed with the prospects of a gas line project?

Olson: I think we are closer than we've ever been. Nobody is going to get everything they wanted from this. I don't think the state is. The producers made some concessions. TransCanada isn't going to get everything it wants. It has a strong chance of happening because everybody who is involved is trying to make it happen. It's never going to happen until a bunch of moving wheels and gears are in place. We are getting close to that. We are not there. But we are close. ●

Contact Steve Quinn at squinnwrite@gmail.com

continued from page 1

JOBS PLAN

seen this kind of cooperation early in the process, where both senior levels of government understand this is a once-in-a-lifetime opportunity and we need to be working together," Bond said.

She said the LNG opportunity available to British Columbia is also an "opportunity for Canadians. We want to make sure that LNG is on the national agenda."

BG in working group

David Keane, an executive with the United Kingdom-based BG Group, operator of the Prince Rupert LNG project, has been a member of Clark's working group on labor-related LNG issues.

He said the industry does not want to repeat the "overly restrictive immigration policies" that have caused problems in Australia.

The danger to British Columbia of losing momentum in the LNG sector was reflected in a research report by RBC Capital Markets which said the rising tide of comparatively inexpensive LNG has surfaced in the United States.

"A window of opportunity exists for Canadian LNG projects to capture market share, but that opening is limited given intensifying supply competition from the United States, Russia and Mozambique.

"While the global LNG market is likely to remain supply-constrained into 2018, demand growth limitations could play a much bigger role thereafter, particularly if Japan's nuclear utilization rates rebound as we expect," RBC said.

Building union trust

Clark has invested considerable effort in building trust with trade unions, which she clearly hopes will pay off with their support for an apprenticeship program that would see 25 percent of trades jobs on LNG projects filled by apprentices.

A report from Clark's working group warned that competition for skilled laborers in British Columbia's north will be heavy, noting: "This is a key risk factor for the LNG proponents."

Clark vowed that better training opportunities, resulting in a new wave of qualified journeymen by the time LNG projects are ready to break ground, will be offered "immediately" through a "re-engineering" of the education system in high schools and post-secondary institutions.

The working groups said that from 2013 to 2023, 47 major projects — mines, dams, pipelines and LNG terminals — are planned for British Columbia that are each worth more than C$500 million, with the peak labor years starting in 2016.

"We have a plan to grow our economy," Clark said. "We are going to make sure the work force is there."

Jim Sinclair, president of the B.C. Federation of Labor, representing 450,000 workers, said the apprenticeship strategy is a solution to trades training concerns. "We don't want to just build bridges, we want to build B.C., too," he said.

Bond said seven British Columbia LNG proposals have received export permits so far and "we are going to keep working tirelessly ... to make sure these projects move to final investment decisions."

Some issues with TFW

The TFW program allows the hiring of foreign workers who have skills sought by Canadian companies, although the program has been troubled in the past by abuses, forcing the Canadian government to toughen sanctions against employers who use the initiative to drive down wages.

Clark and federal cabinet ministers also stressed that temporary workers will not get hiring priority over qualified Canadians.

"Our commitment is this: British Columbians first, Canadians second, and then, when we have maxed out every opportunity to put Canadians to work on these projects, we will look overseas," Clark said.

Canada's Employment Minister Jason Kenney said the TFW program will actually make it harder, not easier, for employers to bring in foreign workers.

In answer to criticism from the opposition New Democratic Party, NDP, he said the federal government has made it "absolutely clear" British Columbia's LNG industry must "employ and train Canadians first, particularly young Canadians and aboriginal Canadians, and only look to the TFW as a last and very limited resource."

However, Jinny Sims, an NDP Member of Parliament from the Vancouver region, said LNG should provide a "generation of quality, decent-paying jobs for British Columbians, which should not make it easier to bring in even more temporary foreign workers when there are plenty of Canadians to fill jobs."

Kenney said the "hypocrisy of the NDP on this question is really bizarre," given that party members have written letters in support of employers trying to recruit foreign workers.

In the 1990s, the intake of foreign workers was relatively flat, peaking at 164,972 in 1999, before surging to 255,331 in 2004 and a record 491,537 in 2012

The natural resource provinces of British Columbia, Alberta and Saskatchewan have claimed a disproportionate number of those workers.

Yuen Pau Woo, chief executive officer of the Asia-Pacific Foundation of Canada, wrote in the Vancouver Sun that the majority of employers are "not interested in global talent; rather they are looking for specific skills and capabilities, developed abroad perhaps but applied to a domestic market."

He said the British Columbia government's hope of building an LNG industry and opening a gateway to Asia can benefit from recruiting "globally connected talent," noting that there could be as many as 600,000 Canadians (most of them foreign-born) living in Asia and eager to return to Canada. ●

Contact Gary Park through publisher@petroleumnews.com

continued from page 1

SB 138 UPDATE

same subject matter as House Bill 383, allowing for a non-resident to serve on the board. The other prohibits the commissioners of the departments of Natural Resources and Revenue from sitting on the board, extending a prohibition that previously extended only as long as there was a license in effect under the Alaska Gasline Inducement Act, AGIA.

Feige said one of the concerns he heard was that AGDC is subject to regulation by DNR and Revenue in various ways and that keeping those commissioners off the board helps keep a bright line between regulators and regulated. Rep. Mike Hawker, R-Anchorage, prime co-sponsor of AGDC's enabling legislation, said the amendment accomplished an objective of the AGDC legislation to separate regulators and regulated.

Deputy Commissioner of Revenue Mike Pawlowski told the committee there were good policy reasons for having diversity on the board, which includes five public members appointed by the governor and Commissioner Susan Bell of the Department of Commerce, Community and Economic Development and Commissioner Dianne Blumer of the Department of Labor and Workforce Development.

The committee also amended the bill to provide that the attorney general will be AGDC's legal counsel for legal services to develop contracts and agreements related to an Alaska liquefied natural gas project. For other purposes AGDC has its own counsel.

Pawlowski said this amendment would provide a unified legal voice for AGDC, DNR and Revenue for Alaska LNG project contracts and agreements.

The bill also amended AGDC's statutes to allow the board to appoint a separate program director for an in-state natural gas pipeline; the bill already authorized the board to appoint a program director for the Alaska LNG project.

Public window, confidentiality, board

The bill was also amended to provide a specific public review period for proposed contracts.

DNR Commissioner Joe Balash said this would provide a 90-day window for the public to see contracts the Legislature will be asked to approve. The same amendment provides for DNR consultation with AGDC on development of contracts for the project. Balash said AGDC might be able to provide services DNR needs for the project.

The bill had provided for confidential briefing of legislators; it was amended to allow inclusion of staff and contractors at the request of legislators — such briefings would require those receiving them to sign confidentiality agreements. Hawker noted that the Legislature may want Legislative Budget & Audit or the Legislative Council to provide training so that legislators and staff understand the obligation they place themselves under when signing a confidentiality agreement.

The committee also amended the bill to include the language of the governor's administrative order No. 269, establishing the Municipal Advisory Gas Project Review Board.

Briefings, reports, competitiveness

A proposal requiring briefings at least quarterly to the Legislature by the parties involved in the project, and written reports by DNR on the money the state would be obligated to pay TransCanada if the project were terminated prior to sale of gas, was changed to require briefings at least three times a year.

The bill was also amended to require the Revenue commissioner to report on financing options for state ownership and participation in the project, including "a description of the risk associated with each option and the effect of each option on the bonding capacity and bond rating of the state," with an interim report due the first day of next year's legislative session and a final report when the DNR commissioner submits the first agreement or contract to the Legislature for approval. The same amendment also

see **SB 138 UPDATE** *page 16*

The hemisphere's most treacherous waters

The likely winter sea conditions in the Gulf of Alaska should give cause for concern for anyone planning a major vessel tow through this challenging region, according to the U.S. Coast Guard's newly published report on its investigation of the December 2012 grounding of Shell's Kulluk drilling rig. The report says that a U.S. coastal pilot manual characterizes the northern Gulf of Alaska and the southern Bering Sea as "having among the most treacherous winter waters in the Northern Hemisphere," with a succession of storms typically bringing rain, sleet, snow, howling winds and mountainous seas.

Apparently the weather study that Shell had contracted for the Kulluk's tow route had suggested the likelihood of seas as high as 9.2 meters (about 30 feet) and 44.6-knot winds for about 10 percent of the voyage.

Records from the tow operation indicate that, with its conical shaped hull, the Kulluk pitched violently in heavy seas, alternately tightening and slackening the towline attached to the Aiviq, the vessel conducting the tow operation, the Coast Guard report says.

And, although the Aiviq, the vessel that Shell contracted to tow the Kulluk, appears to have been amply powerful to conduct the tow, the Kulluk's tall infrastructure made the drilling rig particularly challenging to pull against a severe headwind. In the final minutes before the Kulluk ran aground, the tug Alert, a powerful and very capable tug that had come to the Kulluk's assistance, was unable to make headway at full power in pulling the Kulluk into the teeth of a 40- to 45-knot gale in 20- to 25-foot seas, the Coast Guard report says.

—ALAN BAILEY

USCG recommendations over Kulluk grounding

As part of the report from its investigation of the 2012 grounding of Shell's Kulluk floating drilling rig, the U.S. Coast Guard has made several recommendations for actions that might prevent a similar disaster from happening in the future.

At the top of the list comes a recommendation that the Coast Guard commandant should partner with the Towing Safety Advisory Council to form a working group to develop a "task statement" addressing concerns relating to the Kulluk incident, including the issues that the incident has raised and the towage of offshore drilling units in an Arctic marine environment.

The report also recommends that the U.S. Coast Guard should review its towing capabilities, to evaluate any appropriate upgrades to the towing equipment on the agency's cutter fleet — one issue identified in the report was the inadequacy of the towing capabilities of some of the vessels that went to the assistance of the Kulluk after the original tow of the drilling rig ran into difficulties.

Policies, guidance and procedures

The report also recommends that Shell and any other entity planning marine operations in an Arctic marine environment should develop policies and guidance for these operations, and that marine companies intending to work in the Arctic should re-evaluate their operating procedures for vessels plying the Gulf of Alaska or similar environments.

Edison Chouest Offshore, the company operating the Aiviq, the vessel that was towing the Kulluk, should ensure critical fuel management and towing procedures are included in the Aiviq's safety management system; the company should establish levels of competency and training requirements for the Aiviq's masters and mates when engaged in towing; and the company should work with the Coast Guard and the American Bureau of Shipping to address all potential Aiviq design deficiencies, the report says.

—ALAN BAILEY

continued from page 1

KULLUK REPORT

High-risk endeavor

Rear Adm. Joseph Servidio, USCG assistant commandant for prevention policy, commented on the importance of addressing risks in marine operations.

"In this case, the risks associated with a single-vessel tow by a new purpose-built vessel of a unique conical-shaped hull, with people aboard, in winter Alaskan waters where weather systems and seas are expected to rapidly develop, were extremely high," Servidio said.

Referencing a section of the report that highlights the possibility of enforcement actions against Edison Chouest Offshore, the operator of the Aiviq, the vessel towing the Kulluk, and some members of the Aiviq's crew, Servidio commented that he was most troubled by the significant number and nature of the potential violations of law and regulations.

"I will ensure that these potential violations are thoroughly investigated by the officer in charge, marine inspection, western Alaska," Servidio wrote.

"We appreciate the thorough investigation and will take any findings seriously," wrote Shell spokeswoman Megan Baldino in a press release issued on April 3. "Already, we have implemented lessons learned from our internal review of our 2012 operations. Those improvements will be measured against the findings in the USCG report as well as recommendations from the U.S. Department of Interior."

December 2012

The Aiviq, with the Kulluk under tow, set out from Dutch Harbor on Dec. 21, 2012, to deliver the drilling rig to a yard in Seattle for repair, following the end of Shell's 2012 open water drilling season in the Beaufort Sea. On Dec. 27, while the vessels were transiting the northern Gulf of Alaska in heavy seas the towing hawser between the two vessels parted. Although the Aiviq succeeded in re-establishing a tow using an emergency tow line, all four of the Aiviq's engine's subsequently failed.

Multiple vessels, including a Coast Guard cutter, tugs and the Aiviq herself, with her engines repaired, made valiant attempts to save the Kulluk. But, eventually with the response efforts defeated by severe gales, heavy seas and breaking towlines, on Dec. 31 the Kulluk ran aground on the shore of Sitkalidak Island, to the southeast of Kodiak Island.

The Coast Guard report says that Shell had decided to move the Kulluk to Seattle because of the impracticality of carrying out needed repairs to the rig in Alaska. On Dec. 7, 2012, the company made the final decision to move the vessel, with the vessel being scheduled to enter a Seattle shipyard in February. The report says that several factors played into the timing of the move from Dutch Harbor, including forecasts of weather and wave conditions for the period December 2012 to February 2013. A belief by Shell that millions of dollars of property tax might be assessed on Jan. 1, if the vessel was in Alaska on that date, also influenced the timing decision, the report says.

The Aiviq

The Aiviq, a new, extremely powerful, ice-class anchor-handling vessel, had been commissioned by Shell for its Arctic exploration program and had been delivered from the shipbuilder in April 2012. The Aiviq had towed the Kulluk from Seattle to Dutch Harbor in preparation for Shell's 2012 drilling season, and had also towed the Kulluk during that drilling season.

But, according to the Coast Guard report, while conducting those towing operations the Aiviq had experienced a number of technical difficulties, including an engine failure and a "host of mechanical problems." A list of major issues remained unresolved as the Aiviq prepared for the December tow south, the report says.

One concern was a design problem that, during storm conditions, resulted in seawater ingress to areas of the deck where fuel vents and electrical fittings are located, the report says.

Shackle lost

It became clear from the outset of the Kulluk towing incident that the towline between the Kulluk and the Aiviq parted because of the loss of a large shackle that linked two sections of the line. Since the shackle itself was lost at sea when the line parted, it has not been possible to determine a cause for the shackle failure, the report says.

But, prior to shackle failure, the pitching of the Kulluk in heavy seas had placed intermittent loads in excess of 300 tons on the towing system, according to records from the system's instrumentation. The shackle had a 120-ton rating, a rating that should enable the shackle to withstand a load of 240 tons without distortion, and as much as 600 tons before breaking, according to the Coast Guard report. However, the report says that the load ratings of the shackles used for the Kulluk tow appeared to be lower than the ratings recommended by the U.S. Navy Towing Manual.

Loads of more than 300 tons on the shackle immediately prior to the shackle failure suggest metal fatigue as a "significant contributor" to the failure, the report says.

Fuel contamination

Apparently the failure of the Aiviq's engines after the towline-breakage incident resulted from the internal corrosion of the engines' fuel injectors, probably as a consequence of seawater contamination in the vessel's fuel. The suspicion is that seawater had entered the fuel tanks through the tank vents, probably on numerous occasions prior to the engine failure, as a consequence of the design

see **KULLUK REPORT** *page 16*

continued from page 15

KULLUK REPORT

problem in which water could reach the vents during storms.

Although the Aiviq carried several spare injectors, the vessel only had sufficient spares to fix one engine, resulting in a need to procure further injectors from various parts of the United States and airlift them to the vessel.

Long list of factors

The report provides a long list of factors that contributed to the Kulluk incident, including severe weather and the Kulluk's unusual conical hull design, in addition to the technical issues associated with the shackle failure and the Aiviq's engine problems. There were failings by the Aiviq's crew in properly handling the tow, probably in part because of a lack of experience in carrying out a tow of this type in winter conditions in the Gulf of Alaska, the Coast Guard report says.

However, the report does commend the crews of the Aiviq and the other vessels involved in the Kulluk incident for their skill and resourcefulness in dealing with the emergency.

Inadequate plan

But the report severely criticizes Shell's towing plan, saying that the plan was inadequate for a towing operation across the Gulf of Alaska in the winter, had not been adequately reviewed, did not address the role of the master of the Aiviq in the towing operation and lacked proper contingency planning.

Reliance on a single towing vessel, the Aiviq, was ill advised, especially given the severe weather anticipated on the tow route. And the mechanical and design deficiencies that had been identified in the Aiviq should have precluded the use of this vessel for this tow, the report says.

The route used for the tow, although selected to remain within range of a land-based helicopter, should an emergency arise, did not provide sufficient sea room for launching an effective response prior the Kulluk drifting into dangerously shallow waters. And despite the expectation of severe weather along the tow route, the tow planners had not appreciated the overall risks involved in the tow — no formal risk assessment was conducted, the report says. ●

Contact Alan Bailey at abailey@petroleumnews.com

Coast Guard recommends enforcement action

As one its findings, the U.S. Coast Guard investigation into the December 2012 grounding of Shell's Kulluk floating drilling rig has recommended that the appropriate authorities investigate possible infringements of U.S. law governing marine operations.

The Coast Guard's report from the investigation says that Edison Chouest Offshore, the operator of the Aiviq, the vessel that was towing the Kulluk, appears to have broken the law by failing to report to the U.S. Coast Guard and the American Bureau of Shipping some of the problems encountered by the Aiviq when towing the Kulluk during the summer of 2012, prior to the tow in which the grounding occurred. Those problems included the failure of one of the Aiviq's engines and an ingress of seawater that caused a sustained list during a storm.

The report also says that there is evidence that the Aiviq's chief engineer may have committed an act of negligence in the manner in which he managed the Aiviq's fuel system; that the Aiviq's master may have been negligent by not effectively overseeing the Aiviq's bridge officers during the Kulluk tow; that the master may have infringed regulations governing the Aiviq's watch-keeping system; and that the Aiviq's mate may have been negligent by failing to ensure appropriate tension in the towline to the Kulluk.

—ALAN BAILEY

continued from page 14

SB 138

added to items the Revenue commissioner needs to include in a plan allowing participation of municipalities, regional corporations or residents to invest in the North Slope gas pipeline. Among those items are how cash calls for the project and expansion would be handled; income tax consequences to the holder of an ownership interest; risk that receipt of benefits from the project by others than the state would make income from the project subject to federal taxation; and constitutional issues from restricting ownership interests in the plan to state residents and municipalities.

Hawker said some of the additions were "buyer beware" considerations, making sure that risks and obligations involved in ownership are fully disclosed.

An Oil and Gas Competitiveness Review Board was established under Senate Bill 21 last year and duties of that board were amended under the bill to include a report to the Legislature by Jan. 15, 2017, on tax structure and rates on oil and gas produces south of the North Slope, taking "into account the unique economic circumstances for each oil and gas producing area" considered and "other incentives for oil and gas production" and "other incentives for oil and gas production" south of the North Slope.

Funds, data

An amendment to add a "Railbelt electrical generation and transmission upgrade fund" to the bill as a special account in the general fund did not win committee support, but the 10 percent of revenue from the state's royalty gas transported in an Alaska LNG project after payment to the Alaska Permanent Fund approved by the Senate for the Alaska affordable energy fund was increased to 20 percent.

An amendment to ensure state access to data from the project was approved as amended. It requires that, should the DNR commission determine "that the North Slope natural gas project is not making adequate progress toward a final investment decision, the state shall have access to data developed under the agreement or contract in which the state has directly participated."

The administration did not support this amendment.

Pawlowski called the principle of access to data a key interest for the state and one it jealously guards in any agreement. He said there are termination provisions in the agreement with TransCanada and said concern with the amendment is that the DNR commissioner could exercise a different termination than agreed to in the term sheet and MOU.

On the issue of "adequate progress" Balash told the committee he could tell them what he thinks adequate progress is, but couldn't say what his replacement would say. The parties to the project are approaching it through a stage-gated mechanism, Balash said, with agreement to get through pre-FEED (front-end engineering and development) to be followed by an agreement which would go through FEED. Whether the project goes to final investment decision would be a decision made by the parties at the end of FEED.

On the issue of data, Balash said conversations have occurred with sensitivities around use of data. The state using data to build a small line is not a problem he said; selling it to someone else is where it's an issue.

The parties are prepared to pony up costs and treat each other the same, Balash said, but if the state said unilaterally it could yank data and use it however it liked, he thought the other parties would have a problem with that.

—KRISTEN NELSON

Contact Kristen Nelson at knelson@petroleumnews.com

continued from page 12

OIL PATCH BITS

operators to deploy more efficient and effective completion strategies."

Baker Hughes will include RoqSCAN in its shale reservoir evaluation services as part of the Shale Science Alliance with CGG. The agreement further strengthens the strategic relationship between the two companies, which is designed to help operators better understand shale plays and predict "sweet spots" based on the combination of seismic attributes and accurate wellbore measurements.

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 September.

continued from page 1

RATE INCREASE

the Badami Pipeline to Nutaaq Pipeline, which is a joint venture between unit-operator Savant and its partner Arctic Slope Regional Corp.

The methodology for the shipping rate on the pipeline is governed by a 2004 settlement between BP and the state, and requires the owner to file annual revisions based on costs.

In November 2013, after the RCA approved the transfer, but before the deal closed, BP filed its annual tariff revision. The previous rate had been $12.25 per barrel, and while the settlement methodology allowed for a maximum rate of $21.97 per barrel, at least according to BP calculations, BP requested a voluntary rate reduction of $9.42 per barrel.

Using the settlement methodology, Nutaaq is calculating a rate of $12.25 per barrel. The higher rate would bring in $4.07 million, up from $3.13 million under the previous rates.

—ERIC LIDJI

Contact Eric Lidji at ericlidji@mac.com