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3 enlightening; transparency lacking

This week's Mining News

NEWS NUGGETS

Graphite One PEA details robust return for western Alaska project

Mining policy trifecta

NMA hopeful Trump, Congress, voter priorities translate to permit reform

By SHANE LASEY

After eight years of increasing federal regulations, Alaska, United States mining are encouraged that President Donald Trump, Congress and the support policies issued at... (text continues)

National Mining Association hopeful Trump, Congress, voter priorities translate to permit reform. Read more in Mining News, page 7.

Armstrong extols new oil play

Bill Armstrong, CEO of Armstrong Energy, has weighed in on the ramifications of ConocoPhillips' newly announced Willow oil discovery in the National Petroleum Reserve-Alaska. On Jan. 13 ConocoPhillips announced that Willow, a discovery in the Nanushuk formation, may be capable of delivering oil at a rate as much as 100,000 barrels per day.

Armstrong, with its partner Repsol E&P USA, is planning a major oil development in its Pikka unit on the east side of the

see ARMSTRONG PLAY page 16

Questions over new Valdez fleet

With construction underway of a new fleet of tugs to support oil tanker operations at the Valdez Marine Terminal and in Prince William Sound, a new report commissioned by the Prince William Sound Regional Citizens' Advisory Council has questioned whether the tug designs adequately cater to the demanding operating conditions at the terminal and in the sound. A draft version of the report, by naval architects and marine engineers Robert Allan Ltd., says that the tug designs require more thor-

see FLEET QUESTIONS page 16

Canada makes its case

Canada's Natural Resources Minister Jim Carr has assured a rattled Canadian oil and natural gas industry that he will do all in his power to build an energy-based trading relationship with the United States under President Donald Trump.

In Washington, D.C., for Trump's inauguration he seized the chance to meet with a broad cross-section of U.S. lawmakers, government officials and industry executives in his efforts to find "points of intersection."

see CANADA'S CASE page 14

NATURAL GAS

AGDC talks plant

Corporation now has Houston, Tokyo offices; looks at Conoco LNG facility

By TIM BRADNER
For Petroleum News

AGDC is now working to raise approximately another \$1.5 billion to do final engineering while also seeking investors and gas purchasers.

Discussions are underway between Alaska Gasline Development Corp., the state-owned gas corporation, and ConocoPhillips on a possible purchase of the mothballed liquefied natural gas plant at Nikiski, near Kenai south of Anchorage.

AGDC officials discussed the matter in briefings on the Alaska LNG Project before legislative committees in Juneau.

The idea is at an early stage. "We haven't signed a confidentiality agreement yet," said Frank Richards, AGDC's engineering vice president, in a Jan. 23 Senate Resources Committee hearing.

AGDC also disclosed other moves toward expansion including the opening of an office in

Houston, Texas, along with one in Tokyo, which was announced earlier in January. The Houston office will cost AGDC about \$1 million a year to operate, AGDC told lawmakers.

State Sen. Cathy Giessel, chair of the Senate committee, expressed concern that the Houston expansion was not discussed in a public session by AGDC's board.

"The last board meeting was open for 20 minutes," she said.

see LNG FACILITY page 15

PIPELINES & DOWNSTREAM

A major transition

Alyeska moves ahead with switch over to Edison Chouest marine services

By ALAN BAILEY
Petroleum News

Day said that he anticipates that, in parallel with the shipbuilding program, at some time in the next few months Edison Chouest will actively begin its process to recruit the people it needs to operate the new marine services.

Alyeska Pipeline Service Co., the operator of the trans-Alaska pipeline and the Valdez Marine Terminal, where North Slope oil is loaded onto tankers for shipment to market, is engaged in a switch of its marine services fleet to a new contractor. Having put the marine support contract out to bid, Alyeska announced in August 2016 that it had selected Edison Chouest Offshore to take over the support services that Crowley Marine Corp. has provided for several decades. The new contract goes into effect in July 2018.

During a board meeting of the Prince William Sound Regional Citizens' Advisory Council on

Jan. 19, Mike Day, Alyeska marine services transition manager, described the marine transition project and its current status.

The marine services

The marine services, managed by Alyeska's Edison Chouest Offshore, will provide support for the trans-Alaska pipeline. The services will be provided by Edison Chouest Offshore, a subsidiary of Edison Chouest Offshore.

see MARINE SERVICES page 14

PIPELINES & DOWNSTREAM

Trump spurs pipelines

Gives OK to Keystone XL, Dakota Access, citing jobs; faces immediate backlash

By GARY PARK
For Petroleum News



DONALD TRUMP

President Donald Trump signed two executive orders Jan. 24 that could pave the way for completion of the Keystone XL and Dakota Access pipelines, putting himself squarely in the conflict zone of the fossil-fuel war.

He said the orders would create 28,000 "great construction jobs" in the United States (Canada expects to create 4,500 jobs from its section of the pipeline), but he injected a cautionary note by subjecting both projects "to terms and conditions to be negotiated by us."

Those conditions, which must be met to obtain

a Presidential Permit for Keystone, are vague beyond Trump's insistence that he wants better terms from TransCanada to ensure U.S. interests are fully met, including exclusive U.S. manufacturing of the pipeline, of which a large percentage has already been delivered.

In addition, TransCanada must also receive a permit from Nebraska for the route to carry 830,000 barrels per day of Alberta oil sands crude to the Texas Gulf Coast, a process that could take up to a year.

Trump invited TransCanada to "promptly resubmit its application to the Department of State" to overthrow the rejection of the pipeline in

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GOVERNMENT

Giessel: AKLNG update enlightening

Anchorage Republican buoyed by BP-AGDC agreements, but remains concerned over transparency she says still lacking from AGDC

By **STEVE QUINN**
For Petroleum News

Sen. Cathy Giessel began her third term as the Senate Resources co-chair with her typical heavy lifting by getting an update on the AKLNG project, which is designed to market North Slope natural gas. The Anchorage Republican's first hearing, she says, came with some good news, some alarming news and new questions for the administration. She shared her thoughts with Petroleum News after the committee's first hearing Jan. 23.

Petroleum News: What are your objectives and goals for this session?

Giessel: Broadly, number one, my goal for the committee is we do whatever we can to increase oil production for the state. That's the source of our lifeblood — revenue — and that's what we need most, increased production. Just as we saw 3 percent increase production this last calendar year, that's what we would like to continue to facilitate.

Petroleum News: As much talk as there has been for natural gas, be it SB 138 and quarterly updates since then, do you think people forget that oil is still where the money is?

Giessel: Well, I'm not sure that they forget about it so much as take it for granted. Even though we are in a challenging time in terms of our budget, it feels like people still think oil is going to pay the bills and we need to tax them more. The fact of the matter is we can actually destroy that industry by taxing them more.

There is also a false message out there about what gas sales will bring to the state. Gas does not have nearly the value as oil. The main value we looked at with the passage of SB 138 was gas for Alaskans. We knew that bullet line just was not going to pencil out. Our demand in-state is just too small. It had to be a project that would monetize the gas globally but always that main emphasis was gas for Alaskans first. That seems to be left behind.

Petroleum News: You've got three new committee members. One is new to the Senate (Shelly Hughes); one is new to the Legislature (Natasha von Imhof) and someone who is not new to the Legislature but by his own admission is coming up to speed (Kevin Meyer). How do you integrate these three with the rest of the group — Bill Wielechowski, John Coghill, Bert Stedman — who have more experience?

Giessel: First of all, Sen. Meyer, he actually is more up to date than he thinks he is. He asked great questions today. They are the kinds of questions that Alaskans are asking also. Sen. Hughes, same thing, she was here to vote on SB 138. She's heard this information before. This is refreshing it for her. Sen. von Imhof, she is a very intelligent, hard working woman. She has been meeting with DNR commissioners, the Department of Revenue, and I've been meeting with her as well. She is coming up to speed. I'm confident she is going to step up. Remember, this was her first meeting. She has also attended one of our summer updates. So she has more information in her back pocket

than perhaps you saw exemplified today. But it will come out.

Petroleum News: So it's your first hearing and you're digging in right away with an AKLNG update ...

Giessel: As we always have ...

Petroleum News: What were some of your takeaways?

Giessel: I was very encouraged by BP's announcement of entering an agreement with AGDC today. A couple of reasons for that: No. 1, I'm pleased that AGDC is willing to accept help. That says to me they realize that they need help; no. 2, I appreciate BP's willingness to frankly spend a bit more on the project. They are committing personnel and personnel represent a cost. They are the most valuable asset any company has.

So I'm grateful for that. At the same time, it's not eluding me the fact that this is a self-interest by BP. They want to monetize their gas. The more they can help this come to fruition helps them. Plus, they then have that inside information. So I get that and that's a reasonable tradeoff.

Petroleum News: Getting back to some of the analyses that you've heard, would you rather be in a slowed down pre-FEED than where we are now?

Giessel: I would rather have taken the option that the producers suggested and that was spend more time in pre-FEED, keep the partnership together with the four entities, make sure we keep the cost of supply down utilizing those industry experts, and when we all felt the market had recovered enough, then move forward.

Petroleum News: Speaking of industry experts, what was your takeaway from analytica's recent report on the project?

Giessel: This report is really enumerating the concerns the state Legislature has. We don't know what the plan is. We don't see that the market has gotten any better. Frankly, we've been kept in the dark in terms of what is going on with the state side. Really, then the analytica report is summarizing what we know and that is: Be careful.

Petroleum News: You noted something that speaks to transparency or at least not knowing what's going on. Sen. Meyer also noted transparency in the hearing. Do you feel like you're seeing more transparency and would you like to see another bill pushed through to get some lawmakers on the AGDC board?

Giessel: First of all no, we don't see more transparency. I was shocked to get (AGDC's) power point presentation last night at 5:30 and go to near the end of the presentation and find five staff people in the Houston office and a couple of days prior finding out there was a Tokyo office. What?

I go to these board meetings. None of this was discussed in public session or even intimated at other than we are going into executive session to discuss



CATHY GIESEL

infrastructure acquisition. We had heard they were looking at doing that (staffing Houston office). In fact, the board meeting included discussion on hiring Mr. (Keith) Meyer's daughter to run the place. I didn't know that it had been fully implemented with five staff people. That's news.

It raised my question about the ConocoPhillips export facility (whether AGDC is pursuing a purchase) but all of that was a surprise to me. Now that we are in session, we can certainly demand more information and we will be doing that. We will have another update before we leave Juneau and in the summer.

So more transparency: We would love to have more transparency. I don't know that we've had it.

Petroleum News: So should you try again to get another member of the House and Senate on the board? As you mentioned, last year's effort was vetoed by the governor.

Giessel: I think that's pretty fruitless. The governor is not willing to do that apparently. You know many of us have signed the confidentiality agreements when SB 138 passed. They are not being honored, either — to allow us to see any confidential information. AGDC is refusing. The partner companies have been agreeing, but ADGC declined.

Petroleum News: So you've got the office in Houston, which you knew was on the horizon, just not to the extent you learned in the hearing, and you've got the Japan office, which you said caught you off guard. What was your reaction?

Giessel: Well, I was very alarmed. We know DNR is the entity — constitutionally — to guard those molecules and get

QA

the greatest return for Alaskans. Now we have somebody in Japan promoting our project? Really, what is he telling people? How could companies in Japan be interested in our project if they have no idea what the cost of supply is? So, yeah it's alarming. We don't know what's being told to buyers over there.

The other question I ask is are we only focused on Japan? China, we know is going to increase its demand for LNG. Are we going to allow them to simply have Russia as their supplier or are we going to try to get into that market? It seems pretty narrow to be only focused on Japan.

Petroleum News: Well, one of the staff in Houston apparently speaks Chinese, so maybe there are targeting that region.

Giessel: That's a good thing, but we haven't heard AGDC talk about going to

see **GIESEL Q&A** page 13

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● PIPELINES & DOWNSTREAM

A marine terminal containment headache

Damage to the membrane for containing oil from a storage tank spill at the Valdez Marine Terminal raises concerns and questions

By **ALAN BAILEY**
Petroleum News

The 14 large crude oil storage tanks in the east tank farm at the Valdez Marine Terminal sit in basin-like enclosures lined with impervious material, designed as secondary oil containment, should a tank develop a leak. The idea is to hold any spilled oil for a sufficient time to enable responders to remove the oil without the oil contaminating the groundwater under the farm.

But evidence has emerged that the liner along the base of the secondary containment area is damaged, thus raising questions over whether the secondary containment can any longer meet the required specifications for holding back spilled oil.

The marine terminal accepts oil from the trans-Alaska oil pipeline and loads the oil onto tankers in Port Valdez. The oil tanks provide buffer storage, to enable the efficient loading of oil into the tankers.

Austin Love, a project manager with

The issues relating to the liner came to light in the course of carrying out a successful project to refurbish the system of pipe work used to drain rainwater and snow melt from the secondary containment enclosures.

the Prince William Sound Regional Citizens' Advisory Council, talked about the issue during a Jan. 19 meeting of the PWSRCAC board. Love explained that the membrane, composed of a material called catalytically blown asphalt, or CBA, had originally been installed at the terminal in 1977.

Importance of liner integrity

The integrity of the liner matters, not just because of the protection it provides to the environment, but also because of the economics of oil spill contingency arrangements at the marine terminal, Love explained. State and federal regula-

tions spell out the permeability requirements for the liner. And the state allows Alyeska Pipeline Service Co., the terminal operator, to reduce the oil volume specified in the terminal's spill response requirements by more than half, on the assumption that the tank secondary containment meets the regulatory standards and would, therefore, be effective. Any increase to the response requirement as a consequence of the secondary containment being inadequate would require a corresponding increase to the equipment and people that would need to be available to respond to an oil spill, Love said.

The issues relating to the liner came to light in the course of carrying out a successful project to refurbish the system of pipe work used to drain rainwater and snow melt from the secondary containment enclosures. Normally, the CBA liner is invisible, being covered by several feet of gravel designed to protect the liner from damage from any heavy equipment operating around the tanks. But renovating the drainage system involved removing some of the gravel, thus exposing some sections of the liner, Love said.

And the uncovering of the liner revealed a couple of problems: a network of cracks permeating one section of the liner, and holes in the liner that appeared more widespread.

Liner cracking

The problem with cracks, some of which were superficial but some of which went right through the liner, impacted an area of 5,000 to 6,000 square feet. Beyond that area, no cracking was evident, and Alyeska remedied the problem by installing a sheet of modern impermeable material over the damaged area of the liner. But, although the cracking appears to only impact that one area and no evidence for cracking has been found elsewhere, the reason for the cracking remains an enigma. Scott Hicks, Valdez Marine Terminal manager, told the PWSRCAC board that there must be something particular to the liner in the region of the cracking, perhaps a spill of diesel fuel at some time in the past, or perhaps a bad batch of the CBA material. Alyeska is still conducting rigorous testing of the damaged material and anticipates results from the testing in March, Hicks said.

Liner holes

The problem of holes in the liner was found at each place where the liner was exposed for the pipe work repair work, Love said. The holes range from 5 inches in diameter to an opening as big as 20 inches by 60 inches. In one example, a rock had pushed up through a hole, although a permeability test indicated that the rock had, in fact, retained the permeability of the liner to within regulatory requirements. In one area some holes had become filled with bentonite clay and it was not clear whether those holes would leak oil, Love said.

The pipe work renovation project continues and, with it, more examinations and tests of the CBA liner. Test results from 2016 have yet to appear.

The CBA material is an obsolete technology, now replaced by more advanced materials. However, having found the liner problem, Alyeska tested some undamaged CPA material, finding that the material still comes within the regulatory standards for permeability and durability, Love said.

A challenge to fix

Finding a way of fixing the liner presents something of a headache for Alyeska, given the huge area that the liner covers and the fact that it is buried under several feet of gravel. Each cell of the containment system is 4.5 to 5 acres in extent, and each storage tank has a footprint of about an acre, Hicks said.

Amanda Bauer, PWSRCAC president, commented that it was necessary to be reasonable in figuring out what to do and that people want the terminal to remain viable in years to come. Perhaps there is some interim fix, such as shortening the tank internal inspection intervals, she suggested. However, the secondary containment system does not appear to meet regulatory requirements and there needs to be some recognition that there probably is a problem, she said.

Donna Schantz, executive director of PWSRCAC, commented that the secondary containment issue is a top priority in PWSRCAC's long term plan. ●

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GOVERNMENT

Coast Guard, BSEE form new agreements

The U.S. Coast Guard and the Bureau of Safety and Environmental Enforcement have signed four revised memorandums of agreement for collaboration over the regulation of the energy industry on the U.S. outer continental shelf, BSEE announced Jan. 10. Both the Coast Guard and BSEE perform regulatory roles on the outer continental shelf and in 2012 the two agencies signed a memorandum of understanding aimed at coordinating their responsibilities.

The revised agreements, which come as a result of that earlier MOU, consist of an MOA for civil penalties; an MOA for oil discharge planning, preparedness and response; an MOA for incident notifications and investigations; and an MOA for safety and environmental management systems and for safety management systems.

The idea is to improve collaboration, clarify responsibilities and streamline information sharing by leveraging each agency's authorities and areas of expertise, BSEE said. The agreements address best practices for managing civil penalties, incident investigations, management systems and oil discharge preparedness.

For example, the agreement relating to oil discharges spells out which agency takes a lead position in the various functions involved in oil spill planning, preparedness and response for various types of offshore facility.

—ALAN BAILEY

● GOVERNMENT

New state, federal moves to open ANWR

By **KRISTEN NELSON**
Petroleum News

With a new administration in Washington, D.C., and a new Legislature in Juneau come renewed efforts to get the 1002 area of the Arctic National Wildlife Refuge open for drilling.

Alaska's U.S. Sens. Lisa Murkowski and Dan Sullivan, both Republicans, introduced legislation early in the year to allow limited oil and natural gas development within the non-wilderness portion of ANWR.

Resolutions have been introduced in the Alaska Legislature supporting the opening of ANWR, one of Rep. Dave Talerico, R-Healy, and one by Rep. Dean Westlake, D-Barrow.

Congressman Don Young, R-Alaska, has introduced a bill in the House to allow drilling in the 1002 area of ANWR.

S. 49, the Alaska Oil and Gas Production Act, would allow development of no more than 2,000 surface acres in the 1.5 million acre 1002 area of ANWR, which overall includes 19 million acres.

In a release on their legislation, Murkowski and Sullivan noted that the U.S. Geological Survey estimates the 1002 area as having an estimated 10.4 billion barrels of oil and 8.6 trillion cubic feet of natural gas, with a rea-

Both resolutions encourage Congress to open the 1002 area of ANWR for drilling while protecting local residents and the wildlife, with the Porcupine Caribou herd specifically named.

sonable chance of economically producing 16 billion barrels of oil. The lead time for development would be as much as 10 years, with the Energy Information Administration projecting that in 2027 the U.S. would still import 6.94 million barrels per day.

Murkowski noted that Alaskans have proved for nearly 40 years that natural resources can be developed responsibly, while protecting the environment.

"Alaskans overwhelmingly support responsible development in the non-wilderness portion of ANWR and there is no valid reason why we should not be allowed to proceed," she said.

Sullivan said Alaskans "of all political stripes" have been pleading with the federal government for decades to develop the state's resources, "including the small 1002 area of ANWR." The denial, he said, is "shameful."

"Development of this area would be a boost to our state and national economies, providing thousands of good-paying jobs and billions of dollars in federal and

state revenue," Sullivan said.

Alaska Gov. Bill Walker applauded the senators for introducing the legislation and said, "The state will do everything it can to provide the infrastructure needed to responsibly access the 1002 section of ANWR."

There will be opposition — as there has been whenever 1002 area drilling is proposed.

Cindy Shogan, executive director of the Alaska Wilderness League, said in a statement that the organization "will fight any and all attempts to drill in the Arctic National Wildlife Refuge," saying ANWR "is owned by all Americans and is one of our nation's most treasured places."

House Joint Resolution 5, by Westlake, chair of the House Special Committee on Arctic Policy, Economic Development and Tourism, had its first hearing, in that committee, Jan. 24. HJR 4, by Talerico, who serves on the special committee, was also assigned to that committee but the committee had not yet scheduled it when Petroleum News went to press.

Both resolutions encourage Congress to open the 1002 area of ANWR for drilling while protecting local residents and the wildlife, with the Porcupine Caribou herd specifically named. ●

Contact Kristen Nelson at knelson@petroleumnews.com

● PIPELINES & DOWNSTREAM

Alyeska working to add heat to crude oil

Cold winter weather in Interior Alaska compounds challenges of keeping smaller, slower moving volumes of oil moving through TAPS

By **TIM BRADNER**
For Petroleum News

In Interior Alaska is having one of its coldest winters in years and Alyeska Pipeline Service Co. is adding all the heat it can to crude oil flowing through the Trans Alaska Pipeline System.

Temperatures recently dropped to minus 50 and minus 60 Fahrenheit at some points in Interior Alaska, which the 800-mile pipeline crosses in moving oil from the North Slope to the TAPS marine terminal at Valdez.

"We're adding all the heat we can," Alyeska President Admiral Thomas Barrett said.

Alyeska spokeswoman Michelle Egan said the problem is exacerbated by the low volumes of oil moving through the pipeline. TAPS was built to handle 2 million barrels per day but is now moving just over 500,000 bpd. The lower flow means oil takes much longer to travel 800 miles to Valdez, and is more exposed to cold weather in winter.

Oil recirculated

Heat is being added this winter by recirculating crude oil at TAPS Pump Stations 3 and 4 on the North Slope as well as stations 7 and 9 in the Interior, Egan said, with additional heat added with mobile heating units installed at a remote gate valve, RGV 65, and at a closed pump station, Pump Station 8, which is near Fairbanks in the Interior. In recirculating, Alyeska re-pumps oil through loops so that the friction adds heat.

Alyeska's challenge is to keep the oil warm enough as it moves through spots of the Alaska Interior where there is intense cold, such as low points in river valleys, Alyeska has said in the past.

Crude oil won't start to jell until it is

below 32 degrees Fahrenheit, the freezing point for water, but at that temperature ice can also form in the line as water drops out of the crude oil, causing problems. Also, wax accumulations cause other issues.

Alyeska's goal is to keep the temperature well above freezing so there is a margin of safety in case an operations problem requires a temporary shutdown. This happened a few years ago in mid-winter and at the time Alyeska was very concerned about getting the pipeline restarted. It was able to do that, but the winter conditions were mild that year. This winter has been different. Temperatures were measured on day at minus 58 degrees Fahrenheit at Pump Station 5, Egan said.

Oil starts at 105-110 degrees

Crude oil is now entering TAPS at Pump Station 1, at Prudhoe Bay, at about 105 to 110 degrees Fahrenheit, but the temperature drops rapidly as the oil moves south through sections of the pipeline that are built aboveground.

Egan said that on one recent cold day the temperature dropped to 57 degrees F by the time oil had travelled 100 miles to Pump Station 3, in the southern North Slope. At that point, recirculation added 13 degrees of heat back into the crude, she said.

Similar steps are taken as the crude moves south and cools, and is then reheated. "We're using all the methods we have to maintain temperatures," Egan said.

Barrett said a major concern for Alyeska is the potential for an operational problem with the remote heating systems that would require the pipeline company to put people into the field in very cold weather. ●

Contact Tim Bradner at timbradner@gmail.com

ENVIRONMENT & SAFETY

EPA proposes Fairbanks air quality action

The Environmental Protection Agency is proposing to accept the Alaska Department of Environmental Conservation's air quality plan, addressing winter air quality issues in the city of Fairbanks. However, EPA also accepts that the state plan will not succeed in reducing the pollution to levels acceptable under the Clean Air Act. The agency's new proposal results from a complaint by environmental organization Earthjustice that EPA had failed to act in dealing with Fairbanks pollution.

EPA is also now considering reclassifying Fairbanks' air quality status from moderate to serious, a reclassification that would require the implementation of "best available" rather than "reasonably available" emission control technologies. The agency has given the state until Dec. 31, 2017, to submit a serious air quality plan.

The Fairbanks air pollution largely emanates from the use of wood burning stoves for the heating of buildings during the winter. In cold winter weather, thermal inversions tend to trap the smoke from the stoves near the ground, thus giving rise to high concentrations of particulates in the air. EPA says that the Fairbanks area has recorded the highest levels of particulate pollution in the United States. The pollution has serious health ramifications.

The DEC air quality plan places restrictions on the use of wood burning stoves when air quality advisories are in effect. EPA says that the plan does show that the state has implemented all reasonable pollution control measures.


People in the Fairbanks area are motivated to burn wood for heating because of the relatively high cost of alternative fuels in the region. The Interior Energy Project, a project being managed by the Alaska Industrial Development and Export Authority, is trying to organize an affordable natural gas supply for the city, in part to address the air quality problem.

The Fairbanks air pollution largely emanates from the use of wood burning stoves for the heating of buildings during the winter.


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GOVERNMENT

Trump's talk of taking oil sparks questions

By VIVIAN SALAMA

Associated Press

No one knows how seriously to take President Donald Trump's threat to seize Iraq's oil.

Doing so would involve extraordinary costs and risk confrontation with America's best ground partner against the Islamic State group, but the president told the CIA Jan. 21, "Maybe you'll have another chance."

The recycled campaign comment is raising concerns about Trump's understanding of the delicate Middle East politics involved in the U.S.-led effort against extremist groups. Trump has said he was opposed to the 2003 invasion that toppled Saddam Hussein's dictatorship. But on the campaign trail and again Jan. 21, the day after his inauguration, he suggested the costly and deadly occupation of the country might have been offset somewhat if the United States had taken the country's rich petroleum reserves.

"To the victor belong the spoils," Trump told members of the intelligence community, saying he first argued this case for "economic reasons." He said it made sense as a counterterrorism approach to defeating the IS group "because that's where they made their money in the first place."

"So we should have kept the oil," he said. "But, OK, maybe you'll have another chance."

Precedent ignored

The statement ignores the precedent of hundreds of years of American history and presidents who have tended to pour money and aid back into countries the United States has fought in major wars. The U.S. still has troops in Germany and Japan, with the permission of those nations, but did not take possession of their natural resources. And taking Iraq's reserves, the world's fifth largest, would require an immense investment of resources and manpower in a country that the United States couldn't quell after spending more than \$2 trillion and

deploying at one point more than 170,000 troops.

U.S. enemies and friends would oppose the move. While Iraqi Prime Minister Haider al-Abadi has accepted U.S. help to retake IS-held territory in his country, he has repeatedly asserted Iraqi sovereignty. He said of Trump's oil vow in November, "I am going to judge him by what he does later."

Asked about the matter Jan. 23, White House press secretary Sean Spicer stressed Trump's economic argument.

"We want to be sure our interests are protected," he told reporters. "We're going into a country for a cause. He wants to be sure America is getting something out of it for the commitment and sacrifice it is making."

Source of idea?

There is uncertainty as to where Trump's idea derives from, though the president has noted that taking the oil is something "I have long said." Hints of this notion existed

in some of the pre-2003 rhetoric from the Bush administration about the Iraq war "paying for itself." But top advisers to President George W. Bush have stressed how the future of Iraq's resources were pointedly left out of decision-making related to the invasion so as not to fuel a perception that the war was driven by oil concerns.

Bush "almost bent over backwards not to make a special effort to gain access for us to the oil resources," John Negroponte, who was Bush's director of national intelligence, told CNN.

Regarding Trump, former CIA Director and Defense Secretary Robert Gates told NBC, "I have no clue what he's talking about."

Permanent US occupation

Taking the oil would require a permanent U.S. occupation, or at least until Iraq's 140 billion barrels of crude run out, and a large presence of American soldiers to guard sometimes isolated oil fields and infrastructure. Such a mission would be highly unpopular with Iraqis, whose hearts and minds the U.S. is still trying to win to defeat groups such as IS and al-Qaida.

"This is totally wrong," said Zaher Aziz, a 42-year-old owner of a market stand in Irbil. "They came here by themselves and occupied Iraq. And now they want the Iraqis to pay for that?"

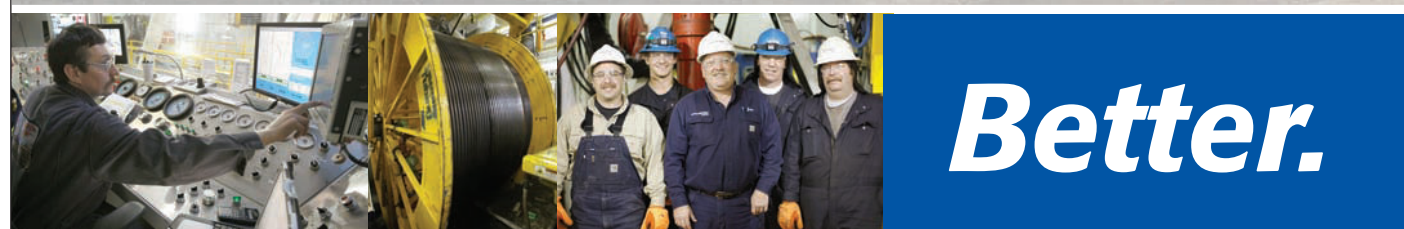
However unrealistic Trump's suggestion, intelligence officials believe more has to be done to cut off Islamic State oil revenues. The group seized significant oil when it stormed across Syria's border in 2014 and seized the city of Mosul and large swaths of Iraqi territory. The Treasury Department estimated that IS raked in \$500 million from oil and gas sales in 2015. That figure is likely lower now as a result of U.S.-led operations, but officials say oil continues to fund the group's recruitment and far-flung terrorist activities.

"In terms of oil helping establish ISIS, of course that's oversimplification," said Hassan Hassan, co-author of the book "ISIS: Inside the Army of Terror," using an alternate acronym from the militants. He said oil was a small part of the group's "origins and early years," when it morphed from an al-Qaida branch to an organization claiming a worldwide caliphate. ●



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NEWS NUGGETS

Compiled by Shane Lasley



GRAPHITE ONE RESOURCES INC.

Distinctive characteristics of the graphite contained in the Graphite Creek deposit in western Alaska makes it particularly well suited for the manufacture of coated spherical graphite, the primary material for the anodes of lithium-ion batteries used in electric vehicles and hand-held electronics.

Graphite One PEA details robust return for western Alaska project

Graphite One Resources Inc. Jan. 25 published the results of a preliminary economic assessment, or PEA, for the development of its Graphite One project in western Alaska. Formerly referred to as Graphite Creek, the project is conceived as a vertically integrated manufacturer of high grade coated spherical graphite with mining and processing facilities near Nome and an advanced material processing facility outside of Alaska. Due to its maritime links to Alaska, low-cost power and proximity to markets, Washington is being considered as a potential site for this facility. The PEA, prepared by Toronto-based TRU Group, envisions the Graphite One project producing 55,350 metric tons of coated spherical graphite and other specialty graphite materials by the sixth year of operation, when full production is scheduled to be achieved. Coated spherical graphite is the primary material for the anodes of lithium-ion batteries used in electric vehicles and hand-held electronics.

The graphite project outlined in the PEA is expected to have a net present value of US\$1.037 billion, using a 10 percent discount rate, and an internal rate of return of 27 percent. This is anticipated to generate cash earnings of US\$182 million per year on sales of US\$280 million once full scale operations are achieved. A minimum of 40 years of indicated and inferred resources grading 7 percent graphite have been identified in the target exploitation zone to sustain full scale operations, notwithstanding additional potential resources immediately outside the target zone or the broader Graphite Creek property. "This PEA shows the strong potential of our project as America's emerging producer of lithium ion battery-grade coated spherical graphite," said Graphite One CEO Anthony Huston. "With the prospect of a low-cost, 40-year mine life using half of the identified graphite mineral resources, and given our projected production costs and conservative pricing assumptions, we are confident that Graphite One has the potential to become a reliable provider of graphite materials critical to clean-tech, high-tech and national security applications." Pending a detailed graphite market study, the PEA has opted for a conservative selling price of US\$6,200 per metric ton of coated spherical graphite and an average selling price of US\$1,500 per metric ton of purified graphite powders. Coated spherical graphite is expected to dominate output, accounting for 75 percent of sales volume and 93 percent of sales revenue. "The robust financials for vertically-integrated production of CSG at the projected unit pricing of US\$6,200 per (metric ton) merits that the project proceed to a feasibility study to maintain an accelerated project schedule that would coincide with projected market

see NEWS NUGGETS page 10



COEUR MINING INC.

After 20 years of permitting and litigation, Coeur Mining's Kensington gold project in Southeast Alaska was granted permits for development after a 2009 U.S. Supreme Court ruling in favor of Coeur and its plan to develop the underground mine. SNL Metals & Mining calculates the costs to develop Kensington, swelled by 49 percent for a mine one-third the size originally proposed over two decades of permitting.

MINING POLICY

Mining policy trifecta

NMA hopeful Trump, Congress, voter priorities translate to permit reform

By SHANE LASLEY

Mining News

After eight years of increasing federal regulations, United States miners are encouraged that President Donald Trump, Congress and the American people have formed a trifecta that will support policies aimed at streamline permitting and encourage growth in the mining sector.

A poll conducted for NMA earlier this month indicates that the U.S. mining sector and the American populace at large have similar priorities for the Trump administration and 115th Congress.

"When they cast their ballots in November, Americans were clear about their priorities, job creation and the economy being chief among them," said National Mining Association President and CEO Hal Quinn. "The mining industry shares these priorities."

Of the 1,991 registered voters polled, 33 percent listed jobs and economy as the highest priority for the Trump administration and Congress. Healthcare (26 percent), national security (24 percent), infrastructure (6 percent) and energy policy (4 percent) rounded out the list of top issues for the voters.

NMA is hopeful that this prioritization on economic growth will translate into policies that could help new mines come online sooner in the United States.



HAL QUINN



DONALD TRUMP

"Fortunately, there are actions the Trump administration and new Congress can take on day one to save jobs in our industry and address voter concerns," Quinn said.

Out of control

While Trump may have not directly addressed mining regulations on day one, he did make it abundantly clear that he intends to eliminate unnecessary environmental regulations in the United States.

During his first formal day in the Oval Office, Trump told a gathering of corporate leaders that the his administration can cut regulations hampering businesses in the United States by at least 75 percent while still protecting the environment.

"We're going to have regulation, and it'll be just as strong and just as good and just as protective of the people as the regulation we have right now. The problem with the regulation that we have right now is that you can't do anything," he explained.

He delivered a similar message to automobile executives the next day.

"Our friends that want to build in the United States, they go many, many years and then they can't get the environmental permit over something that nobody ever heard of before. And it's absolutely crazy," He told the automobile sector leaders, "I am, to a large extent, an environmentalist - I believe in it, but it's out of control."

Quinn said the notoriously long process to gain environmental permits to open a mine "places the U.S. at a competitive disadvantage and forces us to increasingly rely on foreign producers for minerals we can produce domestically."

Miners agree

While Trump's promise to roll back regulations

see MINING POLICY page 10

NORTHERN NEIGHBORS

Compiled by Shane Lasley



TERRAX MINERALS INC.

TerraX Minerals geologists have been prospecting the surface of the Southbelt property over the past several years, 2017, however, marks the first year the company will carry out a major drill program at this southern part of its Yellowknife City Gold project in Northwest Territories.

TerraX set for first drilling at Southbelt

TerraX Minerals Inc. Jan. 24 said it has received the permits needed to drill Southbelt, one of two large land packages that make up its Yellowknife City Gold project. With permits approved, the company plans to begin drilling this highly prospective property around the end of February. Southbelt is about five kilometers (three miles) south of the city of Yellowknife and extends from the mine leases of the historic Con Mine, where more than 6 million ounces of gold was produced during a 60 year mine life. TerraX says extensions of several mineralized trends previously mined at Con extend onto the Southbelt property, including the namesake Con Shear, which appears to extend up to five kilometers (three miles) onto Southbelt. Other structures have been traced on surface for about 1,000 meters onto the Southbelt property. Sampling of these structures in 2015 returned up to 94.9 grams per metric ton gold and grab samples collected in 2016 returned 33.6 g/t and 16.4 g/t gold. TerraX plans to target these structures with 10,000 meters of drilling in 2016. "The Southbelt target contains multiple high-grade gold occurrences with very high potential for discovery," said TerraX CEO Joseph Campbell. In recent years, TerraX has focused its drilling on Northbelt, a second large Yellowknife Gold property that extends north from the capital of Northwest Territories. The company says the six veins and shear zones it has discovered along a 10-kilometer-long (six miles) core area of Northbelt – Mispickel, Sam Otto, Barney, Herbert-Brent, 20 Shear and Crestaurum – are indicative of a larger mineralized system on the property. TerraX will continue drilling at Northbelt with a planned 7,000-

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OPINION

Irony abounds at confirmation hearing

After committee's gentle treatment, quick approval of Trump's candidate for Interior Department's top job appears imminent

By J. P. TANGEN

Special to Mining News

Montana's lone Congressman, Rep. Ryan Zinke, R-Mont., who is President Trump's nominee to be the next Secretary of the Interior, was sautéed (fried quickly in hot oil) for four hours on Jan. 17 by the U. S. Senate Energy and Natural Resources Committee. Zinke, a former U. S. Navy Seal Commander, was introduced by Montana's two senators, one a Republican and the other a Democrat, who took pains to emphasize that the nominee was a fine fellow, a great hero and a consummate fighter, who would be an excellent Secretary.

During Zinke's opening comments and subsequent interrogation, he emphasized several points which are bound to endear him to the committee and ensure his easy confirmation by the full Senate. In scoring his hearing, it can be said that he scored no pop flies, no home runs, a few singles and a lot of walks.

It was very important to Sens. Sanders, D-Vt., and Franken, D-Minn., that Rep. Zinke did not believe that global warming was a hoax. Sens. Duckworth, D-Ill., Stabenow, D-Mich., and Hirono, D-Hawaii, all are very anxious to get his commitment that he would address the ongoing problem of sexual harassment within the National Park Service. He promised "zero tolerance."

As a hunter, he assured the committee that he would be protective and supportive of the Land and Water Conservation Fund. He expressed extreme frustration about the risk that public lands might be closed to fishing and hunting. This, in no small part, was a nod to Sen. King, I-Maine, whose constituents fear being barred from harvesting clams in Maine's Acadia National Park.

As a veteran, Mr. Zinke acknowledged several times his awareness that bureaucracy can be frustrating and suggested that the Navy model of deciding centrally and executing locally was a better way of getting to the right result. He pointed out that the government employees who are charged with making things work must live with the people who are confronted with the result, and that outcomes can be a win-win for everyone, if decisions are made collaboratively.

As an adopted Assiniboine, Rep. Zinke exhibited a depth of knowledge about Native American issues and especially the Bureau of Indian Affairs' problems with education and Native health care. He said repeatedly that tribal sovereignty should mean something and that treaty obligations should be honored.

When it came to the occasional fast ball that was thrown his way, such as whether the establishment of National Monuments by one president could be revoked by another, he deferred to the courts. On the question of water rights throughout the west, he said he was committed to ensuring that disputes are resolved fairly. When it came to the wild horses and burros crisis, he was quite clear in his opposition to letting the critters starve.

As for questions from Committee Chairman Lisa Murkowski, R-Alaska, who laid out the full panoply of Alaska issues

Mining & the law

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J.P. TANGEN

for the record, Mr. Zinke was quite gracious, acknowledging that Alaska is different.

The most controversial position that the designee announced was his opposition to the devolution of federal lands to the states, except perhaps in the case of Alaska where the State, the Native community and some veterans still had unfulfilled entitlements. Apparently he is unaware that the location of federal mining claims is perhaps the last vestige of the erstwhile commitment of the United States to develop acquired land. In a word, although he has no conceptual problem with delegating some land management functions to local federal employees, in his view, there should be no transfer of title to third parties or even the host states.

Mr. Zinke spoke of oil and gas gingerly and was not challenged on his views. He acknowledged the existence of mining on federal lands pretty much as an "outsider" to the topic. If the designee has any appreciation of the role that metal mining occupies in the economy of the United States, he didn't disclose it. If he has any commitment to federalism, he kept it close to his chest. If he has any sense as to the antipathy that many Alaskans feel toward the petty tyrants posing as federal land managers, he barely mentioned it. To his credit, he did suggest that Smoky Bear should be loved and not feared, but that light-hearted metaphor was not central to his case for confirmation.

Congressman Zinke appears to lack depth on Alaska issues, especially vis-à-vis the perceived arrogance of the Beltway. He has pledged to visit virtually every place in the world that the department has an interest, even Alaska. We can only hope and pray that when he does, he will take the time to learn about our state, visit a few of our mines, meet with those who recover gold and copper and zinc and coal here and perhaps come to realize that his agency's producer-tenants are contributing substantially to the security and the economy of the nation.

Upon confirmation, Zinke will take his place in a long line of westerners who have led the "Department of Everything Else" down a poorly marked trail into the misty gloom. Someone should mention to him that being the landlord of roughly 30 percent of the nation's land, one fifth of which is in Alaska, will not be just a walk in the park. We sincerely wish the secretary designate well; we hope for the best, but candidly, until we get to know him a little better, we must fear the worst. ●

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NORTHERN NEIGHBORS

meter program in 2017.

IDM adds gold to Red Mountain ahead of FS

IDM Mining Ltd. Jan. 23 posted an updated resource estimate for its Red Mountain project in northwestern British Columbia that includes the results from 2016 drilling that expanded mineralization at this gold-silver project a few miles northeast of Stewart. Red Mountain now hosts 2.07 million metric tons of measured and indicated resource averaging 8.75 grams per metric ton (583,700 ounces) gold and 25 g/t (1.66 million oz) silver. This marks a 32 percent increase in gold compared to a resource calculated last April. IDM President and CEO Rob McLeod said, "Future underground drilling from the production-sized decline will continue to step-out in all directions, including targeting the northern extension of the mineralized trend, which can be traced a further 800 meters to the north of the current resources." IDM said the updated resource has been provided to the Red Mountain feasibility study team, which is being led JDS Energy and Mining, to be incorporated into a revised and expanded mine design. The feasibility study is slated for completion this spring.

Commander claims Rebel zinc prospect

Commander Resources Ltd. Jan. 23 said it has staked claims covering the Rebel zinc-lead prospect in northeastern British Columbia. The 1,620-hectare (4,000 acres) Rebel property is at the southern end of the Kechika Trough and about 50 kilometers (30 miles) south of Canada Zinc Metals Corp.'s Akie project. Rebel was first identified in 1979 when prospectors discovered a 40-meter horizon of massive pyrite beds and black shale with anomalous concentrations of zinc, lead, barite and silver. Commander interprets the massive sulfide horizon as a distal expression of a sedimentary exhalative zinc-lead deposit. Soil sampling indicates potential extensions to the main horizon, which remains undrilled. Commander will undertake a program of additional soil and rock sampling in 2017.

BHP gets out of Storm; Aston Bay looks ahead

Aston Bay Holdings Ltd. Jan. 20 announced that BHP Billiton Ltd. intends to terminate its option for the Storm copper project in Nunavut. The option agreement, which was finalized in May of last year, would have provided C\$40 million toward exploration at Storm, which blankets mineralized showings along a more than 100-kilometer-stretch (60 miles) of Somerset Island. In July, Aston Bay launched a C\$4 million exploration program funded by BHP Billiton that included roughly 2,000 meters of drilling; re-logging of existing core; mapping; soil sampling; and



IDM Mining says it will continue underground drilling, targeting the expansion of the gold-silver resource at its Red Mountain project near Stewart, British Columbia.

prospecting. Visual copper was identified in three holes drilled last year. The best hole cut 16 meters averaging 3.07 percent copper and 12.3 grams per metric ton silver. The company said the 2,005 soil samples collected last year confirmed previously known copper in soil anomalies and identified new areas with anomalous copper and zinc. "We remain confident in the technical merits of the Storm Copper and Seal Zinc projects, as well as the exploration potential for both copper and zinc on Somerset Island," said Aston Bay CEO Tom Ulrich. "We are excited to investigate the source of these anomalies in future programs at Storm," he added. The company said it will provide information on its plans to continue advancing Storm and Seal in the coming weeks.

Ascot to invest C\$20M in Premier re-opening

Ascot Resources Ltd. Jan. 19 announced a C\$20-million exploration and development program at its Premier project, a large land package that blankets the historical Premier gold-silver mine in northwestern British Columbia. In 2016, Ascot carried out a C\$5.5 million exploration program that demonstrated continuity of gold mineralization within a proposed pit area at Premier and expanded several high-grade zones within it. Given this success, the company has budgeted C\$13 million for a roughly 120,000-meter drill program aimed at establishing an initial 2-million to 3-million-ounce high-grade gold resource. In addition to this resource drilling, which is slated to start in March, Ascot plans to complete 20,000 meters of exploration drilling targeting high-grade areas in the northern portions of the property. In conjunction with this surface work, Ascot has budgeted C\$7.3-million for an underground program that includes rehabilitation of historical mine working, as well as new development that will provide access to mineralized zones and

establish underground drill stations. Roughly 27,000 meters of underground aimed at defining reserves in the high-grade Lunchroom, Obscene and 602 zones is planned for this year. Ascot is seeking to establish an initial reserve of 600,000 to 750,000 ounces of gold in these zones that could be mined in the near term. To support this goal, the 2017 program will also include engineering, environmental, resource and reserve studies. Initial scoping and environmental studies will also be undertaken.

Deeper gold vein tapped at 3 Aces

Golden Predator Mining Corp. Dec. 19 said the first 13 of 54 holes drilled during a winter 2016 program at its 3 Aces gold project in southeastern Yukon has extended the high-grade gold at the Ace of Spades zone and encountered wide zones of previously unknown lower grade gold mineralization. Hole 3A16-RC-032 cut 7.54 meters of 32.86 grams per metric ton gold from a depth of 16.76 meters. Below this intercept in the main Ace of Spades vein, RC-032 cut 47.33 meters of low-grade gold mineralization in stockwork before encountering a new blind vein at 71.63 meters that returned 3.23 meters of 10.04 g/t gold. Other highlights from drilling at Ace of Spades include 3.12 meters of 13.18 g/t gold from a depth of 10.57 meters in hole 3A16-DD-036; 6.75 meters of 25.61 g/t gold from a depth of 17.53 meters in hole 3A16-RC-042; and 6.91

meters of 14.73 g/t gold from a depth of 15.24 meters in hole DD-043. The first 13 holes of this late 2016 program were all drilled in the Spades zone. Assays are still pending from holes targeting previously undrilled areas at the Clubs zone, as well as step-out and infill drilling at the Hearts zone. Golden Predator plans to resume drilling at 3 Aces in February with a 20,000-meter drill program that will initially focus on the Spades zone and then test other areas of the property. Drilling in the Spades zone is intended to test targets including the depth and strike extensions of the Ace of Spades vein, deeper stockwork mineralization, and commence initial drilling at the Jack, Queen, Seven and Three of Spades. Due to their higher elevations, follow up drilling at the Clubs and Hearts zones is expected to resume during the summer months.

Victoria readies for busy Dublin Gulch exploration

Victoria Gold Corp. Jan. 19 announced that it plans to carry out a C\$6.2-million initial phase of 2017 exploration at its Dublin Gulch property which hosts the Eagle Gold project and a number of outlying exploration targets. The majority of the planned gold exploration activities will be focused on the Dublin Gulch claim block with a subordinate amount of exploration work set to be conducted on regional targets within the company's larger Yukon property holdings portfolio. "2017 will be an exciting and busy exploration season for Victoria as we look to advance a series of high priority exploration targets previously identified on the large Dublin Gulch block," said Victoria President and CEO John McConnell. "Our exploration team has been working with minimal budgets for many years and has delivered high quality reserve ounces at the Olive-Shamrock target which were included in the updated Eagle feasibility study, filed in October 2016. The mineral endowment of the Dublin Gulch claim block is impressive, and management believes that 2017 represents a unique opportunity to underscore this through systematic exploration efforts in parallel to the development of our Eagle Gold Mine advances." The phase-1 drill program will include infill and step-out drilling aimed at upgrading and expanding the Olive-Shamrock deposit. Victoria said there are six other gold targets along the same trend that hosts Olive-Shamrock. In addition to their geological potential, Victoria said these targets are proximal to the Eagle Mine project and largely accessible by existing access roads. ●

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MINING POLICY

was directed primarily at the manufacturing sector, it addresses a long running concern for the mining industry – a long and arduous permitting process.

“The U.S. is blessed with abundant mineral wealth essential for our basic infrastructure needs, our national defense systems and the consumer products we use every day. Yet we are burdened by a painfully slow mine permitting process that can take seven to 10 years,” explained Quinn.

The NMA executive said these delays have resulted in a doubling of U.S. dependence on foreign sources of minerals over the past 20 years.

“Today, less than half of the mineral needs of U.S. manufacturing are met from domestically mined minerals, a trend that will only worsen unless we reform the permitting process responsible for it,” he added.

SNL Metals & Mining, a global research firm, found that the permitting process in the U.S. takes more than three times longer than other western mining

countries with comparable environmental standards.

“Like the U.S., the environmental permitting process in other developed world mining countries, such as Australia and Canada, is very stringent. These countries also require consultation with local communities and give stakeholders the right to raise objections and appeals. However, in both countries, the processes for obtaining permits are swifter than those observed in the U.S.,” the research firm penned in the 2015 report.

SNL said a clearly defined timeline and making it the mine proponent’s responsibility to complete the environmental impact statement contribute to the more compact permitting process in these countries – steps the research firm suggested the U.S. should take.

“While the (U.S.) project pipeline is strong for early stage projects, a bottleneck exists, slowing the progression to full functioning mines. For the U. S. to maintain security of supply in the future, it needs to



LISA MURKOWSKI

address this bottleneck,” concluded SNL.

New bills, new hope

Sen. Lisa Murkowski, R-Alaska, and Rep. Mark Amodei, R-Nevada, have introduced several bills in recent years aimed at streamlining the permitting process, but have never gained enough support on Capitol Hill to send legislation to the White House.

“Permitting delays are the most significant risks to mining projects in the United States,” Murkowski told miners gathered in Anchorage in 2013. “We are tied for the worst in the world, along with Papua New Guinea, as the two countries with the most numerous permitting delays. That doesn’t happen by accident; in my view, that is intentional.”

This year, Amodei and Sen. Dean Heller, a fellow Nevada Republican, have introduced legislation in the House and Senate aimed at addressing mine permitting delays.

“This legislation improves the burdensome permitting process, increasing American mineral security while creating blue collar mining and manufacturing jobs,” Heller explained on Jan. 17.

Introduced as S.145 in the Senate and

H.R.520 in the House, the “National Strategic and Critical Minerals Production Act of 2017” is a continuation of a long-standing effort by Amodei.

“This is a necessary piece of legislation that has already passed the House five times the past three Congresses. I’m pleased to have Sen. Heller join me as we work to streamline the permitting process to leverage our nation’s vast mineral resources, while paying respect to economic, national security, and environmental concerns,” said the Nevada congressman.

With similar legislation being considered in both chambers, the White House aligned with the idea of streamlining permitting and a stronger economy on the minds of many Americans, the mining sector is hopeful that this time around new legislation that addresses the notoriously long mine permitting timeline in the United States is signed into law.

“If adopted, this legislation will support our ability to fully utilize abundant domestic mineral resources that are essential for basic infrastructure needs, national defense systems and consumer products,” the National Miners Association said in a statement. ●



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AVALON DEVELOPMENT CORP.

Early in 2016, Peak Gold completed the first ever winter drill program at its Tetlin gold project in Interior Alaska. This year, the joint venture is following up on that success with a planned 6,000-meter program focused on expanding the Main Peak and North Peak deposits at this expansive property just a few miles southeast of Tok.

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NEWS NUGGETS

demand in 2021," TRU Group wrote.

Peak Gold wraps 2016 program; new resource, drilling up next

Contango ORE Inc. Jan. 19 reported results from the final 11 holes completed during the third phase of 2016 drilling at the Tetlin gold project in Interior Alaska. Overall, the 2016 program at Tetlin – conducted by Peak Gold, LLC, a joint venture between Contango Ore and a wholly owned subsidiary of Royal Gold Inc. – included 20,523 meters of drilling in 118 holes. The phase-3 drill program, which included 37 holes, focused on the North Peak zone at Tetlin. Highlights from the last 11 holes include 22.74 meters of 26.61 grams per metric ton gold from a depth of 14.31 meters in hole TET16302; 21.2 meters of 11.86 g/t gold from a depth of 16.31 meters in TET16304; and 29.54 meters of 7.17 g/t gold from a depth of 17.7 meters in TET16306. The best hole drilled into the North Peak zone last year cut 38.88 meters averaging 51.62 g/t gold from a depth of 14.5 meters. All of the drilling completed since Royal Gold joined the project in 2015 will be included in a resource calculation slated for completion by the end of March. “We anticipate that drilling operations will resume in early February to target open areas at North Peak, as well as exploratory targets in close proximity to both North Peak and Main Peak. This first phase of 2017 drilling is expected to total 6,000 meters of new core drilling,” said Contango Ore President and CEO Brad Juneau. ●

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Lynden appoints Jeff Bell VP, sales and marketing

Lynden International, a full-service freight forwarding and logistics company, recently announced the promotion of Jeff Bell from western region manager to vice president, sales and marketing. He will be based in Seattle where he will direct the company's global sales and marketing efforts.

Bell began his career with Lynden International in 2003 as a district manager in Honolulu, Hawaii. Over his 14 years with the company, he has served as director mid-pacific, district manager and, most recently, as western region manager.

"Jeff's experience and many years with Lynden will serve him well in his new position. He has worked alongside customers for decades and knows what is needed to match Lynden products and services to those who need our unique transportation and logistics solutions," said John Kaloper, Lynden International president.

Bell is a graduate of Emerson College in Boston where he earned a degree in mass communications. He serves on the board of directors and is treasurer for Pacific Historical Parks and is a former board member and chairman of the Lanikai Charter School in Kailua, Hawaii.



JEFF BELL

Calista creates new maritime apprenticeship program

Calista Corp. recently announced the creation of the Alaska Maritime Apprenticeship Program. AMAP's mission is to help increase Alaska hire in the maritime industry while meeting the subsistence needs of the Alaska lifestyle.

Together with the U.S. Department of Labor, Alaska Department of Labor and Workforce Development and AVTEC, Calista has created a multi-employer, three-tiered pre-apprenticeship and apprenticeship program with different pathways for apprentices to grow: deck side, engine room and galley/kitchen. Each tier allows an apprentice to grow into the next tier as he or she earns certifications and sea time.

"To meet the subsistence needs of the Alaskan lifestyle, apprentices can choose from two apprenticeship tracks, Traditional or Subsistence," said Calista Corp. President/CEO Andrew Guy. "Working with their employer, apprentices may have the option of taking time for subsistence activities to provide traditional foods for their families."

The first cohort is scheduled to begin at AVTEC in Seward, Alaska this spring. For more information visit <http://akmaritimeapp.com>.

ASRC and NSB mourn passing of Jeslie Kaleak Sr.

Arctic Slope Regional Corp. and the North Slope Borough said they are saddened to learn of the passing of Jeslie Kaleak Sr., whaling captain and former mayor of the North Slope Borough. Kaleak passed away Jan. 14, in Barrow at the age of 65.

"Jeslie was a dedicated family man and a real leader in the Iñupiaq community," said Rex A. Rock Sr., ASRC president and CEO. "He leaves behind a legacy of service that will never be forgotten. Our thoughts and prayers go out to the Kaleak family."

Crawford Patkotak, ASRC board chairman, added, "Jeslie always fought to protect the interests of the Iñupiaq community. His lifetime of service to the North Slope and to Arctic Slope Regional Corp. has improved the lives of our people and he will be missed. Jeslie was a man of faith in God and set a great example for the younger generation. We all

see **OIL PATCH BITS** page 13

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

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GIESSEL Q&A

China.

Petroleum News: On DNR then, what do you feel DNR's role is, given the gentleman in Tokyo right now?

Giessel: Basic, basic things. We had deliverables last session that we knew were milestones that needed to be done. The first was RIK, royalty in kind. That's up to the commissioner. If they, DOR and the Department of Law, those three state agencies are actually part of this process, they should have enough information to be making decisions like this. It's been a year.

That says to me they haven't been engaged in all of this. That concerns me. That was a very clear mandate in SB 138, which raises the question in my mind, has AGDC violated SB 138? We will be exploring that.

Petroleum News: Do you foresee putting in some new legislation?

Giessel: I can't tell you. I really don't know. Then of course comes the question would it be a futile effort if the governor disagrees with us and wouldn't sign it anyway? There is always that question. And I don't know how our House colleagues feel about all of this. I think their concerns mirror ours and that's based on the joint hearings we had, two of them last summer, particularly House Resources Co-Chairs Rep. Josephson and Rep. Tarr were mirroring the same concerns senators were expressing.

Petroleum News: You've got a new mix of committee members on the House side. I know that doesn't change how you do things here, but does it affect any kind of communication you might have with them?

Giessel: You know, honestly, I have not in the past collaborated in terms of agendas or things like that with the House people in the Resources Committee anyway. Rep. Josephson and Tarr knew I was doing the update. They thought boy we'll do it too. That's great. The more we can mirror that with people testifying the better, so you'll certainly see that just as happened in the past. They have legislation very different than anything you would see coming out of the Senate so there will be a parting of the ways at times.

Petroleum News: They have said they want to revisit the tax system. I know your position on tax credits and that to scale them back or even remove them is ultimately a tax hike. If the state can't afford these beyond what the statutory formula says must be paid, how do you reconcile that? Let's say you have a project that cost \$10 billion to bring to production and the state is on the hook for more than \$3 billion, but at these prices can only afford \$100 million a year, how do you pay for that? Do you find a way to revise in a way that still incentivizes?

Giessel: So still yet another change to tax policy? So first of all, last session people don't understand we made a huge change to the tax credit program. Cook Inlet will be gone next year. We diminished the credits on the North Slope by changing the new oil designation. The two big projects from Caelus and Armstrong and of course Conoco has got the Willow discovery, those are years out yet.

There are discussions about what kind of creative ideas would facilitate additional oil development without the cost that the credits represent. So we will see

"Our demand in-state is just too small. It had to be a project that would monetize the gas globally but always that main emphasis was gas for Alaskans first."

—Sen. Cathy Giessel, R-Anchorage

what evolves. There are lots of heads thinking about it so that's a potential. One of the things the governor is going after is completely changing the tax policy by taking away the net operating loss.

The net operating loss is an integral part of a net profits tax policy. That's what we have. What the governor is proposing reverts us to a gross tax policy. That's a huge change in policy. We certainly can do whatever we want, but it diminishes the potential of increasing oil production. I want to keep that pipeline as full as possible so it continues to be economic. As flow does down, the tariff goes up.

Petroleum News: What did the recent discoveries tell you about Alaska's prospects?

Giessel: Pretty awesome, huh? You know the most recent lease sale where there were very aggressive bids around the Armstrong property. I think the companies realize what Armstrong realizes. They may have gotten into a layer on the North Slope that has huge, huge potential. Of interest was former commissioner Mark Myers' response when Armstrong announced they thought they had a big find. He, as a geologist, was aware something was there, so he was pretty excited when somebody proved that up.

Petroleum News: Do you think that it's piqued interest from other companies?

Giessel: Oh, yes. I've heard it speculated that this particular layer of oil may extend a significant distance to the west, so that's into NPR-A, so that becomes a challenge because it's federal. On the other hand what alleviates some of that challenge is the new administration. So I'm eager to see what that businessman who is now the president will be doing to allow business to prosper in this country. As large businesses prosper, it stimulates small businesses, which in turn employ local people. All of that prosperity raises everyone's vote.

Petroleum News: You've got a new administration and a new Congress aligned with resource development. What are your hopes from that alignment?

Giessel: I'm hoping our state government will align with development. Sometimes it looks pretty challenging. Sometimes it feels like we are out of step, but I'm hoping for the best.

Petroleum News: There is a special committee on Arctic policy this year in the Senate. You're the chair of that committee. Talk about that.

Giessel: The U.S. still chairs the Arctic Council. We don't want to lose track of what's happening in Arctic policy. We have a new president who may not be totally informed on the subject, though we have Alaskans in Washington who are available to brief him. We are interested in some of the additional appointments he could make within the Department of the Interior, some of the lower level type of appointments. They could be Alaskans who know a lot about the Arctic. Regardless, we still need ice breakers. We need an Arctic port. I was part of the Arctic Policy Commission and I wrote

the section on resource development and spill response. You probably saw that Sen. Olson and Sen. Hoffman are on those committees. Those are our Arctic area representatives, though the entire state of Alaska is part of the Arctic as far as we are concerned. I used to have Seward in my district. Seward is certainly an Arctic port. That is where a lot of the infrastructure comes through. The University of Alaska Fairbank's research vessel harbors there.

Petroleum News: OK, getting back to AGDC, there was an issue over how much money remains. Did you get a satisfactory answer?

Giessel: I did. As I said back in November I have a letter from President Meyer there is \$109 million so now to hear that there is \$104 million tells me they spend \$5 million in the last six weeks. That's interesting. I'm not a Finance Committee member but I think that information will be of interest to the Finance Committee. We will need to know what it was spent on, which is part of the reason I was delving in what it cost to run the Houston office.

Petroleum News: There was also the issue of getting tax exemption from the federal government. You've received some opinions that it's not likely to happen. Are you still waiting for the IRS to weigh in?

Giessel: Of course, the last word belongs to the IRS and the private letter ruling. I haven't heard anyone say oh, yes, this will be easy to get. Not only the two law firms that presented to us in August were unpromising on that subject but Mr. (Larry) Persily, a former federal pipeline coordinator, does not see that as a likelihood, either. We also have Roger Marks, who has been a consultant to us in the past, not believing with the structure that is being set up now that it's going to be a possibility. But let's write to them (IRS) and find out.

Petroleum News: And if the project is not taxable by the state, where does the state get any return?

Giessel: That's the reason I keep repeating that question. I think the citizens of Alaska are interested in whether we are abdicating our taxing authority. That's in our constitution, so is that going to require a constitutional amendment to give up property tax, corporate income tax, production tax? Citizens should be aware of this.

I conducted a pretty extensive qualitative research project this last summer. It's called going door-to-door. One hundred percent of constituents I talked to at the door said the state of Alaska should stop spending on the gas line if the companies are not willing to build it. We should not be spending our money on it.

Petroleum News: So is the state advancing an uneconomic project?

Giessel: The information I've seen from experts, I would say yes. I am willing to let AGDC, with the help of BP, bring back proof that this is viable. ●

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OIL PATCH BITS

looked up to him and greatly respected him for his exemplary leadership. He served his people with honor."

"What I remember most about Jeslie was that he was welcoming to everyone," said current NSB Mayor Harry Brower. "He was about including all members of the community, embracing other cultures and empowering the youth. I remember him as a bridge — transitioning the old into the new and bringing people together to create a strong and united community. He was such a major contributor and a humble personality, who will be greatly missed."

Kaleak Sr. grew up in Barrow, but left the North Slope community to attend school in Oregon. He was a devout member of the Utqia vik Presbyterian Church, worked in leadership positions at ASRC and served over a decade on the ASRC board of directors. At the urging of elders, he successfully ran for mayor of the North Slope Borough and led the fight for improved water and sewer conditions across the Arctic Slope.

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



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MARINE SERVICES

Ship Escort/Response Vessel System, known as SERVS, provides tug assistance for tankers berthing at the marine terminal, as well as supporting SERVS' oil spill prevention and contingency plans for the tanker operations. As part of the spill prevention program, tugs escort tankers through the Valdez Narrows at the entrance to Port Valdez, and across Prince William Sound between Port Valdez and the Gulf of Alaska.

Edison Chouest is going to bring in a fleet of new vessels and will replace Crowley's existing tug fleet.

The huge exercise involved in the marine services transition includes the design and construction of the new vessels; sea trials; testing of the vessels under operational conditions; revisions to the oil spill response plans for the marine terminal and tanker operations; and the recruitment and training of personnel to operate the services.

New vessels

In all, Edison Chouest is building five new tugs for escorting oil tankers, four general purpose tugs and three new oil spill response barges, Day told the PWSRCAC board. The company is also buying two existing response barges already in use at Valdez, is bringing in one of its own utility tugs and will operate some other existing response support vessels under charter. According to information published by the PWSRCAC, the new response barges will be outfitted with new high-capacity oil skimmers, for recovering oil from the sea surface. The vessel construction program started in August 2016 and will continue to March 2018, with sea trials of the new

tanker escort tugs starting in December 2017, Day said.

The new response barges will be purpose built for spill response use and will include features such as decks long enough for the inflation of oil containment boom, ramps to aid with boom deployment, and storage tanks designed to hold consistent, pre-approved quantities of recovered fluids, Day said.

The marine transition will not impact Alyeska's program for the use of vessels of opportunity, including fishing vessels, during a Prince William Sound oil spill response, he also commented.

Edison Chouest is building its new vessels in four shipyards in Louisiana and Mississippi. The plan is to conduct initial testing of the vessels and crew training in the Gulf of Mexico, a region relatively close to the construction shipyards, should any problems with the vessels need to be fixed, Day explained. Further testing will take place in Puget Sound on the West Coast, another area where there is easy access to shipyards and where there is also the opportunity to use a tanker in conjunction with the testing. But, given size restriction on the type of tanker that can be used in Puget Sound, final testing will need to take place in Prince William Sound, Day said.

Given the scale and complexity of the marine transition project, Alyeska has established two teams for oversight of the program: an Alyeska transition team that will oversee the project, and a participant team of key stakeholders in the transition, including representatives from the U.S. Coast Guard, the Alaska Department of Environmental Conservation, PWSRCAC and tanker operators. The participant team reviews regular reports on the project status.

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CANADA'S CASE

Carr's major selling point is that the U.S. receives about 98 percent of Canada's oil and gas exports as part of a "very deep relationship which we have shared for a very long time."

"I'm sure it's in the interest of both countries to make sure that those links continue," he said.

That thought was echoed Jan. 23 when Prime Minister Justin Trudeau's cabinet held a retreat in Calgary and received a surprise visit from Steve Schwarzman, the chief executive officer of a private equity firm and an economic adviser to Trump, who had nothing but encouraging words for Canada.

"One of the important things is the unusually positive view that's held of Canada (in the U.S.)," he said.

Asked what risks Canada might face if Trump introduces a border tax on imported goods, Schwarzman said that was a "very low" prospect.

"I don't think (Trudeau) should be enormously worried because Canada is held in very high regard. We have balanced trade between the U.S. and Canada and is a model for the way that trade relations should be. That's not the kind of situation where you should be worried," he said in reiterating the same theme in several different ways.

Canada's International Trade Minister Francois-Phillipe Champagne said Trudeau's cabinet takes Schwarzman "at his word ... we had a great meeting with him. We you have someone like him who has known President Trump for decades you listen."

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Recruitment

Day said that he anticipates that, in parallel with the shipbuilding program, at some time in the next few months Edison Chouest will actively begin its process to recruit the people it needs to operate the new marine services. Then SERVS will conduct mission-specific training, acquainting new personnel with the procedures involved in operations such as tanker escorting and with the specifics of oil spill response plans. Apparently, the handover from Crowley will involve a transition period during which both Crowley and Edison Chouest will operate vessels.

Alyeska itself will need to manage its internal change process, to incorporate Edison Chouest into day-to-day operations, Day commented. Alyeska has already embarked on the process of coordinating the two companies' programs for issues such as environmental protection and safety management. For example, Edison Chouest will need to adapt to Alyeska's employee concerns program, Day said.

Some Edison Chouest staff have already started attending fishing vessel training sessions and have attended a spill response exercise and some vessel deployments.

Changes to plans

Before new equipment can be incorporated into SERVS' oil spill contingency arrangements, appropriate changes to the spill prevention and response contingency plans for the marine terminal and for the tanker operations will have to be approved by government regulators. SERVS has initiated the process of determining what needs to be drafted into the contingency plans and has supplied information about likely tanker plans amendments, Day said.

The intent is to file the new plans in the April to July timeframe this year.

Essentially, after the marine transition, the response barge and tug fleet will revert to its 2007 configuration, with four open-water response barges and 10 tugs, Day said.

And, in preparation for the changes, SERVS is reviewing and updating its matrix of training classes.

One issue that is being addressed is disentangling the ownership status of the various existing items of oil spill response equipment, much of which has been deployed and interconnected over the years. Under the new contract with Edison Chouest, Alyeska will end up owning all of this equipment.

Monitoring what is happening

SERVS staff are also monitoring Edison Chouest's shipbuilding program, visiting the shipyards and completing shipyard reviews, with an emphasis on accident prevention. SERVS response coordinators are reviewing the vessel layouts, looking for any potential problems relating to equipment storage.

Meanwhile, monitoring of SERVS existing performance involves keeping an eye on attrition rates for Crowley personnel, as the change out in marine services approaches. The decommissioning of the Crowley services is part of Alyeska's transition plan, Day said.

And, overall, Alyeska's commitment and obligation to protect the environment and culture of Prince William Sound through and beyond the marine transition drives the decisions that company makes in carrying out the transition project, Day commented. ●

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shipments to the U.S. total about 3 million barrels per day and could rise to 5 million bpd over the next decade, but gas exports across the 49th Parallel have shrunk to 5 billion cubic feet per day from 9 bcf per day in 2007 mostly reflecting the surge in output from shale fields such as the Marcellus.

Genscape oil analyst Carl Evans said that even with crude prices hanging around US\$50 heavy bitumen production has continued to grow to serve U.S. refineries which face shrinking imports from Mexico and Venezuela.

Keystone would help Canadian producers spend less on transport and could help them realize better prices for their crude products, Evans said.

What has Canadian producers on edge is how far Trump may go in adopting a border adjustment tax and scrapping the North American Free Trade Agreement.

Philip Verleger, principal of the Colorado-based consulting firm PKVerleger, said in a paper for The Brattle Group that no sector would be more affected by an import tax than petroleum, with exports from Canada, Mexico and the rest of the world facing a possible shut-out.

The tax reform strategy spearheaded by House Speaker Paul Ryan would punish those businesses that rely on imports by removing an existing write-off.

The best the government of Trudeau can hope for is that the Trump will acknowledge the jobs, taxes and contribution to U.S. energy security created by Canada's heavy crude oil which is the major source of feedstock for refineries throughout the U.S.

Bewildering direction

For now, though, the best Trudeau and his cabinet can do is remain poised to take advantage of the bewildering changes of direction in the White House including Trump's pledges to nullify requirements for

U.S. federal agencies to weigh climate change when handling pipeline applications and rescind an executive order dating back to President Lyndon B. Johnson that puts the State Department in charge of permitting oil pipelines that cross the Canada-U.S. border.

Andy Koenig, a vice president of policy at a donor organization tied to billionaires Charles and David Koch, expects Trump to wipe out barriers to economic growth and opportunities for all Americans and use revenues from oil and gas production to help finance new roads and bridges.

Jack Mintz, a fellow at the University of Calgary's School of Public Policy, wrote in the Financial Post that the "most revolutionary change in modern energy markets has arguably been the growth in extraction of shale gas and oil over the past decade. It has given the United States a tremendous opportunity to refashion energy and foreign policy."

But the opportunity was missed by Barack Obama "while he fixated on greenhouse gas emissions" and opted for symbolism by "pointlessly blocking pipelines like Keystone XL and Dakota Access," passing up the chance to shift priorities away from the Middle East."

Mintz said Trump appears to have realized a North American energy network that relies more on supplies from Canada and Mexico is achievable if he can unleash oil and gas development in the U.S. and approve both Keystone and Dakota.

A more robust North American energy sector, with Canadian oil substituting for Middle Eastern oil, could pull "fast-growing India and China into our economic orbit" and have a "profound impact on world political developments."

—GARY PARK

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LNG FACILITY

utes and then went into executive session for several hours,” Giessel said. The stated purpose of the executive session was “infrastructure,” but there was no other information, she said.

Cooperative agreement with BP

In another development, AGDC said BP has entered into a cooperative agreement with AGDC to supply expertise on developing a commercial structure for the gas and LNG project.

BP, a major North Slope producer, would supply expertise to support AGDC’s proposed commercial innovations, such as third-party equity investment and a tax-free status, that would allow Alaska LNG to lower costs of supplying liquefied natural gas, Damian Bilbao, the company’s vice president for Alaska gas ventures, told the Senate Resources Committee.

The agreement will contribute “our efforts and resources on the three focus areas, first in assessing a tolling model; two in preserving the regulatory progress; and three, identifying financing options for the path forward,” Bilbao said.

“BP is committing people and funding to this joint effort although it will be an effort led by a much smaller group of people than during the completed pre-FEED,” or preliminary engineering, he said.

BP’s involvement as well as a contract signed last fall with ConocoPhillips on joint-venture marketing of LNG, are giving the state gas corporation a needed boost in credibility among legislators.

Benefits to AGDC

On the ConocoPhillips plant, Fritz Krusen, AGDC’s vice president for LNG, said owning the plant, which exported Cook Inlet gas and is not now operating, would help the state corporation in its current bid to build a much larger LNG export project using North Slope gas.

“It would allow us to present an early production scenario to buyers,” Krusen said, where the smaller ConocoPhillips plant, which is capable of manufacturing up to 1.5 million tons per year, could begin exports under sales contracts before a much larger 20 million-ton-per-year project is constructed.

A large three-train LNG plant planned as a part of the

ConocoPhillips has operated the plant since 1969 but ceased regular shipments to Japan in early 2012. The company put the facility up for sale last fall.

Alaska LNG Project would be on a 600-acre tract of land near the site of the current ConocoPhillips plant. Krusen said there are many ways AGDC’s acquisition of the plant would benefit the larger project. “It would give up control of much more waterfront acreage,” on Cook Inlet, he said.

Owning the plant would also allow AGDC to tap into a long history of reliable operations and relationships with customers, Krusen said.

State Sen. Bill Wielechowski, an Anchorage Democrat, asked Krusen about the status of discussions with ConocoPhillips during a briefing to the Senate Resources Committee. “If I answered that, I’m afraid I would breach confidentiality,” he replied.

The LNG plant

ConocoPhillips has operated the plant since 1969 but ceased regular shipments to Japan in early 2012. The company put the facility up for sale last fall.

Company spokeswoman Amy Jennings Burnett did not confirm talks were underway with AGDC, but said discussions are being held with a wide range of possible buyers.

“We are in the early stages of marketing the plant. ConocoPhillips is following a standard marketing process for the Kenai LNG plant. A virtual data room, which opened on January 10, provides critical information to help potential buyers assess the asset and determine if they are interested in submitting a formal bid,” Burnett said in an email.

“Interested parties are currently reviewing the data room material and we anticipate receiving bids later this year. At that point, ConocoPhillips will evaluate the bids and determine a path forward. We are not in negotiations with any party at this time,” she said.

When Phillips Petroleum built the plant in 1969 it was to ship LNG made from Cook Inlet gas, then in surplus, to Japan. At the time it was the first long-distance shipment of LNG, and demonstrated the viability of the business.

Much larger shipments of LNG to Japan from Southeast Asia developed in following years.

The Kenai plant made regular shipments until 2012

when long-term contracts with Tokyo Gas and Tokyo Electric expired. ConocoPhillips made periodic shipments on spot sales between 2014 and 2015 but made no shipments in 2016.

The company recently sold the North Cook Inlet gas field, which had supplied gas to the plant, to Hilcorp Energy, which operates other Cook Inlet oil and gas properties.

AGDC takes control

AGDC recently assumed control of the large Alaska LNG Project from a consortium of three North Slope producers and itself, as one of four partners in pre-engineering work, which is now complete.

Given the state of Pacific LNG markets the three producers, BP, ConocoPhillips and ExxonMobil, have stepped back from the project for now, but are supporting the state’s AGDC in continuing work to keep the regulatory process in motion and work on commercial terms that would be available only to a state-owned project.

The formal handover from the previous four-party partnership to the state corporation is only partly complete, AGDC told legislators the week of Jan. 23. Agreements on access to information compiled in preliminary engineering are signed but two other agreements, to allow AGDC to have an option, and control, of 600 acres of land purchased by the three producers at Nikiski for the LNG plant, as well as the federal LNG export license, are still under negotiation.

If built, Alaska LNG would tap 35 trillion cubic feet of confirmed gas reserves on the North Slope with an 800-mile pipeline from north to south across Alaska, and also build the large LNG plant near Kenai and a large gas treatment plant on the Slope.

The companies, and the state, have spent about \$600 million to date on pre-engineering, environmental and regulatory work.

AGDC is now working to raise approximately another \$1.5 billion to do final engineering while also seeking investors and gas purchasers. The three large producing companies may still participate in the project, they have said.

Overall project cost is now estimated at \$45 billion. If built according to AGDC’s current schedule Alaska LNG could be operating by 2025. ●

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PIPELINES

late 2015 by President Barack Obama.

TransCanada said it is “currently preparing the application” which former company executive Dennis McConaghy said should lead to a “final permitting determination within 60 days.”

Dakota Access proponent Energy Transfer made no immediate comments on Trump’s announcement.

Trump declined to answer a reporter who asked for his view of a months’ long demonstration against Dakota Access, including an encampment by protesters on the Standing Rock Sioux reservation in North Dakota.

Agreement in US, Canada

U.S. Sen. Lisa Murkowski, R-Alaska, chair of the Senate Committee on Energy and Natural Resources, called the actions “a welcome sign.”

“I support consultation with the people affected by infrastructure projects, and we must ensure that they are built and operated responsibly.” She said federal agencies “have been sources of unnecessary delay and uncertainty. Reform is long overdue, and the president’s actions today are a good start.”

American Petroleum Institute president Jack Gerard welcomed the “new direction being taken by the administration to recognize the importance of our nation’s energy infrastructure by restoring the rule of law in the permitting process that’s critical to pipelines and other infrastructure projects.”

House Speaker Paul Ryan said it was “about time” that the pipelines moved forward.

“The unfortunate reality is that these important infrastructure projects were used by special interests to advance their radical anti-energy agenda and were therefore needlessly halted by the last administration to the detriment of America’s national interest,” he said in a statement.

Canada’s Foreign Affairs Minister Chrystia Freeland said her government strongly believes “it is not just possible but essential to have strong policies on climate change (including the federal government’s planned carbon tax) and at the same time fulfill our duty to get natural resources to market.

Opposition pledges strong response

Tiernan Sittenfeld, a lobbyist at the League of Conservation voters, said “no amount of ‘alternative facts’ can change the reality that these dirty and dangerous

pipelines are a bad deal for clean air, safe drinking water and the communities living along the routes.”

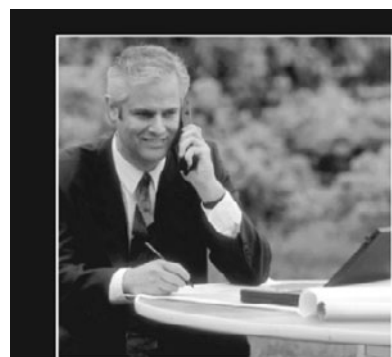
For Trump, the two pipelines set the stage for a head-on clash with environmentalists, landowners and indigenous peoples.

If there was any doubt about the prospect of legal challenges and disruption of pipeline construction that was quickly removed Jan. 24 when hundreds of activists gathered outside the White House.

A spokesman for the Sierra Club said the anti-pipeline movement won’t even bother trying to sway Trump as it did Obama.

“You’re going to see much more aggressive lawsuits (and) more protests and tension on the streets. You’re also going to see much more resistance in the communities directly impacted.” ●

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FLEET QUESTIONS

ough evaluation, especially with respect to operating conditions in Alaska sea and climate conditions. Alyeska Pipeline Service Co., the operator of the marine terminal and the trans-Alaska oil pipeline, says it is reviewing the draft report, which has only just been released, and that it is confident that the new fleet will maintain services at current performance levels.

The fleet change comes as part of a transition from Crowley Maritime Corp. to Edison Chouest Offshore for the provision of vessel services for the Valdez terminal. Edison Chouest is contracted to take over the marine services in July 2018. The services include the provision of tug assistance for tankers docking at the terminal, and the support of oil spill prevention and response arrangements for the terminal and for the tanker operations across Prince William Sound and Port Valdez.

New tug fleet

To replace Crowley's existing tug fleet, Edison Chouest is building five new tugs for escorting oil tankers and four general purpose tugs. Construction of the new tugs has already started, with sea trials of the new escort tugs expected to begin in December 2017.

Concerned to ensure that Edison Chouest's services meet the demanding requirements for operating in the harsh marine environment of the Valdez area, the PWSRCAC commissioned Robert Allan Ltd. to review specifications and drawings for the tugs and to comment on the suitability of the designs for the required marine services.

During a PWSRCAC board meeting on Jan. 19 Robert Allan, the company's executive chairman, reviewed his company's report's contents. Edison Chouest is building the tugs using designs developed by Damen, a major international shipbuilder. Allan commented that, although his company and Damen are business competitors, the report findings result from an objective evaluation by professional engineers with knowledge of the operating conditions involved in the required marine services.

Powerful tugs

The new tanker escort tugs have higher power ratings than the Crowley tugs that they will replace. Allan said that,

although Damen is a company with substantial experience of designing and building tugs, these new tugs are larger than any tug that the company has previously designed. But, with a power rating of 12,336 horsepower, the new tugs will be fully powerful enough for the required operations, Allan said.

However, Allan questioned the pulling performance quoted both for the new escort tugs and for the new general purpose tugs, saying that the performance seems low in relation to the tugs' power. A too-low performance rating runs the risk of the tug overpowering the towing equipment and impacting the stability of the boat, he warned, saying that he would like to see an explanation of how the performance rating was calculated.

Allan also questioned the apparent lack of scale model testing of the escort tug design, an omission that he viewed as very serious, given the demanding nature of the tugs' required operations. Those operations include the tethered escorting of tankers through the Valdez Narrows; tanker escorting across the eastern end of Prince William Sound; emergency towing; and oil spill response support. Moreover, Allan said, computer modeling of the escort tug performance seemed simplistic and did not appear to have taken account of the full speed at which the tugs would be required to operate, and of the more severe sea states that can occur in Prince William Sound and the Gulf of Alaska.

Design questions

In terms of the tug design, Allan questioned the high deck housing, a structure that would be impacted by strong winds, and the very large size of the "skeg," the keel-like structure that runs the length of the vessel's underside. Given these factors, a bow thruster would significantly improve vessel handling at slow speeds, he suggested. The vessels appear to have insufficient fendering for Prince William Sound operations, and the bow shape and height appeared inappropriate for rough sea conditions in the Gulf of Alaska. Moreover, the design of the deck towards the front of the ship seemed likely to result in the pooling of water in heavy seas, Allan commented.

Allan also said that the design of the accommodations inside both the escort and general purpose tugs appeared unsuitable for operations in the Alaska winter, with, for example, bunks placed adjacent the hull, where temperatures would be coldest and the motion of the ship would be

most severe. He also commented that no information had been provided on other aspects of ship design appropriate to Alaska operations, such as the protection and heating of mooring lines, the heating of decks in exposed working areas, and the need to protect winches from freezing spray.

Allan cautioned that fixing any design issues with the new vessels would be much cheaper at the design stage than following construction.

Tug capabilities

With respect to the general purpose tugs, Allan questioned the apparent lack of evidence that these tugs will have the capability to provide tethered escorting of smaller tankers, one of the tasks that the smaller tugs were listed as required to be able to conduct. He also questioned whether these tugs would be fast enough to provide untethered escort services for tankers. And, in the interests of ensuring that the tug engines do not stall when maneuvering a vessel, he recommended the use of variable pitch propellers, rather than the fixed pitch propellers that the design assumes.

Alyeska reviewing report

Andres Morales from Alyeska SERVS told the PWSRCAC board that his company is taking the information in the Robert Allan report to heart and has reached out to Edison Chouest for answers to the questions raised. SERVS has only just received the report and anticipates providing feedback in due course, Morales said.

Morales said that the performance requirements for the new vessels are specified in the oil spill prevention and response contingency plans for the tanker operations. Morales also commented that the general purpose tugs would be fully tested for use in escort duties, should it be decided at some point that these tugs would be used for that purpose. And Graham Wood from the Alaska Department of Environmental Conservation said that the state's expectation is that, following the transition to Edison Chouest, there will be no net loss of performance relative to the current arrangements in place for the protection of Prince William Sound.

Donna Schantz, executive director of the PWSRCAC, requested that missing information that has generated many of the concerns expressed in the Robert Allan report be made available.

—ALAN BAILEY



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ARMSTRONG PLAY

Colville River delta, with the Nanushuk hosting a substantial portion of the oil. Armstrong sees exact parallels between the Willow and Pikka oil pools and thinks that these finds could mark the beginning of a new and productive direction for North Slope exploration and development.

"We are really excited about what we have found at Pikka and for what ConocoPhillips has found at Willow," Armstrong has told Petroleum News. "Both discoveries are big and may get a lot bigger. Pikka and Willow could be the first of many as they have revealed a new play type for the North Slope that should have lots of running room."

U.S. Geological Survey geologist David

Houseknecht has previously suggested that the Armstrong development represents a new North Slope oil play involving rocks of the Brookian sequence, the shallowest and youngest rock sequence in the North Slope petroleum systems. The play involves oil reservoirs in the Nanushuk and Torok formations. Caelus Energy's recent major discovery at Smith Bay, with a reservoir in the Torok, also fits into the play.

Houseknecht thinks that the play runs west from the Colville River delta area, along the Barrow Arch, a major geologic structure associated with North Slope oil fields. Oil, in some cases sourced from deep under the nearshore waters of the Beaufort Sea, would flow up the flanks of the arch and be caught in stratigraphic traps in the Brookian.

—ALAN BAILEY



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