



This week's Mining News



NEWS NUGGETS
Compiled by Shana Lasey

Whistler project deal falls through
Alternative Earth Resources Inc. April 28 reported that it has decided to terminate its previously announced deal to acquire Kiska Metals Corp.'s Whistler copper-gold project in Southeast Alaska. Under a non-binding agreement reported by Mining News on April 19, Alternative Earth was to acquire full ownership of Whistler in exchange for leasing of the company's shares upon completion of the exchange. Alternative Earth, which has been seeking the right project to jump into mineral exploration, said that it continues to assess various projects from mineral exploration to development stage. Kiska said the holding team for Whistler has been reduced to a manageable level, allowing the company to maintain the asset as it continues to seek joint venture or other arrangements on the prospective advanced stage exploration project.

All Boken rare earths split with MRT
Ucore Rare Metals Inc. April 28 reported the separation of samarium and gadolinium, the first two rare earths needed to be split by way of the cutting-edge molecular recognition technology. The MRT process is designed to bind select chemistry, and geometry. Using a pregnant leach solution prepared from material taken from Ucore's Dotsen Ridge deposit in Southeast Alaska, MRT Advanced Technologies developed a three-step process for extracting nearly pure rare earths. In early March, Ucore reported the successful separation of all the individual rare earth elements except for samarium and gadolinium, which were bonded together. Samarium and gadolinium have now been separated into individual salts, each with 99.2 percent purity. "We look forward to completing pilot-scale testing of this promising rare earth technology," said Ucore President and CEO and Jim McKee.

Critical minerals bill in the House
Rep. Mark Amodei, R-Nevada, April 22 introduced the "National Strategic and Critical Minerals Production Act of 2015."

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Interior Secretary Sally Jewell cites "much" mining on Alaska's federal lands; miners disagree. Read more in Mining News, page 9.

Interior energy bill passes, but Senate cuts out House projects

The Alaska Legislature has passed and sent to Gov. Bill Walker a bill that would allow the Interior Energy Project to use gas from anywhere in the state. When the project was authorized in 2013 it was to be a North Slope liquefied natural gas project, with natural gas from the Slope turned into LNG there and trucked to Fairbanks.

The Alaska Industrial Development and Export Authority

see **ENERGY BILL** page 18

Corri Feige named director of DNR's Division of Oil and Gas

Corri Feige has been named director of the Alaska Division of Oil and Gas. The Department of Natural Resources said the appointment is effective April 30.

Feige is a geophysicist and engineer with more than 20 years of management-level experience in the energy industry. During her 17 years in Alaska she has worked for and on behalf of small and mid-size independents, advancing conventional and non-conventional energy projects on the North Slope, Cook Inlet and Southwest Alaska, DNR said. She previously held management positions at Pioneer Natural Resources and Linc Energy and has owned a consulting group involved in energy projects. DNR said her skills include project management, permitting, government and regulatory affairs, stakeholder relations and remote Alaska logistics.

Feige has a degree in geophysical engineering from the Montana School of Mines and before coming to Alaska worked as a geophysicist on exploration programs around the world.



CORRI FEIGE

—PETROLEUM NEWS

FINANCE & ECONOMY

Call for earnings use

Goldsmith: Budget shortfall can be reduced short-term, eliminated long-term

By ERIC LIDJI

For Petroleum News

A state economist believes earnings from the Alaska Permanent Fund and other public sources could reduce a current budget shortfall and balance the budget in the future.

"Fortunately, there is a strategy that can move us in the direction of fiscal sustainability while sidestepping many of the political roadblocks — such as fear of losing the Permanent Fund dividend or the imposition of new taxes — standing in the way of a fiscal plan," Scott Goldsmith, an economist with the Institute of Social and Economic Research at the University of Alaska Anchorage, wrote in a recent research paper.



SCOTT GOLDSMITH

A drop in global oil prices over the past year has crimped state finances. The state is expected to collect some \$2.2 billion in revenues in fiscal year 2016 and is projected to spend some \$5.5 billion, according to Goldsmith's calculations. Gov. Bill Walker recently convened a special legislative session aimed at passing a balanced budget.

Current proposals to address the \$3.3 billion shortfall involve cuts to the operating budget and cancelled capital projects. Using earnings from the permanent fund could reduce the shortfall by two-thirds, to \$1.1 billion down, according to Goldsmith, who described the smaller shortfall as being "still a fiscal challenge, but a

see **EARNINGS USE** page 20

UTILITIES

A continuing question

RCA hears cost analysis of reforming the Railbelt power transmission grid

By ALAN BAILEY

Petroleum News

A debate has raged for many years over the question of whether or how to improve the transmission grid that carries electrical power around the Alaska Railbelt. The aging grid is operated by five independent utilities, suffers from some single points of failure and lacks the capacity to make optimum use of the power that is generated at various points along its length. Some, including the Alaska Energy Authority, have at various times recommended both upgrades to the grid infrastructure and major changes to the way in which the grid is managed, perhaps bringing the

Overall, it appears to cost about \$38 million annually to operate the grid, about 4 percent of total Railbelt power utility operating costs, he said.

entire grid under a unified management structure, for example.

RCA investigation

Following a directive from the state Legislature, the Regulatory Commission of Alaska is investigating the thorny question of whether

see **RAILBELT GRID** page 19

EXPLORATION & PRODUCTION

Canada peers into abyss

Pullback from conventional sector; rig count there at 18, down from 400 a year ago

By GARY PARK

For Petroleum News

Of all the numbers capturing the slide in Canada's oil industry one of the most telling involves a pullback from the conventional sector.

Data provided by Baker Hughes shows the number of rigs chasing conventional deposits fell to 18 — a count unheard of even in the worst downturns over the past three decades — in March from more than 400 at the same time in 2014.

The result, according to the Canadian Energy Research Institute, is that the brakes will come on Canada's conventional output, president emeritus Peter Howard told a Calgary conference, although it will take time for the slowdown to show up in statistics.

tics.

Because of well tie-ins and completions that were under way before crude prices took their nosedive, volumes should continue to rise by 126,000 barrels per day in 2017 and 167,000 bpd in 2018.

What they represent is a carryover from upstream activity in recent years and not what could be in store if the drilling slump worsens and extends.

The industry is currently counting on about 1,200 conventional well completions this year, when it's estimated that a total of 2,500 is needed to sustain production over the longer term.

Howard said Canada will not be in trouble until

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North America's source for oil and gas news

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Alaska - Mackenzie Rig Report

Rig Owner/Rig Type	Rig No.	Rig Location/Activity	Operator or Status
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Alaska Rig Status

North Slope - Onshore

Doyon Drilling Dreco 1250 UE Dreco 1000 UE Dreco D2000 Uebd AC Mobile OIME 2000 TSM 7000	14 (SCR/TD)	Prudhoe Bay PBU 07-07C	BP
	16 (SCR/TD)	Prudhoe Bay PBU Z-15	BP
	19 (SCR/TD)	Alpine CD5-314	ConocoPhillips
	25	Kuparuk 2L-316	ConocoPhillips
	141 (SCR/TD)	Kuparuk 1D-143	ConocoPhillips
	Arctic Fox #1	Wildcat Qugruk-8	Repsol
Kuukpik	5	Prudhoe Bay	Available
Nabors Alaska Drilling AC Coil Hybrid Dreco 1000 UE Mid-Continental U36A Oilwell 700 E Dreco 1000 UE Dreco 1000 UE Oilwell 2000 Hercules Oilwell 2000 Hercules	CDR-2	Kuparuk 2F-18	ConocoPhillips
	2-ES (SCR-TD)	Nabors yards completing demobilization procedures	
	3-S	Prudhoe Bay	Available
	4-ES (SCR)	Prudhoe Bay	Available
	7-ES (SCR/TD)	Kuparuk	ConocoPhillips
	9-ES (SCR/TD)	Kuparuk	ConocoPhillips
Emsco Electro-hoist-2 Emsco Electro-hoist Varco TDS3 Emsco Electro-hoist Canrig 1050E Emsco Electro-hoist Oilwell 2000 Academy AC Electric CANRIG OIME 2000 Academy AC electric CANRIG Academy AC electric Heli-Rig	14-E (SCR)	Prudhoe Bay	Available
	16-E (SCR/TD)	Mustang location, Under contract to Brooks Range Petroleum	Brooks Range Petroleum
	18-E (SCR)	Prudhoe Bay	Stacked
	22-E (SCR/TD)	Prudhoe Bay	Stacked
	27-E (SCR-TD)	Deadhorse, under contract to ExxonMobil for 2015	
Emsco Electro-hoist Oilwell 2000 Academy AC Electric CANRIG OIME 2000 Academy AC electric CANRIG Academy AC electric Heli-Rig	28-E (SCR)	Prudhoe Bay	Stacked
	33-E	Prudhoe Bay	Available
	99AC (AC-TD)	Nabors yards completing demobilization procedures	
	245-E (SCR-ACTD)	Oliktok Point	ENI
	105AC (AC-TD)	Nabors yards completing demobilization procedures	
	106-E (AC-TD)	Deadhorse Nabors yard	Available
Nordic Calista Services Superior 700 UE Superior 700 UE Ideco 900	1 (SCR/CTD)	Prudhoe Bay Drill Site 7-33	BP
	2 (SCR/CTD)	Prudhoe Bay Well Drill Site F-23A	BP
	3 (SCR/TD)	Milne Point MP-J- 09	Hilcorp
Parker Drilling Arctic Operating Inc. NOV ADS-10SD NOV ADS-10SD	272	Prudhoe Bay DS 18	BP
	273	Prudhoe Bay DSW-59	BP

North Slope - Offshore

BP Top Drive, supersized	Liberty rig	Inactive	BP
Doyon Drilling Sky top Brewster NE-12	15 (SCR/TD)	Spy Island SP04-SE5 L1	ENI
Nabors Alaska Drilling OIME 1000	19AC (AC-TD)	Oooguruk ODSN-02	Caelus Alaska

Cook Inlet Basin – Onshore

Miller Energy Resources Mesa 1000	Rig 37	Mobilized to North Fork to begin drilling this winter	Miller Energy Resources
All American Oilfield LLC IDECO H-37	AAO 111	In All American Oilfield's yard in Kenai, Alaska	Available
Aurora Well Services Franks 300 Srs. Explorer III	AWS 1	Sterling, Stacked out at D&D yard	Available
Nabors Alaska Drilling Continental Emsco E3000 Franks IDECO 2100 E	273E	Kenai	Available
	26	Kenai	Stacked
	429E (SCR)	Kenai	Stacked
Saxon TSM-850	147	Ninilchik Unit, Bartolowits pad drilling Frances #1	Hilcorp Alaska
TSM-850	169	Swanson River	Hilcorp Alaska

Cook Inlet Basin – Offshore

XTO Energy National 110	C (TD)	Idle	XTO
Spartan Drilling Baker Marine ILC-Skidoff, jack-up		Spartan 151 Upper Cook Inlet KLU#1	Furie
Cook Inlet Energy National 1320	35	Osprey Platform RU-1, workover	Cook Inlet Energy
Hilcorp Alaska LLC (Kuukpik Drilling, management contract)		Monopod Platform, Workovers	Hilcorp Alaska LLC
Patterson UTI Drilling Co LLC	191	West McArthur River Unit #8	Cook Inlet Energy

Mackenzie Rig Status

Canadian Beaufort Sea

SDC Drilling Inc. SSDC CANMAR Island Rig #2	SDC	Set down at Roland Bay	Available
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Central Mackenzie Valley

Akita TSM-7000	37	Racked in Norman Well, NT	Available
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The Alaska - Mackenzie Rig Report as of April 30, 2015.
Active drilling companies only listed.

TD = rigs equipped with top drive units WO = workover operations
CT = coiled tubing operation SCR = electric rig

This rig report was prepared by Marti Reeve



JUDY PATRICK

Baker Hughes North America rotary rig counts*

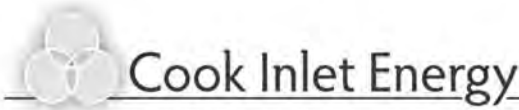
	April 24	April 17	Year Ago
US	932	954	1,861
Canada	79	80	168
Gulf	33	32	53

Highest/Lowest

US/Highest	4530	December 1981
US/Lowest	488	April 1999
Canada/Highest	558	January 2000
Canada/Lowest	29	April 1992

*Issued by Baker Hughes since 1944

The Alaska - Mackenzie Rig Report
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Agrium tax break bill passes House

Kenai Peninsula fertilizer plant would obtain temporary income tax credit if it restarts; bill will go to Senate next session

By **ALAN BAILEY**
Petroleum News

On April 13 the Alaska House of Representatives passed a bill granting a corporate income tax credit for Agrium Inc.’s fertilizer plant at Nikiski on the Kenai Peninsula, if Agrium restarts the plant. The credit could start at any time after July 1, 2017, and would sunset on Jan. 1, 2024, thus lasting for up to six-and-a-half years, depending on when Agrium puts the plant into operation.

The House has now sent the bill to the Senate for consideration during next year’s legislative session.

House Bill 100

The bill, House Bill 100, relates to any plant that produces fertilizer from natural gas but is clearly aimed at the Agrium facility. And the version of the bill passed by the House extends the credit to a gas-to-liquids plant in addition to a fertilizer plant, although Agrium has indicated that it has no interest in gas-to-liquids development.

The original version of the bill, when introduced to the House, had the tax credit

sun setting in 2027, rather than 2024. The credit, which is indexed to the royalties that the state would receive from gas sold to the plant from state leases, would likely result in Agrium incurring no corporate income tax during the period when the tax credit would apply.

The fertilizer plant, which converts natural gas, water and nitrogen into urea and ammonia, was built in 1968 to monetize excess gas production from the Cook Inlet basin. Agrium purchased the plant in 2000 but closed it down in 2007 because of a shortage in Cook Inlet gas supplies at that time. Following a resurgence in the Cook Inlet gas industry, Agrium has indicated that it is considering re-opening the plant. The company has said that it would cost about \$275 million to rehabilitate the plant for a re-opening.

\$15 million in royalties

On April 9 Tom Wright, chief of staff to Rep. Mike Chenault, R-Nikiski, sponsor of the bill, told House Finance that a study into the re-opening of the Agrium facility had indicated that, with one fertilizer train in operation, the facility would consume about

28 billion cubic feet of gas per year, with 21 billion cubic feet coming from state leases. That gas consumption would result in an estimated annual state royalty payment of about \$15 million, Wright said.

Rep. Dan Saddler, R-JBER/Eagle River, a supporter of the bill, told House Finance that, having a large anchor gas purchaser such as Agrium would encourage gas exploration and development in the Cook Inlet basin. This would ensure the availability of more gas for local gas consumers, Saddler said. And, with Cook Inlet exploration tax credits that the state introduced a few years ago due to expire in 2016, a new anchor customer would maintain incentives for gas producers beyond that time, he said.

“It would cost only about \$3 million to \$4 million per year in tax credits ... that would leave a net benefit to the state of \$11 million to \$12 million per year,” Saddler said.

The rehabilitation project for the Agrium plant would result in 440 jobs, with the operating plant then generating 340 direct and indirect jobs, he said.

“This is a way of getting revenue that we are currently not getting,” commented Rep. Tammie Wilson, R-North Pole. “This brings revenue into the state. It brings jobs for this area.”

Chenault compared the proposed tax credit with the current exploration tax credits that, he said, had revitalized the Kenai Peninsula economy.

“My community now is very prosperous,” Chenault said. “You may drive up that same north road today and you’ll see numerous new shop buildings, numerous new businesses moving into town ... They’re moving into town because of the exploration tax credits that we were smart enough to move forward.”

A tax giveaway?

Rep. Les Gara, D-Anchorage, an opponent of the bill, characterized the bill as a tax giveaway at a time when the state, short of revenues, is cutting funding for many programs. Gara expressed particular concern about authorizing a tax credit without any information about the viability of the plant. Agrium may well open the plant without any assistance from the state, he said.

“I want to see jobs on the Kenai Peninsula, but we have a \$5.3 billion (state budget) deficit and we’re giving a company \$4 million per year and they’ve told us that they might open the plant, even without that \$4 million a year,” Gara told House Finance. “I think that’s a terrible way to negotiate.”

Arguing that the tax credit would ultimately lead to a loss of state revenues, Gara characterized as a red herring the view that the opening of the fertilizer plant would generate state royalties that would not otherwise be forthcoming — at some time the gas in the ground will be produced and will therefore generate royalties, he said.

“Nobody’s going to leave gas in Cook Inlet that’s producible and affordable,” Gara said.

Gara introduced amendments to the bill to limit the tax credit period to five years, and to limit the credit to \$2 million per year, with Kenai Peninsula residents given the option to invoke further local tax credits for the fertilizer plant. House Finance and, later, the House floor rejected these amendments.


Ultimately, the House approved HB 100 by a vote of 27 in favor and eight against. ●

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LAND & LEASING

Potential Alaska, federal oil gas lease sales

Agency	Sale and Area	Proposed Date
DNR	Cook Inlet Areawide	May 6, 2015
DNR	Alaska Peninsula Areawide	May 6, 2015
DNR	Beaufort Sea Areawide	fall 2015
DNR	North Slope Areawide	fall 2015
DNR	North Slope Foothills Areawide	fall 2015
BLM	NPR-A	fall 2015
BOEM	Chukchi Sea	May 2016
BOEM	Cook Inlet (special interest)	November 2016
BOEM	Beaufort Sea	May 2017

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



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GOVERNMENT

Micciche growing bullish on AKLNG project

Soldotna Republican Senator says state's focus needs to be common goal between Gov. Bill Walker and Legislature on export project

By STEVE QUINN

For Petroleum News

Sen. Peter Micciche is getting different views of the AKLNG project. One comes from inside the state's Capitol where he serves on the Resources and Finance committees. The second comes from the home town of this Soldotna Republican. Micciche is watching the Kenai Peninsula evolve into an area preparing to become the terminus of what may be the world's largest infrastructure project: a pipeline that ships natural gas from the North Slope to tidewater in Nikiski. First gas is at least a decade away, but Micciche says it can happen and he's more optimistic than ever. Still he worries about a lack of alignment between the Legislature and Gov. Bill Walker, who arrived just four months ago. Walker's inexperience is getting him some benefit of the doubt, but that tank is running low.



SEN. PETER MICCICHE

Micciche spoke to Petroleum News about his views on the gas line progress.

Petroleum News: Where do you think the state is, within the context of SB 138 or otherwise, with the gas line and LNG project?

Micciche: So I'll give you two aspects, one I know from the Legislature and one I know from the community sense.

The community sense is there is a joke how there is one expanding economy in the United States right now and it's in Nikiski, Alaska. There is a lot going on in Nikiski, aside from the field work where the holes are being bored and data collection going on. Land purchases have been successful and significant. There is a buzz going on, on the Kenai. As the terminus of the AKLNG project, my community is excited about the project.

Organizations today don't like to own real estate. This organization, for folks who are not yet convinced that things are moving along, owns a lot of real estate. You can see an outline of hundreds and hundreds of acres they secured.

Now sitting here, even though we watched people tell us that everything is going well and on schedule, I think I don't want to say a bomb because I don't want to sound entirely negative with the field work on track, but I do believe doubt has been cast with the ASAP, that being Plan B, has slowed down other negotiations that have to occur.

As you know a project like this has many, many moving pieces. When one of those pieces has stalled, it creates doubt throughout the rest. A lot of those things have to come into play. We should be working on key negotiations like fiscal terms, governance, commercial terms. Those things need to get under way this summer. We still have to work on royalty in-kind agreements, PILT agreements. We have a lot to do.

"I believe we are a state that has one shot at doing this right. I would rather borrow the experience of our partners than trying to wing it with majority ownership."

—Sen. Peter Micciche, R-Soldotna

So here's my take. I think the governor is a very good man who has Alaska's best interest at heart. Under SB 138, which enjoyed a 52-8 level of support in this building, we put forth a plan. That plan seems to be functioning as intended. I think when a new administration comes in, especially when it had the experience with the Port Authority, everyone wants to put their fingerprints on something to ensure that the project succeeds.

I believe that the governor in his heart thinks that a Plan B is prudent. So if we back up where we are with credibility, it's a challenge to credibility. It no longer says that this state is a strong believer in the success of AKLNG. Gov. Walker ran in my district on a platform that he supported the AKLNG project with a terminus in Nikiski. The ASAP project doesn't have a terminus and it certainly doesn't have a terminus in Nikiski.

That is important to my district for all of the benefits that come with a large project. The interruption is something that we cannot afford. If Gov. Walker was to be the governor when we went to FEED and these major agreements that still have to occur were executed, he would still be the guy.

He's the guy. There is enough of a challenge in moving forward with AKLNG without feeling that a different plan would mean that he's any more successful. If he's able to lead this state and pull off what we have under SB 138, I'm certainly going to appreciate his leadership.

Petroleum News: So where do you see differences right now?

Micciche: I think the beauty about the AKLNG arrangement under SB 138 is you truly enjoy the benefits of being in a partnership through trust but verify or ironclad agreements and the benefits of combined experience of companies who are responsible for the lion's share of global LNG throughout the planet. Or you forget about that value and always feel like you're looking over your shoulder and there is a better deal out there. When you look at the administration's thoughts that we should have a controlling interest in this project, well we are harnessing the value of companies with the value of one trillion dollars.

I think the governor has a philosophy that the larger the proportion of ownership, the bigger potential gain. Where I'm sort of at is the maximum amount of value the state can derive from the project with the minimal amount of acceptable risk.

Those other companies, again a trillion dollars in

market cap essentially with millions of shareholders and other projects all over the world. We have one game with 730,000 souls, so making a major mistake on too much ownership, on a project that is commodity value driven can put the people of Alaska on the hook for much more liability than I'm comfortable doing.

When you think about credible sponsors with the AKLNG arrangement, the answer is easy. One of the companies is a pioneer in LNG; the others have a large global share in reliable successful projects. They have relationships with buyers. They have all of the pieces along the value chain that Alaska simply doesn't have.

With Alaska as majority owner, is that what we really want to do? Do we want that

Norwegian business model that we hear pushed throughout this building from folks who don't understand the value of experience in an industry that's really only 50 years old?

It's funny because I like the governor and the governor has talked about how he has interested buyers in another concept.

I think Alaskans need to understand that if you hold a sign up that says gas for sale, the entire world is interested. When you finally take the time to figure out whether or not that entity has the financial and technical wherewithal to be a partner or customer, there is likely a very small pool of people who can sign on that line. We already have those partners together on a project side. Those parties have generations of experience on the market side.

I'd rather avoid all the risk we possibly can. I believe we are a state that has one shot at doing this right. I would rather borrow the experience of our partners than trying to wing it with majority ownership.

Petroleum News: What do you feel you've learned this session throughout these hearings?

Micciche: I don't know how much I've learned. There hasn't been a lot of AKLNG progress. I've learned about things from around the world that have not proved up the way they expected, and that's important while we look at AKLNG. One of the benefits we have is conventional gas reserves. If you look at places like Queensland, Australia, their supply is not coming on as expected.

Alaska has been in this market for many years and that's a benefit. Our traditional buyers — when you think of Tokyo Gas, Tokyo Electric, and Mitsubishi of the world — Alaskans have known and dealt with those entities. A relationship with a new player can be hard to establish. It's interesting because you hear folks worrying about the current commodity price, and I think about the history of TAPS and think about that pendulum of unit value.

I'm not sure I've learned this but it's been talked about a lot. Plan B. Philosophically, what is Plan B? So as opposed to adjusting a Plan A. First, you're looking

see MICCICHE Q&A page 17



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PIPELINES & DOWNSTREAM

Final tasks under way for Point Thomson line Badami connection

Savant Alaska LLC wants to expand its right of way at the Badami Central Production Facility Pad to accommodate an interconnection with the Point Thomson Export Pipeline.

A subsidiary of the Badami unit operator is asking the state to add 0.22 acres adjacent to the pad to make room for construction cranes required to install piping, to include the entire system with acknowledged rights of way and to accommodate future maintenance.

The right-of-way expansion is among the final administrative tasks to accomplishment before ExxonMobil can bring the long-awaited Point Thomson unit into production.

The Regulatory Commission of Alaska certificated the Point Thomson Export Pipeline in November 2012 and approved its connection with the existing North Slope grid in August 2013. ExxonMobil installed the 22-mile pipeline alongside the coastline in 2014.

ExxonMobil expects to bring the field into production this coming winter. The interconnection will allow Exxon to move Point Thomson production to the Badami unit and from there to the Prudhoe Bay unit and to market on the trans-Alaska oil pipeline.

The 12-inch pipeline will be able to move as much as 70,000 barrels per day from Point Thomson, which will become the easternmost producing field on the North Slope.

The capacity is considerably higher than the 10,000 barrel per day Exxon is expecting Point Thomson to produce in its early stages of development. The excess capacity is meant to accommodate future growth — both at Point Thomson and at nearby fields.

The State Pipeline Coordinator's Office is taking comments through June 24.

—ERIC LIDJI

• ENVIRONMENT & SAFETY

Cross-border harmony — with conditions

Canada discloses talks with US on joint effort to lower carbon emissions; Harper says sides will likely agree on similar objectives

By GARY PARK

For Petroleum News

Canada's greenhouse gas emissions have far exceeded the government's international commitment for 2020, prompting efforts by Prime Minister Stephen Harper to open talks with the United States on ways to curb cross-border emissions in the oil and gas sector.

He has pledged to join the U.S. in introducing tougher fuel efficiency standards and accelerating the phase out of coal-fired power plants, although there would be no measurable result from those steps until well into the next decade.

However, that surprise announcement came with a condition from Harper who said it is "unlikely" Canada and the U.S. will set identical targets, although their objectives will be "similar to other major industrialized countries."

Previously in lockstep

Canada has previously operated in lockstep with the U.S. in setting GHG-reduction targets, but the two could part ways on Harper's refusal to introduce carbon taxes under a cap-and-trade system.

"The reason governments do carbon taxes is not so they can reduce emissions, it's so they can get more tax revenue in their pockets," he said.

An insight into Canada's negotiating position is expected in June when Harper unveils Canada's revised GHG targets as part of the buildup to an expected federal election in October and a United Nations climate summit in Paris before Christmas.

His toughest challenge is to convince critics in Canada and globally that he is serious about tackling emissions when the oil sands are identified as one of the planet's leading environmental enemies.

Oil sands growing source of emissions

The difficulty facing the Harper administration is contained in Environment Canada's latest assessment of trends in GHGs that show Alberta's oil sands were the fastest-growing source of emissions in the 2005-13 period, even though it trails the transportation and electricity sectors.

Emissions from the oil sands over the eight years climbed to 62 million metric tons a year from 30 million metric tons.

In contrast, the Ontario government's decision to close coal-fired power plants reduced emissions from the electricity sector by 36 million metric tons from 121

million metric tons.

The Harper government has constantly claimed that Canada's overall production of GHGs has decreased since 2005, but that included a steep drop during the 2008-09 recession.

Emissions rising

The bottom line for Canada is that emissions are rising, putting beyond the government's reach any hope of achieving the 2020 target of reducing emissions by 17 percent from 2005 levels, a goal set by Harper in 2009.

Environment Canada tried to put the best spin it could on the latest statistics, noting that emissions' growth has slowed since 2009, even during an economic recovery.

"Over the long term, the link between growth in Gross Domestic Product and emissions has weakened, resulting in the decoupling of economic growth and emissions," the report said.

In contrast, the United States reported to the United Nations that its GHG emissions rose by 2.2 percent in 2013, but were still 10 percent below 2005 levels.

Louise Comeau, executive director of Canada's Climate Action Network, said the Harper government is a laggard in giving priority to reducing GHGs, rating the administration's efforts as "weak and late."

Concern over competition with US

Natural Resources Minister Greg Rickford hinted at a shift by his government, which has failed to set GHG regulations for the oil and gas industry, claiming that any unilateral moves would place Canada at a disadvantage in competing with the United States.

Now, he said, Canada and the United States are "all in this together," and, although Canada accounts for only 1.6 percent of the world's GHGs, Canada will "be there for any discussions to strengthen global targets."

But Rickford was not prepared to reverse Canada's support for Keystone XL.

He agreed with the U.S. State Department that the "environmentally responsible choice" is to approve the pipeline on its merits, to "create jobs, encourage better environmental performance and enhance the largest energy trade relationship in the world."

Rickford forecast that U.S. Energy Secretary Ernest Moniz and Mexico's Energy Secretary Pedro Joaquín Coldwell along with Canada will make advances on an energy and environment pact over the next month, without creating "any unfairness or imbalance in the competitive edge of our respective jurisdictions."

He said "initial signals" from the U.S. on achieving a common GHG emissions approach are now "favorable" following an agreement by the two governments last September to enhance collaboration in 11 areas of energy development and consumption. ●

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GOVERNMENT

Seaton wants return to separate accounting

Tells House Resources Committee change would provide fair, equitable treatment among taxpayers; no rate change in taxes proposed

By KRISTEN NELSON

Petroleum News

Rep. Paul Seaton, R-Homer, is proposing that Alaska return to separate accounting for calculation of corporate income tax for oil and gas companies. Currently the state uses worldwide apportionment, and Seaton told House Resources April 17 that when corporate entities outside Alaska are less profitable than those within the state, taxes paid to Alaska are reduced to account for expenses occurring overseas.

He said that during the 2013 tax year the top five producers in Alaska paid an average corporate income tax rate of 4.4 percent, a total of \$319,247,744, whereas under separate accounting they would have paid the full 9.4 percent, a total of \$674,425,324, a difference Seaton said was a loss of \$355,177,580 to the state in that year.

In a sponsor statement he said House Bill 191 would require international or Lower 48 oil producers to pay their 9.4 percent Alaska corporate income tax “on profits made in and expenses related to Alaska, just like companies operating only in Alaska,” and called it a fairness issue as well as a revenue issue for the state.

The bill was heard and held in House Resources.

Alaska used separate accounting from 1978 through 1981, and during those four years, Seaton said, an additional \$1.4 billion was collected under separate accounting that would not have been collected under worldwide apportionment. Oil companies sued the state, Seaton said, and lost on all points at trial; they appealed to the Alaska Supreme Court.

There was concern, however, that if the companies won, the state would have to pay back the \$1.4 billion, so the Legislature returned to worldwide apportionment while awaiting resolution of the case.

In 1985 the Alaska Supreme Court upheld the state’s right to use separate accounting to collect corporate income tax. That decision was appealed to the

U.S. Supreme Court, which dismissed the appeal for lack of federal constitutional or statutory issues.

Loss of revenue cited

Seaton cited a 2000 report by Dan Dickinson, then with the Department of Revenue, which concluded Alaska lost \$4.6 billion from 1982 through 1997 by not utilizing separate accounting. During the four years the state used separate accounting it collected an average of an additional \$350 million per year, and Seaton said that \$350 million, multiplied by the 32 years that state hasn’t used separate accounting, equals some \$11.2 billion in revenue lost to the state.

On the issue of how difficult it would be for oil and gas producers to comply, Seaton said major producers operating in Alaska have been complying with separate accounting terms in other jurisdictions. “Most nations such as Norway utilize separate accounting,” Seaton said in the sponsor’s statement.

He said Pedro van Meurs, the international energy consultant who has advised Alaska and numerous other jurisdictions on their petroleum tax regimes, “is a strong supporter of calculating state corporate tax based on costs and revenues attributed to oil production in Alaska.”

More work for state

A fiscal note for HB 191, prepared by Revenue’s Tax Division Director Ken Alper, said Revenue currently “relies on federal corporate income tax audits as an audit resource, and does not audit down to the invoice level.” Under separate accounting as proposed in HB 191, the calculation of taxable income would not begin with federal taxable income and Revenue will not be able to rely on federal audits but “will have to conduct more comprehensive audits down to the invoice level.”

The fiscal note said Revenue believes it would need four additional corporate income tax auditors to handle the increased work, as well as “a substantial capital expense” to update its “Tax Revenue Management System with what amounts to a completely new tax that is fundamentally different than the existing Corporate Income Tax.”

The estimated capital cost is \$5 million and the addition of the four auditors would be \$670,000 per year.

Alper said in the fiscal note that

Revenue doesn’t have enough information to “fully estimate the change in oil and gas corporate income tax as a result of this legislation,” but he said current corporate income tax “is highly dependent” on the price of oil and gas and year-by-year profitability of the industry, and “the change envisioned in this bill would likely increase that volatility.”

Alper said preliminary estimates show that under separate accounting oil and gas corporations subject to the change would have paid a combined average of some \$220 million more per year for 2006 through 2013. ●

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REP. PAUL SEATON

NATURAL GAS

Apache closes LNG deals

One transaction is seen as an easy fit for Woodside; the other poses challenges in untried territory for the Australian company.

On the heels of wrapping up the sale of its Wheatstone project in Australia to Woodside for US\$2.8 billion, the Houston-based Apache also exited the Kitimat project in British Columbia by selling its 50 percent stake in the Chevron-operated venture for US\$854 million.

The Kitimat assets come with Apache’s onshore shale gas properties in northeastern British Columbia’s Horn River and Liard basins, involving an estimated 15 trillion cubic feet of proved plus probable reserves.

When the deal was first announced, Woodside Chief Executive Officer Peter Coleman conceded that shale gas development “is not a core skill” for his company, but found comfort in Chevron’s experience as a “very competent unconventional” operator.

Still unresolved is the future of Woodside’s proposed Grassy Point LNG project in British Columbia, which has been based on a 2021 startup at 20 million metric tons a year, relying on third-party gas as feedstock.

That venture likely now hangs on the future of Kitimat, which is well advanced in the regulatory and permitting phases.

Sanford C. Bernstein & Co. has tagged Kitimat and the Shell-operated LNG Canada partnership as the two best bets among the 19 projects floated for British Columbia to achieve full commercial operation.

For Apache the LNG transactions, along with the sale of its upstream business in Australia, reflected the pressure it was under from activist investor Jana Partners and the corporate strategy to make the North America onshore its “primary growth engine.”

—GARY PARK

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• ENVIRONMENT & SAFETY

Putting the spill risk in perspective

BOEM explains reasoning behind its Chukchi Sea oil spill 75% probability assessment in revised lease sale environmental analysis

By **ALAN BAILEY**

Petroleum News

Following criticism from environmental organizations over approval for a Chukchi Sea oil and gas sale, despite recognition of offshore oil spill risks, the Bureau of Ocean Energy Management has issued a fact sheet, explaining the context and meaning of its spill probability assessment.

“The bureau supports energy independence, environmental protection and economic development through responsible management of these offshore resources based on the best available science,” BOEM says. “All offshore exploration has potential benefits and potential risks. Our goal is to maximize benefits and minimize risks — to people, wildlife and to the environment.”

In February, following a lengthy appeal against the Chukchi sale, which was held in 2008, the agency published a new supplemental environmental impact statement for the sale. And, on the basis of that new document, at the end of March the agency re-affirmed the holding of the sale.

But the media and some stakeholders have particularly homed in on one specific estimate in the environmental document, an estimate that there is a 75 percent probability of one or more oil spills of more than 1,000 barrels of oil as a consequence of the lease sale taking place, BOEM says. The fact sheet that BOEM has now issued attempts to put that 75 percent figure into perspective.

Long-term scenario

Firstly, the 75 percent figure relates to

a hypothetical long-term oil exploration and production scenario that BOEM analysts created for assessing the potential environmental impacts of the sale. The figure does not relate to a single oil industry program, such as Shell’s planned Chukchi Sea exploration, BOEM says. In fact BOEM views the probability of a large oil spill during exploration in the Chukchi Sea as very low, the agency says.

BOEM’s hypothetical scenario, assuming that offshore exploration meets with success, envisages the installation of eight production platforms and the drilling of more than 500 wells over the course of 77 years, resulting in the production of 4.3 billion barrels of oil. For that entire timeframe of more than seven decades, the BOEM analysts estimated a 75 percent probability of a single oil spill

of more than 1,000 barrels, BOEM says. Then, in the interests of not understating the oil spill risk, the agency based its environmental impact evaluation on an assumption of the possibility of two such spills, not one.

The median estimated size of a significant spill of this scale would be 5,100 barrels from a production platform and 1,700 barrels from a production pipeline, the agency says.

By way of comparison, estimates for the size of the 1989 Exxon Valdez oil spill range from 257,000 to 750,000 barrels, while 3.19 million barrels are thought to have spewed from the Macondo well following the Deepwater Horizon disaster, BOEM says. ●

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• GOVERNMENT

Canada grappling with ‘dramatic plunge’

Government forecasts loss of C\$40B in annualized oil exports, holds out hold for gradual turnaround in prices over next two years

By **GARY PARK**

For Petroleum News

The Canadian government’s newly released 2015-16 budget paints a stark picture of the economic fallout from the slide in oil prices, with the value of exports — almost exclusively to the United States — dropping by an annualized C\$40 billion, or 2 percent of gross domestic product.

In the second quarter of 2014, those exports were valued at C\$100 billion, or 5.1

percent of GDP, pointing to a decline of 3 percent in annual government revenues compared with the normal gain of 2 percent.

Finance Minister Joe Oliver, delivering his first budget, said the “dramatic plunge in oil prices has taken its toll on our economy” and will continue to act as a drag on growth.

The lower commodity price will also eat into corporate profits, which will result in reduced investment and employment in the industry, he said.

In what many observers rated as an overly optimistic forecast, the government expects the benchmark West Texas Intermediate price will average US\$54 a barrel this year, rising to US\$67 in 2016 and US\$75 in 2017.

No lifeline

But the administration of Prime Minister Stephen Harper, who once counted on Canada joining the ranks of global energy superpowers, made no effort to throw a lifeline to the floundering sector.

It extended C\$80 million over five years in special funding for the National Energy Board to strengthen its safety and environmental protection measures, although that allocation will be fully recovered from the industry.

The government also extended a hand to the hoped-for LNG industry in British Columbia by confirming it will accelerate capital write-offs for the sector.

In addition, it announced the maximum length of gas export licenses for LNG will be extended to 40 years from 25 years to improve regulatory certainty.

No raise in taxes

Despite these small offerings, the Canadian Association of Petroleum Producers saluted the unveiling of Canada’s first balanced budget in eight years and no plan to raise taxes “in these tough economic times when low oil prices are hurting some companies, costing jobs and reducing gov-

ernment revenues.”

CAPP President Tim McMillan said the fiscal regime in the budget “supports capital investment and enables future growth” in an industry that expects capital spending this year of C\$49 billion — higher than the next two industrial sectors combined.

He said the LNG provisions recognize the need for a globally competitive business environment and create a more level playing field for companies weighing potential investments.

“Along with fiscal considerations, we need to continue our country-wide focus on diversifying markets for oil and gas products and moving these products to market,” McMillan said, pointing to the importance of improved transportation infrastructure.

Third largest decline in three decades

The budget documents noted that the drop in WTI prices from mid-2014 to February this year is the third largest decline in three decades.

“There is considerable uncertainty over the path of crude oil prices going forward in the current episode,” with most economists forecasting only a gradual recovery in the second half of 2015.

The budget said the primary driver of the drop in prices has been increased oil supply, with the rapid rise in United States volumes since 2011 representing more than 85 percent of the incremental growth in global production.

It said market analysts doubt there will be a rebound in prices until U.S. shale production begins to slow down, noting that the current decline in the number of rigs dedicated to oil production in the U.S. only affects the least productive rigs, allowing operators to refocus on fields with lower costs and higher yields.

“However, as the technology in this industry is relatively new, and underlying production costs continue to decline, there is considerable uncertainty over the actual timing and magnitude of the expected decline in production,” the government said. ●

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NEWS NUGGETS

Compiled by Shane Lasley

Whistler project deal falls through

Alternative Earth Resources Inc. April 28 reported that it has decided to terminate its previously announced deal to acquire Kiska Metals Corp.'s Whistler copper-gold project in Southcentral Alaska. Under a non-binding agreement reported by Mining News on April 19, Alternative Earth was to acquire full ownership of Whistler in exchange for issuing Kiska 24.5 million of its shares, which would represent half of the company's shares upon completion of the exchange. Alternative Earth, which has been seeking the right project to jump into mineral exploration sector, said that it continues to assess various projects from mineral exploration to development stage. Kiska said the holding costs for Whistler has been reduced to a manageable level, allowing the company to maintain the asset as it continues to seek joint venture or other arrangements on this prospective advanced stage exploration project.

All Boka rare earths split with MRT

Ucore Rare Metals Inc. April 28 reported the separation of samarium and gadolinium, the final two rare earths needed to be split by way of the cutting-edge molecular recognition technology. The MRT process is designed to bind selectively with ions based on multiple parameters such as size, chemistry, and geometry. Using a pregnant leach solution prepared from material taken from Ucore's Dotson Ridge deposit in Southeast Alaska, IBC Advanced Technologies developed a three-step process for creating nearly pure rare earths. In early March, Ucore reported the successful separation of all the individual rare earth elements except for samarium and gadolinium, which were bound together. Samarium and gadolinium have now been separated into individual salts, each with 99.2 percent purity. "We look forward to completing pilot-scale testing of this promising nano-technology," said Ucore President and CEO said Jim McKenzie.

Critical minerals bill in the House

Rep. Mark Amodei, R-Nevada, April 22 introduced the "National Strategic and Critical Minerals Production Act of

see **NEWS NUGGETS** page 12

PUBLIC POLICY

AMA calls out Jewell

Secretary cites 'much' mining on Alaska's federal lands; miners disagree

By SHANE LASLEY

Mining News

Alaska miners are taking U.S. Department of Interior Secretary Sally Jewell to task over recent comments she made that suggest mining is prolific on federal lands in Alaska.

Following a speech to the Center for American Progress, a liberal think-tank based in Washington, D.C., Jewell told Alaska Public Radio Network Correspondent Liz Ruskin that "much" of mining in Alaska is done on federal lands.

The Alaska Miners Association said this assertion contradicts what is actually happening in the Far North State and seized the "opportunity to clarify the actual amount of mining activity on federal lands and point out why there isn't more – massive areas currently closed to mineral entry and more proposed to be added, permitting delays, and other circumstances of bureaucracy."

In an April 22 letter to the Interior secretary, the mining group said that while nearly two-thirds of Alaska is owned by the federal government, a disproportionately small amount of mining activity takes place on these lands.

This is the latest exchange in an ongoing row between those advocating for resource development in Alaska and the department managing a large swath of the state's public lands.

While Jewell's comments on mining activity on federal lands have raised some questions about how much is 'much,' AMA does not see two of six large-

scale mines and roughly 18 percent of placer operations fitting the Secretary's description.

"For Secretary Jewell to say 'much' of Alaska's mining activity is on federal lands is an overstatement at best," according to AMA statewide board of directors President Jason Brune.

The mining association points out that the two large mines operating on federal lands in Alaska – Coeur Mining's Kensington operation and Hecla Mining's Greens Creek Mine, both in Southeast – are on U.S. Forest Service lands that do not even fall under the administration of the Interior Department.

Of these, Kensington was only developed after a lengthy legal battle between Coeur and another federal agency, the Environmental Protection Agency, which was only resolved when the U.S. Supreme Court decided in favor of the mine developer.

Much of the reason for the dearth of mines on federal lands in Alaska, however, is that many companies familiar with the landscape sidestep exploration on federally administered lands whenever possible.

Mineral companies, however, are reluctant to publicly express this discontent because of needing to deal with the Department of Interior and other federal agencies as a normal course of business – no matter whether it is state, federal or Alaska Native lands in which they are exploring or developing.

"Personally, we avoid working on federal lands," one such mining representative told Mining News.

This is particularly true at the exploration stage, according to a mining executive.

"Working on federal lands in Alaska is way more difficult than working on state lands, in terms of getting permits for exploration," he said.

While Millrock Resources Inc. CEO Greg Beischer said his company would not turn down the chance to evaluate a promising mineral prospect on federal lands, the prospect generator's extensive portfolio in Alaska does not include any federal claims.

Beischer said that, due to the perception that it is

see **JEWELL COMMENTS** page 12



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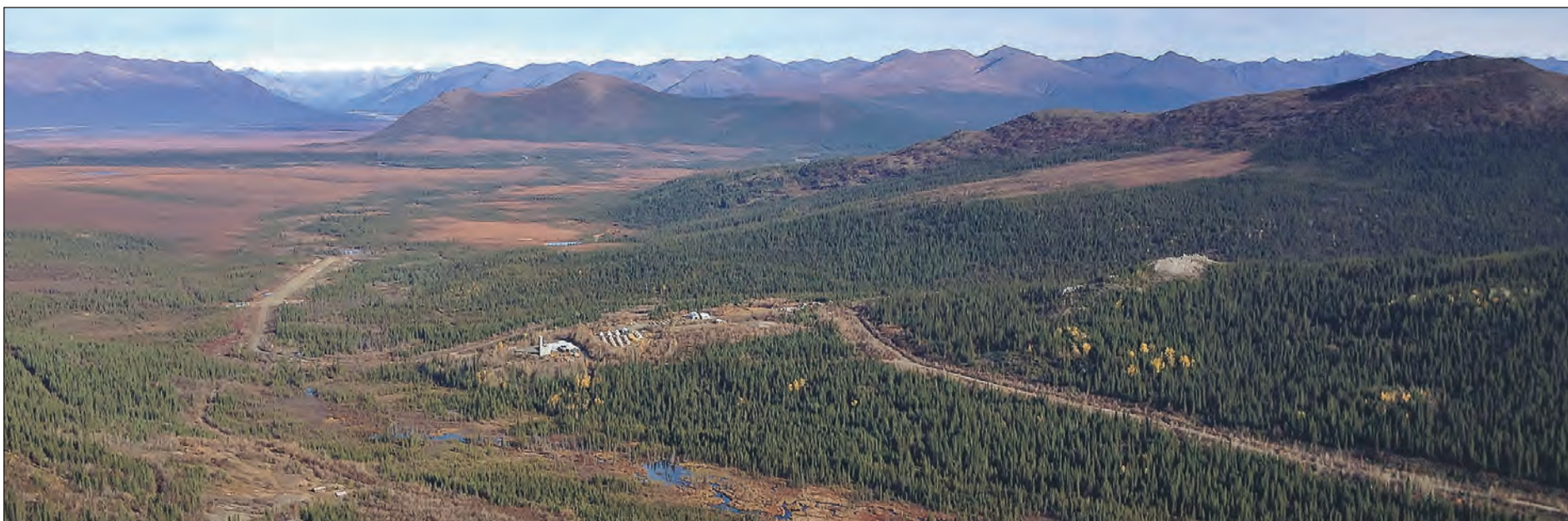
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Looking over the Bornite camp and deposit, NovaCopper's Arctic project lies in the Schvatka Mountains about 16 miles to the northeast. As engineers complete a feasibility study for Arctic, they will be looking for potential synergies with Bornite, including a single tailings facility and mill that can be used for both of these copper deposits in the Ambler Mining District.

• MERGERS & ACQUISITIONS

NovaCopper arranges creative financing

Junior offers to buy out cash-rich Columbia-focused explorer; directors, major shareholders of both companies sign off on deal

By SHANE LASLEY

Mining News

In a move that provides the cash needed to advance a feasibility study for the Arctic project in Northwest Alaska, NovaCopper has agreed to purchase Sunward Resources Ltd., a Vancouver, B.C.-based mining exploration company with a copper-gold asset in Columbia and roughly US\$20 million in the bank.

Over the several weeks leading up to the April 23 announcement of the potential merger, the value of Sunward's stock has hovered at roughly US\$13 million, substantially less than the cash in the company's treasury, not to mention the value of its Columbia asset.

"The market had basically discounted the cash they had in the bank, so that provided an opportunity for us, particularly since we have a couple of shareholders in common," NovaCopper President and CEO Rick Van Nieuwenhuyse explained.

For Sunward shareholders, the deal provides an opportunity realize a benefit to the cash by continuing the exploration and development of a large Alaska project with nearly 10 billion pounds of copper identified to date.

"The combination of Sunward and NovaCopper pro-



RICK VAN NIEUWENHUYSE

vides shareholders a single company with a strong balance sheet to advance critical path objectives at our high quality Arctic and Bornite copper-zinc assets in Alaska," said Van Nieuwenhuyse.

The merger – which already has the support of directors, management and major shareholders of both companies – is expected to get the go-ahead when the proposal comes to a vote in this summer.

Pre-approved

To complete the deal, NovaCopper will issue Sunward shareholders 0.3 NovaCopper shares for every Sunward

see **NOVACOPPER DEAL** page 11



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continued from page 10

NOVACOPPER DEAL

share held. This comes to a value of US\$18.65 cents per Sunward share based on the 20-day volume weighted average price of the NovaCopper shares on the NYSE MKT exchange through April 22.

Sunward has roughly 142.33 million shares outstanding, making the deal worth about US\$27.6 million. At the end of 2014, the Columbia-focused exploration company had US\$20.95 million in cash and cash equivalents.

NovaCopper pitched the idea of merging with Sunward last year, and after shopping around the junior decided to accept the offer early in 2015.

Haywood Securities Inc., on behalf of NovaCopper, and Cormark Securities Inc., on behalf of Sunward, deemed the deal financially fair to the shareholders of both companies.

The proposed merger also won unanimous approval from the board of directors of both companies. The two directors that sit on the boards of both companies – Novagold Resources President and CEO Greg Lang and Electrum Group President Igor Levental – abstained from voting.

NovaCopper Chairman Thomas Kaplan also abstained from voting due to his relationship with Electrum Strategic Resources L.P., which owns about 27.8 percent of NovaCopper's issued and outstanding shares, and an Electrum-affiliated fund owns roughly 18.2 percent of Sunward's issued and outstanding shares.

Sunward's four largest shareholders – including Gold First Investments Ltd., Electrum Strategic Acquisitions LLC and Paulson & Co. Inc. – which hold roughly 70 percent of Sunward's issued and outstanding shares, have agreed to vote in support of the arrangement at Sunward's special meeting of shareholders expected to be held in June or July. This exceeds the 66.66 percent shareholder majority needed to approve the merger.

Together, Electrum and Paulson & Co. also hold about 42 percent of NovaCopper's shares.

Once pertinent approvals are in place, the merged company will be run by current NovaCopper management and its board of directors will be expanded from seven to nine members to accommodate two nominees by Gold First Investments, Sunward's largest investor.

Columbia copper

In addition to a substantial bank account, Sunward brings Titiribi gold-copper project in Columbia to the merger. The company, however, has not completed any significant exploration on the property since 2012.

"We are not acquiring the company for its asset, and Titiribi is the only asset they have," said Van Nieuwenhuysse.

NovaCopper, however, does see value in the Colombian property.

Titiribi has an NI 43-101-compliant measured and indicated resource of 285.8 million metric tons averaging 0.5 grams per metric ton (4.63 million ounces) gold and a relatively small amount (654 million pounds) of copper. Additionally the project has 349.4 million metric tons of inferred resources averaging 0.53 g/t (6.53 million

oz) gold.

"There is good exploration potential there for a big porphyry system, but it is not something we are going to spend a lot of our own dollars on," Van Nieuwenhuysse told Mining News.

Instead, NovaCopper plans to re-evaluate the geology and seek a partner to continue the exploration of Titiribi. Thanks to very low holding costs, the company can afford to be patient with its re-interpretation and marketing of the property.

Arctic feasibility

For NovaCopper, the merger is basically a US\$20-million financing. Combined with the nearly US\$4 million the company already had in its coffers, the merged entity would have plenty of cash to complete a feasibility study for the Arctic deposit, the next step toward developing mines at the world-class copper projects underway in the Ambler Mining District of Northwest Alaska.

In 2011, NovaCopper cut a deal with NANA Corp., the Alaska Native regional corporation for Northwest Alaska, to explore a large swath of land in the Ambler District. Known as the Upper Kobuk Mineral Project, the lands being advanced by this partnership cover the copper-rich Arctic and Bornite deposits, and a number of other prospects on public and NANA lands.

NovaCopper intends to carry out an US\$8 million to US\$10 million program this year that will focus primarily on infill resource and geotechnical drilling at Arctic. Continued environmental and engineering studies for the feasibility study and work at the Bornite deposit also are planned.

A preliminary economic assessment for developing an open-pit mine at Arctic was completed in 2013.

This scoping level study outlined a 10,000-metric-ton-per-day mill at Arctic that is anticipated to produce roughly 1.5 billion pounds of copper, 1.8 billion lbs. of zinc, 289 million lbs., of lead, 30.5 million oz of silver and 349,000 oz of gold over a 12-year mine-life.

The open-pit for Arctic encompasses an indicated resource of 23.85 million metric tons averaging 3.26 percent (1.71 billion lbs.) copper, 4.45 percent (2.34 billion lbs.) zinc, 0.76 percent (400 million lbs.) lead, 0.71 grams per metric ton (550,000 oz) gold, and 53.2 g/t (40.8 million oz) silver. Additionally, Arctic has an inferred resource of 3.63 million metric tons averaging 3.22 percent (239 million lbs.) copper, 3.84 percent (285 million lbs.) zinc, 0.58 percent (43.2 million lbs.) lead, 0.59 g/t (60,000 oz) gold.

According to the PEA, it will only take about 4,400 meters of drilling to upgrade the inferred resources at Arctic to measured and indicated categories. Another roughly 4,000 meters is needed to gather the geotechnical, hydrological and metallurgical data needed to complete the feasibility study.

Bornite synergies

While the 2015 program will primarily focus on advancing Arctic to a project that can be presented to banks and permitting agencies, NovaCopper intends to continue

see **NOVACOPPER DEAL** page 12

NORTHERN NEIGHBORS

Compiled by Shane Lasley



Stakeholder nabs Ryan's expertise

Stakeholder Gold Corp. April 23 reported that renowned Yukon Territory prospector and innovator Shawn Ryan has agreed to join its exploration advisory committee. Ryan will provide guidance for exploration of Stakeholder's Ballarat gold property and other strategic initiatives in the White Gold District, Yukon. "Shawn Ryan is an experienced and proven discoverer of gold deposits in the Yukon, and the company he founded, GroundTruth Exploration Inc., has developed some of the most advanced and cost-effective methods of exploring for mineral assets – particularly, but not exclusively, gold occurrences," said Stakeholder CEO Chris Berlet. Located 75 miles (120 kilometers) southeast of Dawson City, Ballarat is situated between Kaminak Gold Corp.'s Coffee Property and Kinross Gold Corp.'s Golden Saddle Property. Stakeholder and others have completed some exploration at Ballarat, including a five-hole drill program completed in 2011. GroundTruth is reviewing geological data for furthering exploration at Ballarat. "We are happy to be involved with the Ballarat project, which we believe hosts meaningful potential for discovery of another economic gold deposit in the Yukon," said Ryan. GroundTruth will be applying its industry leading technologies – such as the GT Probe, the GT RAB Drill and the exploration applications developed for the UAV Drone – to the exploration of Ballarat and for other exploration projects in the White Gold District.

Evrin cuts deal for B.C. copper project

Evrin Resources Corp. April 27 said it has signed an agreement with Paget Minerals Corp. to acquire the Ball Creek project, an early-stage exploration project in northwestern British Columbia considered prospective for copper-gold-molybdenum porphyry and epithermal gold-silver deposits. "The project is central to the Galore Creek and Schaft Creek deposits to the west and the Red Chris Mine to the northeast," said Evrin President and CEO Paddy Nicol. The Ball Creek porphyry system contains at least four distinct mineralized zones. Past drilling at the Main zone has cut 231 meters grading 0.21 percent copper and 0.54 grams per metric ton gold. Evrin said there is significant potential to expand the area of mineralization to the south. Two other porphyry prospects and three epithermal systems identified at Ball Creek have limited exploration. Evrin Resources is prospect generator with a number of exploration projects in northwestern Mexico. To acquire full ownership of Ball Creek, Evrin has agreed to pay Paget C\$150,000 upon closing the agreement; issue 1.25 million Evrin shares, or cash equivalent, in stages; and pay Paget a percentage of payments received as part of any future partnership agreements reached on the property.

Kennady reports kimberlite results

Kennady Diamonds Inc. April 23 reported further diamond recovery results from the 2014 summer/fall drilling of the Kelvin kimberlite at its Kennady North diamond project, Northwest Territories. A 1.83-metric-ton sample from the Kelvin South Lobe averaged 3.64 carats per metric ton of diamonds greater than 0.85 millimeters. The four largest diamonds recovered from the Kelvin South Lobe sample

see **NORTHERN NEIGHBORS** page 12

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NOVACOPPER DEAL

to investigate the viability of mining the near-surface portion of Bornite, a large copper deposit situated about 16 miles south of Arctic.

The potentially open-pittable portion of Bornite contains indicated resources of 14.1 million metric tons grading 1.08 percent (334 million pounds) copper and inferred resources of 109.6 million metric tons grading 0.94 percent (2.3 billion pounds) copper; and the deeper, potentially underground minable portion of Bornite contains inferred resources of 55.6 million metric tons grading 2.8 percent (3.4 billion pounds) copper.

NovaCopper expects that the re-sampling of roughly 13,000 meters of core drilled by Kennecott Copper Co. between 1957 and 1976 will translate to a substantial increase in the indicated resources at Bornite.

While developing a mine-plan for

Arctic, engineers also will be contemplating how Bornite will fit into the overall scenario to the maximum benefit of both projects.

“Hopefully, we can find out that there are true synergies, and we find out we can have a single tailings facility and can have a mill that can be used for both deposits,” Van Nieuwenhuysse explained.

If such synergies are identified, engineers will be tasked with finding the best location for such shared facilities and begin formulating ideas about when to phase in Bornite production in relation to Arctic.

Van Nieuwenhuysse said it currently looks like the best scenario is to start mining at the higher-grade Arctic deposit and phase in Bornite production, but at what point would most economical remains an open question.

“Where does Bornite fit in best to maximize the value out of both assets?” he asked, summarizing the trade-off studies that engineers are eyeing as they consider developing the first two mines in the Ambler Mining District. ●

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NORTHERN NEIGHBORS

are: 1.36 carat off-white, transparent, macle (twinned) with inclusions; 0.68 carat off-white, transparent, broken tetra-hexahedron with inclusions; 0.44 carat off-white, transparent, fragment with minor inclusions; and 0.44 carat off-white, transparent, octahedral with inclusions. A 47.62-kilogram sample from the Kelvin Sheet averaged 5.95 c/t of diamonds greater than 0.85 millimeters. The largest diamond recovered

from the Kelvin Sheet sample is described as a 0.12 carat white-colorless, transparent octahedral with minor inclusions. Kennady noted that the number of transparent white-colorless and off-white diamonds is very high. Another 2.73 metric tons of kimberlite from the Kelvin North Lobe is now being processed and results are expected by the end of the second quarter. Processing of a 436-metric-ton bulk sample collected from Kelvin over the winter is expected to begin by the end of May. ●

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NEWS NUGGETS

2015,” which is intended to address American dependence on foreign minerals and to enable the United States to more efficiently develop its own mineral supplies. “It’s not hyperbole to say our national defense and way of life depend on mineral production,” said Amodei. “From military technology, such as aircraft and missiles used by service men and women to defend our country, to the cars, smartphones and televisions we use every day, they all contain strategic and critical minerals such as rare earth elements, gold and silver, to name a few.” This legislation, H.R. 1937, enjoys the support of 29 original co-sponsors. It would require the U.S. departments of Interior and Agriculture to more efficiently develop domestic sources of strategic and critical minerals and mineral materials, including rare earth elements. The bill aims to facilitate a timely permitting process for mineral exploration projects by clearly defining the responsibilities of a lead agency; and setting the total review process for issuing permits to 30 months. The legislation also aims to ensure American mining projects are not indefinitely delayed by frivolous lawsuits by setting a 60-day time limit to file a legal challenge to a mining project; limiting injunctive relief to what is necessary to correct the violation of a legal requirement; and prohibiting the payment of attorney’s fees, expenses and other costs by the U.S. taxpayer. Amodei said H.R. 1937 respects and upholds all environmental laws while setting timelines that ensure these laws do not become tools for lawsuits or

bureaucrats to block or delay responsible projects. Sen. Lisa Murkowski, R-Alaska, introduced a similar piece of legislation, the “American Mineral Security Act of 2015,” to the Senate in March.

Zazu raises US\$2M of working capital

Zazu Metals Corp. April 22 said it is proceeding with a non-brokered private placement of US\$2 million through the issuance of up to 10 million shares at a price of C25 cents, or US20 cents per share. The company intends to use the proceeds from the financing for property development expenditures and general working capital purposes. Completion of the private placement is subject to regulatory approval. A preliminary economic assessment completed for the Lik South deposit in 2014 envisions a 5,500-metric-ton-per-day mill producing 234,000 dry metric tons of zinc concentrate (53 percent zinc) and 55,800 dry metric tons of lead concentrate (61 percent lead) annually over a nine-year mine-life. In total, 17.1 million metric tons of ore milled at an average grade of 7.7 percent zinc, 2.6 percent lead and 47 g/t silver is expected from the Lik South open pit. Zazu holds a 50 percent operating interest in the Lik zinc-lead-silver deposit in Northwest Alaska and Teck Resources Ltd. owns the remaining interest. Zazu has the exclusive right to increase its interest in Lik to 80 percent by investing US\$25 million (pre-inflation adjusted) by 2018. Adjusting for inflation, Zazu estimates this spending commitment will be roughly US\$45 million, leaving a balance of around US\$22 million remaining to earn the 80 percent ownership interest. ●

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JEWELL COMMENTS

harder to get permits for projects on federal claims, his company tends to prefer Alaska Native and state lands.

This avoidance results in fewer mineral projects on federal lands in Alaska being explored to a point that they can be proven feasible for future development.

Jewell’s comment on mining was not the only problem that the AMA had with what the Interior Secretary had to say.

During the same interview with APRN,

Jewell advised, “I do think if I was in Gov. Walker’s situation, I’d be looking to diversify my sources of revenue for the state.”

AMA contends that federal policies that prevent resource development need to be eased before Alaska can fully diversify its economy.

“Alaskans would love to diversify its revenue streams, if the federal government would allow us to do so,” said Brune.

From policies to block development of the oil-rich Arctic Coastal Plain of the Arctic National Wildlife Refuge to similar plans to place large swaths of the Fortymile Mining District off-limits, the federal gov-

ernment has increasingly been at odds with Alaska’s government and resource sectors over the best use of lands in the Far North State.

“You need to look no further than recent decisions to permanently block drilling in the coastal plain of ANWR, permanent prohibitions on oil leasing in the North Aleutian Basin, delays for drilling in the OCS (outer continental shelf), closure of the most resource-rich areas of NPR-A (that’s entirely closed to mineral entry), actions to obstruct the Pebble Project from entering the permitting process, the staggering reduction of timber sales and harvesting in

Southeast, and mineral closures through ACECs (Areas of Critical Environmental Concern),” said AMA Executive Director Deantha Crockett.

Earlier this year, the U.S. Bureau of Land Management announced plans to designate 685,000 acres of the historic Fortymile mining district in eastern Alaska as an ACEC, a move that would put this area in a conservation unit that is off-limits to mining.

In its letter to Secretary Jewell, AMA contends that this withdrawal breaks a promise the federal government made to Alaska in 1980, when it placed 106 million acres of federal lands in Alaska in conservation units as part of the Alaska National Interest Lands Conservation Act.

In brief, ANILCA promises that the federal government will not withdraw more than 5,000 acres of Alaska public lands without an act of Congress.

Many Alaskans see the use of ACECs as a way to skirt this promise and further debilitate resource opportunities on BLM lands in Alaska.

“The Fortymile ACEC, and the proposal of others in the western and northern regions of the state, closes off opportunities for mining on federal lands to expand in the future,” AMA inked in its letter to Jewell.

Despite diverging views of the best use of Alaska public lands, the miners association encourages the Interior Secretary to help diversify Alaska’s economy through policies that encourage development of the state’s rich mineral resources.

“Mining on ‘much’ of Alaska’s federal lands will occur only when a stable and predictable permitting process is in place and land is managed in a way that incentivizes business investment,” Executive Director Crockett said. “AMA looks forward to that day and stands ready to help Secretary Jewell make her statements a reality.” ●

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• FINANCE & ECONOMY

Weathering the storm

Encana's Prairie Sky IPO almost a year ago raised an initial C\$1.46 billion, followed by C\$2.6 billion in a secondary offering last September

By **GARY PARK**

For Petroleum News

Encana and Cenovus Energy, once the core components of the same company until they split six years ago, are taking decisive steps to ride out the current commodity price slump that is acting as a drag on their share values.

In the past year, Encana, which is turning the clock back to add oil to its natural gas production, has seen its shares drop by 32 percent, while oil sands operator Cenovus has experienced a 24 percent decline.

Not that observers are reaching for the panic button.

David Meats, an analyst with Morningstar, said Encana has the cleanest balance sheet in Canada's exploration and production sector and is strongly placed to ride out the current storm.

A share offering by Cenovus in February raised only C\$1.5 billion to pay for its 2015 capital spending program, leaving investors disappointed.

Mohit Bhardwaj, an analyst with Citigroup Global Markets, suggested Cenovus should have done an initial public offering of some assets, especially given the valuation of PrairieSky Royalty, a spinoff of Encana royalty lands in Western Canada, but others would prefer to see a share dilution.

Cenovus responded to the urgings on April 23 when it hired bankers to explore the possible sale or an IPO of its royalty holdings, which RBC Capital Markets analyst Shailender Randhawa estimates could fetch as much as C\$1.6 billion.

Encana's Prairie Sky IPO almost a year ago raised an initial C\$1.46 billion, followed by C\$2.6 billion in a secondary offering last September.

Cenovus has 3.1 million net acres of royalty lands that produce 7,600 barrels a day and yield C\$150 million of pre-tax operating cash flow a year, Randhawa said, suggesting potential buyers include PrairieSky, Freehold Royalties or mining royalty firm Franco-Nevada, along with pension plans or private equity partners.

She said that "if you own land, it's a real estate/finance company. It's hard to lose a dollar."

Penn West Petroleum recently sold royalty lands to Freehold Royalties for C\$321 million, while Canadian Natural Resources said it may sell or spin off its own royalty lands, which have been valued at C\$2.5 billion.

Encana is continuing on the sales path, announcing April 20 that it is seeking buyers for natural gas properties in Louisiana as it concentrates on drilling for oil and natural gas liquids in the Eagle Ford and Permian plays of Texas and the Montney and Duvernay basins Canada.

Citigroup has been hired to solicit offers for Encana's Haynesville Shale basin acreage, valued at US\$1 billion, although Encana has declined to comment. The first of those leases, which cover more than 350,000 acres, was acquired in 2005.

Earlier in April, Encana sold some gas-gathering assets in Canada for C\$461 million to Veresen Midstream. ●

Contact Gary Park through publisher@petroleumnews.com

• EXPLORATION & PRODUCTION

AOGCC approves Swanson gas pools rules

Hilcorp Alaska requested definition of three gas pools late last year; previous order dealt with Hemlock oil pool at Swanson River

By **KRISTEN NELSON**

Petroleum News

The Alaska Oil and Gas Conservation Commission has issued a new conservation order, No. 716, for natural gas pools at Swanson River in the Kenai National Wildlife Refuge on the Kenai Peninsula in Southcentral Alaska. Operator Hilcorp Alaska requested an amendment to conservation order No. 123B in October to define three new gas pools at Swanson River. The commission held a hearing Jan. 15 (see stories in Nov. 30, 2014, and Jan. 25 issues).

In an April ruling the commission concluded it was more appropriate to issue a new order for development of gas-bearing sands at Swanson rather than amending CO 123B, which was issued to govern development of the Hemlock oil pool at Swanson.

Hilcorp asked for the definition of three new gas pools, the Sterling/Upper Beluga/the Beluga and the Tyonek, and for rules governing development and operation of the pools.

Hilcorp is the owner of the Swanson River field; the Bureau of Land Management and Cook Inlet Region Inc.

are the landowners.

In its application Hilcorp told the commission there are 67 wells in the Swanson River field, 36 of which are producing. During June of 2014 the wells produced 68,882 barrels of oil and 238.787 million cubic feet of natural gas. Peak oil production at the field was 1.457 million barrels of oil in September 1968 and 706.304 million cubic feet of natural gas in October 2004.

When a unit operating agreement was signed in 1963 Swanson River had four working interest owners: Union Oil Company of California, Standard Oil Company of California, Richfield Oil Corp. and Marathon Oil.

Hilcorp now holds a 100 percent working interest at Swanson, as a result of its acquisition of the Cook Inlet assets of Union Oil in 2011 and Marathon in 2012.

The gas pools would be based on intervals correlated with the Soldotna Creek unit 41-4 well: the Sterling/Upper Beluga gas pool from 2,140 feet true vertical depth to 4,490 feet tvd; the Beluga gas pool from 4,490 feet tvd to 5,120 feet tvd; and the Tyonek gas pool from 5,120 feet tvd to 10,085 feet tvd.

The gas is found in the Miocene-to-Pliocene-aged sandstones of the Sterling formation and the Miocene-aged sandstones of the Beluga formation.

"Within the development area, gas has accumulated in several pockets of a north-south trending faulted anticline, which measures about 7 miles long and 4 miles wide and is bounded on the west by a large sealing fault," the commission said in its order.

The commission said the northern two-thirds of the Swanson River field is also

known as the Swanson River unit; the southern third is also known as the Soldotna Creek unit.

Order 716 provides for no restrictions on spacing of development gas wells within the affected area except that no well shall be drilled or completed less than 1,500 feet from the exterior boundary of the area unless owner and landowner are the same on both sides. ●

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A less pessimistic Arctic sea ice view

New research points to a gradual, reversible ice shrinkage under global warming, rather than a sudden rapid loss of ice cover

By ALAN BAILEY

Petroleum News

The multiyear shrinkage of the extent of the Arctic sea ice cover has become one of the most prominent lines of evidence demonstrating the continuing warming of the Earth's climate. And scientists have argued that there will likely be a future tipping point, a point at which the self-reinforcing nature of the ice melt will cause a sudden acceleration in ice loss, leading to an ice-free polar region. Pass that tipping point and the loss of ice will be irreversible, some scientists have said.

But two scientists in the Scripps Institution of Oceanography have conducted research which points to a less catastrophic future, according to an April 22 news release from the institution. New climate and ice modeling that the scientists have conducted, while not contradicting the general thesis that the Earth is becoming warmer and that the sea ice is melting, have indicated that there will be no tipping point in the melt. And the loss of ice will simply reverse, if the climate cools, modeling has found.

Combined model

While the more cataclysmic view of the ice melt has come from mathematical modeling of the ice-melt process itself, the new perspective comes from combining this "process model" with global climate models. This more complex, and potentially more realistic, view of the situation erases the tipping point from the ice-melt scenario. Then, with no tipping point, the ice melt becomes reversible.

"We found that two key physical processes, which were often overlooked in previous process models, were actually essential for accurately describing whether sea ice loss is reversible," said Ian Eisenman, a professor of climate dynamics at Scripps and one of the scientists conducting the research. "One relates to how heat moves from the tropics to the poles and the other is associated with the seasonal cycle. None of the relevant previous process modeling studies had included both of these factors, which led them to spuriously identify a tipping point that did not correspond to the real world."

"So if global warming does soon melt all the Arctic sea ice, at least we can expect to get it back if we somehow manage to cool the planet back down again," said Till Wagner, the other Scripps scientist involved in the research.

The Office of Naval Research and the National Science Foundation funded the Scripps research, with the Navy funding coming as part of a strategy to better understand future changes in the Arctic Ocean and to clarify how the challenges that those changes may bring for future naval operations.

"The Navy has broad interest in the evolution of the Arctic," said Frank Herr from the Office of Naval Research. "Sea ice dynamics are a critical component of the changing environmental picture. Our physical models lack important details on the processes controlling ice formation and melting, thus ONR is conducting a series of experimental efforts on sea ice, open water processes, acoustics, and circulation." ●

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● NATURAL GAS

Enstar rate increase hearing hits bump

State attorney general objects to filing of additional cost items gas utility wants to include in argument for increasing fees

By ALAN BAILEY

Petroleum News

As a rate case before the Regulatory Commission of Alaska moves forward, in which Enstar Natural Gas Co. wants to increase the fees it charges for shipping gas through its pipeline network, parties in the case have been jostling over the scope of evidence that Enstar can use to justify its position.

The Southcentral Alaska utility, the primary supplier of natural gas for residents

and businesses in the region, wants to increase its transportation rate by 20.3 percent — the commission has already allowed a 3.75 percent interim increase that would be refunded if the rate increase is ultimately denied.

Enstar filed its tariff advice for the rate increase in September, saying that this would be the first increase in its rates since 2010 and that, given new costs that the utility has had to incur, the rate increase would restore the company's return on its equity to the level approved in its last rate increase.

The rate increase relates to Enstar's transportation fees and is separate from the cost of the gas that the utility ships through its pipelines.

Additional costs

On April 1 Enstar filed some additional costs that it wants to be considered as part of its case. But the state attorney general objected to this filing, saying that there was insufficient time for the state's Regulatory Affairs and Public Advocacy section to evaluate the new cost data, given the hearing schedule.

"Adding this substantial amount of new information at this late date prejudices RAPA by greatly reducing the time period for RAPA to investigate, including shortening the time for conducting sufficient discovery along with any needed follow-up discovery," wrote Steve DeVries, chief assistant attorney general, in an April 3 filing with the commission.

Chugach Electric Association and Matanuska Electric Association subsequently registered their support for the attorney general's position.

The commission had previously set a schedule for the tariff hearing, with a closing date of April 27 for interested parties to obtain documents and information from Enstar, and a date of May 13 for filings by the attorney general and other responders in the case. Enstar will then have an opportunity to investigate claims made by the attorney general and others before replying to those claims by June 26.

In its original tariff filing Enstar said that additions to its "rate base," the costs used to justify rate levels, include the cost of improvements to the utility's pipeline infrastructure; some upcoming upgrade projects; the cost of storing gas in the Cook Inlet Natural Gas Storage facility on the Kenai Peninsula, and the required replacement of a portion of a pipeline between Kenai and Anchorage. In its April 1 filing the utility asked to add final cost estimates for three projects which had previously been listed in prefiled testimony. The utility also wanted to add the estimated cost of a project for the construction of a pipeline to provide a new connection between the Kenai Peninsula storage facility and Enstar's pipeline network — Enstar says that it had also provided information about this project in prefiled testimony.

In addition, Enstar said that in October it had to replace the gas pipeline crossing of the Beluga River, after discovering that river erosion had exposed the existing pipeline. The cost of that project should be included in the tariff case, Enstar argued.

Commission order

On April 16 John Wood, chief administrative law judge for the commission, issued an order saying that Enstar's April 1 filing should be struck from the record for the case, unless Enstar was willing to allow an extension to the statutory deadline by which the tariff hearing must be completed. And on April 24 Enstar declined to consent to the deadline extension, thus causing the April 1 filing to be removed from consideration. While objecting to the terms of Wood's April 16 order, Enstar said that a delay to the commission proceedings would perpetuate the under recovery of Enstar's costs.

"In striking this testimony, the commission is denying Enstar the opportunity to introduce relevant evidence of over \$7 million of capital expenditures incurred on plant that will be in service well prior to the statutory deadline applicable to this case," wrote Matthew Findley, Enstar's attorney. ●

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• LAND & LEASING

North Nenana exploration license issued

By KRISTEN NELSON

Petroleum News

The Alaska Department of Natural Resources' Division of Oil and Gas issued a written finding April 29 determining that the issuance of an oil and gas exploration license to Rocky Riley of Tolovana Construction Co. is in the best interests of the state.

The exploration license, for North Nenana, is one of two applications that had been shown pending — the other is for the Houston-Willow basin — on the division's website.

The North Nenana exploration license issued to Riley is a five-year license with a \$500,000 work commitment and covers 25,294 acres. The license area is some 35 miles west of Fairbanks, within the Minto

Flats State Game Refuge in townships 2-3 north, range 8 west, Fairbanks Meridian.

A map of the license area shows that it is south of Minto.

The division said it received an exploration license application from Riley on April 30, 2013, and on May 30, 2013, published a notice of intent to evaluate the proposal, a request for comments and a request for competing proposals; no competing proposals were received.

Limited potential

The division said "potential for oil generation, migration, and trapping in the license area is considered low," while the potential for coal gas and biogenic gas "is low to moderate," with primary risks whether the area has "a trapping mecha-

nism and seal capacity."

The North Nenana exploration license area is on the northern margin of the Nenana basin, the division said. The Nenana basin is considered prospective for hydrocarbons. Union Oil of California and Atlantic Richfield have both drilled, with the most recent activity by Rampart Energy and Doyon Ltd. and their partners.

Union Oil drilled the Nenana No. 1 well to a total measured depth of 3,062 feet in 1962. In 1984, Atlantic Richfield drilled the Totek Hills No. 1 wells to a total measured depth of 3,590 feet. Both wells were drilled along the flanks of the southern Nenana basin and both were plugged and abandoned.

The U.S. Geological Survey conducted petroleum resource assessments of the

area in the 1990s and 2000s.

Rampart Energy drilled the Nunivak No. 1 well in a thicker portion of the basin in 2009, some 31 miles south of the southern boundary of the license area. That well reached a total measured depth of 11,136 feet.

"The occurrence of potential source rocks such as coals and lake-deposited sediments can be anticipated in the license area based on outcrop and well samples," the division said. "In addition, the presence of reservoir rock such as sandstone, conglomerates, and silty sandstones may be anticipated based on outcrop and the three Nenana basin well penetrations that are publicly available." ●

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• FINANCE & ECONOMY

Lower prices take slice out of BP profits

By DANICA KIRKA

Associated Press

BP reported April 28 that its first-quarter profit fell 26 percent in the wake of the sharp drop in oil prices, less than many analysts had feared.

The London-based company said net income for the quarter was \$2.6 billion, compared with \$3.5 billion in the same period last year. Market expectations were for a drop of as much as 60 percent, however, and BP share rose 1.5 percent on the news in a lower market.

Underlying replacement cost profit — a measure that strips out fluctuations in the value of reserves — was \$2.6 billion compared with \$3.2 billion for the same period in 2014.

Chief Executive Robert Dudley said the results "reflect both this weaker environment and the actions we are taking in response."

"We are continuing to progress our planned divestment program, we are resetting our level of capital spending, and we are addressing costs through focusing on simplification and efficiency throughout BP," Dudley said.

Brent down by half

The price of Brent crude, the benchmark for North Sea oil, averaged \$54 a barrel in the first quarter, half the level of a year earlier. All of the major oil companies will be taking a hit, said Fadel Gheit, a managing director and senior analyst at Oppenheimer & Co. Inc.

"The only good thing about the first quarter of this year is that it is over," Gheit said.

BP is also trying to repair the damage for past mistakes. The Deepwater Horizon spill, which killed 11 workers and spilled billions of barrels of oil into the Gulf of Mexico, continued to take a toll on BP's balance sheet.

It took a \$332 million charge for the first quarter, taking its total pre-tax charge to date for the spill to \$43.8 billion.

Speculation has swirled in the markets about whether BP may become a takeover target. Low oil prices tend to boost merg-

The price of Brent crude, the benchmark for North Sea oil, averaged \$54 a barrel in the first quarter, half the level of a year earlier. All of the major oil companies will be taking a hit, said Fadel Gheit, a managing director and senior analyst at Oppenheimer & Co. Inc.

ers and acquisitions in the industry — Shell recently agreed to buy BG for 47 million pounds (\$69.7 billion).

"This morning's trading update from BP managed to surprise the market and beat expectations," said Michael Hewson, chief market analyst at CMC Markets UK. "The next question now is whether this number makes BP a more attractive target for an acquisition." ●

GOVERNMENT

USCG sets safety zones around Shell vessels

The U.S. Coast Guard has imposed safety zones around vessels associated with Shell's planned Chukchi Sea drilling program when those vessels are in the Puget Sound region near Seattle. The Coast Guard has also established a regulated navigation area that protesters against Shell's planned Arctic operations can use to exercise their first amendment rights to free speech and peaceable assembly.

The Coast Guard says that the safety zones and navigations area will ensure the mutual safety of all waterway users, including Shell's vessels and vessels involved in protests against Shell's plans.

The restrictions apply from April 28 until June 30.

Shell is using Seattle as an assembly point for some of its Arctic fleet, before moving the fleet north towards the Chukchi.

A number of environmental organizations are vehemently opposed to Shell's planned Chukchi Sea drilling, saying that the drilling poses unacceptable environmental risks. For a few days in early April protesters from activist organization Greenpeace boarded the drilling vessel Polar Pioneer, under charter to Shell and being carried by heavy lift vessel to the Seattle area. And some groups have sued the Port of Seattle, hoping to prevent Shell from using the port.

On April 11 Judge Sharon Gleason from the federal District Court in Alaska issued a temporary restraining order against Greenpeace, banning protesters from the organization from boarding or interfering with certain of Shell's vessels. However, the judge has yet to rule on broadening the injunction to cover all of the vessels engaged in Shell Chukchi Sea program.

When announcing its new safety zone rule the Coast Guard said that it is possible that Greenpeace may attempt to again board the Blue Marlin, the heavy lift vessel carrying the Polar Pioneer. In addition, environmental groups have announced an intention to form a "kayak flotilla" in Puget Sound, in protest against Shell's activities, the Coast Guard said.

—ALAN BAILEY



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Crowley honored for outstanding marine safety

The state of Washington’s Department of Ecology has honored Crowley Maritime Corp.’s petroleum services division once again with the Exceptional Compliance Program award in recognition of excellence in marine safety and environmental stewardship. The ECOPRO program represents a unique, non-regulatory environmental protection program for tank vessels, recognizing operators who demonstrate exceptional compliance with the program’s strict criteria.

Deputy Director Polly Zehn, representing the state’s Department of Ecology Spill Prevention, Preparedness and Response Program, presented the award to Crowley during a ceremony at Seattle’s Odyssey Maritime Discovery Center. Capt. Mark Homeyer, Crowley’s director, West Coast marine operations, accepted the award on behalf of the company before an audience of U.S. Coast Guard and Maritime Administration attendees. Homeyer thanked the state for the recognition and reiterated both his and the company’s commitment to environmental stewardship.



COURTESY CROWLEY

“We are proud to be among the companies representing the leading edge of operational excellence in petroleum transportation in the world today,” Homeyer said. “Our business is built on a strong commitment to environmental protection through safe and reliable petroleum transportation.”

Crowley first received this award in 2005 for its ATB division, joining an elite group of tanker and tank-barge operators which have earned ECOPRO recognition from Ecology since the program’s inception in 1999. To gain membership, companies must meet industry best practice standards and undergo rigorous Ecology inspections encompassing a wide range of operational and safety best practices. Members renew their commitment to the program every three years.

C&J and Nabors announce transaction completion

C&J Energy Services Inc. and Nabors Industries Ltd. announced the completion of the combination of C&J with Nabors’ completion and production services business. The resulting combined company, which has been renamed C&J Energy Services Ltd., is one of the largest completion and production services providers in North America and is led by the current C&J management team, with Josh Comstock serving as CEO and chairman of the board, and Randy McMullen as president and CFO. New C&J is headquartered in Bermuda

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

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MICCICHE Q&A

at the most economical project that has the greatest probability of success. If one of the partners doesn't pan out, the plan can evolve. It may evolve into a plan that's very different than AKLNG today. The probability you will have a second plan on the shelf is not great — and this is not dogging the governor, this is more philosophically from me. There are examples around the planet where a project is not a good fit for a partner and there is a re-adjustment.

I do enjoy (consultants) analytica. They do have a unique way of explaining the global outlook. They look at places like Sabine Pass, Angola, Qatar Gas, those are all re-worked projects that came to fruition. If your project becomes uneconomic, you'll have to analyze what went wrong with the first project and understand if there is potential for another.

People get squeamish because the current price of LNG may be somewhat destabilized. Had we worried with TAPS and worried with oil was \$10 a barrel, think about how different this state would look. What is going to make this project work or not work is what we can deliver energy on a cost-per-unit basis.

I think we are on track with that. I'd like to continue forward with our current progress. I certainly hope the governor and legislative leadership can agree without the very public spectacle where we have the governor dropping a bomb and the Legislature reacting.

Petroleum News: The term "Plan B" seemed to carry a positive tone a few years ago. Now it seems to be the opposite this year. Why do you think that is?

Micciche: It is interesting. Remember the study when we talked about expanding ASAP, when the governor came in with his administrative order to stop all forward progress. This has gone both ways. He sort of ridiculed ASAP, then that became his path. Where the Legislature had already sort of processed ASAP then put it on a shelf. You almost have converging paths that are intersecting in a way that is not good for either project. We may very well decide to move forward with a smaller-diameter project at some point. Smaller diameter may be dramatically smaller if we feel there is not a market for large volumes of LNG. But I think the biggest struggle is promoting both projects as being viable and investing in both projects as being viable. I heard a statement that \$180 million at AGDC is not enough to build a pipeline. It's not. But it's more than enough to compromise the success of AKLNG. That's what worries me the most.

Petroleum News: So should that money be used at all, or in part?

Micciche: I would like for the dollars to be spent eventually. I don't mind some of the dollars to be spent to study the potential of ASAP, but it needs to be a project on the shelf. We need to stop creating what has led to a credibility issue that has certainly commercially slowed the progress of AKLNG, when the Army Corps delayed moving forward because of a lack of understanding of the state's intent. I think it's clear federal agencies need to be alongside us along the way every step of the way.

Once you lose their attention, you can delay a project significantly. We need to let them know we are on a clear path. If that path doesn't pan out, I'll be the first to agree it's time to look at other options.

"I heard a statement that \$180 million at AGDC is not enough to build a pipeline. It's not. But it's more than enough to compromise the success of AKLNG."

—Sen. Peter Micciche, R-Soldotna

It's improbable that we are going to find, after fully processing AKLNG toward a final investment decision, it's improbable we are going to find a smaller diameter export project that is going to be economic if AKLNG doesn't pan out. The sad thing is we have talked about this since my voice cracked with puberty. This is the first time we have alignment that looks very promising. I hate to see anyone or anything get in the way of that amount of project.

I like where we are going, and I hope we can all work together as a team to find out if AKLNG is going to move toward fruition.

Petroleum News: Speaking of team, the Kenai Peninsula added a member of its team: Larry Persily. What are your thoughts on that?

Micciche: For me Larry Persily is a welcome addition to the Kenai Peninsula Borough. As the terminus for the AKLNG export, although there is some experience residing on the Kenai, what Larry brings to the table is all that experience and connections as federal coordinator. He's got an impressive volume of contacts. He's got a wealth of knowledge, of expertise. I think it is something that the Kenai Peninsula needed. He is going to be very helpful on all stages from field work to permitting. If we need an extra push with some help from D.C., he has those connections. He seems resolved toward seeing AKLNG through

and not interested in a diversion from the ASAP project. Mayor (Mike) Navarre is a great man to be at the helm at this point and time. He's a member of the PILT (Payment In Lieu of Taxes) team.

Petroleum News: Speaking of the mayor, Gov. Walker said the mayor was here to broker some differences. Can that help either in the short- or long-term?

Micciche: The mayor was in this building for a long time (as a former state lawmaker), so if anyone can be considered a centrist, it would be Mike Navarre. He works both sides of the aisle very, very well. I'm appreciative of having him by my side. The key here is he saw the letter the governor wrote to the Legislature. He put a letter out telling us what he thought the Legislature should be doing during extra innings. I was asked about that letter by the press before it was received by the Legislature. What I would rather see the governor do is, if we are a team, and we are different branches of government, the communication should be started with your work mates, then provided to the press so that we can inform Alaskans about what's happening. We've seen the reverse happening with this administration. I don't think there is any ill intent.

But after three bouts of dropping a bomb, then looking to your friends in the Legislature to remove the scar tissue, I hope that going forward on this project and many others, it starts with direct communication. We don't work for the governor; we work with the governor. He's been in office for a few months. I expect very positive things from the administration. I hope in some cases, he retools with some of his personnel.

The administration has a flavor of having some efforts of the past that were

not entirely successful and I think we've moved beyond that. I think it's time to sit back and re-evaluate how this whole thing started. I know my relationship with him is very good. I think legislators are willing to start over and hopefully move as a unit as opposed to what looks like in the public a very divided administration/Legislature team. And it is.

The reason I think AKLNG is important, when you look at the Goldsmith model, it does capture the remaining wealth in the state, and a lot of it is counting on billions of revenue from AKLNG. When you think of the fiscal gap, this is the first time we've talked about not how to meet the budget but how to shrink the gap. We can't close the gap, but how to shrink the gap. This shows the importance of working together on AKLNG.

It would provide a new source of revenue. It provides a diversification we don't enjoy. If we had substantial exports of LNG, it would be somewhat softened. The governor campaigned on 25 percent cuts. When we talk about the administration and shared leadership, we've seen very little working together on how to meet that gap.

AKLNG is one revenue solution we are not going to enjoy for perhaps close to another decade. If they are going to keep people investing in our state, they need to understand we are getting our fiscal house in order. That needs to be a team effort. It's not. It currently isn't.

We've got to stop firing salvos between the third and other floors and try to negotiate through the press. It's not going to get better until people are at the same table. ●

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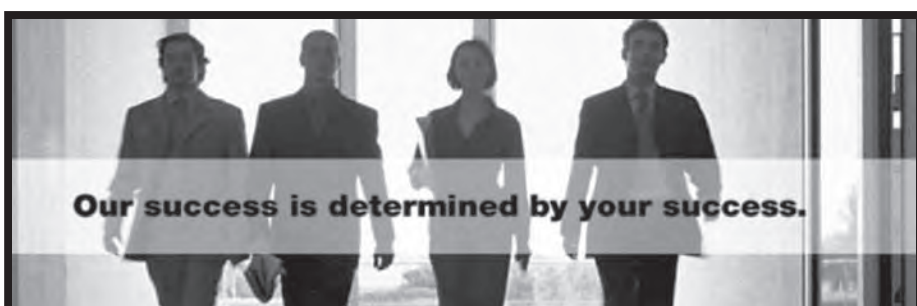


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ENERGY BILL

was in charge of the North Slope LNG project, but dropped it late last year because the burner tip cost to Interior consumers would have been too high. AIDEA was unable to proceed with a Cook Inlet based plan because of the statutory limitation of the original authorization.

General AIDEA cleanup

House Bill 105, an administration bill, also provides increases in AIDEA bonding authority and removal from statute of some old bond authorizations which AIDEA had not used, but which impacted the agency's current bonding authority.

The House added AIDEA bonding authority for several projects, authorizations which were removed in the Senate: a Point MacKenzie bulk commodity loading and shipping terminal; a hydroelectric project at Sweetheart Lake; rebuilding of Railbelt transmission facilities; and a hydroelectric project at Waterfall Creek for the City of King Cove.

Reports required

The Legislature added a requirement for quarterly written reports by AIDEA on the Interior Energy Project to the Legislature, including: project progress on all components; the status of local infrastructure build out; conversions to natural gas to date and anticipated; and an accounting of funds spent and anticipated to be spent.

If requested, AIDEA is also to present a project briefing to the Legislative Budget and Audit Committee.

That report is required through June 30, 2025.

Limitations

Intent language provides that the geographic flexibility provided will be used only to advance the Interior Energy Project previously authorized by the Legislature, and specifies that AIDEA "use an open and competitive solicitation process to select private entities to participate in developing" the LNG capacity and infrastructure for the project.

And AIDEA's ability to engage in a pipeline is limited to distribution lines or a pipeline with a diameter of 12 inches or less transporting natural gas to Interior Alaska.

There are also some limitations on AIDEA's ability to contract for natural gas without legislative approval unless that natural gas is to serve Interior consumers.

The bill also prohibits AIDEA from purchasing or acquiring gas reserves or a gas lease or becoming a working interest owner in a natural gas lease.

And AIDEA's ability to engage in a pipeline is limited to distribution lines or a pipeline with a diameter of 12 inches or less transporting natural gas to Interior Alaska.

A project plan, approved by resolution by AIDEA's board, must identify the source of natural gas; include the estimated cost of the project; and "include the estimated price of natural gas supplied to natural gas utilities in Interior Alaska before distribution to consumers."

The scope of the project has also been expanded to include propane.

Thanks from Walker

Gov. Bill Walker thanked the Legislature for passage of the bill.

"The high cost of heat and electricity is a tremendous burden for many Interior residents," he said in an April 27 statement. He also noted the poor air quality in the Fairbanks North Star Borough, and said delivering natural gas to the Interior will provide a cleaner source of fuel for home heating and energy.

"The economic future of the Interior depends on low-cost energy being delivered to its residents," the governor said. "At the end of the day, conditions in Fairbanks have not changed, and relief in the form of clean, affordable energy is needed now. HB 105 provides a clear path to accomplish that."

—KRISTEN NELSON

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OIL PATCH BITS

and its common shares have been listed on the NYSE under the ticker symbol "CJES." Nabors received approximately \$688 million in cash from C&J as a portion of the consideration for the transaction and now owns approximately 53 percent of the outstanding and issued common shares of New C&J, with the remainder held by former C&J shareholders.

The transaction was originally announced on June 25, 2014, with the execution of a definitive merger agreement to combine C&J with Nabors' completion and production services business in the U.S. and Canada. Under the terms of the transaction agreements, Nabors separated its completion and production services business in the United States and Canada from the rest of its operations and consolidated this business under New C&J. A Delaware subsidiary of New C&J then merged into C&J, with C&J surviving the merger as a subsidiary of New C&J. Effective upon closing of the transaction, common shares of C&J have been converted into common shares of New C&J on a 1-for-1 basis.

Amanda Reeves joins Alaska Rubber Group team

Alaska Rubber Group has hired Amanda Reeves as its accounts payable specialist. Reeves was born and raised in Anchorage, Alaska, and spent the first 20 years of her life in East Anchorage. In 2010 she left Alaska for Washington state and attended college while working as a caregiver for her grandfather. In 2005, Reeves succumbed to her homesickness and decided to come back to Alaska and start on her career in the administrative field. She worked as an office temp for three years and finally found an accounting position that she truly enjoyed. In February 2015 Reeves was hired at Alaska Rubber and Supply and is now a full time accounts payable specialist. Alaska has always brought so many amazing opportunities her way and she is very grateful to be from such a thriving state.



AMANDA REEVES

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.

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RAILBELT GRID

there would be benefit in transferring the management of the grid to some form of independent operator. Proponents of this option have said that a single operator could oversee the unified dispatch of power on the grid, thus bringing the benefits of using the lowest cost power generation to the maximum extent possible while also easing the ability to make major decisions over grid upgrades.

Anthony Scott, senior economist and energy analyst with the Alaska Center for Energy and Power, is conducting a series of presentations to the commission, presenting analyses of the costs and benefits that may be associated with changes in the way in which the grid is managed. And, in an April 29 presentation, Scott homed in on the cost side of the cost-benefit equation, saying that while change could be expensive and risky, some potential costs associated with operation under a single private company do not appear to be prohibitive.

Complex system

He prefaced his remarks by commenting that the current transmission grid system and its mode of management form a complex, multidimensional entity that requires more than just a simple cost-benefit analysis. In general, for example, the benefits of system reliability cannot readily be quantified. The utilities that currently manage the grid appear to have made decisions that optimize the operation of the grid from each utility's perspective. And, perhaps, what appears to be an optimum situation for each utility may be optimum for the grid as a whole, he conjectured.

Moreover, any change to a new arrangement would involve significant transition costs, he said.

However, on the assumption that there would be benefit from some form of unified operation, Scott proceeded to describe some ballpark cost data for that approach, to at least see if change appears feasible from a cost perspective.

Scott said that he had used data from FERC filings for the Railbelt power utilities for 2013 and made a number of simplifying assumptions to derive cost data for the transmission grid. Overall, it appears to cost about \$38 million annually to operate the grid, about 4 percent of

total Railbelt power utility operating costs, he said.

In terms of the current book value of the transmission system, it turns out that Southcentral utility Chugach Electric Association owns about half of the system, with Golden Valley Electric Association, the Fairbanks utility, owning about quarter. As a result the percentage of each utility's revenue requirement needed to support the transmission network, a measure of each utility's financial interest in the system, also varies from one utility to another, with Chugach Electric being the highest at 6.2 percent. Matanuska Electric Association has the lowest estimated revenue requirement, at less than 1 percent.

Postage stamp rate

It follows that if the revenue needed to operate the grid were to come from a consistent or "postage stamp" rate across the whole grid, as a consequence of some form of unified rate structure, the rates for Chugach Electric and Golden Valley would drop while those for the other utilities would rise. However, the rate change for Chugach Electric, by far the largest of

the changes, would just be around half a cent per kilowatt hour, a figure that might represent a \$3.19 drop in a typical consumer's monthly electricity bill.

If this postage stamp rate were to result from a private transmission company taking over the grid, that company would incur a higher cost of capital than the current utilities and would also be liable for federal and state income taxes, Scott said. The net impact of those additional costs might amount to an increase of 60 cents per month in an average customer's electricity bill, thus reducing the gain from a postage stamp rate for a Chugach Electric customer to around \$2.59 per month. Under this scenario, the biggest monthly cost increase for a consumer would come from Matanuska Electric Association, with an increase of perhaps \$2.94.

Based on these numbers, Scott said that from his perspective having a private party with private equity returns operating the grid does not appear to be a big deal in terms of its cost implications. Scott deferred discussion of benefits that might arise from a unified grid to a further talk that will revolve around the benefit question.

System upgrades

However, while emphasizing that the question of having a private transmission company take on the grid has no implications in terms of upgrades to the grid, Scott commented that the Alaska Energy Authority had recommended major upgrades, to improve the grid reliability and to prepare the grid to be able to handle power supplies from a planned major hydropower system at Watana on the Susitna River. The authority had actually determined that the upgrades would pay for themselves, even without the Watana dam, mainly as a result of the heightened efficiency of the dispatch of power over the upgraded system, Scott said.

Scott commented that the concept of expecting the state to fund transmission upgrades of this type appears questionable, if a private company is able to raise capital to invest in the system.

Scott also provided some cost estimates for enforcing reliability standards on the grid, and for unifying the dispatch of power. ●

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EARNINGS USE

much more manageable one.”

The proposal goes hand in hand with another Goldsmith made earlier this year. In his annual “sustainable yield” report, he recommended a \$4.5 billion budget cap — adjusted for inflation and population growth — as a sustainable figure for future spending.

Even if lawmakers honor the cap and oil prices recover, the state would deplete its \$10 billion constitutional budget reserve within a decade, according to Goldsmith. Relying only on existing earnings from petroleum revenue and other existing sources of revenue would almost certainly require some additional revenue source, such as an income tax.

Adding permanent fund earnings to existing revenue sources and respecting the \$4.5 billion spending limit would balance the budget by 2019, according to Goldsmith.

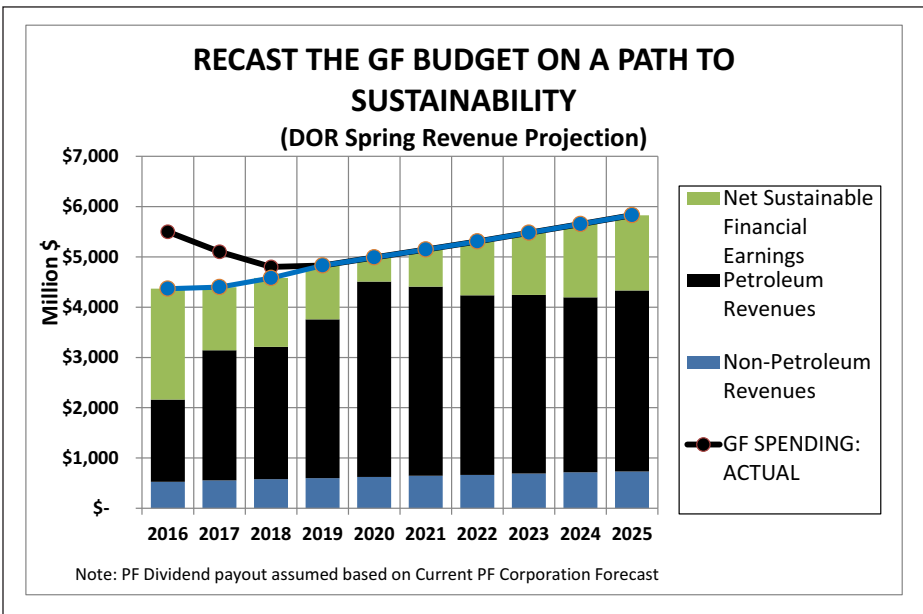
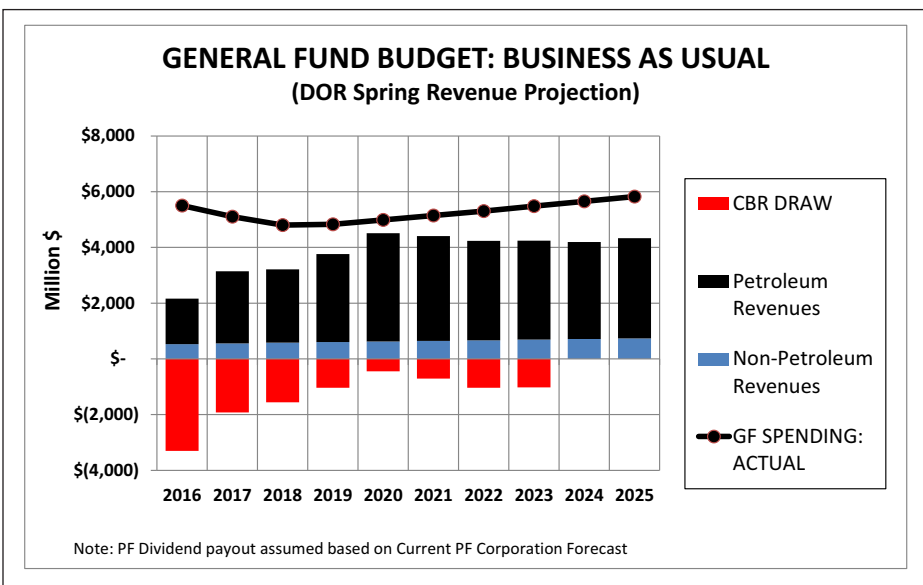
ISER produced the report using a grant from Northrim Bank.

How it works

The art of Goldsmith’s plan would be drawing enough from earnings to ease budget shortfalls while saving enough to reinvest and pay out annual dividend to residents.

The plan is a way of managing the “nest egg,” which is the combination of current savings and future revenues from petroleum in the ground at a reasonable rate of return.

The nest egg was estimated to be some \$131 billion at the beginning of the year — down from \$135 billion when ISER



released its most recent “sustainable yield” report, in January — split almost evenly between savings (\$66.4 billion) and future earnings (\$64.6 billion). At a

7.5 percent return, these revenues would generate \$9.825 billion in earnings.

The plan calls for saving \$4.585 billion of these earnings to accommodate

inflation and population growth, setting aside \$1.402 billion for dividends and spending the rest.

To avoid harming the dividend, the plan proposes calculating the amount of earnings available for the general fund after paying the annual dividend. Goldsmith forecasts a \$2,000 dividend in 2017, which would fall to \$1,800 by 2019 and rise steadily thereafter.

With oil prices, oil production and financial markets always changing, the “sustainable spending” plan is merely a strategy, according to Goldsmith. It would require policymakers to adjust the specifics of spending and saving each year based on various factors, including the ever-declining amount of oil and natural gas still in the ground.

So Goldsmith compared the “sustainable spending” strategy with two other strategies, simple rules using a percent of market value and an expanded permanent fund. The former would draw a fixed percentage of the market value of the entire portfolio of state assets. The latter would do the same for an expanded permanent fund. At 4 percent, the former would yield more than the sustainable plan, in part because savings fail to offset the depleting resource. The latter would yield less because it ignores future earnings.

Even if the state implements his plan, Goldsmith acknowledges the target could prove to be impossible to reach, at which point “the state would need to consider adding new non-petroleum revenues or changing the way the Permanent Fund dividend is calculated.” ●

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CANADA PULLBACK

2018 and the outlook could become even more serious unless one of the proposed major pipelines out of Alberta is built before the end of the decade.

He said the industry is desperate to see at least one of four pipeline projects — TransCanada’s Keystone XL or Energy East, Kinder Morgan’s Trans Mountain expansion and Enbridge’s Northern Gateway — clear the regulatory and permitting hurdles and go ahead.

However, the chances that any will even get regulatory approval are increas-

ingly bleak as they become bogged down in public hearings and face threats of legal action or civil unrest at construction sites.

Impact beginning to be felt

The full impact of unease about the prospects of a strong recovery in crude prices has only started to be felt in the oil sands sector, where projects are being shelved and the layoffs are widespread.

The Canadian Association of Petroleum Producers forecast nine months ago that production from the bitumen deposits would double to 4.8 million bpd by 2030, but that projection is due for a revision.

CERI also remained bullish about the oil sands five months ago, despite trimming its oil price assumption to US\$85 a barrel from US\$100, estimating production would reach 3.7 million bpd in 2020 and 5.2 million bpd in 2030.

Howard said at that time that US\$85 oil would still generate “significant benefits across the board,” but cautioned that if prices dropped below US\$80 “you would actually start affecting developments. They would get pushed off and maybe cancelled.”

That CERI report predicted investment in new oil sands projects and reinvestment investment in existing operations would exceed C\$514 billion, peaking in 2017

and resulting in revenue from all projects of about C\$2.5 trillion by 2038.

For all of Canada, the gross domestic product impact from investment and operating revenues would yield C\$3.9 trillion, with about 88 percent of GDP impacts and 80 percent of employment impacts occurring in Alberta.

CERI said that if its objectives were accurate, oil sands employment would surge from 514,000 to 802,000 in 2028, assuming that all four of the big pipeline projects got green lights.

First wave of layoffs

Those numbers must now seem like a cruel trick for those whose livelihoods are tied to the industry.

The first wave of layoffs has surfaced in claims for employment insurance, with the Canadian government reporting increases in those collecting benefits in February of 12.3 percent in Edmonton and 11.8 percent in Calgary, compared with a national increase of 2 percent. The number of applications filed in Alberta soared by 30 percent in the same month.

Anyone trying to get a fix on industry intentions in the next year and beyond has only to check the barometer of industry confidence — government land sales.

British Columbia and Saskatchewan, which have collected C\$1 billion and more in recent years, would settle for C\$100 million in a heartbeat.

British Columbia’s first sale of 2015 brought in C\$2.3 million compared with C\$38 million in December 2014, while Saskatchewan opened the year by raising C\$17.5 million, 65 percent lower than the first auction of 2014.

Alberta, the bellwether province, raised C\$31.9 million in its first two sales, 18 percent lower than the same period of 2014 and is braced for much worse to come. ●

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